Prepared for

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2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

PLANT HAMMOND ASH POND 1 (AP-1)

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CERTIFICATION STATEMENT

This *2023 Annual Groundwater Monitoring and Corrective Action Report, Plant Hammond Ash Pond 1 (AP-1)* 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.

_____ January 31, 2024

Whitney B. Law — Date

Georgia Professional Engineer No. 36641

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 of January through December 2023 (referred to herein as the "annual reporting period") at Georgia Power Company's (Georgia Power's) Plant Hammond Ash Pond 1 (AP-1) (the Site). This summary was prepared by Geosyntec Consultants, Inc. (Geosyntec) on behalf of Georgia Power to meet the requirements listed in Part A, Section 6[1] of the United States Environmental Protection Agency (USEPA) Coal Combustion Residual Rule (federal CCR Rule) (40 Code of Federal Regulations [CFR] 257 Subpart D).

Plant Hammond is located at 5963 Alabama Highway SW, approximately 10 miles west of Rome in Floyd County, Georgia. CCR material resulting from power generation were historically transferred and stored in AP-1 until 1969. After 1969, AP-1 was utilized as a co-treatment pond to handle return water flows from the other ponds and for recycling of process water for plant operations. The Site is located on the southeastern portion of the Plant Hammond property. The Georgia Environmental Protection Division (GA EPD) approved closure permit no. 057-023D(CCR) for AP-1 on June 22, 2020.

Plant Hammond and the Site

Groundwater at the Site is monitored using a comprehensive monitoring 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

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

the federal CCR Rule, groundwater data from the two semiannual assessment monitoring events conducted during the annual reporting period were evaluated in accordance with the certified statistical methods. The evaluations identified statistically significant values of select Appendix III[2] and Appendix IV[3] constituents in excess of established groundwater protection standards (GWPS) in select monitoring wells, as summarized in the table below for the annual reporting period.

Appendix III Constituent	**January 2023**	**August 2023**
Boron	HGWC-7, HGWC-8, HGWC-9, HGWC-11, HGWC-12, HGWC-13	HGWC-7, HGWC-8, HGWC-9, HGWC-10, HGWC-12, HGWC-13
Calcium	HGWC-9, HGWC-12, HGWC-13	HGWC-9, HGWC-10, HGWC-12, HGWC-13
Chloride	HGWC-8, HGWC-9	HGWC-8, HGWC-9
Sulfate	HGWC-7, HGWC-8, HGWC-9, HGWC-11, HGWC-12, HGWC-13	HGWC-8, HGWC-9, HGWC-10, HGWC-11, HGWC-12, HGWC-13
Total Dissolved Solids	HGWC-9, HGWC-13	HGWC-9, HGWC-12, HGWC-13
Appendix IV Constituent[4]	**January 2023**	**August 2023**
Arsenic	HGWC-13	HGWC-13
Molybdenum	HGWC-8	HGWC-8

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-8 Pilot Study Workplan* (Geosyntec,

[2] Boron, calcium, chloride, fluoride, pH, sulfate, and total dissolved solids
[3] Antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, fluoride, lead, lithium, mercury, molybdenum, selenium, thallium, and radium 226 + 228
[4] A statistically significant level (SSL)-related constituent is determined by comparing the confidence intervals developed to either the constituent's MCL, if available; where an MCL has not been established, then a CCR-rule specific GWPS; or background concentrations for constituents where the concentration is greater than the MCL or rule specified GWPS.

2023a) and the *HGWC-13 Pilot Study Workplan* (Geosyntec, 2023b) on August 24, 2023, a pilot study was initiated at AP-1 in support of the ongoing Remedy Selection process.

Geosyntec consultants

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LIST OF ACRONYMS AND ABBREVIATIONS

ACM	Assessment of Corrective Measures
AP-1	Ash Pond 1
ASD	Alternate Source Demonstration
CCR	coal combustion residuals
CFR	Code of Federal Regulations
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
i	horizontal hydraulic gradient
K_h	horizontal hydraulic conductivity
MCL	Maximum Contaminant Level
mg/L	milligram per liter
MNA	Monitored Natural Attenuation
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 1 (AP-1) 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. 057-023D(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 arsenic and molybdenum 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-1 in January 2019. Pursuant to § 257.96(b), Georgia Power continues to monitor groundwater associated with AP-1 in accordance with the assessment monitoring program established for the unit, 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, 2022a) and is currently under review.

The current reporting period groundwater data indicate that SSLs for arsenic and molybdenum concentrations are horizontally and vertically delineated to below their corresponding groundwater protection standards (GWPS) and contained within the property boundary.

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 decommissioned in July 2019 and no longer produce electricity.

AP-1 is a 35-acre surface impoundment located at Plant Hammond that received CCR materials from its commission in 1952 until 1969. After 1969, AP-1 was utilized as a co-treatment pond to handle return water flows from the other ponds and for recycling of process water for plant operations. Georgia Power has commenced closure of AP-1 through removal of the CCR material from the CCR unit; closure activities will be conducted in accordance with § 257.102 and corresponding Rule 391-3-4-.10(7)(b). 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, published to Georgia Power's CCR Rule Compliance website. Closure permit no. 057-023D(CCR) was approved by GA EPD on June 22, 2020.

1.2 Regional Geology and Hydrogeologic Setting

The following section summarizes the geologic and hydrogeologic conditions at AP-1 as described in the *Hydrogeologic Assessment Report Revision 01 – AP-1* (HAR Rev 01) submitted to GA EPD in December 2019 in support of the AP-1 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-1 is underlain by the middle units of the Cambrian age Conasauga Formation, consisting of mostly shaley limestone. Subsurface investigations at AP-1 describe the

bedrock as limestone or shaley limestone. AP-1 is underlain primarily by five lithologic units: (i) fill; (ii) terrace alluvium; (iii) residuum; (iv) highly weathered/fractured shaley limestone bedrock; and (v) competent shaley limestone bedrock.

Based on subsurface investigations, the fill material is composed of lean clay or gravelly lean clay with sand from the construction of the pond. The terrace alluvium consists of unconsolidated sediments associated with deposition from the Coosa River and Cabin Creek. Alluvium was variously described as well sorted and poorly sorted sand, clayey sand, sandy gravel, clayey gravel, or gravelly clay. The residuum clay layer or native soils have been derived from the in-place weathering of the shaley limestone bedrock. The residuum is generally described as a lean to fat clay, sometimes silty with some sand, and rarely gravel. The subsurface investigation data suggest that the residuum thins out in places, and the alluvial deposits is in direct contact with the upper fractured or the unweathered limestone bedrock. Just below the residuum clay layer is a gradational zone of varying proportions of clayey residuum and sand, gravel, and cobble-sized angular pieces of partially weathered limestone, grading into a zone of fractured shaley limestone, before grading into unweathered, fresh shaley limestone bedrock. The upper highly weathered zone appears more as residuum with various sized rock fragments. The lower zone becomes less clayey with depth and is estimated to be approximately 10 feet thick. The limestone is described as medium to dark gray, very finely laminated with lighter and darker gray layers, and contains interbeds of calcareous shale.

1.2.2 Hydrogeologic Setting

The uppermost aquifer at AP-1 is a regional groundwater aquifer that occurs in the terrace alluvium, residuum, and the weathered and fractured bedrock. The uppermost aquifer is considered to be unconfined; however, localized, semi-confined conditions may be encountered due to the low-permeability clayey nature of the residual soils, or as a result of perched groundwater or poorly interconnected fracture networks in the bedrock. The movement of groundwater in the uppermost aquifer can be characterized as low-to moderate permeability porous media flow. Groundwater flow in the more competent underlying bedrock is characterized as fracture flow. The regional groundwater flow direction is expected to be from north to south; however, the local flow direction proximal to AP-1 is to both the east and south under current pre-closure conditions. Under post-closure conditions, the groundwater flow direction is anticipated to resemble the regional flow regime more closely (north to south toward the Coosa River).

1.3 Groundwater Monitoring Well Network

In accordance with § 257.91, a groundwater monitoring system was installed at AP-1 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 monitoring 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-1. Pursuant to § 257.195(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

Six piezometers (MW-53, MW-54, PT-07, PT-08, PT-09, and PT-10) were installed in June 2023; the locations of these six piezometers are shown on **Figure 2**. MW-53 and MW-54 were installed to support high-resolution site characterization. PT-07, PT-08, PT-09, and PT-10 were installed to specifically monitor the performance of the pilot study injection activities initiated in September 2023 in support of the ACM program. 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-1 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 identified SSLs of Appendix IV constituents exceeding their respective GWPS at AP-1 are arsenic in HGWC-13 and molybdenum in HGWC-8.

Pursuant to § 257.96, an ACM was initiated for AP-1 in January 2019. An *Assessment of Corrective Measures Report – Plant Hammond Ash Pond 1 (AP-1)* (ACM Report) was subsequently prepared for AP-1 (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, 2022a). In accordance with § 257.96(b), groundwater continues to be monitored at AP-1 under the assessment monitoring program while the ACM phase is implemented.

In support of the routine assessment monitoring program, the semiannual assessment monitoring events were conducted in January and August 2023. The wells sampled and the dates the samples were collected at AP-1 during the annual reporting period are summarized in **Table 2**. Well MW-28D was resampled for barium in October 2023 to verify the result collected during the August 2023 monitoring event. Details of these events and analytical results are discussed in Section 3.

2.3 Additional Groundwater Evaluations

Supplemental groundwater samples were collected from the entire AP-1 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.

2.4 Assessment of Corrective Measures

High-resolution site characterizations were completed in August 2022 and February 2023 to characterize and refine proposed in-situ injection treatment areas proximal to HGWC-8 and HGWC-13, respectively. Twelve direct push technology (DPT) borings were advanced near HGWC-8 and seven borings near HGWC-13 for the collection of remedial design parameters and screening-level groundwater data. The 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-8 Pilot Study Workplan* (Geosyntec, 2023a) and the *HGWC-13 Pilot Study Workplan* (Geosyntec, 2023b).

To establish pre-injection baseline conditions, groundwater samples were collected from performance monitoring piezometers (PT-07 through PT-10) in July and August 2023, prior to initiating injection activities in late 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 October 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-1 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-1 wells and piezometers during the January and August 2023 assessment monitoring events 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 the ongoing dewatering of AP-1.

A surface water elevation was recorded at the Coosa River staff gauge located downgradient of AP-1. The location of the Coosa River staff gauge is shown on **Figure 2**. A water level within AP-1 was not recorded in January or August 2023 as the staff gauge was reportedly removed due to closure construction activities.

The groundwater and surface water elevation data were used to prepare a potentiometric surface map for the January and August 2023 gauging events, which are presented on **Figure 3** and **Figure 4,** respectively. Groundwater in the AP-1 area flows under the influence of topography from slightly higher elevations on the north side of the Site in a generally easterly and southerly direction. 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-1 were calculated using the groundwater elevation data from the January and August 2023 gauging events. Horizontal hydraulic gradients were calculated along the flow path south of AP-1 between HGWC-13 and MW-7 and between HGWC-8 and MW-20 along the flow path east of AP-1. The supporting calculations are presented in **Table 4.** The table also presents the average hydraulic gradients calculated from the January and

August 2023 gauging events. The general trajectory of the flow paths used in the calculations and associated potentiometric contour lines are shown on **Figure 3** and **Figure 4**. The calculated average hydraulic gradients along the southerly and easterly groundwater flow path lines associated with AP-1 for the annual reporting period is 0.013 feet per foot (ft/ft) between HGWC-13 and MW-7, and 0.011 ft/ft between HGWC-8 and MW-20.

The approximate horizontal flow velocities associated with AP-1 were calculated using the following derivative of Darcy's Law. The calculations are presented on **Table 4**.

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

where:

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

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

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

h_1 and h_2 = Groundwater elevation at location 1 and 2

L = Distance between location 1 and 2

n_e = Effective porosity

The average horizontal hydraulic conductivity (K_h) for AP-1 of 11.82 feet per day (ft/day) was computed from slug test data derived from ten locations across the AP-1 area and presented in the HAR Rev 01 (Geosyntec, 2019c). An estimated effective porosity (n_e) of 0.15 is used to represent average conditions at AP-1, derived based on review of literature (Kresic, 2007), observed site lithology, and professional judgement. With these variables defined, and accounting for the averaged hydraulic gradient discussed above for the January and August 2023 gauging events, the average groundwater flow velocity in the vicinity of AP-1 for the annual reporting period was calculated to be 0.9 ft/day (i.e., average of the southerly and easterly flow velocities).

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

Following purging, and once stabilization was achieved, unfiltered samples were collected into appropriately preserved laboratory-supplied sample containers. Sample bottles were placed in ice-packed coolers and submitted to Pace Analytical Services, LLC (Pace Analytical) 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 sample analyses, and associated results, are listed in the analytical laboratory reports included in **Appendix C**. The groundwater analytical results from the annual reporting period are summarized in **Table 5**. 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, 2021b), 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, 2020a). 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 the statistical analysis reports 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 6**.

4.1.1 Appendix III Statistical Methods

Based on guidance from GA EPD, statistical tests used to evaluate the groundwater monitoring data consist of interwell prediction limits (PLs) combined with a 1-of-2 verification resample plan for each of the Appendix III constituents. Interwell PLs pool upgradient well data to establish a background limit for an individual constituent, and the most recent sample from each downgradient well is compared to the same limit for each constituent. The most recent sample from each downgradient well is compared to the background limit to 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 PL, 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 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 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 6**.

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 the statistical analyses, select Appendix IV constituents exceeded the GWPS during the annual reporting period.

4.2.1 January 2023 Data

- Arsenic: HGWC-13
- Molybdenum: HGWC-8

Wells with SSLs were further evaluated using the Sen's Slope/Mann Kendall trend test (**Appendix D**). No statistically significant trends were identified in January 2023.

4.2.2 August 2023 Data

- Arsenic: HGWC-13
- Molybdenum: HGWC-8

Wells with SSLs were further evaluated using the Sen's Slope/Mann Kendall trend test (**Appendix D**). No statistically significant trends were identified in August 2023.

4.2.3 Summary of Statistical Analyses

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

5.0 NATURE AND EXTENT

Based on the groundwater data presented herein, the SSLs for wells and constituents identified in Section 4.2 have been horizontally and vertically delineated to below the established GWPS and are contained within the property boundary. Delineation is determined by confidence intervals (statistical analysis) prepared for the assessment wells discussed in the following paragraphs. Results of the statistical analyses are provided in **Appendix D**.

The identified SSL of arsenic in HGWC-13 is horizontally and vertically delineated to below the GWPS by MW-19 and MW-24D, respectively. Similarly, the SSL of molybdenum in HGWC-8 is horizontally and vertically delineated by MW-20 and MW-27D, respectively. The groundwater data from the January and August 2023 assessment monitoring events were used to generate the arsenic and molybdenum iso-concentration maps presented on **Figure 5** through **Figure 8**.

5.1 Alternate Source Demonstrations

An alternate source demonstration (ASD) was submitted to GA EPD on January 29, 2021, to address the fluoride and lithium SSLs reported for MW-30D, and molybdenum SSL reported for MW-40D (Geosyntec, 2021a). The ASD presented multiple lines of evidence that the SSLs are not associated with a release from AP-1, but are instead a result of natural variation in groundwater quality due to the limited (i.e., MW-30D) or no (i.e., MW-40D) connection these wells have to the uppermost aquifer as evidenced by (i) slow recharge encountered within the deeper delineation wells installed in less fractured bedrock zones; (ii) starkly different groundwater elevations in these wells compared to other site wells; and (iii) very different geochemical conditions. Additionally, all previous SSLs of molybdenum reported in MW-40D have at all times complied with the current GWPS of 0.1 mg/L.

An ASD to address the previous SSL of lithium identified in MW-25D was submitted to GA EPD in August 2022 (Geosyntec, 2022b). Geochemical evaluations using Piper and Stiff diagrams indicate that the chemical composition of groundwater sampled from well MW-25D shows no evidence of a CCR impact (i.e., as compared to the geochemistry of AP-1 pore water) and is similar to other deep background and slow recharge wells screened in bedrock (HGWA-43D, MW-30D, MW-40D). Secondly, all previous SSLs of lithium reported in MW-25D have at all times complied with the current GWPS of 0.064 mg/L.

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-1 in accordance with the assessment monitoring program regulations of § 257.95 while ACM efforts are implemented to address SSLs of arsenic and molybdenum in select AP-1 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 Repor*t was submitted to GA EPD on August 31, 2022 (Geosyntec, 2022a), in lieu of the *Semiannual Remedy Selection and Design Progress Reports* (semiannual progress reports) previously included in the appendix of the routine 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-1.

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-1 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-8 and HGWC-13 (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 plots for the performance monitoring piezometers through November 2023 are included in Appendix E. The groundwater analytical results from the pilot study monitoring events through November 2023 are summarized in **Table 7**. Results received after November 2023 will be summarized in the next groundwater monitoring and corrective action report.

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

6.3 Annual Potable Well Survey

An updated potable well survey of potential groundwater wells within a two-mile radius of AP-1 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-1 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-1 for the annual reporting period identified the continued presence of SSLs of arsenic and molybdenum in HGWC-13 and HGWC-8, respectively. Based on the most current groundwater quality, the SSLs are vertically and horizontally delineated to below their respective GWPS within the property boundary.

Georgia Power will continue to monitor AP-1 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, 2022a). The next routine semiannual assessment monitoring event for AP-1 is tentatively scheduled for January 2024. Progress made regarding the pilot studies and corrective action design will be documented as a brief summary 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-1, Floyd County, Georgia

Well ID	Hydraulic Location	Installation Date	Northing [1]	Easting [1]	Ground Surface Elevation (ft)	Top of Casing Elevation [1] (ft)	Top of Screen Elevation [1] (ft)	Bottom of Screen Elevation [1] (ft)	Well Depth (ft BTOC) [2]	Screen Interval Length (ft)
Detection Monitoring Well										
HGWA-1	Upgradient	12/3/2014	1550423.32	1940770.00	592.32	595.21	573.12	563.12	32.49	10
HGWA-2	Upgradient	12/2/2015	1549796.87	1939845.15	585.29	587.92	570.29	560.29	27.95	10
HGWA-3	Upgradient	12/2/2015	1549794.41	1939833.39	585.23	587.74	553.23	543.23	44.51	10
HGWA-43D	Upgradient	8/26/2020	1550422.85	1940753.81	592.08	595.08	544.08	534.08	61.25	10
HGWA-44D	Upgradient	8/25/2020	1550409.13	1940756.19	592.01	594.79	491.76	481.76	113.50	10
HGWC-7	Downgradient	12/3/2015	1549520.67	1942319.75	576.55	579.18	561.55	551.55	27.96	10
HGWC-8	Downgradient	12/8/2015	1549114.61	1942392.56	577.14	579.82	564.64	554.64	25.51	10
HGWC-9	Downgradient	12/9/2015	1548693.30	1942215.03	577.72	580.36	543.72	533.72	46.97	10
HGWC-10	Downgradient	12/8/2015	1548469.25	1941644.43	576.76	579.37	566.76	556.76	22.94	10
HGWC-11	Downgradient	12/15/2015	1548477.91	1941146.79	578.12	580.67	565.19	555.19	25.78	10
HGWC-12	Downgradient	12/9/2015	1548476.53	1941152.34	578.14	580.73	555.64	545.64	35.42	10
HGWC-13	Downgradient	12/10/2015	1548628.03	1940900.60	592.94	595.76	560.94	550.94	45.15	10
Assessment Monitoring Well										
MW-5	Downgradient	11/4/2014	1548436.02	1942448.85	578.00	581.14	560.70	550.70	30.84	10
MW-6	Downgradient	11/4/2014	1548383.12	1941689.01	579.18	581.84	559.28	549.28	32.96	10
MW-7	Downgradient	10/30/2014	1548230.47	1941087.44	574.94	577.73	561.24	551.24	26.89	10
MW-19	Downgradient	9/26/2018	1548422.94	1940943.01	577.46	580.65	561.45	551.45	29.53	10
MW-20	Downgradient	9/27/2018	1549029.68	1942736.85	575.96	579.00	554.96	544.96	34.37	10
MW-24D	Downgradient	11/7/2018	1548638.80	1940900.37	592.91	595.68	532.91	522.91	72.77	10
MW-25D	Downgradient	11/6/2018	1548473.00	1941162.20	577.71	580.59	527.71	517.71	63.21	10
MW-26D	Downgradient	11/14/2018	1548699.91	1942222.36	577.63	580.41	512.63	502.63	78.11	10
MW-27D	Downgradient	11/8/2018	1549103.57	1942390.80	576.84	579.70	526.84	516.84	63.19	10
MW-28D	Downgradient	11/13/2018	1549510.90	1942321.14	576.20	579.08	531.20	521.20	58.21	10
MW-29	Downgradient	11/13/2018	1549437.67	1942633.60	572.14	575.06	557.14	547.14	28.25	10

Notes:
ft = feet
ft BTOC = feet 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 data certified by GEL Solutions May 19, 2020. Survey data for HGWA-43D and HGWA-44D certified by GEL Solutions September 10, 2020.
(2) Total well depth accounts for sump if data provided on well construction logs.

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

Well ID	Hydraulic Location	Installation Date	Northing [1]	Easting [1]	Ground Surface Elevation (ft)	Top of Casing Elevation [1] (ft)	Top of Screen Elevation [1] (ft)	Bottom of Screen Elevation [1] (ft)	Well Depth (ft BTOC) [2]	Screen Interval Length (ft)
AP1A-1	Upgradient	12/15/2015	1550080.01	1941614.12	584.78	587.44	575.84	565.84	21.93	10
MW-1	Upgradient	12/2/2014	1549938.24	1941589.06	585.63	588.66	567.93	557.93	31.06	10
MW-8	Downgradient	10/29/2014	1548171.86	1940016.70	584.25	586.93	565.05	555.05	32.72	10
MW-30D	Downgradient	6/19/2019	1549530.00	1942318.45	576.20	578.59	481.20	471.20	107.72	10
MW-40D	Downgradient	4/29/2020	1549542.29	1942316.55	576.41	578.92	450.41	440.41	138.84	10
MW-53	Downgradient	6/2/2023	1548835.51	1942399.62	577.64	580.59	554.54	544.54	36.45	10
MW-54	Downgradient	6/2/2023	1548699.51	1940805.03	592.98	592.66	564.98	554.98	38.30	10
PT-07	Downgradient	6/3/2023	1548675.24	1940933.39	592.00	591.75	554.40	544.40	47.99	10
PT-08	Downgradient	6/3/2023	1548666.82	1940929.58	592.10	591.83	560.20	550.20	42.32	10
PT-09	Downgradient	6/1/2023	1549049.74	1942393.11	577.33	580.35	560.18	550.18	30.47	10
PT-10	Downgradient	6/1/2023	1549040.34	1942413.88	577.39	580.44	560.29	550.29	30.45	10

Notes:
ft = feet
ft BTOC = feet 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 data certified by GEL Solutions May 19, 2020. Survey data for MW-53, MW-54, PT-07 through PT-10 certified by GEL Solutions July 17, 2023, and August 30, 2023.
(2) Total well depth accounts for sump if data provided on well construction logs.

Table 2
Groundwater Sampling Event Summary
Plant Hammond AP-1, Floyd County, Georgia

Well ID	Hydraulic Location	January 23 - February 1, 2023	August 8-13, 2023	October 31, 2023	Status of Monitoring Well
Purpose of Sampling Event:		**Assessment**	**Assessment**	**Confirmation sampling**	
Detection Monitoring Well					
HGWA-1	Upgradient	X	X	--	Assessment
HGWA-2	Upgradient	X	X	--	Assessment
HGWA-3	Upgradient	X	X	--	Assessment
HGWA-43D	Upgradient	X	X	--	Assessment
HGWA-44D	Upgradient	X	X	--	Assessment
HGWC-7	Downgradient	X	X	--	Assessment
HGWC-8	Downgradient	X	X	--	Assessment
HGWC-9	Downgradient	X	X	--	Assessment
HGWC-10	Downgradient	X	X	--	Assessment
HGWC-11	Downgradient	X	X	--	Assessment
HGWC-12	Downgradient	X	X	--	Assessment
HGWC-13	Downgradient	X	X	--	Assessment
Assessment Monitoring Well					
MW-5	Downgradient	X	X	--	Assessment
MW-6	Downgradient	X	X	--	Assessment
MW-7	Downgradient	X	X	--	Assessment
MW-19	Downgradient	X	X	--	Assessment
MW-20	Downgradient	X	X	--	Assessment
MW-24D	Downgradient	X	X	--	Assessment
MW-25D	Downgradient	X	X	--	Assessment
MW-26D	Downgradient	X	X	--	Assessment
MW-27D	Downgradient	X	X	--	Assessment
MW-28D	Downgradient	X	X	X	Assessment
MW-29	Downgradient	X	X	--	Assessment

Table 3
Summary of Groundwater and Surface Water Elevations
Plant Hammond AP-1, Floyd County, Georgia

Well ID	Top of Casing Elevation [(1)] (ft)	January 23, 2023		August 7, 2023	
		Depth to Water (ft BTOC)	Groundwater Elevation [(1)] (ft)	Depth to Water (ft BTOC)	Groundwater Elevation [(1)] (ft)
Detection Monitoring Well					
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-43D	595.08	10.23	584.85	21.90	573.18
HGWA-44D	594.79	10.96	583.83	21.54	573.25
HGWC-7	579.18	6.33	572.85	13.56	565.62
HGWC-8	579.82	7.90	571.92	14.43	565.39
HGWC-9	580.36	14.85	565.51	16.11	564.25
HGWC-10	579.37	13.16	566.21	14.90	564.47
HGWC-11	580.67	16.43	564.24	16.50	564.17
HGWC-12	580.73	16.50	564.23	16.54	564.19
HGWC-13	595.76	24.68	571.08	27.65	568.11
Assessment Monitoring Well					
MW-5	581.14	16.67	564.47	17.35	563.79
MW-6	581.84	17.11	564.73	17.60	564.24
MW-7	577.73	14.40	563.33	13.80	563.93
MW-19	580.65	13.68	566.97	15.24	565.41
MW-20	579.00	12.95	566.05	15.22	563.78
MW-24D	595.68	29.15	566.53	30.20	565.48
MW-25D	580.59	16.37	564.22	16.40	564.19
MW-26D	580.41	14.95	565.46	16.05	564.36
MW-27D	579.70	8.07	571.63	14.28	565.42
MW-28D	579.08	8.25	570.83	13.41	565.67
MW-29	575.06	4.36	570.70	17.28	557.78
Piezometer					
AP1A-1	587.44	5.94	581.50	13.73	573.71
MW-1	588.66	7.22	581.44	15.22	573.44
MW-8	586.93	19.14	567.79	20.80	566.13
MW-30D	578.59	5.90	572.69	10.40	568.19
MW-40D	578.92	115.42	463.50	110.20	468.72
MW-53	580.59	--	--	16.05	564.54
MW-54	592.66	--	--	24.10	568.56
PT-07	591.75	--	--	26.10	565.65
PT-08	591.83	--	--	23.52	568.31
PT-09	580.35	--	--	15.00	565.35
PT-10	580.44	--	--	15.10	565.34
Surface Water Level Gauge Point					
Coosa River	--	--	560.40	--	564.10

Notes:

-- = not applicable

ft = feet

ft BTOC = feet below top of casing

(1) Elevations referenced to the North American Vertical Datum of 1988 (NAVD88). Survey data certified by GEL Solutions May 19, 2020. Survey data for HGWA-43D and HGWA-44D certified by GEL Solutions September 10, 2020. Survey data for MW-53, MW-54, PT-07 through PT-10 certified by GEL Solutions July 17, 2023, and August 30, 2023.

Table 4
Horizontal Groundwater Gradient and Flow Velocity Calculations
Plant Hammond AP-1, Floyd County, Georgia

Flow Path Direction [1]	January 23, 2023				August 7, 2023				Average i (ft/ft)
	h_1 (ft)	h_2 (ft)	L (ft)	i (ft/ft)	h_1 (ft)	h_2 (ft)	L (ft)	i (ft/ft)	
Southerly Flow Path (HGWC-13 to MW-7)	571.08	563.33	450	0.017	568.11	563.93	433	0.010	0.013
Easterly Flow Path (HGWC-8 to MW-20)	571.92	566.05	350	0.017	565.39	563.78	363	0.004	0.011

Flow Path Direction [1]	K_h (ft/day)	n_e	Averaged for 2023		
			i (ft/ft)	V (ft/day)[2]	V (ft/day)[3]
Southerly Flow Path (HGWC-13 to MW-7)	11.82	0.15	0.013	1.1	0.9
Easterly Flow Path (HGWC-8 to MW-20)	11.82	0.15	0.011	0.8	

Notes:
ft = feet
ft/day = feet per day
ft/ft = feet per foot
h_1 and h_2 = groundwater elevation at location 1 and 2
$i = h_1-h_2/L$ = horizontal hydraulic gradient
K_h = horizontal hydraulic conductivity
L = distance between location 1 and 2 along the flow path
n_e = effective porosity
V = groundwater flow velocity
(1) Flow path direction relative to the orientation of AP-1 and illustrated on Figures 3 and 4 of associated report.
(2) Groundwater flow velocity equation: $V = [K_h * i] / n_e$
(3) Average groundwater flow velocity for unit.

Table 5
Summary of Assessment Monitoring Groundwater Analytical Data
Plant Hammond AP-1, Floyd County, Georgia

	Well ID:	HGWA-1	HGWA-1	HGWA-2	HGWA-2	HGWA-3	HGWA-3	HGWA-43D	HGWA-43D	HGWA-44D	HGWA-44D	HGWC-7	HGWC-7	HGWC-8	HGWC-8	HGWC-9	HGWC-9
	Sample Date:	1/24/2023	8/8/2023	1/24/2023	8/8/2023	1/23/2023	8/8/2023	1/24/2023	8/8/2023	1/24/2023	8/8/2023	1/27/2023	8/12/2023	2/1/2023	8/12/2023	1/26/2023	8/11/2023
	Parameter [1,2,3]																
APPENDIX III	Boron	0.015 J	0.023 J	0.046	0.060	0.012 J	0.011 J	0.037 J	0.038 J	0.44	0.55	0.93	0.82	1.9	1.7	1.9	2.1
	Calcium	117	118	29.4	30.7	85.0	78.3	56.6	52.8	13.2	8.1	124	101	110	122	173	168
	Chloride	9.0	26.0	7.1	6.6	5.6	5.3	4.3	3.5	24.9	27.0	40.0	33.3	52.4	53.1	86.9	78.9
	Fluoride	0.089 J	0.088 J	0.053 J	0.070 J	0.061 J	0.055 J	0.23	0.18	1.3	1.3	0.10	0.071 J	0.40	0.59	0.11	0.12
	pH	6.76	7.05	5.23	5.01	7.32	7.42	7.56	7.39	8.22	8.20	7.25	7.36	6.60	6.84	7.07	7.09
	Sulfate	48.3	67.7	79.7	89.9	39.5	35.0	34.7	25.6	10.1	1.3	119	84.2	179	170	217	197
	TDS	369	457	164	189	293	285	271	274	363	361	473	378	528	564	745	757
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	0.00092 J	<0.0012
	Arsenic	<0.0022	<0.0037	<0.0022	<0.0037	<0.0022	<0.0037	<0.0022	<0.0037	0.0027 J	<0.0037	<0.0022	<0.0037	<0.0022	<0.0037	<0.0022	<0.0037
	Barium	0.033	0.039	0.088	0.068	0.13	0.12	0.28	0.30	0.18	0.12	0.065	0.060	0.058	0.052	0.069	0.068
	Beryllium	<0.000054	<0.000054	0.00016 J	0.00022 J	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	0.000056 J	<0.000054	<0.000054	<0.000054
	Cadmium	<0.00011	<0.00011	0.00021 J	0.00026 J	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	0.00019 J	<0.00011	0.00014 J	0.00044 J	<0.00011	<0.00011
	Chromium	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	0.0014 J	<0.0011	<0.0055	<0.0011	0.0013 J	<0.0011
	Cobalt	<0.00039	0.00080 J	0.024	0.029	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039	0.00067 J	0.00061 J	<0.002	0.0016 J	0.00068 J	0.00057 J
	Fluoride	0.089 J	0.088 J	0.053 J	0.070 J	0.061 J	0.055 J	0.23	0.18	1.3	1.3	0.10	0.071 J	0.40	0.59	0.11	0.12
	Lead	<0.00089	<0.00012	<0.00089	<0.00012	<0.00089	<0.00012	<0.00089	<0.00012	<0.00089	<0.00012	<0.00089	<0.00012	<0.00089	<0.00012	<0.00089	<0.00012
	Lithium	0.00092 J	<0.00073	0.0014 J	0.0017 J	0.003 J	0.0031 J	0.002 J	0.0021 J	0.064	0.092	0.0018 J	0.0023 J	0.0015 J	0.0014 J	0.0032 J	0.0035 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
	Molybdenum	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	0.0027 J	0.0019 J	0.0026 J	0.0013 J	0.039	0.033	0.29	0.34	0.021	0.030
	Comb. Radium 226/228	0.549 U	0.195 U	0.829 U	0.175 U	0.311 U	0.411 U	1.25	0.503 U	0.421 U	0.163 U	0.45 U	0.729 U	0.241 U	0.767 U	0.516 U	0.867 U
	Selenium	<0.0014	<0.0014	<0.0014	0.0019 J	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014
	Thallium	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018
GEOCHEM	Bicarbonate Alkalinity	--	331	--	20.2	--	212	--	251	--	279	--	210	--	145	--	204
	Iron	--	0.35	--	0.29	--	0.87	--	0.29	--	0.065	--	0.073	--	0.058	--	0.052
	Magnesium	--	4.7	--	4.3	--	5.2	--	17.7	--	3.9	--	9.6	--	17.3	--	17.5
	Manganese	--	0.29	--	0.90	--	0.24	--	0.017 J	--	<0.011	--	0.20	--	0.30	--	0.57
	Potassium	--	0.79	--	1.1	--	0.45 J	--	0.86	--	2.6	--	2.1	--	7.6	--	3.4
	Sodium	--	37.0	--	10.9	--	5.6	--	22.2	--	135	--	12.7	--	9.7	--	12.3
	Sulfide	--	0.043 J	--	<0.022	--	<0.022	--	<0.022	--	0.14	--	<0.022	--	<0.022	--	<0.022

Notes:
-- = Parameter was not analyzed.
< = Indicates the parameter was not detected above the analytical method detection limit (MDL).
J = Indicates the parameter was estimated a detected between the MDL a the reporting limit (RL).
TDS = Total dissolved solids
U = Indicates the parameter was not detected above the analytical minimum detectable concentration (MDC) (Specific to combined radium 226/228).
(1) Appendix III/IV parameter per 40 CFR 257 Subpart D. Parameters are reported in units of milligrams per liter (mg/L), except for pH reported as s.u. (standard units) and combined radium reported as picocuries per liter (pCi/L).
(2) Metals were analyzed by EPA Methods 6010D, 6020B and 7470A, anions were analyzed by EPA Method 300.0 Rev 2.1, ions were analyzed by EPA Method 6010D, alkalinity was analyzed by SM2320B, sulfide was analyzed by SM4500-S2D, TDS was analyzed by SM2540C, and combined radium by EPA Methods 9315/9320.
(3) The pH value presented was recorded at the time of sample collection in the field.
(4) MW-28D was resampled on October 31, 2023 to confirm elevated Barium concentrations observed durring the August 2023 sampling event.

Table 5
Summary of Assessment Monitoring Groundwater Analytical Data
Plant Hammond AP-1, Floyd County, Georgia

	Well ID:	HGWC-10	HGWC-10	HGWC-11	HGWC-11	HGWC-12	HGWC-12	HGWC-13	HGWC-13	MW-5	MW-5	MW-6	MW-6	MW-7	MW-7	MW-19	MW-19
	Sample Date:	1/27/2023	8/10/2023	1/26/2023	8/10/2023	1/26/2023	8/10/2023	1/26/2023	8/12/2023	1/26/2023	8/10/2023	1/26/2023	8/10/2023	1/26/2023	8/10/2023	1/26/2023	8/10/2023
	Parameter [1,2,3]																
APPENDIX III	Boron	0.065	0.65	0.50	0.44	1.5	1.4	0.83	1.0	0.044	0.037 J	0.71	0.65	0.033 J	0.13	0.36	0.53
	Calcium	60.4	155	113	100	154	156	234	172	76.1	99.7	180	179	21.6	81.2	118	127
	Chloride	1.6	13.4	8.8	6.5	34.6	30.6	12.5	15.3	0.86 J	0.86 J	30.5	26.9	1.2	3.3	7.7	11.2
	Fluoride	0.16	0.050 J	0.20	0.15	0.21	0.17	0.40	0.32	0.087 J	0.066 J	0.088 J	0.053 J	0.06 J	<0.050	0.098 J	0.14
	pH	6.89	6.81	6.24	5.90	7.10	7.08	6.90	6.89	6.07	6.29	6.90	6.85	6.23	6.85	6.13	6.37
	Sulfate	37.3	128	209	190	228	209	495	347	137	137	203	174	26.0	67.3	214	210
	TDS	188	504	429	438	624	683	962	803	363	423	646	626	89.0	305	490	524
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	<0.00078	<0.0012
	Arsenic	<0.0022	<0.0037	<0.0022	<0.0037	0.0025 J	<0.0037	0.53	0.54	<0.0022	<0.0037	<0.0022	<0.0037	<0.0022	<0.0037	<0.0022	<0.0037
	Barium	0.041	0.045	0.031	0.027	0.076	0.075	0.079	0.057	0.05	0.048	0.079	0.066	0.044	0.059	0.039	0.032
	Beryllium	<0.000054	<0.000054	<0.000054	0.000069 J	<0.000054	<0.000054	0.000099 J	0.00010 J	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054
	Cadmium	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	0.00018 J
	Chromium	0.0012 J	<0.0011	0.0012 J	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	0.0032 J	0.0020 J	0.0014 J	<0.0011	0.0017 J	0.0015 J	0.0011 J	<0.0011
	Cobalt	<0.00039	<0.00039	<0.00039	<0.00039	0.0012 J	0.0012 J	0.012	0.018	<0.00039	<0.00039	0.00044 J	0.00041 J	<0.00039	<0.00039	0.022	0.027
	Fluoride	0.16	0.050 J	0.20	0.15	0.21	0.17	0.40	0.32	0.087 J	0.066 J	0.088 J	0.053 J	0.06 J	<0.050	0.098 J	0.14
	Lead	<0.00089	<0.00012	<0.00089	<0.00012	<0.00089	<0.00012	<0.00089	<0.00012	<0.00089	<0.00012	<0.00089	<0.00012	<0.00089	<0.00012	<0.00089	<0.00012
	Lithium	<0.00073	<0.00073	<0.00073	<0.00073	0.0058 J	0.0075 J	0.04	0.051	<0.00073	<0.00073	<0.00073	<0.00073	<0.00073	<0.00073	0.0038 J	0.011 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
	Molybdenum	<0.00074	0.0014 J	0.022	0.014	0.048	0.050	0.023	0.016	<0.00074	<0.00074	0.0029 J	0.0026 J	<0.00074	0.0022 J	0.012	0.033
	Comb. Radium 226/228	1.2	0.831 U	0.441 U	0.273 U	0.877	0.453 U	0.719	0.58 U	0.909	0.599 U	0.493 U	0.839 U	0.318 U	0.239 U	0.333 U	0.437 U
	Selenium	0.0035 J	<0.0014	0.01	0.0089	<0.0014	<0.0014	<0.0014	<0.0014	0.0045 J	0.0020 J	<0.0014	<0.0014	<0.0014	<0.0014	0.0056	0.0038 J
	Thallium	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	0.00031 J	0.00028 J	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018
GEOCHEM	Bicarbonate Alkalinity	--	270	--	80.0	--	199	--	145	--	179	--	298	--	175	--	133
	Iron	--	<0.025	--	<0.025	--	0.028 J	--	6.9	--	<0.025	--	0.23	--	<0.025	--	<0.025
	Magnesium	--	10.8	--	11.8	--	14.7	--	19.2	--	10.9	--	13.4	--	6.9	--	12.5
	Manganese	--	0.33	--	<0.011	--	1.5	--	9.0	--	<0.011	--	0.43	--	<0.011	--	3.2
	Potassium	--	2.2	--	2.6	--	7.4	--	5.9	--	1.0	--	1.3	--	0.74	--	3.1
	Sodium	--	9.4	--	5.9	--	8.3	--	6.9	--	19.5	--	13.0	--	7.1	--	5.5
	Sulfide	--	<0.022	--	<0.022	--	<0.022	--	<0.022	--	<0.022	--	<0.022	--	<0.022	--	<0.022

Table 5
Summary of Assessment Monitoring Groundwater Analytical Data
Plant Hammond AP-1, Floyd County, Georgia

	Well ID:	MW-20	MW-20	MW-24D	MW-24D	MW-25D	MW-25D	MW-26D	MW-26D	MW-27D	MW-27D	MW-28D	MW-28D	MW-28D[4]	MW-29	MW-29
	Sample Date:	1/26/2023	8/10/2023	1/26/2023	8/12/2023	1/26/2023	8/10/2023	1/26/2023	8/11/2023	1/27/2023	8/12/2023	1/26/2023	8/11/2023	10/31/2023	1/26/2023	8/10/2023
	Parameter [1,2,3]															
APPENDIX III	Boron	0.099	0.10	0.47	0.55	0.30	0.31	1.8	1.6	0.12	0.13	0.29	0.12	--	1.0	1.1
	Calcium	122	123	107	105	21.8	86.1	179	152	28.1	27.8	64.4	49.6	--	146	147
	Chloride	30.0	28.4	38.0	35.1	17.2	13.6	83.6	87.6	32.5	29.0	27.7	17.0	--	62.4	56.1
	Fluoride	0.081 J	<0.050	0.083 J	0.080 J	1.6	1.5	0.11	0.083 J	0.30	0.26	0.22	0.26	--	0.068 J	<0.050
	pH	6.95	6.86	7.61	7.61	7.74	7.73	7.14	7.20	7.80	7.80	7.67	7.50	7.57	7.23	7.06
	Sulfate	109	100	152	146	0.59 J	0.62 J	240	159	9.1	7.6	40.8	15.4	--	161	134
	TDS	482	429	412	449	346	325	741	706	255	238	349	296	--	632	564
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
	Arsenic	<0.0022	<0.0037	<0.0022	<0.0037	<0.0022	<0.0037	<0.0022	<0.0037	<0.0022	<0.0037	<0.0022	<0.0037	--	<0.0022	<0.0037
	Barium	0.097	0.093	0.054	0.053	0.65	0.71	0.065	0.059	0.94	0.98	0.80	2.2	2.5	0.076	0.066
	Beryllium	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	--	<0.000054	<0.000054
	Cadmium	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	--	<0.00011	<0.00011
	Chromium	<0.0011	<0.0011	<0.0011	<0.0011	0.0012 J	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	--	<0.0011	<0.0011
	Cobalt	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039	0.00051 J	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039	--	0.00056 J	<0.00039
	Fluoride	0.081 J	<0.050	0.083 J	0.080 J	1.6	1.5	0.11	0.083 J	0.30	0.26	0.22	0.26	--	0.068 J	<0.050
	Lead	<0.00089	<0.00012	<0.00089	<0.00012	<0.00089	<0.00012	<0.00089	<0.00012	<0.00089	<0.00012	<0.00089	<0.00012	--	<0.00089	<0.00012
	Lithium	<0.00073	<0.00073	0.0025 J	0.0030 J	0.036	0.038	0.0031 J	0.0029 J	0.0072 J	0.0072 J	0.011 J	0.016 J	--	0.0019 J	0.0019 J
	Mercury	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	0.00013 J	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	--	<0.00013	0.00017 J
	Molybdenum	<0.00074	<0.00074	0.0012 J	0.0019 J	<0.00074	<0.00074	0.028	0.014	0.0014 J	0.0019 J	0.0025 J	0.0011 J	--	0.0029 J	0.0030 J
	Comb. Radium 226/228	0.561 U	0.469 U	0.0906 U	0.481 U	1.1	0.972	0.386 U	0.55 U	1.1	0.645 U	0.821	2.66	--	0.793 U	0.244 U
	Selenium	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	--	<0.0014	<0.0014
	Thallium	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	--	<0.00018	<0.00018
GEOCHEM	Bicarbonate Alkalinity	--	249	--	105	--	304	--	177	--	181	--	269	--	--	208
	Iron	--	2.7	--	0.19	--	1.9	--	0.11	--	0.29	--	0.034 J	--	--	0.049
	Magnesium	--	8.8	--	6.3	--	8.8	--	15.5	--	18.1	--	26.7	--	--	11.9
	Manganese	--	0.13	--	0.062	--	0.016 J	--	0.13	--	0.11	--	<0.011	--	--	0.86
	Potassium	--	0.26 J	--	0.68	--	0.47 J	--	1.9	--	0.88	--	1.4	--	--	1.2
	Sodium	--	12.2	--	12.5	--	111	--	12.9	--	31.5	--	24.3	--	--	12.7
	Sulfide	--	0.024 J	--	<0.022	--	0.16	--	<0.022	--	<0.022	--	3.5	--	--	<0.022

Table 6
Summary of Background Concentrations and Groundwater Protection Standards
Plant Hammond AP-1, Floyd County, Georgia

Analyte	Units	MCL	CCR-Rule Specified (1)	Background Limit (2)	GWPS (3,4)
Antimony	mg/L	0.006	N/A	0.003	0.006
Arsenic	mg/L	0.01	N/A	0.005	0.01
Barium	mg/L	2	N/A	0.46	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	0.0079	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	5

Notes:
CCR = Coal Combustion Residuals
GWPS = Groundwater Protection Standard
MCL = Maximum Contaminant Level
mg/L = milligrams per liter
N/A = Not Applicable
pCi/L = picocuries per liter
(1) On February 22, 2022, the Georgia Environmental Protection Division (GA EPD) adopted the federally promulgated GWPS for cobalt, lithium, lead, and molybdenum.
(2) The background limits were used when determining the GWPS under 40 CFR 257.95(h) and GA EPD Rule 391-3-4-.10(6)(a).
(3) Under 40 CFR 257.95(h)(1-3) the GWPS is: (i) the maximum contaminant level (MCL) established under §§141.62 and 141.66 of this title; (ii) where an MCL has not been established a rule-specific GWPS; or (iii) background levels for constituents where the background level is higher than the MCL or rule-specified GWPS.
(4) The GWPS apply to the January and August 2023 sampling events.

Table 7
Summary of Pilot Study Groundwater Analytical Data
Plant Hammond AP-1, Floyd County, Georgia

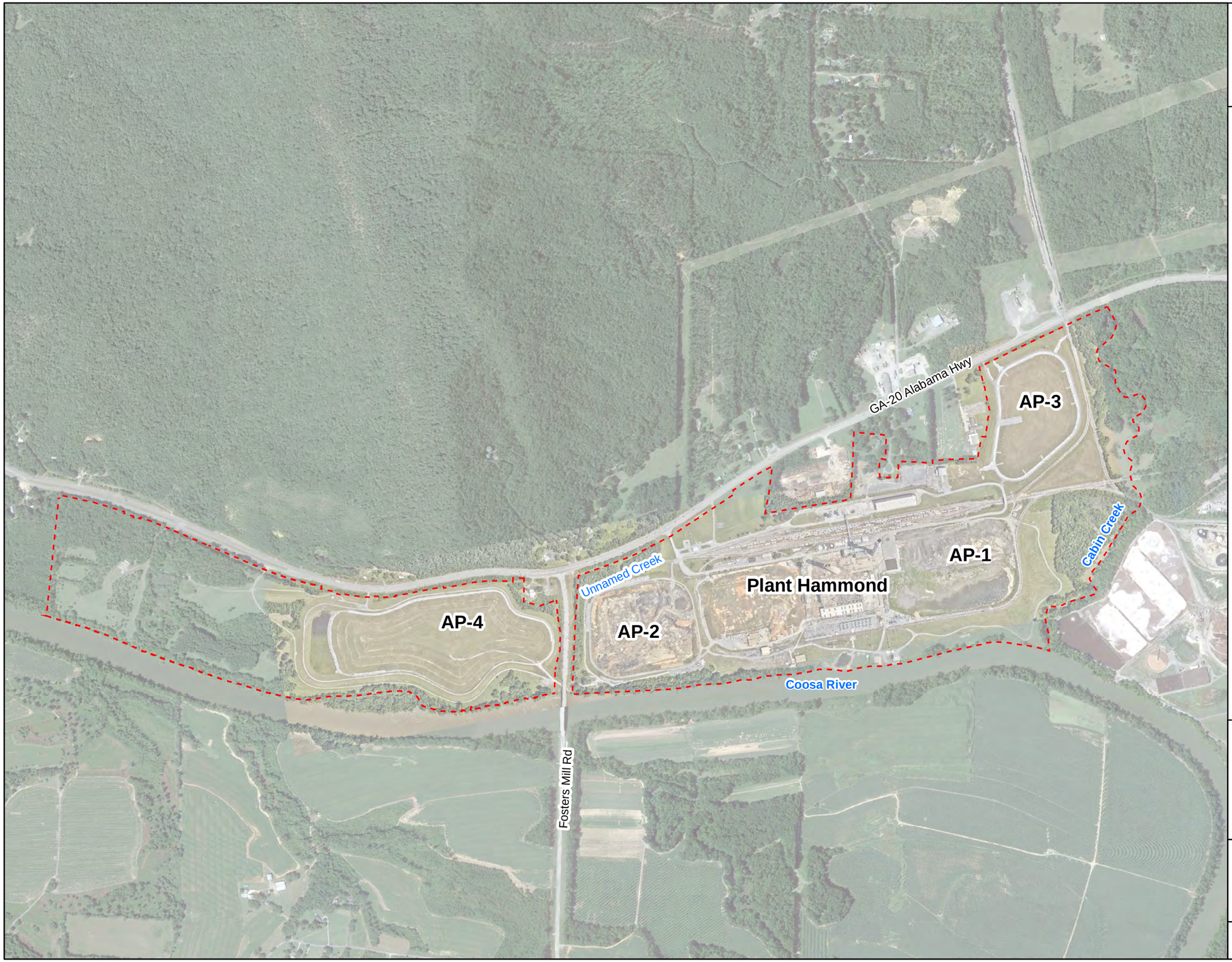
	Pilot Study Area:	South Area															
	Well ID:	PT-07	PT-07	PT-07	PT-07	PT-07	PT-07	PT-07	PT-07	PT-08	PT-08	PT-08	PT-08	PT-08	PT-08	PT-08	MW-53
	Sample Date:	7/13/2023	8/9/2023	10/15/2023	10/17/2023	10/24/2023	10/31/2023	11/7/2023	11/21/2023	7/13/2023	8/9/2023	10/15/2023	10/17/2023	10/24/2023	10/31/2023	11/7/2023	11/21/2023	8/9/2023
	Parameter [1,2,3]																	
APPENDIX III	Boron	1.0	0.93	--	1.1	--	--	1.1	--	1.0	0.99	--	0.51	--	--	1.0	--	1.5
	Calcium	168	173	--	151	--	--	--	--	161	146	--	88	--	--	--	--	--
	Chloride	15.7	13.5	--	15.3	--	--	--	--	17.0	14.5	--	10.8	--	--	--	--	--
	Fluoride	0.36	0.28	--	0.35	--	--	--	--	0.36	0.27	--	0.30	--	--	--	--	--
	pH	6.76	6.82	--	6.89	6.83	6.75	6.89	6.89	6.66	6.82	--	6.79	6.75	6.54	6.73	6.83	--
	Sulfate	411	339	243	306	--	--	287	--	417	290	147	146	--	--	273	--	--
	TDS	808	771	--	677	--	--	--	--	734	682	--	378	--	--	--	--	--
APPENDIX IV	Antimony	<0.0012	<0.0012	--	<0.0012	--	--	--	--	<0.0012	<0.0012	--	0.00062 J	--	--	--	--	--
	Arsenic	0.34	0.27	0.30	0.23	--	--	0.33	--	0.33	0.32	0.30	0.19	--	--	0.24	--	--
	Barium	0.056	0.053	--	0.092	--	--	--	--	0.051	0.050	--	0.039	--	--	--	--	--
	Beryllium	0.00012 J	0.000095 J	--	0.00014 J	--	--	--	--	0.00011 J	0.000073 J	--	<0.000094	--	--	--	--	--
	Cadmium	<0.00011	<0.00011	--	<0.00011	--	--	--	--	<0.00011	<0.00011	--	<0.00010	--	--	--	--	--
	Chromium	<0.0011	<0.0011	--	<0.0011	--	--	--	--	<0.0011	<0.0011	--	<0.0019	--	--	--	--	--
	Cobalt	0.13	0.090	--	0.068	--	--	--	--	0.031	0.032	--	0.018	--	--	--	--	--
	Fluoride	0.36	0.28	--	0.35	--	--	--	--	0.36	0.27	--	0.30	--	--	--	--	--
	Lead	<0.00012	<0.00012	--	0.00029 J	--	--	--	--	0.00019 J	<0.00012	--	<0.00016	--	--	--	--	--
	Lithium	0.060	0.069	--	0.062	--	--	--	--	0.065	0.073	--	0.022 J	--	--	--	--	--
	Mercury	<0.00013	<0.00013	--	<0.00013	--	--	--	--	<0.00013	<0.00013	--	<0.00013	--	--	--	--	--
	Molybdenum	0.017	0.012	--	0.011	--	--	--	--	0.0079 J	0.0071 J	--	0.020	--	--	--	--	0.14
	Selenium	<0.0014	<0.0014	--	<0.0014	--	--	--	--	<0.0014	<0.0014	--	<0.00096	--	--	--	--	--
	Thallium	0.00024 J	0.00022 J	--	0.00026 J	--	--	--	--	<0.00018	<0.00018	--	<0.00038	--	--	--	--	--
GEOCHEM	Alkalinity (Bicarbonate) as $CaCO_3$	102	116	--	120	--	--	--	--	107	118	--	106	--	--	--	--	--
	Alkalinity (Carbonate) as $CaCO_3$	<5.0	<5.0	--	<5.0	--	--	--	--	<5.0	<5.0	--	<5.0	--	--	--	--	--
	Alkalinity (Total) as $CaCO_3$	102	116	--	120	--	--	--	--	107	118	--	106	--	--	--	--	--
	Iron	23.8	27.1	33.5	18.1	--	--	4.0		24.2	22.0	60.1	--	--	--	5.7	--	--
	Magnesium	18.5	19.4	--	17.9	--	--	--	--	18.9	17.3	--	--	--	--	--	--	--
	Manganese	8.2	7.6	--	5.9	--	--	--	--	8.7	6.8	--	--	--	--	--	--	--
	Potassium	6.0	6.8	--	5.5	--	--	--	--	6.0	6.3	--	--	--	--	--	--	--
	Sodium	6.1	7.2	--	6.8	--	--	--	--	6.9	6.8	--	4.8	--	--	--	--	--
	Sulfide	<0.022	<0.022	--	<0.022	--	--	--	--	0.036 J	<0.022	--	<0.022	--	--	--	--	--
FIELD	Dissolved Oxygen	0.30	0.40	--	0.27	0.27	0.70	0.30	2.36	0.09	0.94	--	0.17	0.23	1.31	0.99	1.33	0.24
	Oxidation-Reduction Potential (mV)	-111	-90.9	--	-104.4	-103.8	-84.0	-111.5	-78.2	-124.9	-84.4	--	-62.5	-75.7	-46.3	-44.5	-50.5	57.3
	Temperature (°C)	27.26	21.19	--	20.71	19.83	19.32	20.67	19.18	24.53	20.60	--	19.28	20.57	19.22	20.78	18.99	19.60
	Specific Conductance (µS/cm)	1064.5	1012.4	--	835.69	857.51	793.71	974.44	745.93	1007.1	909.15	--	504.85	736.95	747.41	914.11	749.39	848.27
	pH (s.u.)	6.76	6.82	--	6.89	6.83	6.75	6.89	6.89	6.66	6.82	--	6.79	6.75	6.54	6.73	6.83	6.63
	Turbidity (NTU)	4.91	0.18	--	3.22	2.78	4.39	4.27	4.17	4.41	3.98	--	4.97	4.87	4.57	4.81	4.12	0.00

Notes:
-- = Parameter was not analyzed.
< = 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 charictarization samples were collected on July 13 and August 9, 2023. Subsequent samples were collected after injections began at AP-1 on September 25, 2023.

Table 7
Summary of Pilot Study Groundwater Analytical Data
Plant Hammond AP-1, Floyd County, Georgia

	Pilot Study Area:	East Area																		
	Well ID:	PT-09	PT-09	PT-09	PT-09	PT-09	PT-09	PT-09	PT-09	PT-09	PT-10	PT-10	PT-10	PT-10	PT-10	PT-10	PT-10	PT-10	PT-10	MW-54
	Sample Date:	7/13/2023	8/9/2023	8/30/2023	10/3/2023	10/10/2023	10/17/2023	10/24/2023	10/31/2023	11/14/2023	7/13/2023	8/9/2023	8/30/2023	10/3/2023	10/10/2023	10/17/2023	10/24/2023	10/31/2023	11/14/2023	8/9/2023
	Parameter [1,2,3]																			
APPENDIX III	Boron	2.1	1.6	1.8	--	0.61	0.23	--	--	--	2.2	2.1	2.3	--	1.7	1.3	--	--	--	0.45
	Calcium	110	136	--	--	11	--	--	--	--	127	116	--	--	125	--	--	--	--	--
	Chloride	55.3	47.5	--	--	13.0	--	--	--	--	67.2	62.5	--	--	46.1	--	--	--	--	--
	Fluoride	0.24	0.26	--	--	0.38	--	--	--	--	0.33	0.27	--	--	0.30	--	--	--	--	--
	pH	6.57	6.89	8.94	7.17	9.40	7.80	7.25	7.04	6.98	7.01	7.18	9.22	7.07	9.72	7.11	7.13	7.11	7.16	--
	Sulfate	160	188	--	53.9	71.6	25.2	--	--	--	145	123	--	203	184	122	--	--	--	--
	TDS	534	594	--	--	257	--	--	--	--	557	553	--	--	597	--	--	--	--	--
APPENDIX IV	Antimony	0.0027 J	<0.0012	--	--	0.0017 J	--	--	--	--	<0.0012	<0.0012	--	--	< 0.0012	--	--	--	--	--
	Arsenic	<0.0037	<0.0037	--	--	< 0.0037	--	--	--	--	<0.0037	<0.0037	--	--	< 0.0037	--	--	--	--	0.085
	Barium	0.053	0.057	--	--	0.063	--	--	--	--	0.074	0.070	--	--	0.076	--	--	--	--	--
	Beryllium	0.000077 J	<0.000054	--	--	< 0.000054	--	--	--	--	<0.000054	<0.000054	--	--	< 0.000054	--	--	--	--	--
	Cadmium	<0.00011	<0.00011	--	--	< 0.00011	--	--	--	--	<0.00011	<0.00011	--	--	< 0.00011	--	--	--	--	--
	Chromium	<0.0011	<0.0011	--	--	< 0.0011	--	--	--	--	<0.0011	<0.0011	--	--	< 0.0011	--	--	--	--	--
	Cobalt	0.0045 J	0.0028 J	--	--	0.00063 J	--	--	--	--	0.0026 J	0.0019 J	--	--	0.0022 J	--	--	--	--	--
	Fluoride	0.24	0.26	--	--	0.38	--	--	--	--	0.33	0.27	--	--	0.30	--	--	--	--	--
	Lead	0.00014 J	<0.00012	--	--	< 0.00012	--	--	--	--	<0.00012	<0.00012	--	--	< 0.00012	--	--	--	--	--
	Lithium	0.0013 J	0.0017 J	--	--	0.0012 J	--	--	--	--	0.0014 J	0.0012 J	--	--	< 0.0073	--	--	--	--	--
	Mercury	<0.00013	<0.00013	--	--	< 0.00013	--	--	--	--	<0.00013	<0.00013	--	--	< 0.00013	--	--	--	--	--
	Molybdenum	0.065	0.21	0.23	0.20	0.20	0.27	--	--	--	0.10	0.096	0.96	0.16	0.18	0.21	--	--	--	--
	Selenium	<0.0014	<0.0014	--	--	< 0.0014	--	--	--	--	<0.0014	<0.0014	--	--	< 0.0014	--	--	--	--	--
	Thallium	<0.00018	<0.00018	--	--	< 0.00018	--	--	--	--	<0.00018	<0.00018	--	--	< 0.00018	--	--	--	--	--
GEOCHEM	Alkalinity (Bicarbonate) as $CaCO_3$	144	150	--	--	112	--	--	--	--	185	199	--	--	166	--	--	--	--	--
	Alkalinity (Carbonate) as $CaCO_3$	<5.0	<5.0	--	--	<5.0	--	--	--	--	<5.0	<5.0	--	--	< 5.0	--	--	--	--	--
	Alkalinity (Total) as $CaCO_3$	144	150	--	--	112	--	--	--	--	185	199	--	--	166	--	--	--	--	--
	Iron	0.33	0.10	--	0.35	0.089	0.040	--	-	--	3.1	2.9	--	1.6	1.6	0.84	--	--	--	--
	Magnesium	15.6	18.2	--	--	1.9	--	--	--	--	16.8	16.8	--	--	16.7	--	--	--	--	--
	Manganese	0.79	0.51	--	--	0.030 J	--	--	--	--	3.5	3.1	--	--	1.6	--	--	--	--	--
	Potassium	6.8	7.7	--	--	0.69	--	--	--	--	7.1	6.7	--	--	6.1	--	--	--	--	--
	Sodium	10.6	10.3	--	--	0.69 J	--	--	--	--	10.5	9.4	--	--	8.4	--	--	--	--	--
	Sulfide	<0.022	<0.022	--	--	< 0.022	--	--	--	--	<0.022	0.045 J	--	--	< 0.022	--	--	--	--	--
FIELD	Dissolved Oxygen	0.02	0.58	0.23	3.59	2.79	6.07	1.99	0.31	0.06	0.03	0.12	0.27	0.55	0.39	0.29	0.13	0.15	2.86	0.60
	Oxidation-Reduction Potential (mV)	18.4	14.4	-111.8	51.8	-5.3	32.2	42.7	20.1	-12.9	-161.5	-80.9	-251.4	-24.8	-278.6	-50.3	-80.6	-57.2	-50.9	117.5
	Temperature (°C)	24.48	21.59	21.02	21.06	22.18	21.47	21.31	20.06	19.07	21.95	21.79	20.98	17.56	21.48	20.31	21.19	19.84	20.60	22.86
	Specific Conductance (µS/cm)	779.77	826.86	829.44	317.09	345.12	252.68	367.85	528.08	813.75	842.15	770.46	814.73	884.18	898.80	568.18	548.18	483.92	713.27	488.16
	pH (s.u.)	6.57	6.89	8.94	7.17	9.40	7.80	7.25	7.04	6.98	7.01	7.18	9.22	7.07	9.72	7.11	7.13	7.11	7.16	6.18
	Turbidity (NTU)	4.95	0.56	4.27	9.44	4.93	4.32	4.91	4.77	64.10	4.94	4.55	4.00	--	2.95	4.42	1.43	3.88	4.45	0.36

FIGURES



N

LEGEND

Plant Hammond Property Boundary

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

0 625 1,250 2,500

SCALE IN FEET

SITE LOCATION MAP

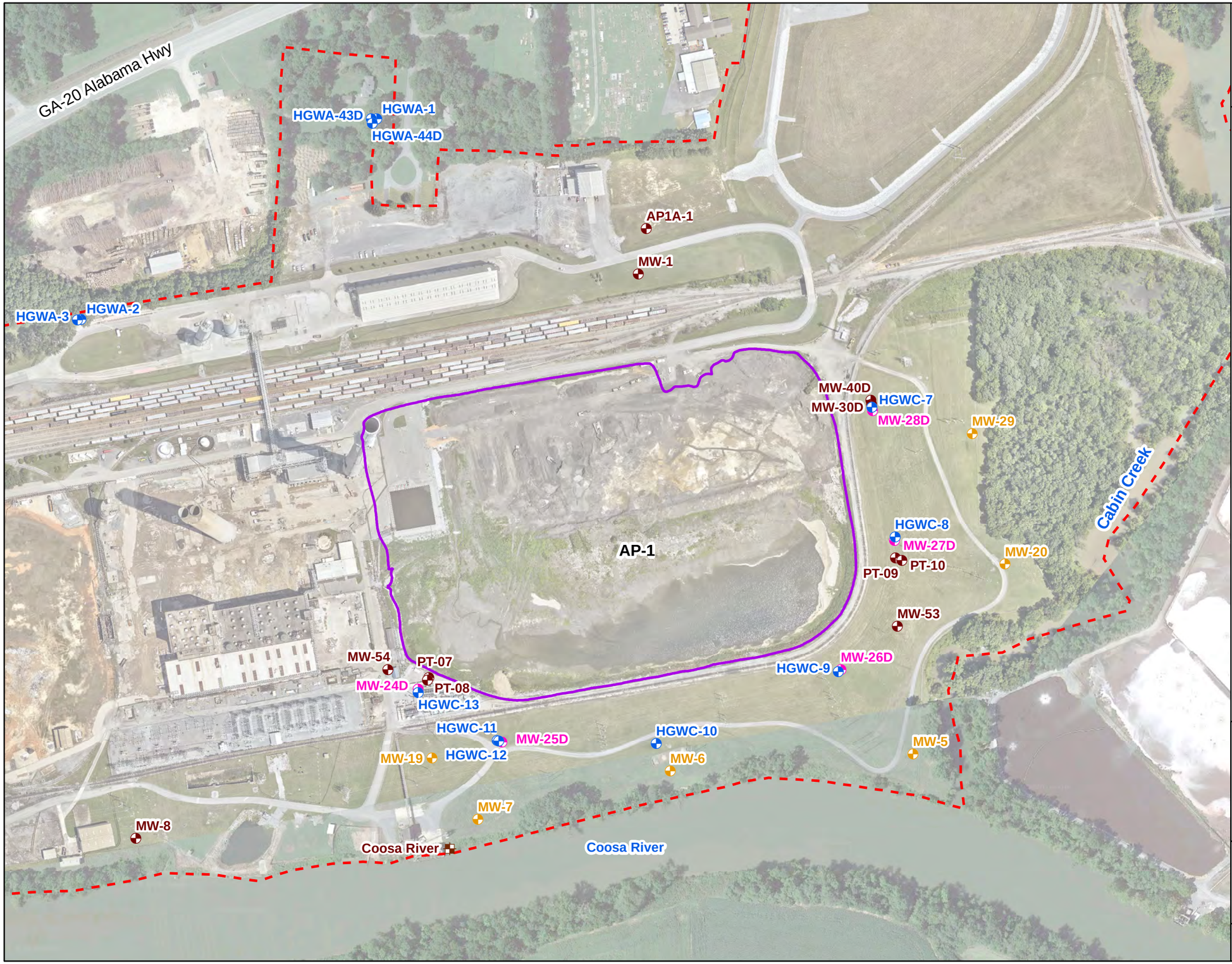
GEORGIA POWER COMPANY
PLANT HAMMOND AP-1
ROME, FLOYD COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA | JANUARY 2024

FIGURE 1



N

LEGEND

- Detection Monitoring Well
- Horizontal Assessment Monitoring Well
- Vertical Assessment Monitoring Well
- Piezometer
- Surface Water Level Gauge Point
- Approximate AP-1 Boundary
- Plant Hammond Property Boundary

Notes:
1. Piezometers PT-07, PT-08, PT-09, PT-10, MW-53 and MW-54 were installed in support of an Assessment of Corrective Measures 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.

0 150 300 600

SCALE IN FEET

MONITORING WELL NETWORK AND SAMPLING LOCATION MAP

GEORGIA POWER COMPANY
PLANT HAMMOND AP-1
ROME, FLOYD COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

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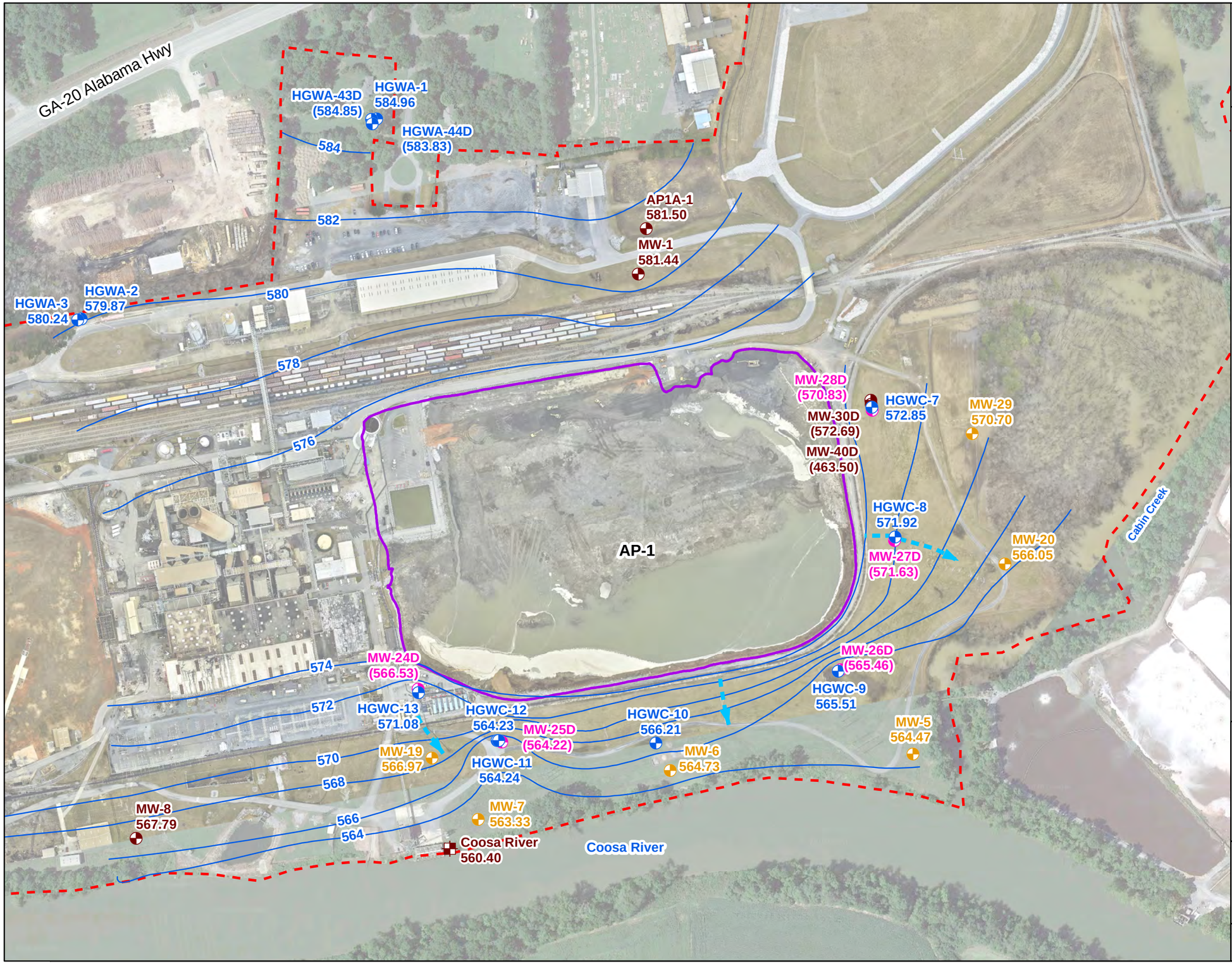
FIGURE 2



N

LEGEND

- Detection Monitoring Well
- Horizontal Assessment Monitoring Well
- Vertical Asessment Monitoring Well
- Piezometer
- Surface Water Level Gauge Point
- Groundwater Elevation Iso-Contour
- Approximate Groundwater Flow Direction
- Approximate AP-1 Boundary
- Plant Hammond Property Boundary

GEORGIA REGISTERED No. PE036640 PROFESSIONAL ENGINEER WHITNEY B. LAW

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

0 150 300 600

SCALE IN FEET

POTENTIOMETRIC SURFACE CONTOUR MAP - JANUARY 2023

GEORGIA POWER COMPANY
PLANT HAMMOND AP-1
ROME, FLOYD COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

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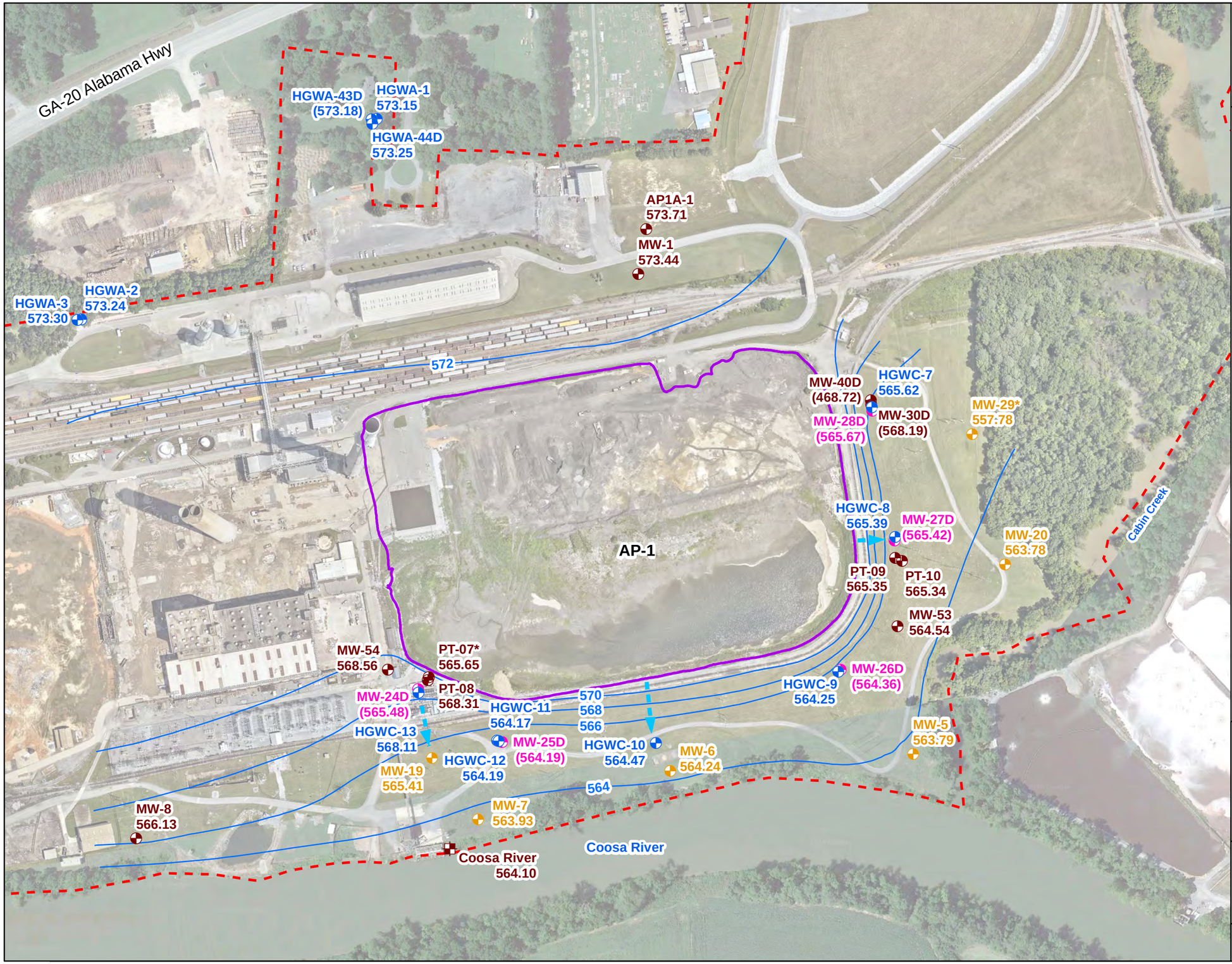
FIGURE 3



N

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-1
- Plant Hammond Property Boundary

GEORGIA REGISTERED No. PE036640 PROFESSIONAL ENGINEER WHITNEY B. LAW

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. MW-29* and PT-07* were not used to make groundwater contours due to anomolous groundwater elevations.
4. Aerial photograph source: Google Earth Pro, August 2019 and Georgia Power Company, July 2023.

0 150 300 600

SCALE IN FEET

POTENTIOMETRIC SURFACE CONTOUR MAP - AUGUST 2023

GEORGIA POWER COMPANY
PLANT HAMMOND AP-1
ROME, FLOYD COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

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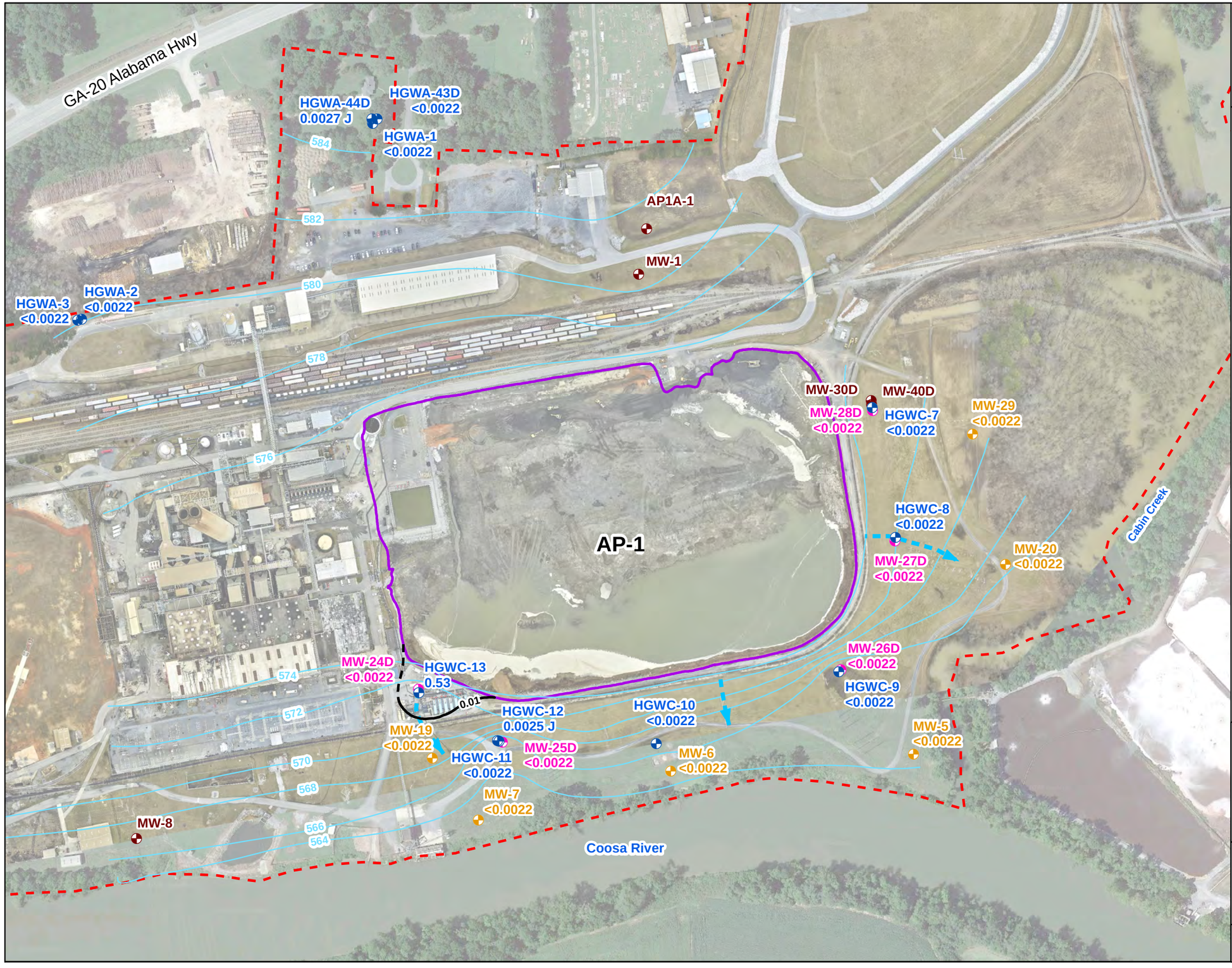
FIGURE 4



N

LEGEND

- Detection Monitoring Well
- Horizontal Assessment Monitoring
- Vertical Assessment Monitoring
- Piezometer
- GWPS Arsenic Iso-Concentration Contour (mg/L) (dashed where inferred)
- Groundwater Elevation Iso-
- Approximate Groundwater Flow
- Approximate AP-1
- Plant Hammond Property

Notes:
1. Concentration data from groundwater samples collected during the January 2023 semiannual monitoring event. Data reported for wells screened deeper in the aquifer were not used to generate the iso-concentration contour (HGWA-43D, HGWA-44D, MW-24D, MW-25D, MW-26D, MW-27D, MW-28D). 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 arsenic is 0.01 mg/L.
4. Aerial photograph source: Google Earth Pro, August 2019, and Georgia Power Company, February 2023.

0 300 600

SCALE IN FEET

ISO-CONCENTRATION MAP
ARSENIC - JANUARY 2023

GEORGIA POWER COMPANY
PLANT HAMMOND AP-1
ROME, FLOYD COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

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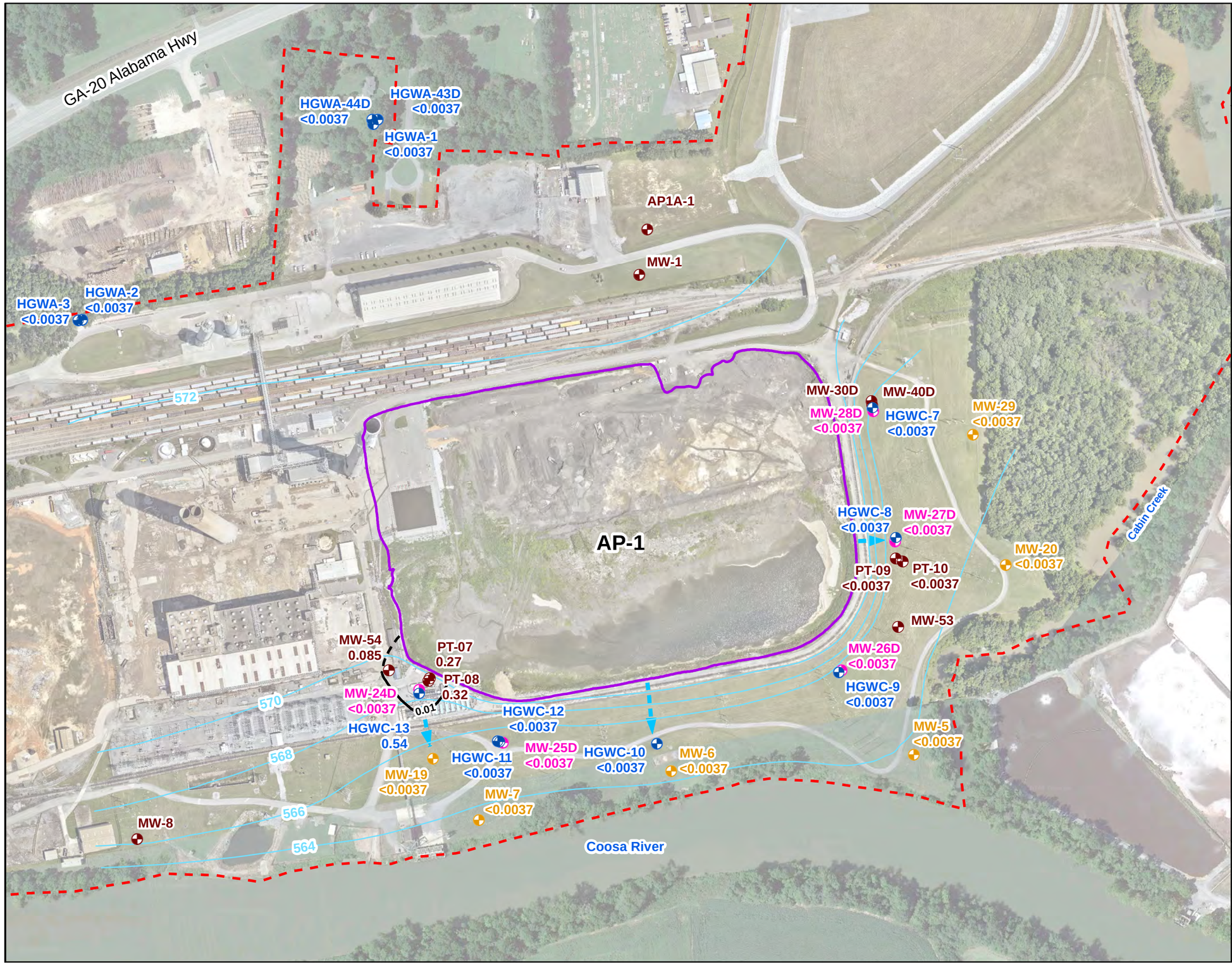
FIGURE 5



N

LEGEND

- Detection Monitoring Well
- Horizontal Assessment Monitoring Well
- Vertical Assessment Monitoring Well
- Piezometer
- GWPS Arsenic Iso-Concentration Contour (mg/L) (dashed where inferred)
- Groundwater Elevation Iso-Contour
- Approximate Groundwater Flow Direction
- Approximate AP-1 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-43D, HGWA-44D, MW-24D, MW-25D, MW-26D, MW-27D, MW-28D). 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 arsenic is 0.01 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.

0 300 600

SCALE IN FEET

ISO-CONCENTRATION MAP
ARSENIC - AUGUST 2023

GEORGIA POWER COMPANY
PLANT HAMMOND AP-1
ROME, FLOYD COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

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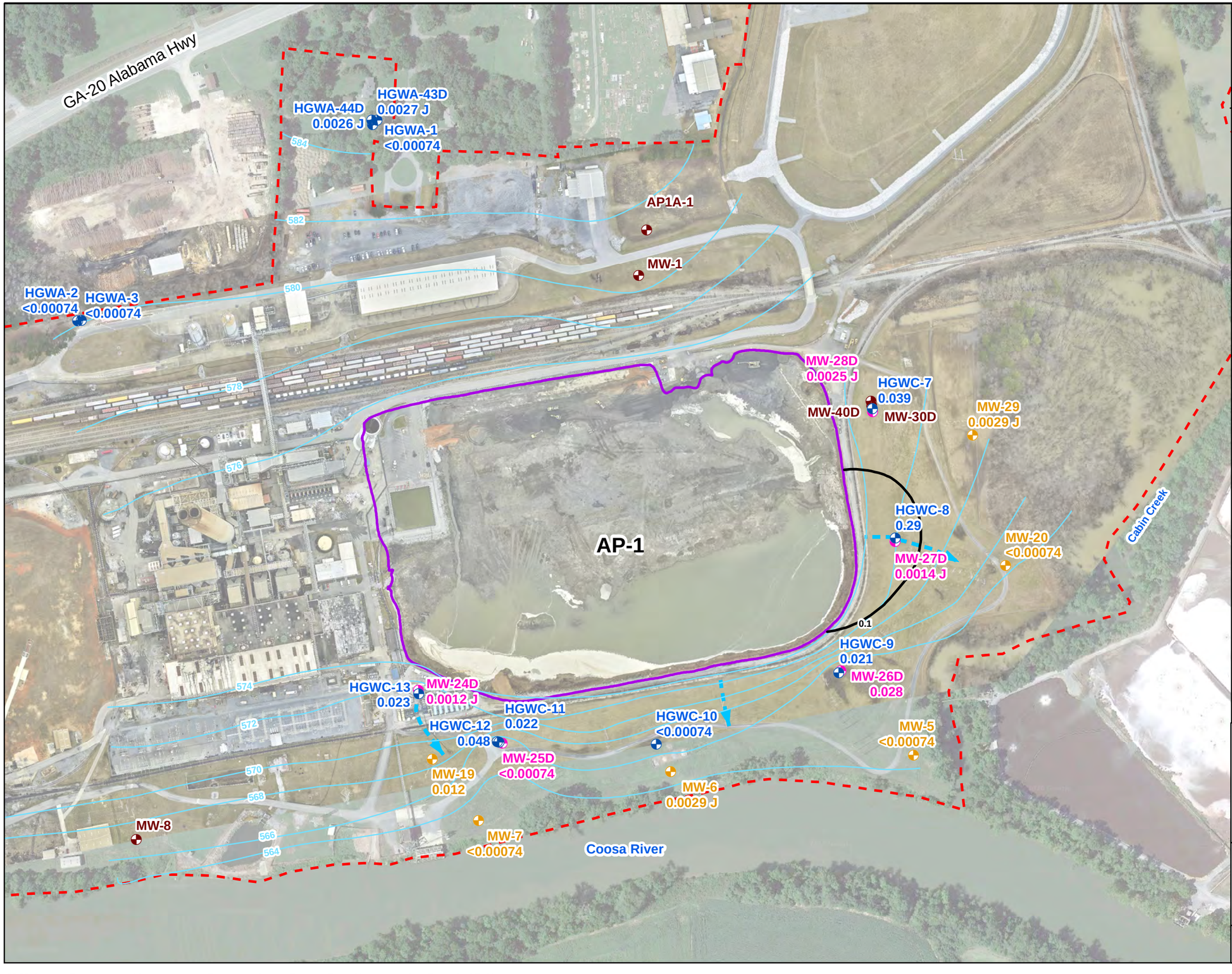
FIGURE 6



N

LEGEND

- Detection Monitoring Well
- Horizontal Assessment Monitoring Well
- Vertical Assessment Monitoring Well
- Piezometer
- GWPS Molybdenum Iso-Concentration Contour (mg/L)
- Groundwater Elevation Iso-Contour
- Approximate Groundwater Flow Direction
- Approximate AP-1 Boundary
- Plant Hammond Property Boundary

Notes:
1. Concentration data from groundwater samples collected during the January 2023 semiannual monitoring event. Data reported for wells screened deeper in the aquifer were not used to generate the iso-concentration contour (HGWA-43D, HGWA-44D, MW-24D, MW-25D, MW-26D, MW-27D, MW-28D). 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 molybdenum is 0.1 mg/L.
4. Aerial photograph source: Google Earth Pro, August 2019, and Georgia Power Company, February 2023.

0 150 300 600

SCALE IN FEET

ISO-CONCENTRATION MAP MOLYBDENUM - JANUARY 2023

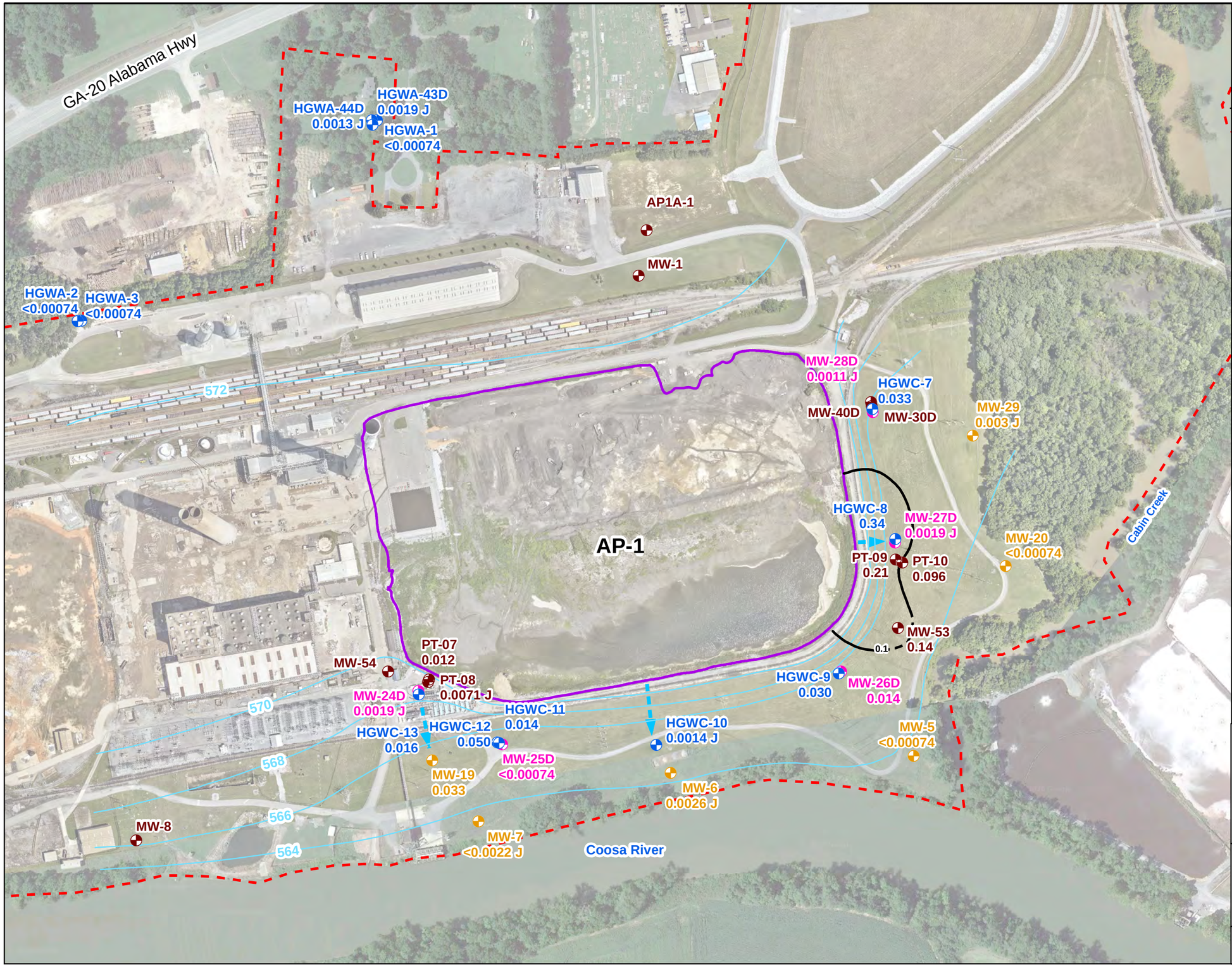
GEORGIA POWER COMPANY
PLANT HAMMOND AP-1
ROME, FLOYD COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA | JANUARY 2024

FIGURE 7



N

LEGEND

- Detection Monitoring Well
- Horizontal Assessment Monitoring
- Vertical Assessment Monitoring
- Piezometer
- GWPS Molybdenum Iso-Concentration Contour (mg/L)
- Groundwater Elevation Iso-Contour
- Approximate Groundwater Flow
- Approximate AP-1
- 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-43D, HGWA-44D, MW-24D, MW-25D, MW-26D, MW-27D, MW-28D). 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 molybdenum is 0.1 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.

0 150 300 600

SCALE IN FEET

ISO-CONCENTRATION MAP
MOLYBDENUM - AUGUST 2023

GEORGIA POWER COMPANY
PLANT HAMMOND AP-1
ROME, FLOYD COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA | JANUARY 2024

FIGURE 8

APPENDIX A

Well Design, Installation, and Development Report – Addendum No. 5

Prepared for

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

WELL DESIGN, INSTALLATION, AND DEVELOPMENT REPORT - ADDENDUM No. 5

PLANT HAMMOND ASH POND 1 (AP-1)

Prepared by

engineers | scientists | innovators

1255 Roberts Boulevard, Suite 200
Kennesaw, Georgia 30144

Project Number GW6581E

October 2023

Georgia Power

CERTIFICATION PAGE

I hereby certify that this *Well Design, Installation, and Development Report – Addendum No. 5, Plant Hammond Ash Pond 1 (AP-1)* 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."

October 3, 2023

Christine Hug P.G. Date
Georgia Professional Geologist No. 002221
Project Manager
Geosyntec Consultants

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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 six piezometers[1] (MW-53, MW-54, PT-07, PT-08, PT-09, and PT-10) to supplement the current groundwater monitoring system at Georgia Power Company (Georgia Power) Plant Hammond (Site) Ash Pond 1 (AP-1). 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, and 2020c), 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-1 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-53 and MW-54 were installed to characterize site conditions. PT-07, PT-08, PT-09, and PT-10 were installed to specifically monitor the performance of the pilot study injections in support of the Assessment of Corrective Measures program.

[1] 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 564.98 to 544.30 feet (referenced to the North American Vertical Datum of 1988). The 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 wells. 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 un-coated 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-53, PT-09, and PT-10. A cement apron 2-feet by 2-feet by 4-inches was poured around flush mount wells PT-07, PT-08, and MW-54. The pads were mounded slightly outward to direct surface drainage away from the wells.

2.7 Cap and Protective Casing

The well risers at MW-53, PT-09, and PT-10 were fitted with a locking cap and a lockable cover. A one-quarter inch vent hole was drilled into the PVC riser pipes 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 MW-53, and well cluster PT-09, and PT-10 to protect the general well area.

MW-54, PT-07, and PT-08 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 and calibration 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 pads 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.

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TABLE

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

Well ID	Purpose	Well Completion	Installation Date	Northing [1]	Easting [1]	Ground Surface Elevation [2] (ft)	Top of Casing Elevation [2] (ft)	Top of Screen Elevation (ft)	Bottom of Screen Elevation (ft)	Well Depth (ft bgs) [3]
PT-07	Piezometer	Flush Mount	6/3/2023	1548675.24	1940933.39	592.00	591.75	554.40	544.30	48.00
PT-08	Piezometer	Flush Mount	6/3/2023	1548666.82	1940929.58	592.10	591.83	560.20	550.20	42.20
PT-09	Piezometer	Protective Riser	6/1/2023	1549049.74	1942393.11	577.33	580.35	560.18	550.18	27.45
PT-10	Piezometer	Protective Riser	6/1/2023	1549040.34	1942413.88	577.39	580.44	560.29	550.29	27.40
MW-53	Piezometer	Protective Riser	6/2/2023	1548835.51	1942399.62	577.64	580.59	554.54	544.54	33.40
MW-54	Piezometer	Flush mount	6/2/2023	1548699.51	1940805.03	592.98	592.66	564.98	554.98	38.30

Notes:

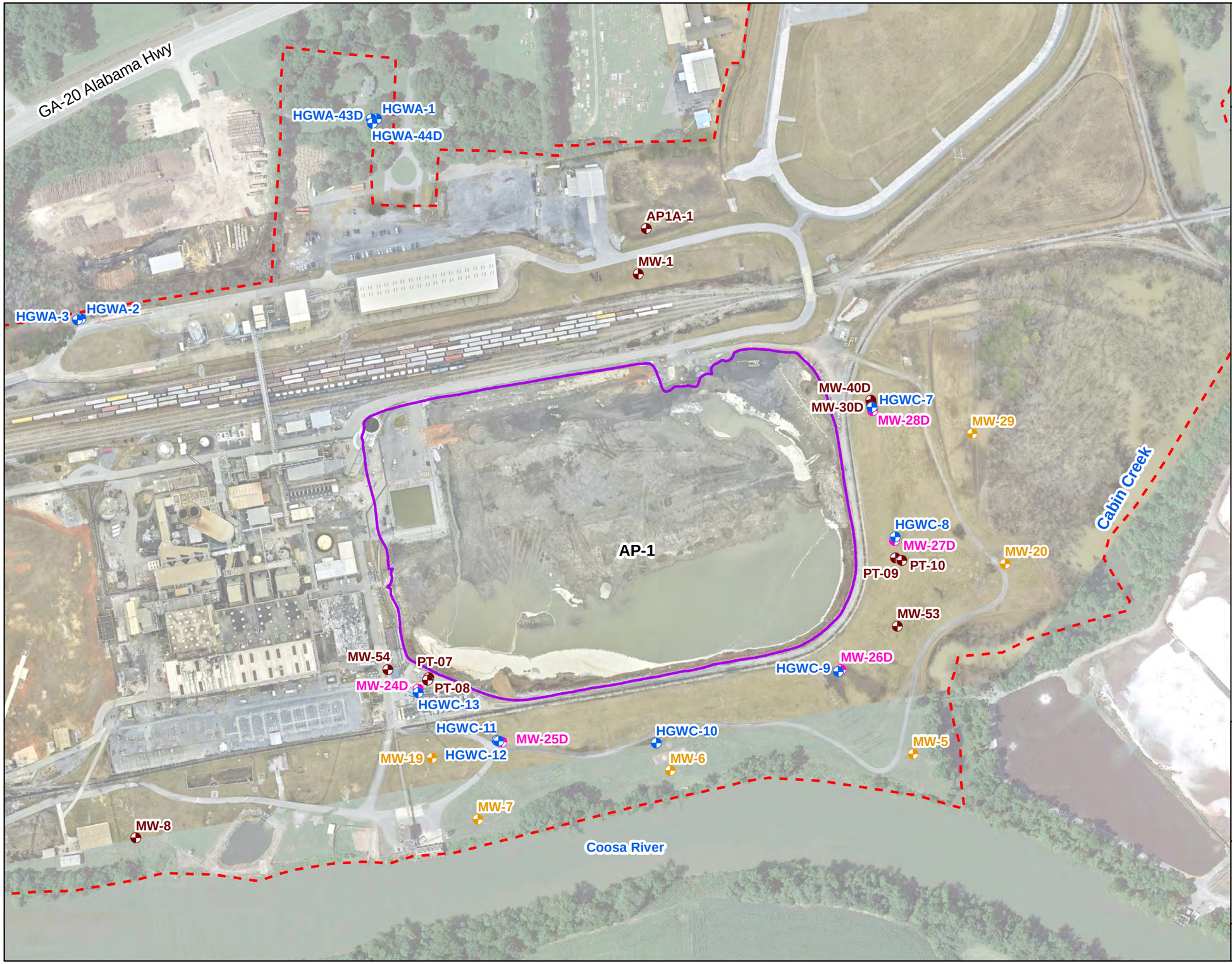
ft bgs = feet below ground surface.

(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



N

LEGEND

- Detection Monitoring Well
- Horizontal Assessment Monitoring Well
- Vertical Assessment Monitoring Well
- Piezometer
- Approximate AP-1 Boundary
- Plant Hammond Property Boundary

Notes:

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

0 150 300 600

SCALE IN FEET

GROUNDWATER MONITORING NETWORK MAP

GEORGIA POWER COMPANY
PLANT HAMMOND AP-1
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

intact INSURANCE

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.

ATLANTIC SPECIALTY INSURANCE COMPANY CORPORATE SEAL 1986 NEW YORK

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.

ALISON DWAN NASH-TROUT
NOTARY PUBLIC - MINNESOTA
My Commission Expires
January 31, 2026

_____
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 13th day of April, 2023.

ATLANTIC SPECIALTY INSURANCE COMPANY CORPORATE SEAL 1986 NEW YORK

This Power of Attorney expires
January 31, 2025

_____
Kara Barrow, Secretary

Please direct bond verifications to surety@intactinsurance.com

APPENDIX B

Boring and Well Construction Logs

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PT-07

CLIENT Southern Company Services
PROJECT NAME Plant Hammond Well Installation
PROJECT NUMBER GW6581E
PROJECT LOCATION Plant Hammond
DATE STARTED 06/03/23 **COMPLETED** 06/03/23
NORTHING 1548675.24 ft **EASTING** 1940933.39 ft
DRILLER Cascade Drilling
GROUND ELEVATION 592.00 ft **BORING DIAMETER** 6 in.
DRILLING METHOD Sonic
TOP OF CASING ELEVATION 591.75 ft
SAMPLING METHOD Sonic Core
GEOPHYSICAL CONTRACTOR ---
RIG TYPE Terrasonic Compact Crawler
LOGGED BY T. Kessler **CHECKED BY** C. Hug

DEPTH (ft)	ELEVATION (ft)	REMARKS	MATERIAL DESCRIPTION	CONSTRUCTION DIAGRAM
0	590	Air knifed material	SILTY SAND, reddish-brown, fine sand with abundant angular fine gravel, moist.	Flush mount well cover set in concrete
10	580	Hard drilling; high water return.	579.0 CLAY, reddish-brown to gray, trace fine sand, trace angular fine gravel, medium plasticity, moist.	Approx. 45 gallon of Aquaguard Bentonite Grout
20	570		572.0 CLAY, reddish yellow, trace silt, medium plasticity, moist, red and gray mottling throughout.	
30	560		27 to 30 ft: Light gray, trace fine sand. 559.0 SANDY CLAY, reddish yellow, fine sand with trace rounded gravel, medium to low plasticity, wet. 557.0	Approx 3.75 gallon of uncoated 3/8" bentonite pellets
40	550		SILTY SAND, reddish yellow, subangular, medium to fine sand, rounded, fine gravel throughout, wet. 551.0 SILTY CLAY, reddish yellow, medium to high plasticity, moist to wet, trace gray mottling.	Approx. 19 gallon of 20/40 Silica Sand 0.010 slot size 2" Pre Pack, U-Pack Screen
		Hard drilling; rock at 46 feet bgs.	545.0 No recovery (47 to 48.6 ft) 543.4	0.3 ft Sump

Bottom of borehole at 48.6 feet below ground surface (ft bgs).

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PT-08

CLIENT Southern Company Services
PROJECT NAME Plant Hammond Well Installation
PROJECT NUMBER GW6581E
PROJECT LOCATION Plant Hammond
DATE STARTED 06/03/23 **COMPLETED** 06/03/23
NORTHING 1548666.82 ft **EASTING** 1940929.58 ft
DRILLER Cascade Drilling
GROUND ELEVATION 592.10 ft **BORING DIAMETER** 6 in.
DRILLING METHOD Sonic
TOP OF CASING ELEVATION 591.83 ft
SAMPLING METHOD Sonic Core
GEOPHYSICAL CONTRACTOR ---
RIG TYPE Terrasonic Compact Crawler
LOGGED BY T. Kessler **CHECKED BY** C. Hug

DEPTH (ft)	ELEVATION (ft)	REMARKS	GRAPHIC LOG	MATERIAL DESCRIPTION	CONSTRUCTION DIAGRAM
0	590	Air knifed material		SILTY SAND, reddish-brown, fine sand, abundant angular fine to coarse gravel, moist.	Flush mount well cover set in concrete
				582.1	
10	580	Very soft drilling, no vibrations to 18 feet bgs. Fill material from 13-16 feet bgs.		CLAY, reddish-brown to gray, trace fine sand and angular to rounded fine gravel, trace silt, medium plasticity, moist, trace organic material.	Approx. 35 gallon of Aquaguard Bentonite Grout
				572.1	
20	570	Drilling becomes harder; significant amount of return water to surface during overdrill.		CLAY, red to yellowish red, trace silt and trace fine sand from 20-21 feet bgs, medium plasticity, moist, gray mottling throughout.	Approx 2.5 gallon of uncoated 3/8" bentonite pellets
30	560			559.1	Approx. 19 gallon of 20/40 Silica Sand
				SILTY SAND, yellowish red, fine sand with trace rounded fine gravel, moist to wet.	
				555.1	0.010 slot size 2" Pre Pack, U-Pack Screen
				SILTY SAND, yellowish red, subrounded medium to fine sand, abundant rounded fine to coarse gravel, wet.	
40	550			550.6	
				SANDY CLAY, yellowish red, fine sand and trace gravel, medium plasticity, moist.	0.3 ft Sump
				549.1	

Bottom of borehole at 43.0 feet below ground surface (ft bgs).

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PT-09

CLIENT Southern Company Services
PROJECT NAME Plant Hammond Well Installation
PROJECT NUMBER GW6581E
PROJECT LOCATION Plant Hammond
DATE STARTED 05/31/23 **COMPLETED** 06/01/23
NORTHING 1549049.74 ft **EASTING** 1942393.11 ft
DRILLER Cascade Drilling
GROUND ELEVATION 577.33 ft **BORING DIAMETER** 6 in.
DRILLING METHOD Sonic
TOP OF CASING ELEVATION 580.35 ft
SAMPLING METHOD Sonic Core
GEOPHYSICAL CONTRACTOR ---
RIG TYPE Terrasonic Compact Crawler
LOGGED BY T. Kessler **CHECKED BY** C. Hug

DEPTH (ft)	ELEVATION (ft)	REMARKS	GRAPHIC LOG	MATERIAL DESCRIPTION	CONSTRUCTION DIAGRAM
0		Hand augered from 0-10 feet bgs.		CLAY, reddish-brown, trace fine sand, medium to low plasticity, dry to moist, trace organics.	Aboveground well cover set in concrete
	570				Approx. 17 gallon of Aquauard Bentonite Grout
				567.3	
10		Water encountered at ~11 feet bgs; easy drilling.		CLAY, reddish-brown to yellowish-brown, trace fine sand, medium to low plasticity, moist, gray mottling throughout.	Approx. 2.5 gallon of uncoated 3/8" bentonite pellets
				560.3	
	560	Alluvium from 17-28 feet bgs.		CLAYEY SAND, gray to yellowish-brown, subrounded medium to fine sand and trace silt, medium plasticity clay, moist to wet.	Approx. 19 gallon of 20/40 Silica Sand
				559.0	
				18 to 18.3 ft: Trace subrounded gravel.	
20				CLAYEY SAND, yellowish-brown, subrounded medium to fine sand, abundant rounded to subrounded gravel, abundant silt, wet. From 20 ft: Medium to coarse grained sand, trace silt.	0.010 slot size 2" Pre Pack, U-Pack Screen
				From 26 ft: Trace rounded fine to coarse gravel.	
	550				0.3 ft Sump
				548.8	

Bottom of borehole at 28.5 feet below ground surface (ft bgs).

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PT-10

CLIENT Southern Company Services
PROJECT NAME Plant Hammond Well Installation
PROJECT NUMBER GW6581E
PROJECT LOCATION Plant Hammond
DATE STARTED 06/01/23 **COMPLETED** 06/01/23
NORTHING 1549040.34 ft **EASTING** 1942413.88 ft
DRILLER Cascade Drilling
GROUND ELEVATION 577.39 ft **BORING DIAMETER** 6 in.
DRILLING METHOD Sonic
TOP OF CASING ELEVATION 580.44 ft
SAMPLING METHOD Sonic Core
GEOPHYSICAL CONTRACTOR ---
RIG TYPE Terrasonic Compact Crawler
LOGGED BY T. Kessler **CHECKED BY** C. Hug

DEPTH (ft)	ELEVATION (ft)	REMARKS	GRAPHIC LOG	MATERIAL DESCRIPTION	CONSTRUCTION DIAGRAM
0		Hand augered from 0-10 feet bgs.		CLAY, brown to reddish-brown, trace sand, medium to low plasticity, moist, trace organics, black and gray mottling throughout.	Aboveground well cover set in concrete
	570				Approx. 15 gallon of Aquauard Bentonite Grout
				567.4	
10				CLAY, yellowish-brown, trace fine sand, medium to low plasticity, moist to dry, gray and red mottling throughout.	Approx. 2.5 gallon of uncoated 3/8" bentonite pellets
				560.4	
	560			SANDY CLAY, yellowish-brown, medium to low plasticity, trace subrounded gravel, moist to wet.	Approx. 19 gallon of 20/40 Silica Sand
				558.9	
				CLAYEY SAND, yellowish-brown/reddish yellow, subrounded medium to fine sand, abundant rounded/sub rounded gravel, abundant silt.	
20				557.4	
				556.4	
				SANDY CLAY, reddish yellow, medium plasticity, abundant subrounded gravel, trace fine sand, wet.	0.010 slot size 2" Pre Pack, U-Pack Screen
				SILTY SAND, yellow, medium to fine, subangular, with trace subrounded fine gravel, wet.	
		Hard drilling from 26-27.5 feet bgs; rod drop from 26.5-27 feet bgs.		552.9	
				SILTY CLAY, brown, low plasticity, abundant fine sand and subrounded fine gravel, wet.	
				550.9	
	550			LIMESTONE, gray, hard, effervesces with acid.	0.3 ft Sump
				549.4	

Bottom of borehole at 28.0 feet below ground surface (ft bgs).

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MW-53

CLIENT Southern Company Services
PROJECT NAME Plant Hammond Well Installation
PROJECT NUMBER GW6581E
PROJECT LOCATION Plant Hammond
DATE STARTED 06/01/23 **COMPLETED** 06/02/23
NORTHING 1548835.51 ft **EASTING** 1942399.62 ft
DRILLER Cascade Drilling
GROUND ELEVATION 577.64 ft **BORING DIAMETER** 6 in.
DRILLING METHOD Sonic
TOP OF CASING ELEVATION 580.59 ft
SAMPLING METHOD Sonic Core
GEOPHYSICAL CONTRACTOR ---
RIG TYPE Terrasonic Compact Crawler
LOGGED BY T. Kessler **CHECKED BY** C. Hug

DEPTH (ft)	ELEVATION (ft)	REMARKS	GRAPHIC LOG	MATERIAL DESCRIPTION
0		Hand augered from 0-10 feet bgs.		CLAY, reddish-brown, medium to low plasticity, dry to moist, trace organic, black mottling throughout.
	570			567.6
10				CLAY, reddish yellow, trace silt, medium to low plasticity, moist, gray mottling throughout. From 11 ft: Trace organics.
	560			558.6
				CLAYEY SAND, reddish yellow, medium to coarse grained, subrounded, moist to wet. 557.6
20				CLAY, reddish yellow, medium plasticity, abundant rounded gravel and abundant silt, wet. 555.6
				SAND, reddish yellow, subrounded to subangular, fine to coarse grained with trace rounded gravel and trace low plasticity clay, wet.
	550	Drill to 30 feet bgs. Rod drop from 30-33 feet bgs.		
30				543.2

CONSTRUCTION DIAGRAM

- Aboveground well cover set in concrete
- Approx. 25 gallon of Aquauard Bentonite Grout
- Approx. 2.5 gallon of uncoated 3/8" bentonite pellets
- Approx. 19 gallon of 20/40 Silica Sand
- 0.010 slot size 2" Pre Pack, U-Pack Screen
- 0.3 ft Sump

Bottom of borehole at 34.4 feet below ground surface (ft bgs).

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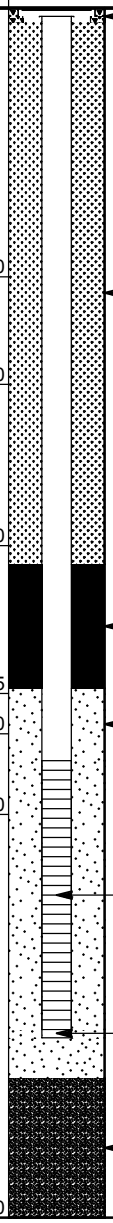
MW-54

CLIENT Southern Company Services
PROJECT NAME Plant Hammond Well Installation
PROJECT NUMBER GW6581E
PROJECT LOCATION Plant Hammond
DATE STARTED 06/02/23 **COMPLETED** 06/02/23
NORTHING 1548699.51 ft **EASTING** 1940805.03 ft
DRILLER Cascade Drilling
GROUND ELEVATION 592.98 ft **BORING DIAMETER** 6 in.
DRILLING METHOD Sonic
TOP OF CASING ELEVATION 592.66 ft
SAMPLING METHOD Sonic Core
GEOPHYSICAL CONTRACTOR ---
RIG TYPE Terrasonic Compact Crawler
LOGGED BY T. Kessler **CHECKED BY** C. Hug

DEPTH (ft)	ELEVATION (ft)	REMARKS	MATERIAL DESCRIPTION
0	590	Air knifed material	CLAY, reddish yellow, trace silt, medium plasticity, wet, dark gray mottling.
			583.0
10	580	Gravel from 10.5 feet bgs is collapse from air knife material.	SILTY SAND, dark gray to black, subrounded medium to fine sand, trace rounded gravel, moist.
			579.0
			CLAY, reddish yellow, medium plasticity, moist to dry, red black and gray mottling throughout.
			573.0
20	570	Slow drilling.	SILTY CLAY, reddish yellow, hard, medium to low plasticity, dry to moist, red/gray mottling throughout.
			567.5
			SILTY SAND, pink/light yellowish gray, fine, subrounded, moist.
			566.0
			SANDY CLAY, reddish yellow, low plasticity, sand is fine to medium, moist.
			563.0
30	560		SAND, reddish yellow/light gray, fine-grained with trace of fine, rounded gravel throughout, wet.
			36 to 36.3 ft: Clay.
40	550	Drilled to 39 feet bgs; core barrel sinks to 45 feet bgs; settles on rock.	
			548.0

CONSTRUCTION DIAGRAM



Bottom of borehole at 45.0 feet below ground surface (ft bgs).

APPENDIX C

Well Development and Equipment Calibration Forms

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GROUNDWATER SAMPLING LOG SHEET

Client: SCS
Site: Plant Hammond
Well ID: PT-07
Total Depth (ft): 48.6
Depth to Water (ft): 24.3
Well Diameter (in): 2
Well Volume (gal) = 0.041d²h: 3.99
Well Volume (L) = gal * 3.785: 15.10
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.: GNV65816
Location: AP-1
Pump Type/Model: Monsoon
Tubing Material: Poly
Pump Intake Depth (ft): 43
Start/Stop Purge Time: 1205/1301
Purge Rate (mL/min): 8000
Total Purge Volume (L): 388
Purge Method: Low-Flow Well Volume Other: —
Sampling Method: Pump Discharge Other: —

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. —

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.)
1205										Begin pre purging
1231	6.87	950.09	-58.2	0.01	19.25	73	28.5	8000	168	motor got filament stuck, had to clean multiplemmos
1236	6.85	953.21	-93.0	0.00	18.90	57.6	28.8	8000	208	
1241	6.85	954.95	-71.8	4.28	19.16	1083 AU	28.1	8000	248	had to remove filament
1246	6.86	953.78	-88.6	0.00	18.92	12.4	28.1	8000	288	
1251	6.86	955.59	-78.3	0.24	18.97	50.1	28.1	8000	328	
1256	6.86	953.56	-53.4	0.00	18.92	12.4	28.1	8000	348	
1301	6.86	954.07	-53.2	0.00	18.96	8.32	28.1	8000	388	
									6/28/23 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-07
Total Depth (ft): 48.6
Depth to Water (ft): 24.3
Well Diameter (in): 2
Well Volume (gal) = 0.041d²h: 3.99
Well Volume (L) = gal * 3.785: 15.10
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.: GWES81G
Location: AP-1
Pump Type/Model: monsoon
Tubing Material: poly
Pump Intake Depth (ft): 43
Start/Stop Purge Time: 1303 / 1328
Purge Rate (mL/min): 200
Total Purge Volume (L): 5
Purge Method: (Low-Flow) Well Volume Other: –
Sampling Method: Pump Discharge Other: –

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. –

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.)
1308	6.72	1046.8	-68.3	0.02	20.5	14.6	25.8	200	1	
1313	6.69	1058.8	-95.3	0.01	19.9	7.21	25.8	200	2	
1318	6.666	1073.6	-66.7	0.02	21.46	6.75	25.58	200	3	
1323	6.666	1069.0	-71.4	0.02	24.11	8.72	25.5	200	4	
1328	6.68	1045.1	-64.1	0.02	22.27	4.15	25.5	200	5	
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-08
Total Depth (ft): 42.2
Depth to Water (ft): 22.7
Well Diameter (in): 2
Well Volume (gal) = 0.041d²h: 3.198
Well Volume (L) = gal * 3 785: 12.104
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.: GW6581G
Location: AP-1
Pump Type/Model: monsoon
Tubing Material: poly
Pump Intake Depth (ft): 32
Start/Stop Purge Time: 0820/0908
Purge Rate (mL/min): 10000
Total Purge Volume (L): 480
Purge Method: Low-Flow Well Volume Other: —
Sampling Method: Pump Discharge Other: —

Sampling Date: 01/29/23
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.)
0843	6.58	1022.7	-54.0	0.03	18.88	614 AV	28.6	10000	230	pre-purge 20 mins
0848	6.103	1026.8	-87.0	0.02	18.79	70.8	28.6	10000	280	
0853	6.105	1026.8	-56.7	0.01	18.78	36.9	28.6	10000	330	
0858	6.105	1027.8	-55.6	0.01	18.75	22.8	28.6	10000	380	
0903	6.106	1028.1	-88.0	0.01	18.78	11.7	28.6	10000	430	
0908	6.106	1027.7	-88.0	0.01	18.78	9.55	28.6	10000	480	
							AN			
								01/29/23		
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**	

Geosyntec consultants

GROUNDWATER SAMPLING LOG SHEET

Client: SCS
Site: Plant Hammond
Well ID: PT-08
Total Depth (ft): 42.2
Depth to Water (ft): 22.7
Well Diameter (in): 2
Well Volume (gal) = 0.041d²h: 3.198
Well Volume (L) = gal * 3.785: 12.104
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.: GW65816
Location: AP-1
Pump Type/Model: MONSOON
Tubing Material: poly
Pump Intake Depth (ft): 32
Start/Stop Purge Time: 0908/0940
Purge Rate (mL/min): 250
Total Purge Volume (L): 8
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.)
0915	6.163	1044.1	-67.1	0.04	20.88	15.8	23.1	250	1.75	Pre-Purge for flow (~7 min)
0920	6.07	1035.0	-63.0	0.07	22.12	17.7	23.1	250	3	
0925	6.04	1032.0	-91.1	0.07	21.93	12.62	23.1	250	4.25	
0930	6.04	1039.16	-61.2	0.06	22.09	10.77	23.1	250	5.5	
0935	6.05	1037.5	-59.7	0.05	22.00	5.71	23.1	250	6.75	
0940	6.05	1037.9	-89.0	0.05	22.02	4.68	23.1	250	8	
										6/29/23 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: Southern Company
Site: Plant Hammond
Well ID: PT-09
Total Depth (ft): 31
Depth to Water (ft): 14.65
Well Diameter (in): 2
Well Volume (gal) = 0.041d²h: 2.681
Well Volume (L) = gal * 3.785: 10.14
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.: GW165581
Location: Plant Hammond
Pump Type/Model: mega monsoon pro
Tubing Material: poly
Pump Intake Depth (ft): 26
Start/Stop Purge Time: 0830 / 1123
Purge Rate (mL/min): 15,000, 250
Total Purge Volume (L): 1458.75
Purge Method: Low-Flow / Well Volume / Other: —
Sampling Method: Pump Discharge / Other: —

Sampling Date: 6/27/23
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.)
0852	6.72	865.25	2.9	0.03	18.39	3884 AU	15.35	15,000	330	pre-purged for 20 min
0858	6.74	868.23	8.7	0.02	18.21	2747 AU	15.3	15,000	405	
0902	6.74	867.72	-5.7	0.01	18.21	2249 AU	15.3	15,000	480	
0906	6.75	867.44	12.4	0.01	18.20	723 AU	15.3	15,000	540	
0911	6.75	865.02	-2.0	0.01	18.20	1205 AU	15.3	15,000	615	
0916	6.75	868.97	14.1	0.01	18.21	128 NTU	15.3	15,000	690	
0921	6.75	864.78	10.3	0.01	18.23	69.1 NTU	15.3	15,000	765	
0926	6.75	867.14	-0.7	0.00	18.25	37.8	15.3	15,000	840	
0931	6.75	868.88	16.6	0.00	18.25	37.3	15.3	15,000	915	
0936	6.75	867.74	13.7	0.00	18.21	73	15.3	15,000	990	
0941	6.75	866.15	8.2	0.00	18.26	57	15.3	15,000	1065	
0946	6.75	870.58	17.5	0.00	18.26	23.8	15.3	15,000	1140	
0951	6.75	868.96	18.0	0.00	18.20	21.2	15.3	15,000	1215	
0956	6.75	869.01	18.3	0.00	18.15	14.3	15.3	15,000	1290	
1001	6.75	867.43	18.4	0.00	18.26	11.9	15.3	15,000	1365	
1006	6.75	861.04	10.4	0.00	18.16	8.37	15.3	15,000	1440	
1011	6.76	864.47	14.8	0.01	18.14	23.7	15.3	250	1491.25	switch to low flow to stabilize
1016	6.72	834.85	15.3	0.04	24.8	17.4	14.9	250	1442.5	
1023	6.74	861.19	11.8	0.00	19.08	36.1	14.9	250	1443.75	
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:	Southern Company	Project No.:	GN6581	Sampling Date:	01/27/2023
Site:	Plant Hammond	Location:	Plant Hammond	Sampler's Name:	AN
Well ID:	PT-09	Pump Type/Model:	mega monsoon pro	Sample Collection Time:	—
Total Depth (ft):	31	Tubing Material:	poly	Sample Purge Rate (mL/min):	—
Depth to Water (ft):	14.65	Pump Intake Depth (ft):	26	Sample ID:	—
Well Diameter (in):	2	Start/Stop Purge Time:	1030 / 1123	Laboratory Analyses:	—
Well Volume (gal) = 0.041d²h:	2.686	Purge Rate (mL/min):	15000, 250		
Well Volume (L) = gal * 3 785:	10.14	Total Purge Volume (L):	1458.75		
d = well diameter (inches); h = length of water column (feet)		Purge Method:	Low-Flow Well Volume Other: —	QA/QC Collected?	—
Well Type:	Flush (Stick Up)	Sampling Method:	Pump Discharge Other: —	QA/QC I D.	—
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.)
1028	6.74	804.55	12.6	0.00	18.96	30.3	14.9	250	1445	
1033	6.74	804.37	12.8	0.00	18.97	25.4	14.9	250	1446.25	
1038	6.75	802.81	13.0	0.00	18.89	21.0	14.9	250	1447.5	
1043	6.74	803.05	1.3	0.00	18.85	18.9	14.9	250	1448.75	
1048	6.75	803.72	12.9	0.00	18.88	19.9	14.9	250	1450	
1053	6.75	803.74	1.7	0.00	18.84	14.2	14.9	250	1451.25	
1058	6.75	803.80	0.4	0.00	18.90	13.2	14.9	250	1452.5	
1103	6.75	803.59	0.4	0.00	18.90	9.57	14.9	250	1453.75	
1108	6.75	805.55	12.7	0.00	18.94	7.39	14.9	250	1455	
1113	6.75	804.61	2.6	0.00	18.88	4.26	14.9	250	1456.25	
1118	6.75	804.98	13.6	0.00	18.97	3.93	14.9	250	1457.5	
1123	6.75	805.63	14.3	0.00	18.84	3.03	14.9	250	1458.75	
AN		01/27/23								
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**	

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GROUNDWATER SAMPLING LOG SHEET

Client: SCS
Site: Plant Hammond
Well ID: PT-10
Total Depth (ft): 30.7
Depth to Water (ft): 14.80
Well Diameter (in): 2
Well Volume (gal) = 0.041d²h: 2.61
Well Volume (L) = gal * 3.785: 9.88
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.: GAN06S816
Location: AP-1
Pump Type/Model: Monsoon
Tubing Material: poly
Pump Intake Depth (ft): 25
Start/Stop Purge Time: 1435 / 1618
Purge Rate (mL/min): 9000
Total Purge Volume (L): 585
Purge Method: Low-Flow / Well Volume / Other: —
Sampling Method: Pump Discharge / Other: —

Sampling Date: 06/27/23
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.)
1435										Start purge, purged dry,
1450										waited + began to purge
1504	6.93	856.25	-34.9	0.25	18.79	89.1	16.8	9000	180	
1509	6.94	855.27	-25.4	0.30	18.88	44.8	16.9	9000	225	
1514	6.93	851.86	-22.8	0.37	18.63	36.4	17.45	9000	270	
1519	6.93	856.43	-48.9	0.27	18.53	94.2	17.6	9000	315	
1524	6.91	859.79	-40.4	0.17	18.58	25.5	17.3	9000	360	
1529							↓	9000	405	Motor broke, had to replace
1603	6.91	856.85	-45.5	0.22	18.01	875AV	19.8	9000	450	
1608	6.90	857.92	-38.9	0.12	17.89	84.4	19.05	9000	495	
1613	6.89	858.38	-38.5	0.12	17.85	18.3	19.1	9000	540	
1618	6.88	858.15	-11.1	0.12	17.85	7.09	19.1	9000	585	
		AN	6/27/23							
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**	

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GROUNDWATER SAMPLING LOG SHEET

Client: SCS
Site: Plant Hammond
Well ID: PT-10
Total Depth (ft): 30.7
Depth to Water (ft): 14.8
Well Diameter (in): 2
Well Volume (gal) = 0.041d²h: 2.61
Well Volume (L) = gal * 3.785: 9.89
d = well diameter (inches); h = length of water column (feet)
Well Type: Flush / **Stick Up** (circled)
Well Lock: **Yes** (circled) / No
Well Cap Condition: **Good** (circled) / Replace
Well Tag Present: **Yes** (circled) / No

Project No.: GW6581
Location: AP-1
Pump Type/Model: Monsoon
Tubing Material: Poly
Pump Intake Depth (ft): 25
Start/Stop Purge Time: 1626/1636
Purge Rate (mL/min): 300
Total Purge Volume (L): 4.5
Purge Method: **Low-Flow** (circled) / Well Volume / Other: –
Sampling Method: Pump Discharge / Other: –

Sampling Date: 10/27/23
Sampler's Name: AW
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.)
1626	6.87	860.76	-18.4	0.01	18.91	4.86	15.4	300	1.5	
1631	6.87	865.22	-12.1	0.02	18.88	2.34	15.4	300	3	
1636	6.88	863.27	-37.8	0.04	18.76	1.09	15.4	300	4.5	
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**	

AW 10/27/23

Geosyntec consultants

GROUNDWATER SAMPLING LOG SHEET

Client: SCS
Site: Plant Hammond
Well ID: MW-53
Total Depth (ft): ~~45.6~~ AN 36.6
Depth to Water (ft): 15.8
Well Diameter (in): 2
Well Volume (gal) = 0.041d²h: 3.41
Well Volume (L) = gal * 3.785: 12.91
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.: GW0581G
Location: AP-1
Pump Type/Model: Monsoon
Tubing Material: POLY
Pump Intake Depth (ft): ~~40~~ AN 31.6
Start/Stop Purge Time: ~~1535~~ 0850/1652
Purge Rate (mL/min): 15000
Total Purge Volume (L): 930
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.)
0350										begin pre-purge, filament turn
1612	6.64	944.07	18.9	0.01	18.25	901 AN	16.7	15000	330	PVC got stuck, had to clean
1617	6.69	945.14	8.5	0.00	18.17	58	19.6	15000	405	
1622	6.67	952.03	18.8	0.00	18.17	94.7	19.6	15000	480	
1627	6.67	954.81	18.1	0.00	18.19	102.9	19.6	15000	555	
1632	6.67	956.48	12.6	0.00	18.20	41.4	19.6	15000	630	
1637	6.67	960.70	19.2	0.00	18.21	40.8	19.6	15000	705	
1642	6.67	957.41	20.1	0.00	18.21	25.2	19.6	15000	780	
1647	6.67	960.21	20.3	0.00	18.23	22.8	19.6	15000	855	
1652	6.67	959.28	20.3	0.00	18.23	9.95	19.6	15000	930	
										6/29/23 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**	

Geosyntec consultants

GROUNDWATER SAMPLING LOG SHEET

Client: SCS
Site: Plant Hammond
Well ID: MW-S3
Total Depth (ft): 36.6
Depth to Water (ft): 15.8
Well Diameter (in): 2
Well Volume (gal) = 0.041d²h: 3.41
Well Volume (L) = gal * 3.785: 12.91
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.: GW1658816
Location: AD-1
Pump Type/Model: monsoon
Tubing Material: poly
Pump Intake Depth (ft): 31.6
Start/Stop Purge Time: 1658/1751
Purge Rate (mL/min): 300
Total Purge Volume (L): 14.9
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.)
1701	6.67	979.82	19.4	0.15	21.17	21.4	16.3	300	0.9	pre purge for flow
1706	6.57	910.53	19.4	0.09	22.62	42.2	16.0	300	2.4	
1711	6.53	886.85	14.4	0.00	22.09	41.9	16.0	300	3.9	
1716	6.52	876.80	17.6	0.04	21.33	45.0	16.0	300	5.4	
1721	6.52	871.62	8.4	0.02	19.62	38.0	16.0	300	6.9	
1726	6.51	871.99	14.1	0.01	19.46	18.0	16.0	300	7.4	
1731	6.64	953.33	8.5	0.00	18.55	39.6	16.0	300	8.9	
1736	6.64	952.14	15.4	0.00	18.57	11.78	16.0	300	10.4	MW
1741	6.64	949.89	13.5	0.00	18.52	7.09	16.0	300	11.9	
1746	6.64	950.31	6.2	0.00	18.57	5.15	16.0	300	13.4	
1751	6.64	951.32	5.6	0.00	18.64	4.93	16.0	300	14.9	
										6/29/23 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**	

Geosyntec consultants

GROUNDWATER SAMPLING LOG SHEET

Client: SCS
Site: Plant Hammond
Well ID: MW-54
Total Depth (ft): 38.8
Depth to Water (ft): 23.3
Well Diameter (in): 2
Well Volume (gal) = 0.041d²h: 2.54
Well Volume (L) = gal * 3.785: 9.61
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.: GW0581G
Location: AP-2
Pump Type/Model: Monsoon
Tubing Material: poly
Pump Intake Depth (ft): 33.8
Start/Stop Purge Time: 1030/1116
Purge Rate (mL/min): 10000
Total Purge Volume (L): 460
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.)
1051	6.77	743.50	-1.8	0.02	20.88	863 AN	27.3	10000	210	
1056	6.77	745.92	-28.3	0.03	20.44	overrange	27.3	10000	260	
1101	6.78	753.73	-27.2	0.02	20.36	68.6	28.0	10000	310	
1106	6.78	756.16	-8.2	0.01	20.35	53.0	28.0	10000	360	
1111	6.78	759.90	-8.7	0.02	20.30	12.94	28.0	10000	410	
1116	6.77	747.9	-26.1	0.08	20.30	8.58 AN3	28.0	10000	460	
						AN	6/29/23			
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**	

Geosyntec consultants

GROUNDWATER SAMPLING LOG SHEET

Client: SCS
Site: Plant Hammond
Well ID: MW-54
Total Depth (ft): 38.8
Depth to Water (ft): 23.3
Well Diameter (in): 2
Well Volume (gal) = 0.041d²h: 2.54
Well Volume (L) = gal * 3.785: 9.61
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.: GW0S816
Location: AP-1
Pump Type/Model: monsoon
Tubing Material: poly
Pump Intake Depth (ft): 33.8
Start/Stop Purge Time: 1125/1237
Purge Rate (mL/min): 250
Total Purge Volume (L): 18
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.)
1127	6.69	748.01	-2.0	0.30	22.48	11.5	23.6	250	0.5	
1132	6.73	750.46	-22.8	0.15	24.17	12.80	23.6	250	1.75	
1137	6.74	739.19	-26.3	0.12	24.78	11.44	23.6	250	3	
1142	6.74	706.06	-26.6	0.11	23.82	37.7	23.6	250	4.25	
1147	6.71	708.108	-26.6	0.12	23.33	69.0	23.6	250	5.5	
1152	6.71	718.13	-28.5	0.11	24.04	56.1	23.6	250	6.75	
1157	6.71	723.43	-29.9	0.11	23.29	50.4	23.6	250	8	
1202	6.72	707.70	-8.4	0.10	25.15	7.0	23.6	250	9.25	
1207	6.70	704.43	-23.2	0.14	23.18	58.1	23.6	250	10.5	
1212	6.72	728.86	-24.4	0.08	23.18	27.0	23.6	250	11.75	
1217	6.67	684.7	-13.5	0.28	23.164	600+N	23.6	250	13	
1222	6.73	711.77	-17.7	0.11	22.27	108.6	23.6	250	14.25	
1227	6.77	737.69	-37.4	0.02	21.87	11.9	23.6	250	15.5	
1232	6.77	740.76	-46.6	0.89	21.87	5.18	23.6	250	16.75	
1237	6.77	746.91	-36.5	0.02	21.85	3.54	21.85	250	~~18~~	
										AN 6/29/23
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**	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Mana Neely | Date: 6/27/23 | 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 11/23	27.06	4490	4,501.1	4486.0	+/- 5 %	(Yes) No	
pH (4)			4.00	4.18	3.99	+/- 0.1 SU	(Yes) No	
Mid-Day pH (4) check	—	—	4.00	—	—	+/- 0.1 SU	Yes No	
pH (7)	2216893 11/23	26.72	7.00	6.97	7.00	+/- 0.1 SU	(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	(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	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	98.78%	99.78%	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0	0.04	-0.01	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1.00	~~0.3~~ 0.80	0.99	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			10.00	12.42	9.87	+/- 0.5 NTU	(Yes) No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Alana Neely | Date: 6/28/23 | Time (start): 0730 | Time (finish): 0800

smarTroll SN: 883553 | Turbidity Meter Type: LaMote 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 11/23	24.51	4490	4435.3	4490.8	+/- 5 %	(Yes) No	
pH (4)			4.00	4.21	3.99	+/- 0.1 SU	(Yes) No	
Mid-Day pH (4) check	–	–	4.00	–	–	+/- 0.1 SU	Yes No	
pH (7)	22108933 11/23	23.80	7.00	7.00	7.00	+/- 0.1 SU	(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	(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	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	98.60	100.52	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0	-0.02	0.00	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1.00	0.62	0.75	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			10.00	12.35	9.96	+/- 0.5 NTU	(Yes) No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Anana Neely

Date: 6/29/23

Time (start): 0735 Time (finish): 0755

smarTroll SN: 883553

Turbidity Meter Type: LaMote 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 11/23	25.95	4490	4478.9	4494.5	+/- 5 %	(Yes) No	
pH (4)			4.00	4.24	3.99	+/- 0.1 SU	(Yes) No	
Mid-Day pH (4) check	–	–	4.00	–	–	+/- 0.1 SU	Yes No	
pH (7)	2216893 11/23	25.14	7.00	6.91	7.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (7) check	–	–	7.00	–	–	+/- 0.1 SU	Yes No	
pH (10)	21320202 12/23	25.92	10.00	9.86	10.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (10) check	–	–	10.00	–	–	+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/23	23.50	228	226.2	228.0	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	99.65	100.48	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0	0.27	0.00	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1.00	0.42	0.95	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			10.00	9.82	10.04	+/- 0.5 NTU	(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
MW-53	1548835.51	1942399.62	580.59	1548835.08	1942400.25	577.64	NAIL ON PAD
PT-09	1549049.74	1942393.11	580.35	1549049.80	1942394.19	577.33	NAIL ON PAD
PT-10	1549040.34	1942413.88	580.44	1549040.30	1942415.26	577.39	NAIL ON PAD
Benchmark	Northing	Easting	Elevation				
BM-H3	1548237.413	1941013.571	574.63				

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-H3 SET BY GEL SOLUTIONS USING A TRIMBLE DINI LEVEL

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
MW-54	1548699.509	1940805.028	592.66	1548699.426	1940804.22	592.977	Nail on Pad
PT-07	1548675.239	1940933.391	591.75	1548675.251	1940932.71	591.998	Nail on Pad
PT-08	1548666.824	1940929.582	591.83	1548666.667	1940928.983	592.104	Nail on Pad
Benchmark	Northing	Easting	Elevation				
BM-H3	1548237.413	1941013.571	574.63				

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-H3 SET BY GEL SOLUTIONS USING A TRIMBLE DINI LEVEL

8/30/2023

COA - LS003119
Exp. 12/31/2023

APPENDIX B

Well Maintenance and Repair Documentation Memoranda

January 2023

Geosyntec consultants

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

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 1 (AP-1) – 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 1 (AP-1) 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.

Georgia Power Site/Unit	Date Performed	Well ID	Maintenance/ Repair Performed
Hammond/AP-1	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
1 Location/Identification				
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area?		✓	
d	Are appropriate measures in place to protect the well (e.g., bollards)?	✓		
e	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2 Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked?	✓		
f	If locked, is the well lock in good condition?	✓		
g	Is the well lid in good condition?	✓		
3 Surface Pad				
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4 Internal Casing				
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the 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)	✓		
5 Sampling and Data Collection Equipment				
a	Indicate if the well is equipped with **dedicated sampling equipment**, a **dedicated water quality sonde**, and/or **dedicated water level data logger**.			Sampling equipment
b	If equipped with dedicated sampling equipment, is it in good operational condition?	✓		
c	If equipped with a dedicated water quality sonde, is it in good operational condition?			NA
d	Does the desiccant need to be replaced on the water quality sonde?			NA
e	If equipped with a water level data logger, is it in good operational condition?			NA
f	Does the well recharge adequately when purged?	✓		
g	Does the well require redevelopment (low flow, excess turbidity)?		✓	
6 Corrective Actions				
a	Are corrective actions needed?		✓	

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 50

		Yes	No	Comments
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area?		✓	
d	Are appropriate measures in place to protect the well (e.g., bollards)?	✓		
e	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked?	✓		
f	If locked, is the well lock in good condition?	✓		
g	Is the well lid in good condition?	✓		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal Casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the 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)	✓		
5	**Sampling and Data Collection Equipment**			
a	Indicate if the well is equipped with **dedicated sampling equipment**, a **dedicated water quality sonde**, and/or **dedicated water level data logger**.			Sampling equipment
b	If equipped with dedicated sampling equipment, is it in good operational condition?	✓		
c	If equipped with a dedicated water quality sonde, is it in good operational condition?			NA
d	Does the desiccant need to be replaced on the water quality sonde?			NA
e	If equipped with a water level data logger, is it in good operational condition?			NA
f	Does the well recharge adequately when purged?	✓		
g	Does the well require redevelopment (low flow, excess turbidity)?		✓	
6	**Corrective Actions**			
a	Are corrective actions needed?		✓	

If yes, indicate here:

Well Inspection Form

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

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

		Yes	No	Comments
1	**Location/Identification**			
a	Is the well visible and accessible?	Y		
b	Is the well properly identified with the correct well ID?	Y		
c	Is the well in a high traffic area?		N	
d	Are appropriate measures in place to protect the well (e.g., bollards)?	Y		
e	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Y		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	X		
b	Is the casing free of degradation or deterioration?	X		
c	Does the casing have a functioning weep hole?	Y		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Y		
e	Is the well locked?	X		
f	If locked, is the well lock in good condition?	Y		
g	Is the well lid in good condition?	X		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	X		
b	Is the well pad sloped away from the protective casing?	X		
c	Is the well pad in complete contact with the protective casing?	X		
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)?	Y		
e	Is the pad surface clean (not covered with sediment or debris)?	X		
4	**Internal Casing**			
a	Does the cap prevent entry of foreign material into the well?	Y		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X		
c	Is the well properly vented for equilibration of air pressure?	X		
d	Is the survey point clearly marked on the inner casing?	X		
e	Is the depth of the well consistent with the original well log?	X		
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)	Y		
5	**Sampling and Data Collection Equipment**			
a	Indicate if the well is equipped with **dedicated sampling equipment**, a **dedicated water quality sonde**, and/or **dedicated water level data logger**.	Sampling equipment		
b	If equipped with dedicated sampling equipment, is it in good operational condition?	No		
c	If equipped with a dedicated water quality sonde, is it in good operational condition?			NA
d	Does the desiccant need to be replaced on the water quality sonde?			NA
e	If equipped with a water level data logger, is it in good operational condition?			NA
f	Does the well recharge adequately when purged?	Y		
g	Does the well require redevelopment (low flow, excess turbidity)?		Y	
6	**Corrective Actions**			
a	Are corrective actions needed?		Y	

If yes, indicate here:

Well Inspection Form

Plant Name/Unit Name: Plant Hammond Bp-1/2/3
Field Technician: C. CAIN
Well ID: HGWA-43D

Date (mm/dd/yyyy): 1/23/23
Field Conditions: Sunny 55

		Yes	No	Comments
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area?		✓	
d	Are appropriate measures in place to protect the well (e.g., bollards)?	✓		
e	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked?	✓		
f	If locked, is the well lock in good condition?	✓		
g	Is the well lid in good condition?	✓		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal Casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the 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)	✓		
5	**Sampling and Data Collection Equipment**			
a	Indicate if the well is equipped with **dedicated sampling equipment**, a **dedicated water quality sonde**, and/or **dedicated water level data logger**.			Sampling Equipment
b	If equipped with dedicated sampling equipment, is it in good operational condition?	✓		
c	If equipped with a dedicated water quality sonde, is it in good operational condition?			NA
d	Does the desiccant need to be replaced on the water quality sonde?			NA
e	If equipped with a water level data logger, is it in good operational condition?			NA
f	Does the well recharge adequately when purged?	✓		
g	Does the well require redevelopment (low flow, excess turbidity)?		✓	
6	**Corrective Actions**			
a	Are corrective actions needed?		✓	

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: 50F sunny

		Yes	No	Comments
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area?		✓	
d	Are appropriate measures in place to protect the well (e.g., bollards)?	✓		
e	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked?	✓		
f	If locked, is the well lock in good condition?	✓		
g	Is the well lid in good condition?	✓		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal Casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the 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)	✓		
5	**Sampling and Data Collection Equipment**			
a	Indicate if the well is equipped with **dedicated sampling equipment**, a **dedicated water quality sonde**, and/or **dedicated water level data logger**.	NA		
b	If equipped with dedicated sampling equipment, is it in good operational condition?			NA
c	If equipped with a dedicated water quality sonde, is it in good operational condition?			NA
d	Does the desiccant need to be replaced on the water quality sonde?			NA
e	If equipped with a water level data logger, is it in good operational condition?	X	✓ 1/23/23	
f	Does the well recharge adequately when purged?	✓		
g	Does the well require redevelopment (low flow, excess turbidity)?		✓	
6	**Corrective Actions**			
a	Are corrective actions needed?		✓	

If yes, indicate here:

Well Inspection Form

Plant Name/Unit Name: Plant Hammond AP-1
Field Technician: C. CAIN
Well ID: HGWC-7

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

		Yes	No	Comments
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area?		✓	
d	Are appropriate measures in place to protect the well (e.g., bollards)?	✓		
e	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked?	✓		
f	If locked, is the well lock in good condition?	✓		
g	Is the well lid in good condition?	✓		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal Casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the 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)	✓		
5	**Sampling and Data Collection Equipment**			
a	Indicate if the well is equipped with **dedicated sampling equipment**, a **dedicated water quality sonde**, and/or **dedicated water level data logger**.			NA
b	If equipped with dedicated sampling equipment, is it in good operational condition?			NA
c	If equipped with a dedicated water quality sonde, is it in good operational condition?			NA
d	Does the desiccant need to be replaced on the water quality sonde?			NA
e	If equipped with a water level data logger, is it in good operational condition?			NA
f	Does the well recharge adequately when purged?	✓		
g	Does the well require redevelopment (low flow, excess turbidity)?		✓	
6	**Corrective Actions**			
a	Are corrective actions needed?		✓	

If yes, indicate here:

Well Inspection Form

Plant Name/Unit Name: Plant Hammond AP-1
Field Technician: C. CAIN
Well ID: HGWC-8

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

		Yes	No	Comments
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area?		✓	
d	Are appropriate measures in place to protect the well (e.g., bollards)?	✓		
e	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked?	✓		
f	If locked, is the well lock in good condition?	✓		
g	Is the well lid in good condition?	✓		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal Casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the 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)	✓		
5	**Sampling and Data Collection Equipment**			
a	Indicate if the well is equipped with **dedicated sampling equipment**, a **dedicated water quality sonde**, and/or **dedicated water level data logger**.			NA
b	If equipped with dedicated sampling equipment, is it in good operational condition?			NA
c	If equipped with a dedicated water quality sonde, is it in good operational condition?			NA
d	Does the desiccant need to be replaced on the water quality sonde?			NA
e	If equipped with a water level data logger, is it in good operational condition?			NA
f	Does the well recharge adequately when purged?	✓		
g	Does the well require redevelopment (low flow, excess turbidity)?		✓	
6	**Corrective Actions**			
a	Are corrective actions needed?		✓	

If yes, indicate here:

Well Inspection Form

Plant Name/Unit Name: Plant Hammond / AP-1
Field Technician: A. Szwast
Well ID: HG-WC-9

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

		Yes	No	Comments
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area?		✓	
d	Are appropriate measures in place to protect the well (e.g., bollards)?	✓		
e	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked?	✓		
f	If locked, is the well lock in good condition?	✓		
g	Is the well lid in good condition?	✓		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal Casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the 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)	✓		
5	**Sampling and Data Collection Equipment**			
a	Indicate if the well is equipped with **dedicated sampling equipment**, a **dedicated water quality sonde**, and/or **dedicated water level data logger**.			dedicated water level data logger and water quality sonde ~~N/A~~ 1-23-2023
b	If equipped with dedicated sampling equipment, is it in good operational condition?	~~✓~~ 1-23-2023		N/A
c	If equipped with a dedicated water quality sonde, is it in good operational condition?	✓		
d	Does the desiccant need to be replaced on the water quality sonde?			N/A
e	If equipped with a water level data logger, is it in good operational condition?	✓		
f	Does the well recharge adequately when purged?	✓		
g	Does the well require redevelopment (low flow, excess turbidity)?		✓	
6	**Corrective Actions**			
a	Are corrective actions needed?		✓	

If yes, indicate here:

Well Inspection Form

Plant Name/Unit Name: Plant Hammond AP-1
Field Technician: C. CAIN
Well ID: HGWC-10

Date (mm/dd/yyyy): 1/27/23
Field Conditions: Sunny 50

		Yes	No	Comments
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area?		✓	
d	Are appropriate measures in place to protect the well (e.g., bollards)?	✓		
e	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked?	✓		
f	If locked, is the well lock in good condition?	✓		
g	Is the well lid in good condition?	✓		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal Casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the 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)	✓		
5	**Sampling and Data Collection Equipment**			
a	Indicate if the well is equipped with **dedicated sampling equipment**, a **dedicated water quality sonde**, and/or **dedicated water level data logger**.	NA		
b	If equipped with dedicated sampling equipment, is it in good operational condition?			NA
c	If equipped with a dedicated water quality sonde, is it in good operational condition?			NA
d	Does the desiccant need to be replaced on the water quality sonde?			NA
e	If equipped with a water level data logger, is it in good operational condition?			NA
f	Does the well recharge adequately when purged?	✓		
g	Does the well require redevelopment (low flow, excess turbidity)?		✓	
6	**Corrective Actions**			
a	Are corrective actions needed?		✓	

If yes, indicate here:

Well Inspection Form

Plant Name/Unit Name: Plant Hammond AP-1
Field Technician: C. CAIN
Well ID: HAWC-11

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

		Yes	No	Comments
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area?		✓	
d	Are appropriate measures in place to protect the well (e.g., bollards)?	✓		
e	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked?	✓		
f	If locked, is the well lock in good condition?	✓		
g	Is the well lid in good condition?	✓		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal Casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the 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)	✓		
5	**Sampling and Data Collection Equipment**			
a	Indicate if the well is equipped with **dedicated sampling equipment**, a **dedicated water quality sonde**, and/or **dedicated water level data logger**.	NA		
b	If equipped with dedicated sampling equipment, is it in good operational condition?			NA
c	If equipped with a dedicated water quality sonde, is it in good operational condition?			NA
d	Does the desiccant need to be replaced on the water quality sonde?			NA
e	If equipped with a water level data logger, is it in good operational condition?			NA
f	Does the well recharge adequately when purged?	✓		
g	Does the well require redevelopment (low flow, excess turbidity)?		✓	
6	**Corrective Actions**			
a	Are corrective actions needed?		✓	

If yes, indicate here:

Well Inspection Form

Plant Name/Unit Name: Plant Hammond AP-1
Field Technician: C. CAIN
Well ID: HGWC-12

Date (mm/dd/yyyy): 6/23/23
Field Conditions: Sunny 50F

		Yes	No	Comments
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area?		✓	
d	Are appropriate measures in place to protect the well (e.g., bollards)?	✓		
e	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked?	✓		
f	If locked, is the well lock in good condition?	✓		
g	Is the well lid in good condition?	✓		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal Casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the 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)	✓		
5	**Sampling and Data Collection Equipment**			
a	Indicate if the well is equipped with **dedicated sampling equipment**, a **dedicated water quality sonde**, and/or **dedicated water level data logger**.			Sampling equipment
b	If equipped with dedicated sampling equipment, is it in good operational condition?	✓		
c	If equipped with a dedicated water quality sonde, is it in good operational condition?			NA
d	Does the desiccant need to be replaced on the water quality sonde?			NA
e	If equipped with a water level data logger, is it in good operational condition?			NA
f	Does the well recharge adequately when purged?	✓		
g	Does the well require redevelopment (low flow, excess turbidity)?		✓	
6	**Corrective Actions**			
a	Are corrective actions needed?		✓	

If yes, indicate here:

Well Inspection Form

Plant Name/Unit Name: Plant Hammond AP-1
Field Technician: A. Szwast
Well ID: HG VC-13

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

		Yes	No	Comments
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area?		✓	
d	Are appropriate measures in place to protect the well (e.g., bollards)?	✓		
e	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked?	✓		
f	If locked, is the well lock in good condition?	✓		
g	Is the well lid in good condition?	✓		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal Casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the 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)	✓		
5	**Sampling and Data Collection Equipment**			
a	Indicate if the well is equipped with **dedicated sampling equipment**, a **dedicated water quality sonde**, and/or **dedicated water level data logger**.			dedicated water quality sonde, dedicated water level data logger, dedicated sampling equipment
b	If equipped with dedicated sampling equipment, is it in good operational condition?	✓		
c	If equipped with a dedicated water quality sonde, is it in good operational condition?	✓		~~AHA~~ @ 1-23-2023
d	Does the desiccant need to be replaced on the water quality sonde?			N/A
e	If equipped with a water level data logger, is it in good operational condition?	✓		~~AHA~~ @ 1-23-2023
f	Does the well recharge adequately when purged?	✓		
g	Does the well require redevelopment (low flow, excess turbidity)?		✓	
6	**Corrective Actions**			
a	Are corrective actions needed?		✓	

If yes, indicate here:

Well Inspection Form

Plant Name/Unit Name: Plant Hammond AP-1
Field Technician: C. CAIN
Well ID: AP1A-1

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

		Yes	No	Comments
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area?		✓	
d	Are appropriate measures in place to protect the well (e.g., bollards)?	✓		
e	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked?	✓		
f	If locked, is the well lock in good condition?	✓		
g	Is the well lid in good condition?	✓		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal Casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the 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)	✓		
5	**Sampling and Data Collection Equipment**			
a	Indicate if the well is equipped with **dedicated sampling equipment**, a **dedicated water quality sonde**, and/or **dedicated water level data logger**.	NA		
b	If equipped with dedicated sampling equipment, is it in good operational condition?			NA
c	If equipped with a dedicated water quality sonde, is it in good operational condition?			NA
d	Does the desiccant need to be replaced on the water quality sonde?			NA
e	If equipped with a water level data logger, is it in good operational condition?	cc 1/23/23		NA
f	Does the well recharge adequately when purged?	X		NA
g	Does the well require redevelopment (low flow, excess turbidity)?		✓	
6	**Corrective Actions**			
a	Are corrective actions needed?		✓	

If yes, indicate here:

Well Inspection Form

Plant Name/Unit Name: Plant Hammond AP-1
Field Technician: C. CAIN
Well ID: MW-1

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

		Yes	No	Comments
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area?		✓	
d	Are appropriate measures in place to protect the well (e.g., bollards)?	✓		
e	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked?	✓		
f	If locked, is the well lock in good condition?	✓		
g	Is the well lid in good condition?	✓		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal Casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the 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)	✓		
5	**Sampling and Data Collection Equipment**			
a	Indicate if the well is equipped with **dedicated sampling equipment**, a **dedicated water quality sonde**, and/or **dedicated water level data logger**.			NA
b	If equipped with dedicated sampling equipment, is it in good operational condition?			NA
c	If equipped with a dedicated water quality sonde, is it in good operational condition?			NA
d	Does the desiccant need to be replaced on the water quality sonde?			NA
e	If equipped with a water level data logger, is it in good operational condition?			NA
f	Does the well recharge adequately when purged?			NA
g	Does the well require redevelopment (low flow, excess turbidity)?		✓	
6	**Corrective Actions**			
a	Are corrective actions needed?		✓	

If yes, indicate here:

Well Inspection Form

Plant Name/Unit Name: Plant Hammond AP-1
Field Technician: C. CAIN
Well ID: MW-5

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

		Yes	No	Comments
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area?		✓	
d	Are appropriate measures in place to protect the well (e.g., bollards)?	✓		
e	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked?	✓		
f	If locked, is the well lock in good condition?	✓		
g	Is the well lid in good condition?	✓		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal Casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the 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)	✓		
5	**Sampling and Data Collection Equipment**			
a	Indicate if the well is equipped with **dedicated sampling equipment**, a **dedicated water quality sonde**, and/or **dedicated water level data logger**.			Sampling equipment
b	If equipped with dedicated sampling equipment, is it in good operational condition?	✓		
c	If equipped with a dedicated water quality sonde, is it in good operational condition?			NA
d	Does the desiccant need to be replaced on the water quality sonde?			NA
e	If equipped with a water level data logger, is it in good operational condition?			NA
f	Does the well recharge adequately when purged?	✓		
g	Does the well require redevelopment (low flow, excess turbidity)?		✓	
6	**Corrective Actions**			
a	Are corrective actions needed?		✓	

If yes, indicate here:

Well Inspection Form

Plant Name/Unit Name: Plant Hammond AP-1
Field Technician: C. CAIN
Well ID: MW-6

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

		Yes	No	Comments
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area?		✓	
d	Are appropriate measures in place to protect the well (e.g., bollards)?	✓		
e	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked?	✓		
f	If locked, is the well lock in good condition?	✓		
g	Is the well lid in good condition?	✓		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal Casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the 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)	✓		
5	**Sampling and Data Collection Equipment**			
a	Indicate if the well is equipped with **dedicated sampling equipment**, a **dedicated water quality sonde**, and/or **dedicated water level data logger**.			Sampling equipment
b	If equipped with dedicated sampling equipment, is it in good operational condition?	✓		
c	If equipped with a dedicated water quality sonde, is it in good operational condition?			NA
d	Does the desiccant need to be replaced on the water quality sonde?			NA
e	If equipped with a water level data logger, is it in good operational condition?			NA
f	Does the well recharge adequately when purged?	✓		
g	Does the well require redevelopment (low flow, excess turbidity)?		✓	
6	**Corrective Actions**			
a	Are corrective actions needed?		✓	

If yes, indicate here:

Well Inspection Form

Plant Name/Unit Name: Plant Hammond AP-1
Field Technician: C. CAIN
Well ID: MW-7

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

		Yes	No	Comments
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area?		✓	
d	Are appropriate measures in place to protect the well (e.g., bollards)?	✓		
e	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked?	✓		
f	If locked, is the well lock in good condition?	✓		
g	Is the well lid in good condition?	✓		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal Casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the 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)	✓		
5	**Sampling and Data Collection Equipment**			
a	Indicate if the well is equipped with **dedicated sampling equipment**, a **dedicated water quality sonde**, and/or **dedicated water level data logger**.			Sampling equipment
b	If equipped with dedicated sampling equipment, is it in good operational condition?	✓		
c	If equipped with a dedicated water quality sonde, is it in good operational condition?			NA
d	Does the desiccant need to be replaced on the water quality sonde?			NA
e	If equipped with a water level data logger, is it in good operational condition?			NA
f	Does the well recharge adequately when purged?	✓		
g	Does the well require redevelopment (low flow, excess turbidity)?		✓	
6	**Corrective Actions**			
a	Are corrective actions needed?		✓	

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
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area?		✓	
d	Are appropriate measures in place to protect the well (e.g., bollards)?	✓		
e	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked?	✓		
f	If locked, is the well lock in good condition?	✓		
g	Is the well lid in good condition?	✓		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal Casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the 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)	✓		
5	**Sampling and Data Collection Equipment**			
a	Indicate if the well is equipped with **dedicated sampling equipment**, a **dedicated water quality sonde**, and/or **dedicated water level data logger**.			NA
b	If equipped with dedicated sampling equipment, is it in good operational condition?			NA
c	If equipped with a dedicated water quality sonde, is it in good operational condition?			NA
d	Does the desiccant need to be replaced on the water quality sonde?			NA
e	If equipped with a water level data logger, is it in good operational condition?			NA
f	Does the well recharge adequately when purged?	✓		
g	Does the well require redevelopment (low flow, excess turbidity)?		✓	
6	**Corrective Actions**			
a	Are corrective actions needed?		✓	

If yes, indicate here:

Well Inspection Form

Plant Name/Unit Name: Plant Hammond AP-1
Field Technician: C. CAIN
Well ID: MW-19

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

		Yes	No	Comments
1 Location/Identification				
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area?		✓	
d	Are appropriate measures in place to protect the well (e.g., bollards)?	✓		
e	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2 Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked?	✓		
f	If locked, is the well lock in good condition?	✓		
g	Is the well lid in good condition?	✓		
3 Surface Pad				
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4 Internal Casing				
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the 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)	✓		
5 Sampling and Data Collection Equipment				
a	Indicate if the well is equipped with **dedicated sampling equipment**, a **dedicated water quality sonde**, and/or **dedicated water level data logger**.			Sampling equipment
b	If equipped with dedicated sampling equipment, is it in good operational condition?	✓		
c	If equipped with a dedicated water quality sonde, is it in good operational condition?			NA
d	Does the desiccant need to be replaced on the water quality sonde?			NA
e	If equipped with a water level data logger, is it in good operational condition?			NA
f	Does the well recharge adequately when purged?	✓		
g	Does the well require redevelopment (low flow, excess turbidity)?		✓	
6 Corrective Actions				
a	Are corrective actions needed?		✓	

If yes, indicate here:

Well Inspection Form

Plant Name/Unit Name: Plant Hammond AP-1
Field Technician: C. CAIN
Well ID: MW-20

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

		Yes	No	Comments
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area?		✓	
d	Are appropriate measures in place to protect the well (e.g., bollards)?	✓		
e	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked?	✓		
f	If locked, is the well lock in good condition?	✓		
g	Is the well lid in good condition?	✓		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal Casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the 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)	✓		
5	**Sampling and Data Collection Equipment**			
a	Indicate if the well is equipped with **dedicated sampling equipment**, a **dedicated water quality sonde**, and/or **dedicated water level data logger**.	Bladder equipment		
b	If equipped with dedicated sampling equipment, is it in good operational condition?	✓		
c	If equipped with a dedicated water quality sonde, is it in good operational condition?			NA
d	Does the desiccant need to be replaced on the water quality sonde?			NA
e	If equipped with a water level data logger, is it in good operational condition?			NA
f	Does the well recharge adequately when purged?	✓		
g	Does the well require redevelopment (low flow, excess turbidity)?		✓	
6	**Corrective Actions**			
a	Are corrective actions needed?		✓	

If yes, indicate here:

Well Inspection Form

Plant Name/Unit Name: Plant Hammond / AP-1
Field Technician: A. Szwast
Well ID: MW-24D

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

		Yes	No	Comments
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area?		✓	
d	Are appropriate measures in place to protect the well (e.g., bollards)?	✓		
e	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked?	✓		
f	If locked, is the well lock in good condition?	✓		
g	Is the well lid in good condition?	✓		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal Casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the 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)	✓		
5	**Sampling and Data Collection Equipment**			
a	Indicate if the well is equipped with **dedicated sampling equipment**, a **dedicated water quality sonde**, and/or **dedicated water level data logger**			dedicated sampling equipment
b	If equipped with dedicated sampling equipment, is it in good operational condition?	✓		
c	If equipped with a dedicated water quality sonde, is it in good operational condition?			N/A
d	Does the desiccant need to be replaced on the water quality sonde?			N/A
e	If equipped with a water level data logger, is it in good operational condition?			N/A
f	Does the well recharge adequately when purged?	✓		
g	Does the well require redevelopment (low flow, excess turbidity)?		✓	
6	**Corrective Actions**			
a	Are corrective actions needed?		✓	

If yes, indicate here:

Well Inspection Form

Plant Name/Unit Name: Plant Hammond AP-1
Field Technician: C. CAIN
Well ID: MW-25D

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

		Yes	No	Comments
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area?		✓	
d	Are appropriate measures in place to protect the well (e.g., bollards)?	✓		
e	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked?	✓		
f	If locked, is the well lock in good condition?	✓		
g	Is the well lid in good condition?	✓		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal Casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the 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)	✓		
5	**Sampling and Data Collection Equipment**			
a	Indicate if the well is equipped with **dedicated sampling equipment**, a **dedicated water quality sonde**, and/or **dedicated water level data logger**.			Sample equipment
b	If equipped with dedicated sampling equipment, is it in good operational condition?	✓		
c	If equipped with a dedicated water quality sonde, is it in good operational condition?			NA
d	Does the desiccant need to be replaced on the water quality sonde?			NA
e	If equipped with a water level data logger, is it in good operational condition?			NA
f	Does the well recharge adequately when purged?	✓		
g	Does the well require redevelopment (low flow, excess turbidity)?		✓	
6	**Corrective Actions**			
a	Are corrective actions needed?		✓	

If yes, indicate here:

Well Inspection Form

Plant Name/Unit Name: Plant Hammond / AP-1
Field Technician: A. Szwast
Well ID: MW-26D

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

		Yes	No	Comments
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area?		✓	
d	Are appropriate measures in place to protect the well (e.g., bollards)?	✓		
e	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked?	✓		
f	If locked, is the well lock in good condition?	✓		
g	Is the well lid in good condition?	✓		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal Casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the 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)	✓		
5	**Sampling and Data Collection Equipment**			
a	Indicate if the well is equipped with **dedicated sampling equipment**, a **dedicated water quality sonde**, and/or **dedicated water level data logger**.			dedicated sampling equipment
b	If equipped with dedicated sampling equipment, is it in good operational condition?	✓		
c	If equipped with a dedicated water quality sonde, is it in good operational condition?			N/A
d	Does the desiccant need to be replaced on the water quality sonde?			N/A
e	If equipped with a water level data logger, is it in good operational condition?			N/A
f	Does the well recharge adequately when purged?	✓		
g	Does the well require redevelopment (low flow, excess turbidity)?		✓	
6	**Corrective Actions**			
a	Are corrective actions needed?		✓	

If yes, indicate here:

Well Inspection Form

Plant Name/Unit Name: Plant Hammond / AP-1
Field Technician: A. Szwast
Well ID: MW-27D

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

		Yes	No	Comments
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area?		✓	
d	Are appropriate measures in place to protect the well (e.g., bollards)?	✓		
e	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked?	✓		
f	If locked, is the well lock in good condition?	✓		
g	Is the well lid in good condition?	✓		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal Casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the 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)	✓		
5	**Sampling and Data Collection Equipment**			
a	Indicate if the well is equipped with **dedicated sampling equipment**, a **dedicated water quality sonde**, and/or **dedicated water level data logger**.			dedicated sampling equipment
b	If equipped with dedicated sampling equipment, is it in good operational condition?	✓		
c	If equipped with a dedicated water quality sonde, is it in good operational condition?			N/A
d	Does the desiccant need to be replaced on the water quality sonde?			N/A
e	If equipped with a water level data logger, is it in good operational condition?			N/A
f	Does the well recharge adequately when purged?	✓		~~N/A~~ ✓ 1-23-2023
g	Does the well require redevelopment (low flow, excess turbidity)?		✓	
6	**Corrective Actions**			
a	Are corrective actions needed?		✓	

If yes, indicate here:

Well Inspection Form

Plant Name/Unit Name: Plant Hammond
Field Technician: C. CAIN
Well ID: MW-28D

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

		Yes	No	Comments
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area?		✓	
d	Are appropriate measures in place to protect the well (e.g., bollards)?			
e	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked?	✓		
f	If locked, is the well lock in good condition?	✓		
g	Is the well lid in good condition?	✓		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal Casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the 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)	✓		
5	**Sampling and Data Collection Equipment**			
a	Indicate if the well is equipped with **dedicated sampling equipment**, a **dedicated water quality sonde**, and/or **dedicated water level data logger**.			Sampling equipment
b	If equipped with dedicated sampling equipment, is it in good operational condition?	✓		
c	If equipped with a dedicated water quality sonde, is it in good operational condition?			NA
d	Does the desiccant need to be replaced on the water quality sonde?			NA
e	If equipped with a water level data logger, is it in good operational condition?			NA
f	Does the well recharge adequately when purged?	✓		
g	Does the well require redevelopment (low flow, excess turbidity)?		✓	
6	**Corrective Actions**			
a	Are corrective actions needed?		✓	

If yes, indicate here:

Well Inspection Form

Plant Name/Unit Name: Plant Hammond AP-1
Field Technician: C. CAIN
Well ID: MW-29

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

		Yes	No	Comments
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area?		✓	
d	Are appropriate measures in place to protect the well (e.g., bollards)?	✓		
e	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked?	✓		
f	If locked, is the well lock in good condition?	✓		
g	Is the well lid in good condition?	✓		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal Casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the 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)	✓		
5	**Sampling and Data Collection Equipment**			
a	Indicate if the well is equipped with **dedicated sampling equipment**, a **dedicated water quality sonde**, and/or **dedicated water level data logger**.			Sampling equipment
b	If equipped with dedicated sampling equipment, is it in good operational condition?	✓		
c	If equipped with a dedicated water quality sonde, is it in good operational condition?			NA
d	Does the desiccant need to be replaced on the water quality sonde?			NA
e	If equipped with a water level data logger, is it in good operational condition?			NA
f	Does the well recharge adequately when purged?	✓		
g	Does the well require redevelopment (low flow, excess turbidity)?		✓	
6	**Corrective Actions**			
a	Are corrective actions needed?		✓	

If yes, indicate here:

Well Inspection Form

Plant Name/Unit Name: Plant Hammond AP-1
Field Technician: C. CAIN
Well ID: MW-30D

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

		Yes	No	Comments
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area?		✓	
d	Are appropriate measures in place to protect the well (e.g., bollards)?	✓		
e	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked?	✓		
f	If locked, is the well lock in good condition?	✓		
g	Is the well lid in good condition?	✓		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal Casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the 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)	✓		
5	**Sampling and Data Collection Equipment**			
a	Indicate if the well is equipped with **dedicated sampling equipment**, a **dedicated water quality sonde**, and/or **dedicated water level data logger**.	NA		
b	If equipped with dedicated sampling equipment, is it in good operational condition?			NA
c	If equipped with a dedicated water quality sonde, is it in good operational condition?			NA
d	Does the desiccant need to be replaced on the water quality sonde?			NA
e	If equipped with a water level data logger, is it in good operational condition?			NA
f	Does the well recharge adequately when purged?			NA
g	Does the well require redevelopment (low flow, excess turbidity)?		✓	
6	**Corrective Actions**			
a	Are corrective actions needed?		✓	

If yes, indicate here:

Well Inspection Form

Plant Name/Unit Name: Plant Hammond AP-1
Field Technician: C. CAIN
Well ID: MW-40D

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

		Yes	No	Comments
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area?		✓	
d	Are appropriate measures in place to protect the well (e.g., bollards)?	✓		
e	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked?	✓		
f	If locked, is the well lock in good condition?	✓		
g	Is the well lid in good condition?	✓		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal Casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the 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)	✓		
5	**Sampling and Data Collection Equipment**			
a	Indicate if the well is equipped with **dedicated sampling equipment**, a **dedicated water quality sonde**, and/or **dedicated water level data logger**.	NA		
b	If equipped with dedicated sampling equipment, is it in good operational condition?			NA
c	If equipped with a dedicated water quality sonde, is it in good operational condition?			NA
d	Does the desiccant need to be replaced on the water quality sonde?			NA
e	If equipped with a water level data logger, is it in good operational condition?			NA
f	Does the well recharge adequately when purged?			NA
g	Does the well require redevelopment (low flow, excess turbidity)?		✓	
6	**Corrective Actions**			
a	Are corrective actions needed?		✓	

If yes, indicate here:

August 2023

Geosyntec consultants

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

MEMORANDUM

DATE: November 3, 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 1 (AP-1) – 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 1 (AP-1) 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.

Georgia Power Site/Unit	Date Performed	Well ID	Maintenance/ Repair Performed
Hammond/AP-1	8/7/2023 -8/8/2023	All Wells	Checked and cleared weep holes of debris.

ATTACHMENT

Well Inspection Summary

Well Inspection

Site Name: Plant Hammond AP-1

Date: 08/07/2023

Permit Number: 057-023D(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-43D	Yes	Yes	No	Yes
HGWA-44D	Yes	Yes	No	Yes
HGWC-7	Yes	Yes	No	Yes
HGWC-8	Yes	Yes	No	Yes
HGWC-9	Yes	Yes	No	Yes
HGWC-10	Yes	Yes	No	Yes
HGWC-11	Yes	Yes	No	Yes
HGWC-12	Yes	Yes	No	Yes
HGWC-13	Yes	Yes	No	Yes
AP1A-1	Yes	Yes	No	Yes
MW-1	Yes	Yes	No	Yes
MW-5	Yes	Yes	No	Yes
MW-6	Yes	Yes	No	Yes
MW-7	Yes	Yes	No	Yes
MW-8	Yes	Yes	No	Yes
MW-19	Yes	Yes	No	Yes
MW-20	Yes	Yes	No	Yes
MW-24D	Yes	Yes	No	Yes
MW-25D	Yes	Yes	No	Yes
MW-26D	Yes	Yes	No	Yes
MW-27D	Yes	Yes	No	Yes
MW-28D	Yes	Yes	No	Yes
MW-29	Yes	Yes	No	Yes
MW-30D	Yes	Yes	No	Yes
MW-40D	Yes	Yes	No	Yes

Well Inspection

Site Name: Plant Hammond AP-1

Date: 08/07/2023

Permit Number: 057-023D(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-43D	Yes	Yes	Yes	Yes	Yes
HGWA-44D	Yes	Yes	Yes	Yes	Yes
HGWC-7	Yes	Yes	Yes	Yes	Yes
HGWC-8	Yes	Yes	Yes	Yes	Yes
HGWC-9	Yes	Yes	Yes	Yes	Yes
HGWC-10	Yes	Yes	Yes	Yes	Yes
HGWC-11	Yes	Yes	Yes	Yes	Yes
HGWC-12	Yes	Yes	Yes	Yes	Yes
HGWC-13	Yes	Yes	Yes	Yes	Yes
AP1A-1	Yes	Yes	Yes	Yes	Yes
MW-1	Yes	Yes	Yes	Yes	Yes
MW-5	Yes	Yes	Yes	Yes	Yes
MW-6	Yes	Yes	Yes	Yes	Yes
MW-7	Yes	Yes	Yes	Yes	Yes
MW-8	Yes	Yes	Yes	Yes	Yes
MW-19	Yes	Yes	Yes	Yes	Yes
MW-20	Yes	Yes	Yes	Yes	Yes
MW-24D	Yes	Yes	Yes	Yes	Yes
MW-25D	Yes	Yes	Yes	Yes	Yes
MW-26D	Yes	Yes	Yes	Yes	Yes
MW-27D	Yes	Yes	Yes	Yes	Yes
MW-28D	Yes	Yes	Yes	Yes	Yes
MW-29	Yes	Yes	Yes	Yes	Yes
MW-30D	Yes	Yes	Yes	Yes	Yes
MW-40D	Yes	Yes	Yes	Yes	Yes

Well Inspection

Site Name: Plant Hammond AP-1

Date: 08/07/2023

Permit Number: 057-023D(CCR)

Field Conditions: Sunny, 70° F

Well ID:	Surface Pad			Internal Casing		
	Good condition (not cracked/ broken)	Sloped away from the protective casing	In complete contact with the ground surface and stable	Cap prevents entry of foreign material into the well	Free of kinks/bends, or any obstructions from foreign objects (such as bailers)	Properly vented for equilibration of air pressure
HGWA-1	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-2	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-3	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-43D	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-44D	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-7	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-8	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-9	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-10	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-11	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-12	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-13	Yes	Yes	Yes	Yes	Yes	Yes
AP1A-1	Yes	Yes	Yes	Yes	Yes	Yes
MW-1	Yes	Yes	Yes	Yes	Yes	Yes
MW-5	Yes	Yes	Yes	Yes	Yes	Yes
MW-6	Yes	Yes	Yes	Yes	Yes	Yes
MW-7	Yes	Yes	Yes	Yes	Yes	Yes
MW-8	Yes	Yes	Yes	Yes	Yes	Yes
MW-19	Yes	Yes	Yes	Yes	Yes	Yes
MW-20	Yes	Yes	Yes	Yes	Yes	Yes
MW-24D	Yes	Yes	Yes	Yes	Yes	Yes
MW-25D	Yes	Yes	Yes	Yes	Yes	Yes
MW-26D	Yes	Yes	Yes	Yes	Yes	Yes
MW-27D	Yes	Yes	Yes	Yes	Yes	Yes
MW-28D	Yes	Yes	Yes	Yes	Yes	Yes
MW-29	Yes	Yes	Yes	Yes	Yes	Yes
MW-30D	Yes	Yes	Yes	Yes	Yes	Yes
MW-40D	Yes	Yes	Yes	Yes	Yes	Yes

Well Inspection

Site Name: Plant Hammond AP-1

Date: 08/07/2023

Permit Number: 057-023D(CCR)

Field Conditions: Sunny, 70° F

Well ID:	Corrective actions as needed, by date:
HGWA-1	N/A
HGWA-2	N/A
HGWA-3	N/A
HGWA-43D	N/A
HGWA-44D	N/A
HGWC-7	N/A
HGWC-8	N/A
HGWC-9	N/A
HGWC-10	N/A
HGWC-11	N/A
HGWC-12	N/A
HGWC-13	N/A
AP1A-1	N/A
MW-1	N/A
MW-5	N/A
MW-6	N/A
MW-7	N/A
MW-8	N/A
MW-19	N/A
MW-20	N/A
MW-24D	N/A
MW-25D	N/A
MW-26D	N/A
MW-27D	N/A
MW-28D	N/A
MW-29	N/A
MW-30D	N/A
MW-40D	N/A

APPENDIX C

Laboratory Analytical and Field Sampling Reports

LABORATORY ANALYTICAL REPORTS

January 2023

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

April 27, 2023

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

RE: Project: Hammond AP-1
Pace Project No.: 92649377

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between January 30, 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,

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: Hammond AP-1
Pace Project No.: 92649377

Pace Analytical Services Charlotte
South Carolina Laboratory ID: 99006
9800 Kincey 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

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

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: Hammond AP-1
Pace Project No.: 92649377

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92649377001	**HAM-HGWC-9**	Water	01/26/23 15:24	01/30/23 11:58
92649377002	**HAM-HGWC-11**	Water	01/26/23 14:27	01/30/23 11:58
92649377003	**HAM-HGWC-12**	Water	01/26/23 12:25	01/30/23 11:58
92649377004	**HAM-HGWC-13**	Water	01/26/23 13:30	01/30/23 11:58
92649377005	**HAM-MW-5**	Water	01/26/23 11:14	01/30/23 11:58
92649377006	**HAM-MW-6**	Water	01/26/23 12:40	01/30/23 11:58
92649377007	**HAM-MW-7**	Water	01/26/23 14:04	01/30/23 11:58
92649377008	**HAM-MW-19**	Water	01/26/23 16:05	01/30/23 11:58
92649377009	**HAM-MW-20**	Water	01/26/23 09:49	01/30/23 11:58
92649377010	**HAM-MW-24D**	Water	01/26/23 11:31	01/30/23 11:58
92649377011	**HAM-MW-25D**	Water	01/26/23 10:14	01/30/23 11:58
92649377012	**HAM-MW-26D**	Water	01/26/23 16:32	01/30/23 11:58
92649377013	**HAM-MW-28D**	Water	01/26/23 17:33	01/30/23 11:58
92649377014	**HAM-MW-29**	Water	01/26/23 15:19	01/30/23 11:58
92649377015	**HAM-AP-1-FD-01**	Water	01/26/23 14:48	01/30/23 11:58
92649377016	**HAM-HGWC-7**	Water	01/27/23 13:15	01/30/23 11:58
92649377017	**HAM-HGWC-10**	Water	01/27/23 15:01	01/30/23 11:58
92649377018	**HAM-MW-27D**	Water	01/27/23 17:35	01/30/23 11:58
92649377019	**HAM-HGWC-8**	Water	02/01/23 10:02	02/03/23 12:50
92649377020	**HAM-AP-1-EB-01**	Water	02/01/23 14:50	02/03/23 12:50
92649377021	**HAM-AP-1-FB-01**	Water	02/01/23 14:40	02/03/23 12:50

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: Hammond AP-1
Pace Project No.: 92649377

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92649377001	**HAM-HGWC-9**	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
92649377002	**HAM-HGWC-11**	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
92649377003	**HAM-HGWC-12**	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
92649377004	**HAM-HGWC-13**	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
92649377005	**HAM-MW-5**	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
92649377006	**HAM-MW-6**	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
92649377007	**HAM-MW-7**	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
92649377008	**HAM-MW-19**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: Hammond AP-1
Pace Project No.: 92649377

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92649377009	**HAM-MW-20**	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
92649377010	**HAM-MW-24D**	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
92649377011	**HAM-MW-25D**	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
92649377012	**HAM-MW-26D**	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
92649377013	**HAM-MW-28D**	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
92649377014	**HAM-MW-29**	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
92649377015	**HAM-AP-1-FD-01**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: Hammond AP-1
Pace Project No.: 92649377

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 300.0 Rev 2.1 1993	CDC	3
92649377016	**HAM-HGWC-7**	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
92649377017	**HAM-HGWC-10**	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
92649377018	**HAM-MW-27D**	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
92649377019	**HAM-HGWC-8**	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
92649377020	**HAM-AP-1-EB-01**	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
92649377021	**HAM-AP-1-FB-01**	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

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92649377

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92649377001	**HAM-HGWC-9**					
	Performed by	Customer			01/30/23 16:42	
	pH	7.07	Std. Units		01/30/23 16:42	
EPA 6010D	Calcium	173	mg/L	1.0	03/21/23 16:21	
EPA 6020B	Antimony	0.00092J	mg/L	0.0030	02/03/23 20:20	
EPA 6020B	Barium	0.069	mg/L	0.0050	02/03/23 20:20	
EPA 6020B	Boron	1.9	mg/L	0.040	02/03/23 20:20	
EPA 6020B	Chromium	0.0013J	mg/L	0.0050	02/06/23 13:32	
EPA 6020B	Cobalt	0.00068J	mg/L	0.0050	02/03/23 20:20	
EPA 6020B	Lithium	0.0032J	mg/L	0.030	02/03/23 20:20	
EPA 6020B	Molybdenum	0.021	mg/L	0.010	02/03/23 20:20	
SM 2540C-2015	Total Dissolved Solids	745	mg/L	25.0	01/31/23 12:43	
EPA 300.0 Rev 2.1 1993	Chloride	86.9	mg/L	1.0	02/01/23 11:20	
EPA 300.0 Rev 2.1 1993	Fluoride	0.11	mg/L	0.10	02/01/23 11:20	
EPA 300.0 Rev 2.1 1993	Sulfate	217	mg/L	4.0	02/04/23 14:55	
92649377002	**HAM-HGWC-11**					
	Performed by	Customer			01/30/23 16:43	
	pH	6.23	Std. Units		01/30/23 16:43	
EPA 6010D	Calcium	113	mg/L	1.0	03/21/23 16:26	
EPA 6020B	Barium	0.031	mg/L	0.0050	02/03/23 20:26	
EPA 6020B	Boron	0.50	mg/L	0.040	02/03/23 20:26	
EPA 6020B	Chromium	0.0012J	mg/L	0.0050	02/06/23 13:38	
EPA 6020B	Molybdenum	0.022	mg/L	0.010	02/03/23 20:26	
EPA 6020B	Selenium	0.010	mg/L	0.0050	02/03/23 20:26	
SM 2540C-2015	Total Dissolved Solids	429	mg/L	25.0	01/31/23 12:44	
EPA 300.0 Rev 2.1 1993	Chloride	8.8	mg/L	1.0	02/01/23 11:37	
EPA 300.0 Rev 2.1 1993	Fluoride	0.20	mg/L	0.10	02/01/23 11:37	
EPA 300.0 Rev 2.1 1993	Sulfate	209	mg/L	4.0	02/04/23 11:43	
92649377003	**HAM-HGWC-12**					
	Performed by	Customer			01/30/23 16:43	
	pH	7.10	Std. Units		01/30/23 16:43	
EPA 6010D	Calcium	154	mg/L	1.0	03/21/23 16:31	
EPA 6020B	Arsenic	0.0025J	mg/L	0.0050	02/03/23 20:32	
EPA 6020B	Barium	0.076	mg/L	0.0050	02/03/23 20:32	
EPA 6020B	Boron	1.5	mg/L	0.040	02/03/23 20:32	
EPA 6020B	Cobalt	0.0012J	mg/L	0.0050	02/03/23 20:32	
EPA 6020B	Lithium	0.0058J	mg/L	0.030	02/03/23 20:32	
EPA 6020B	Molybdenum	0.048	mg/L	0.010	02/03/23 20:32	
SM 2540C-2015	Total Dissolved Solids	624	mg/L	25.0	01/31/23 12:44	
EPA 300.0 Rev 2.1 1993	Chloride	34.6	mg/L	1.0	02/01/23 11:54	
EPA 300.0 Rev 2.1 1993	Fluoride	0.21	mg/L	0.10	02/01/23 11:54	
EPA 300.0 Rev 2.1 1993	Sulfate	228	mg/L	4.0	02/04/23 11:57	
92649377004	**HAM-HGWC-13**					
	Performed by	Customer			01/30/23 16:43	
	pH	6.90	Std. Units		01/30/23 16:43	
EPA 6010D	Calcium	234	mg/L	1.0	03/21/23 16:36	
EPA 6020B	Arsenic	0.53	mg/L	0.0050	02/03/23 20:49	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92649377

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92649377004	**HAM-HGWC-13**					
EPA 6020B	Barium	0.079	mg/L	0.0050	02/03/23 20:49	
EPA 6020B	Beryllium	0.000099J	mg/L	0.00050	02/06/23 14:02	
EPA 6020B	Boron	0.83	mg/L	0.040	02/06/23 14:02	
EPA 6020B	Cobalt	0.012	mg/L	0.0050	02/03/23 20:49	
EPA 6020B	Lithium	0.040	mg/L	0.030	02/03/23 20:49	
EPA 6020B	Molybdenum	0.023	mg/L	0.010	02/03/23 20:49	
EPA 6020B	Thallium	0.00031J	mg/L	0.0010	02/03/23 20:49	
SM 2540C-2015	Total Dissolved Solids	962	mg/L	25.0	01/31/23 12:45	
EPA 300.0 Rev 2.1 1993	Chloride	12.5	mg/L	1.0	02/01/23 12:12	
EPA 300.0 Rev 2.1 1993	Fluoride	0.40	mg/L	0.10	02/01/23 12:12	
EPA 300.0 Rev 2.1 1993	Sulfate	495	mg/L	10.0	02/04/23 12:12	
92649377005	**HAM-MW-5**					
	Performed by	Customer			01/30/23 16:44	
	pH	6.07	Std. Units		01/30/23 16:44	
EPA 6010D	Calcium	76.1	mg/L	1.0	03/21/23 17:15	
EPA 6020B	Barium	0.050	mg/L	0.0050	02/03/23 20:55	
EPA 6020B	Boron	0.044	mg/L	0.040	02/06/23 14:08	
EPA 6020B	Chromium	0.0032J	mg/L	0.0050	02/06/23 14:08	
EPA 6020B	Selenium	0.0045J	mg/L	0.0050	02/03/23 20:55	
SM 2540C-2015	Total Dissolved Solids	363	mg/L	25.0	01/31/23 12:45	
EPA 300.0 Rev 2.1 1993	Chloride	0.86J	mg/L	1.0	02/01/23 12:29	
EPA 300.0 Rev 2.1 1993	Fluoride	0.087J	mg/L	0.10	02/01/23 12:29	
EPA 300.0 Rev 2.1 1993	Sulfate	137	mg/L	3.0	02/04/23 12:27	
92649377006	**HAM-MW-6**					
	Performed by	Customer			01/30/23 16:44	
	pH	6.90	Std. Units		01/30/23 16:44	
EPA 6010D	Calcium	180	mg/L	1.0	03/21/23 17:20	
EPA 6020B	Barium	0.079	mg/L	0.0050	02/03/23 21:01	
EPA 6020B	Boron	0.71	mg/L	0.040	02/06/23 14:14	
EPA 6020B	Chromium	0.0014J	mg/L	0.0050	02/06/23 14:14	
EPA 6020B	Cobalt	0.00044J	mg/L	0.0050	02/03/23 21:01	
EPA 6020B	Molybdenum	0.0029J	mg/L	0.010	02/03/23 21:01	
SM 2540C-2015	Total Dissolved Solids	646	mg/L	25.0	01/31/23 12:46	
EPA 300.0 Rev 2.1 1993	Chloride	30.5	mg/L	1.0	02/01/23 12:47	
EPA 300.0 Rev 2.1 1993	Fluoride	0.088J	mg/L	0.10	02/01/23 12:47	
EPA 300.0 Rev 2.1 1993	Sulfate	203	mg/L	4.0	02/04/23 12:41	
92649377007	**HAM-MW-7**					
	Performed by	Customer			01/30/23 16:46	
	pH	6.23	Std. Units		01/30/23 16:46	
EPA 6010D	Calcium	21.6	mg/L	1.0	03/21/23 17:25	
EPA 6020B	Barium	0.044	mg/L	0.0050	02/03/23 21:07	
EPA 6020B	Boron	0.033J	mg/L	0.040	02/06/23 14:20	
EPA 6020B	Chromium	0.0017J	mg/L	0.0050	02/06/23 14:20	
SM 2540C-2015	Total Dissolved Solids	89.0	mg/L	25.0	01/31/23 12:47	
EPA 300.0 Rev 2.1 1993	Chloride	1.2	mg/L	1.0	02/01/23 13:56	
EPA 300.0 Rev 2.1 1993	Fluoride	0.060J	mg/L	0.10	02/01/23 13:56	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92649377

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92649377007	**HAM-MW-7**					
EPA 300.0 Rev 2.1 1993	Sulfate	26.0	mg/L	1.0	02/01/23 13:56	
92649377008	**HAM-MW-19**					
	Performed by	Customer			01/30/23 16:46	
	pH	6.13	Std. Units		01/30/23 16:46	
EPA 6010D	Calcium	118	mg/L	1.0	03/21/23 17:30	M1
EPA 6020B	Barium	0.039	mg/L	0.0050	02/03/23 21:13	
EPA 6020B	Boron	0.36	mg/L	0.040	02/06/23 14:26	
EPA 6020B	Chromium	0.0011J	mg/L	0.0050	02/06/23 14:26	
EPA 6020B	Cobalt	0.022	mg/L	0.0050	02/03/23 21:13	
EPA 6020B	Lithium	0.0038J	mg/L	0.030	02/03/23 21:13	
EPA 6020B	Molybdenum	0.012	mg/L	0.010	02/03/23 21:13	
EPA 6020B	Selenium	0.0056	mg/L	0.0050	02/03/23 21:13	
SM 2540C-2015	Total Dissolved Solids	490	mg/L	25.0	01/31/23 12:48	
EPA 300.0 Rev 2.1 1993	Chloride	7.7	mg/L	1.0	02/01/23 14:14	
EPA 300.0 Rev 2.1 1993	Fluoride	0.098J	mg/L	0.10	02/01/23 14:14	
EPA 300.0 Rev 2.1 1993	Sulfate	214	mg/L	5.0	02/04/23 13:41	
92649377009	**HAM-MW-20**					
	Performed by	Customer			01/30/23 16:46	
	pH	6.95	Std. Units		01/30/23 16:46	
EPA 6010D	Calcium	122	mg/L	1.0	03/21/23 17:49	
EPA 6020B	Barium	0.097	mg/L	0.0050	02/03/23 21:19	
EPA 6020B	Boron	0.099	mg/L	0.040	02/06/23 14:32	
SM 2540C-2015	Total Dissolved Solids	482	mg/L	25.0	01/31/23 12:48	
EPA 300.0 Rev 2.1 1993	Chloride	30.0	mg/L	1.0	02/01/23 15:06	
EPA 300.0 Rev 2.1 1993	Fluoride	0.081J	mg/L	0.10	02/01/23 15:06	
EPA 300.0 Rev 2.1 1993	Sulfate	109	mg/L	2.0	02/04/23 14:25	
92649377010	**HAM-MW-24D**					
	Performed by	Customer			01/30/23 16:46	
	pH	7.60	Std. Units		01/30/23 16:46	
EPA 6010D	Calcium	107	mg/L	1.0	03/21/23 17:54	
EPA 6020B	Barium	0.054	mg/L	0.0050	02/03/23 21:25	
EPA 6020B	Boron	0.47	mg/L	0.040	02/06/23 14:37	
EPA 6020B	Lithium	0.0025J	mg/L	0.030	02/03/23 21:25	
EPA 6020B	Molybdenum	0.0012J	mg/L	0.010	02/03/23 21:25	
SM 2540C-2015	Total Dissolved Solids	412	mg/L	25.0	01/31/23 12:49	
EPA 300.0 Rev 2.1 1993	Chloride	38.0	mg/L	1.0	02/01/23 15:23	
EPA 300.0 Rev 2.1 1993	Fluoride	0.083J	mg/L	0.10	02/01/23 15:23	
EPA 300.0 Rev 2.1 1993	Sulfate	152	mg/L	3.0	02/04/23 14:40	
92649377011	**HAM-MW-25D**					
	Performed by	Customer			01/30/23 16:48	
	pH	7.74	Std. Units		01/30/23 16:48	
EPA 6010D	Calcium	21.8	mg/L	1.0	03/21/23 17:58	
EPA 6020B	Barium	0.65	mg/L	0.0050	02/03/23 21:31	
EPA 6020B	Boron	0.30	mg/L	0.040	02/06/23 14:43	
EPA 6020B	Chromium	0.0012J	mg/L	0.0050	02/06/23 14:43	

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SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92649377

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92649377011	**HAM-MW-25D**					
EPA 6020B	Lithium	0.036	mg/L	0.030	02/03/23 21:31	
SM 2540C-2015	Total Dissolved Solids	346	mg/L	25.0	01/31/23 12:49	
EPA 300.0 Rev 2.1 1993	Chloride	17.2	mg/L	1.0	02/02/23 13:14	
EPA 300.0 Rev 2.1 1993	Fluoride	1.6	mg/L	0.10	02/02/23 13:14	
EPA 300.0 Rev 2.1 1993	Sulfate	0.59J	mg/L	1.0	02/02/23 13:14	
92649377012	**HAM-MW-26D**					
	Performed by	Customer			01/30/23 16:48	
	pH	7.14	Std. Units		01/30/23 16:48	
EPA 6010D	Calcium	179	mg/L	1.0	03/21/23 18:13	
EPA 6020B	Barium	0.065	mg/L	0.0050	02/03/23 21:37	
EPA 6020B	Boron	1.8	mg/L	0.040	02/06/23 14:49	
EPA 6020B	Cobalt	0.00051J	mg/L	0.0050	02/03/23 21:37	
EPA 6020B	Lithium	0.0031J	mg/L	0.030	02/03/23 21:37	
EPA 6020B	Molybdenum	0.028	mg/L	0.010	02/03/23 21:37	
SM 2540C-2015	Total Dissolved Solids	741	mg/L	25.0	01/31/23 12:49	
EPA 300.0 Rev 2.1 1993	Chloride	83.6	mg/L	1.0	02/02/23 13:33	
EPA 300.0 Rev 2.1 1993	Fluoride	0.11	mg/L	0.10	02/02/23 13:33	
EPA 300.0 Rev 2.1 1993	Sulfate	240	mg/L	5.0	02/02/23 16:23	
92649377013	**HAM-MW-28D**					
	Performed by	Customer			02/15/23 12:06	
	pH	7.67	Std. Units		02/15/23 12:06	
EPA 6010D	Calcium	64.4	mg/L	1.0	03/21/23 18:18	
EPA 6020B	Barium	0.80	mg/L	0.0050	02/03/23 21:43	
EPA 6020B	Boron	0.29	mg/L	0.040	02/06/23 14:55	
EPA 6020B	Lithium	0.011J	mg/L	0.030	02/03/23 21:43	
EPA 6020B	Molybdenum	0.0025J	mg/L	0.010	02/03/23 21:43	
SM 2540C-2015	Total Dissolved Solids	349	mg/L	25.0	01/31/23 12:50	
EPA 300.0 Rev 2.1 1993	Chloride	27.7	mg/L	1.0	02/02/23 13:51	
EPA 300.0 Rev 2.1 1993	Fluoride	0.22	mg/L	0.10	02/02/23 13:51	
EPA 300.0 Rev 2.1 1993	Sulfate	40.8	mg/L	1.0	02/02/23 13:51	
92649377014	**HAM-MW-29**					
	Performed by	Customer			01/30/23 16:48	
	pH	7.22	Std. Units		01/30/23 16:48	
EPA 6010D	Calcium	146	mg/L	1.0	03/21/23 18:23	
EPA 6020B	Barium	0.076	mg/L	0.0050	02/03/23 22:01	
EPA 6020B	Boron	1.0	mg/L	0.040	02/06/23 15:13	
EPA 6020B	Cobalt	0.00056J	mg/L	0.0050	02/03/23 22:01	
EPA 6020B	Lithium	0.0019J	mg/L	0.030	02/03/23 22:01	
EPA 6020B	Molybdenum	0.0029J	mg/L	0.010	02/03/23 22:01	
SM 2540C-2015	Total Dissolved Solids	632	mg/L	25.0	01/31/23 12:51	
EPA 300.0 Rev 2.1 1993	Chloride	62.4	mg/L	1.0	02/02/23 14:10	
EPA 300.0 Rev 2.1 1993	Fluoride	0.068J	mg/L	0.10	02/02/23 14:10	
EPA 300.0 Rev 2.1 1993	Sulfate	161	mg/L	3.0	02/02/23 17:00	
92649377015	**HAM-AP-1-FD-01**					
EPA 6010D	Calcium	113	mg/L	1.0	03/21/23 18:28	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92649377

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92649377015	**HAM-AP-1-FD-01**					
EPA 6020B	Barium	0.031	mg/L	0.0050	02/03/23 22:07	
EPA 6020B	Boron	0.51	mg/L	0.040	02/06/23 15:19	
EPA 6020B	Molybdenum	0.022	mg/L	0.010	02/03/23 22:07	
EPA 6020B	Selenium	0.0095	mg/L	0.0050	02/03/23 22:07	
SM 2540C-2015	Total Dissolved Solids	509	mg/L	25.0	01/31/23 12:51	
EPA 300.0 Rev 2.1 1993	Chloride	9.2	mg/L	1.0	02/02/23 14:29	
EPA 300.0 Rev 2.1 1993	Fluoride	0.20	mg/L	0.10	02/02/23 14:29	
EPA 300.0 Rev 2.1 1993	Sulfate	221	mg/L	4.0	02/02/23 17:19	
92649377016	**HAM-HGWC-7**					
	Performed by	Customer			01/30/23 16:50	
	pH	7.25	Std. Units		01/30/23 16:50	
EPA 6010D	Calcium	124	mg/L	1.0	03/21/23 18:32	
EPA 6020B	Barium	0.065	mg/L	0.0050	02/03/23 22:13	
EPA 6020B	Boron	0.93	mg/L	0.040	02/06/23 15:25	
EPA 6020B	Cadmium	0.00019J	mg/L	0.00050	02/03/23 22:13	
EPA 6020B	Chromium	0.0014J	mg/L	0.0050	02/06/23 15:25	
EPA 6020B	Cobalt	0.00067J	mg/L	0.0050	02/03/23 22:13	
EPA 6020B	Lithium	0.0018J	mg/L	0.030	02/03/23 22:13	
EPA 6020B	Molybdenum	0.039	mg/L	0.010	02/03/23 22:13	
SM 2540C-2015	Total Dissolved Solids	473	mg/L	25.0	01/31/23 12:52	
EPA 300.0 Rev 2.1 1993	Chloride	40.0	mg/L	1.0	02/02/23 14:48	
EPA 300.0 Rev 2.1 1993	Fluoride	0.10	mg/L	0.10	02/02/23 14:48	
EPA 300.0 Rev 2.1 1993	Sulfate	119	mg/L	2.0	02/02/23 17:38	
92649377017	**HAM-HGWC-10**					
	Performed by	Customer			01/30/23 16:50	
	pH	6.89	Std. Units		01/30/23 16:50	
EPA 6010D	Calcium	60.4	mg/L	1.0	03/21/23 18:37	
EPA 6020B	Barium	0.041	mg/L	0.0050	02/03/23 22:19	
EPA 6020B	Boron	0.065	mg/L	0.040	02/06/23 15:31	
EPA 6020B	Chromium	0.0012J	mg/L	0.0050	02/06/23 15:31	
EPA 6020B	Selenium	0.0035J	mg/L	0.0050	02/03/23 22:19	
SM 2540C-2015	Total Dissolved Solids	188	mg/L	25.0	02/02/23 19:15	
EPA 300.0 Rev 2.1 1993	Chloride	1.6	mg/L	1.0	02/02/23 15:07	
EPA 300.0 Rev 2.1 1993	Fluoride	0.16	mg/L	0.10	02/02/23 15:07	
EPA 300.0 Rev 2.1 1993	Sulfate	37.3	mg/L	1.0	02/02/23 15:07	
92649377018	**HAM-MW-27D**					
	Performed by	Customer			01/30/23 16:50	
	pH	7.80	Std. Units		01/30/23 16:50	
EPA 6010D	Calcium	28.1	mg/L	1.0	03/21/23 18:42	
EPA 6020B	Barium	0.94	mg/L	0.0050	02/03/23 22:25	
EPA 6020B	Boron	0.12	mg/L	0.040	02/06/23 15:37	
EPA 6020B	Lithium	0.0072J	mg/L	0.030	02/03/23 22:25	
EPA 6020B	Molybdenum	0.0014J	mg/L	0.010	02/03/23 22:25	
SM 2540C-2015	Total Dissolved Solids	255	mg/L	25.0	02/02/23 19:16	
EPA 300.0 Rev 2.1 1993	Chloride	32.5	mg/L	1.0	02/03/23 15:41	
EPA 300.0 Rev 2.1 1993	Fluoride	0.30	mg/L	0.10	02/03/23 15:41	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92649377

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92649377018	**HAM-MW-27D**					
EPA 300.0 Rev 2.1 1993	Sulfate	9.1	mg/L	1.0	02/03/23 15:41	
92649377019	**HAM-HGWC-8**					
	Performed by	Customer			02/15/23 12:07	
	pH	6.60	Std. Units		02/15/23 12:07	
EPA 6010D	Calcium	110	mg/L	1.0	02/14/23 20:38	
EPA 6020B	Barium	0.058	mg/L	0.0050	02/16/23 21:20	
EPA 6020B	Beryllium	0.000056J	mg/L	0.00050	02/16/23 21:20	
EPA 6020B	Boron	1.9	mg/L	0.040	02/16/23 21:20	
EPA 6020B	Cadmium	0.00014J	mg/L	0.00050	02/16/23 21:20	
EPA 6020B	Lithium	0.0015J	mg/L	0.030	02/16/23 21:20	
EPA 6020B	Molybdenum	0.29	mg/L	0.010	02/16/23 21:20	
SM 2540C-2015	Total Dissolved Solids	528	mg/L	25.0	02/07/23 18:40	
EPA 300.0 Rev 2.1 1993	Chloride	52.4	mg/L	1.0	02/07/23 22:32	
EPA 300.0 Rev 2.1 1993	Fluoride	0.40	mg/L	0.10	02/07/23 22:32	
EPA 300.0 Rev 2.1 1993	Sulfate	179	mg/L	4.0	02/08/23 11:47	
92649377020	**HAM-AP-1-EB-01**					
EPA 6020B	Boron	0.022J	mg/L	0.040	02/16/23 21:26	
92649377021	**HAM-AP-1-FB-01**					
EPA 6020B	Boron	0.011J	mg/L	0.040	02/16/23 21:32	
SM 2540C-2015	Total Dissolved Solids	28.0	mg/L	25.0	02/07/23 18:41	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92649377

Sample: HAM-HGWC-9 **Lab ID: 92649377001** Collected: 01/26/23 15:24 Received: 01/30/23 11:58 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Customer**				1		01/30/23 16:42		
pH	**7.07**	Std. Units			1		01/30/23 16:42		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**173**	mg/L	1.0	0.12	1	03/20/23 12:41	03/21/23 16:21	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00092J**	mg/L	0.0030	0.00078	1	02/01/23 12:06	02/03/23 20:20	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/01/23 12:06	02/03/23 20:20	7440-38-2	
Barium	**0.069**	mg/L	0.0050	0.00067	1	02/01/23 12:06	02/03/23 20:20	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/01/23 12:06	02/06/23 13:32	7440-41-7	
Boron	**1.9**	mg/L	0.040	0.0086	1	02/01/23 12:06	02/03/23 20:20	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/01/23 12:06	02/03/23 20:20	7440-43-9	
Chromium	**0.0013J**	mg/L	0.0050	0.0011	1	02/01/23 12:06	02/06/23 13:32	7440-47-3	
Cobalt	**0.00068J**	mg/L	0.0050	0.00039	1	02/01/23 12:06	02/03/23 20:20	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/01/23 12:06	02/03/23 20:20	7439-92-1	
Lithium	**0.0032J**	mg/L	0.030	0.00073	1	02/01/23 12:06	02/03/23 20:20	7439-93-2	
Molybdenum	**0.021**	mg/L	0.010	0.00074	1	02/01/23 12:06	02/03/23 20:20	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/01/23 12:06	02/03/23 20:20	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/01/23 12:06	02/03/23 20:20	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/08/23 15:40	02/09/23 11:46	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**745**	mg/L	25.0	25.0	1		01/31/23 12:43		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**86.9**	mg/L	1.0	0.60	1		02/01/23 11:20	16887-00-6	
Fluoride	**0.11**	mg/L	0.10	0.050	1		02/01/23 11:20	16984-48-8	
Sulfate	**217**	mg/L	4.0	2.0	4		02/04/23 14:55	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92649377

Sample: HAM-HGWC-11 **Lab ID: 92649377002** Collected: 01/26/23 14:27 Received: 01/30/23 11:58 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Customer**				1		01/30/23 16:43		
pH	**6.23**	Std. Units			1		01/30/23 16:43		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**113**	mg/L	1.0	0.12	1	03/20/23 12:41	03/21/23 16:26	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/01/23 12:06	02/03/23 20:26	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/01/23 12:06	02/03/23 20:26	7440-38-2	
Barium	**0.031**	mg/L	0.0050	0.00067	1	02/01/23 12:06	02/03/23 20:26	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/01/23 12:06	02/06/23 13:38	7440-41-7	
Boron	**0.50**	mg/L	0.040	0.0086	1	02/01/23 12:06	02/03/23 20:26	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/01/23 12:06	02/03/23 20:26	7440-43-9	
Chromium	**0.0012J**	mg/L	0.0050	0.0011	1	02/01/23 12:06	02/06/23 13:38	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/01/23 12:06	02/03/23 20:26	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/01/23 12:06	02/03/23 20:26	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/01/23 12:06	02/03/23 20:26	7439-93-2	
Molybdenum	**0.022**	mg/L	0.010	0.00074	1	02/01/23 12:06	02/03/23 20:26	7439-98-7	
Selenium	**0.010**	mg/L	0.0050	0.0014	1	02/01/23 12:06	02/03/23 20:26	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/01/23 12:06	02/03/23 20:26	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/08/23 15:40	02/09/23 11:57	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**429**	mg/L	25.0	25.0	1		01/31/23 12:44		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**8.8**	mg/L	1.0	0.60	1		02/01/23 11:37	16887-00-6	
Fluoride	**0.20**	mg/L	0.10	0.050	1		02/01/23 11:37	16984-48-8	
Sulfate	**209**	mg/L	4.0	2.0	4		02/04/23 11:43	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92649377

Sample: HAM-HGWC-12 **Lab ID: 92649377003** Collected: 01/26/23 12:25 Received: 01/30/23 11:58 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Customer**				1		01/30/23 16:43		
pH	**7.10**	Std. Units			1		01/30/23 16:43		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**154**	mg/L	1.0	0.12	1	03/20/23 12:41	03/21/23 16:31	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	0.00078	1	02/01/23 12:06	02/03/23 20:32	7440-36-0	
Arsenic	**0.0025J**	mg/L	0.0050	0.0022	1	02/01/23 12:06	02/03/23 20:32	7440-38-2	
Barium	**0.076**	mg/L	0.0050	0.00067	1	02/01/23 12:06	02/03/23 20:32	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/01/23 12:06	02/06/23 13:44	7440-41-7	
Boron	**1.5**	mg/L	0.040	0.0086	1	02/01/23 12:06	02/03/23 20:32	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/01/23 12:06	02/03/23 20:32	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/01/23 12:06	02/06/23 13:44	7440-47-3	
Cobalt	**0.0012J**	mg/L	0.0050	0.00039	1	02/01/23 12:06	02/03/23 20:32	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/01/23 12:06	02/03/23 20:32	7439-92-1	
Lithium	**0.0058J**	mg/L	0.030	0.00073	1	02/01/23 12:06	02/03/23 20:32	7439-93-2	
Molybdenum	**0.048**	mg/L	0.010	0.00074	1	02/01/23 12:06	02/03/23 20:32	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/01/23 12:06	02/03/23 20:32	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/01/23 12:06	02/03/23 20:32	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/08/23 15:40	02/09/23 12:00	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**624**	mg/L	25.0	25.0	1		01/31/23 12:44		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**34.6**	mg/L	1.0	0.60	1		02/01/23 11:54	16887-00-6	
Fluoride	**0.21**	mg/L	0.10	0.050	1		02/01/23 11:54	16984-48-8	
Sulfate	**228**	mg/L	4.0	2.0	4		02/04/23 11:57	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92649377

Sample: HAM-HGWC-13 **Lab ID: 92649377004** Collected: 01/26/23 13:30 Received: 01/30/23 11:58 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Customer**				1		01/30/23 16:43		
pH	**6.90**	Std. Units			1		01/30/23 16:43		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**234**	mg/L	1.0	0.12	1	03/20/23 12:41	03/21/23 16:36	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	0.00078	1	02/01/23 12:06	02/03/23 20:49	7440-36-0	
Arsenic	**0.53**	mg/L	0.0050	0.0022	1	02/01/23 12:06	02/03/23 20:49	7440-38-2	
Barium	**0.079**	mg/L	0.0050	0.00067	1	02/01/23 12:06	02/03/23 20:49	7440-39-3	
Beryllium	**0.000099J**	mg/L	0.00050	0.000054	1	02/01/23 12:06	02/06/23 14:02	7440-41-7	
Boron	**0.83**	mg/L	0.040	0.0086	1	02/01/23 12:06	02/06/23 14:02	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/01/23 12:06	02/03/23 20:49	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/01/23 12:06	02/06/23 14:02	7440-47-3	
Cobalt	**0.012**	mg/L	0.0050	0.00039	1	02/01/23 12:06	02/03/23 20:49	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/01/23 12:06	02/03/23 20:49	7439-92-1	
Lithium	**0.040**	mg/L	0.030	0.00073	1	02/01/23 12:06	02/03/23 20:49	7439-93-2	
Molybdenum	**0.023**	mg/L	0.010	0.00074	1	02/01/23 12:06	02/03/23 20:49	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/01/23 12:06	02/03/23 20:49	7782-49-2	
Thallium	**0.00031J**	mg/L	0.0010	0.00018	1	02/01/23 12:06	02/03/23 20:49	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/08/23 15:40	02/09/23 12:03	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**962**	mg/L	25.0	25.0	1		01/31/23 12:45		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**12.5**	mg/L	1.0	0.60	1		02/01/23 12:12	16887-00-6	
Fluoride	**0.40**	mg/L	0.10	0.050	1		02/01/23 12:12	16984-48-8	
Sulfate	**495**	mg/L	10.0	5.0	10		02/04/23 12:12	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92649377

Sample: HAM-MW-5 **Lab ID: 92649377005** Collected: 01/26/23 11:14 Received: 01/30/23 11:58 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Customer**				1		01/30/23 16:44		
pH	**6.07**	Std. Units			1		01/30/23 16:44		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**76.1**	mg/L	1.0	0.12	1	03/20/23 12:41	03/21/23 17:15	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/01/23 12:06	02/03/23 20:55	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/01/23 12:06	02/03/23 20:55	7440-38-2	
Barium	**0.050**	mg/L	0.0050	0.00067	1	02/01/23 12:06	02/03/23 20:55	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/01/23 12:06	02/06/23 14:08	7440-41-7	
Boron	**0.044**	mg/L	0.040	0.0086	1	02/01/23 12:06	02/06/23 14:08	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/01/23 12:06	02/03/23 20:55	7440-43-9	
Chromium	**0.0032J**	mg/L	0.0050	0.0011	1	02/01/23 12:06	02/06/23 14:08	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/01/23 12:06	02/03/23 20:55	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/01/23 12:06	02/03/23 20:55	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/01/23 12:06	02/03/23 20:55	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/01/23 12:06	02/03/23 20:55	7439-98-7	
Selenium	**0.0045J**	mg/L	0.0050	0.0014	1	02/01/23 12:06	02/03/23 20:55	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/01/23 12:06	02/03/23 20:55	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/08/23 15:40	02/09/23 12:05	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**363**	mg/L	25.0	25.0	1		01/31/23 12:45		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**0.86J**	mg/L	1.0	0.60	1		02/01/23 12:29	16887-00-6	
Fluoride	**0.087J**	mg/L	0.10	0.050	1		02/01/23 12:29	16984-48-8	
Sulfate	**137**	mg/L	3.0	1.5	3		02/04/23 12:27	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92649377

Sample: HAM-MW-6 **Lab ID: 92649377006** Collected: 01/26/23 12:40 Received: 01/30/23 11:58 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Customer**				1		01/30/23 16:44		
pH	**6.90**	Std. Units			1		01/30/23 16:44		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**180**	mg/L	1.0	0.12	1	03/20/23 12:41	03/21/23 17:20	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	0.00078	1	02/01/23 12:06	02/03/23 21:01	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/01/23 12:06	02/03/23 21:01	7440-38-2	
Barium	**0.079**	mg/L	0.0050	0.00067	1	02/01/23 12:06	02/03/23 21:01	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/01/23 12:06	02/06/23 14:14	7440-41-7	
Boron	**0.71**	mg/L	0.040	0.0086	1	02/01/23 12:06	02/06/23 14:14	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/01/23 12:06	02/03/23 21:01	7440-43-9	
Chromium	**0.0014J**	mg/L	0.0050	0.0011	1	02/01/23 12:06	02/06/23 14:14	7440-47-3	
Cobalt	**0.00044J**	mg/L	0.0050	0.00039	1	02/01/23 12:06	02/03/23 21:01	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/01/23 12:06	02/03/23 21:01	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/01/23 12:06	02/03/23 21:01	7439-93-2	
Molybdenum	**0.0029J**	mg/L	0.010	0.00074	1	02/01/23 12:06	02/03/23 21:01	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/01/23 12:06	02/03/23 21:01	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/01/23 12:06	02/03/23 21:01	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/08/23 15:40	02/09/23 12:13	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**646**	mg/L	25.0	25.0	1		01/31/23 12:46		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**30.5**	mg/L	1.0	0.60	1		02/01/23 12:47	16887-00-6	
Fluoride	**0.088J**	mg/L	0.10	0.050	1		02/01/23 12:47	16984-48-8	
Sulfate	**203**	mg/L	4.0	2.0	4		02/04/23 12:41	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92649377

Sample: HAM-MW-7 **Lab ID: 92649377007** Collected: 01/26/23 14:04 Received: 01/30/23 11:58 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Customer**				1		01/30/23 16:46		
pH	**6.23**	Std. Units			1		01/30/23 16:46		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**21.6**	mg/L	1.0	0.12	1	03/20/23 12:41	03/21/23 17:25	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/01/23 12:06	02/03/23 21:07	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/01/23 12:06	02/03/23 21:07	7440-38-2	
Barium	**0.044**	mg/L	0.0050	0.00067	1	02/01/23 12:06	02/03/23 21:07	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/01/23 12:06	02/06/23 14:20	7440-41-7	
Boron	**0.033J**	mg/L	0.040	0.0086	1	02/01/23 12:06	02/06/23 14:20	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/01/23 12:06	02/03/23 21:07	7440-43-9	
Chromium	**0.0017J**	mg/L	0.0050	0.0011	1	02/01/23 12:06	02/06/23 14:20	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/01/23 12:06	02/03/23 21:07	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/01/23 12:06	02/03/23 21:07	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/01/23 12:06	02/03/23 21:07	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/01/23 12:06	02/03/23 21:07	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/01/23 12:06	02/03/23 21:07	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/01/23 12:06	02/03/23 21:07	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/08/23 15:40	02/09/23 12:16	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**89.0**	mg/L	25.0	25.0	1		01/31/23 12:47		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.2**	mg/L	1.0	0.60	1		02/01/23 13:56	16887-00-6	
Fluoride	**0.060J**	mg/L	0.10	0.050	1		02/01/23 13:56	16984-48-8	
Sulfate	**26.0**	mg/L	1.0	0.50	1		02/01/23 13:56	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92649377

Sample: HAM-MW-19 **Lab ID: 92649377008** Collected: 01/26/23 16:05 Received: 01/30/23 11:58 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Customer**				1		01/30/23 16:46		
pH	**6.13**	Std. Units			1		01/30/23 16:46		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**118**	mg/L	1.0	0.12	1	03/20/23 12:41	03/21/23 17:30	7440-70-2	M1
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/01/23 12:06	02/03/23 21:13	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/01/23 12:06	02/03/23 21:13	7440-38-2	
Barium	**0.039**	mg/L	0.0050	0.00067	1	02/01/23 12:06	02/03/23 21:13	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/01/23 12:06	02/06/23 14:26	7440-41-7	
Boron	**0.36**	mg/L	0.040	0.0086	1	02/01/23 12:06	02/06/23 14:26	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/01/23 12:06	02/03/23 21:13	7440-43-9	
Chromium	**0.0011J**	mg/L	0.0050	0.0011	1	02/01/23 12:06	02/06/23 14:26	7440-47-3	
Cobalt	**0.022**	mg/L	0.0050	0.00039	1	02/01/23 12:06	02/03/23 21:13	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/01/23 12:06	02/03/23 21:13	7439-92-1	
Lithium	**0.0038J**	mg/L	0.030	0.00073	1	02/01/23 12:06	02/03/23 21:13	7439-93-2	
Molybdenum	**0.012**	mg/L	0.010	0.00074	1	02/01/23 12:06	02/03/23 21:13	7439-98-7	
Selenium	**0.0056**	mg/L	0.0050	0.0014	1	02/01/23 12:06	02/03/23 21:13	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/01/23 12:06	02/03/23 21:13	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/08/23 15:40	02/09/23 12:18	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**490**	mg/L	25.0	25.0	1		01/31/23 12:48		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**7.7**	mg/L	1.0	0.60	1		02/01/23 14:14	16887-00-6	
Fluoride	**0.098J**	mg/L	0.10	0.050	1		02/01/23 14:14	16984-48-8	
Sulfate	**214**	mg/L	5.0	2.5	5		02/04/23 13:41	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92649377

Sample: HAM-MW-20 **Lab ID: 92649377009** Collected: 01/26/23 09:49 Received: 01/30/23 11:58 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Customer**				1		01/30/23 16:46		
pH	**6.95**	Std. Units			1		01/30/23 16:46		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**122**	mg/L	1.0	0.12	1	03/20/23 12:41	03/21/23 17:49	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	0.00078	1	02/01/23 12:06	02/03/23 21:19	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/01/23 12:06	02/03/23 21:19	7440-38-2	
Barium	**0.097**	mg/L	0.0050	0.00067	1	02/01/23 12:06	02/03/23 21:19	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/01/23 12:06	02/06/23 14:32	7440-41-7	
Boron	**0.099**	mg/L	0.040	0.0086	1	02/01/23 12:06	02/06/23 14:32	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/01/23 12:06	02/03/23 21:19	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/01/23 12:06	02/06/23 14:32	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/01/23 12:06	02/03/23 21:19	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/01/23 12:06	02/03/23 21:19	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/01/23 12:06	02/03/23 21:19	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/01/23 12:06	02/03/23 21:19	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/01/23 12:06	02/03/23 21:19	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/01/23 12:06	02/03/23 21:19	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/08/23 15:40	02/09/23 12:21	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**482**	mg/L	25.0	25.0	1		01/31/23 12:48		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**30.0**	mg/L	1.0	0.60	1		02/01/23 15:06	16887-00-6	
Fluoride	**0.081J**	mg/L	0.10	0.050	1		02/01/23 15:06	16984-48-8	
Sulfate	**109**	mg/L	2.0	1.0	2		02/04/23 14:25	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92649377

Sample: HAM-MW-24D **Lab ID: 92649377010** Collected: 01/26/23 11:31 Received: 01/30/23 11:58 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Customer**				1		01/30/23 16:46		
pH	**7.60**	Std. Units			1		01/30/23 16:46		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**107**	mg/L	1.0	0.12	1	03/20/23 12:41	03/21/23 17:54	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	0.00078	1	02/01/23 12:06	02/03/23 21:25	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/01/23 12:06	02/03/23 21:25	7440-38-2	
Barium	**0.054**	mg/L	0.0050	0.00067	1	02/01/23 12:06	02/03/23 21:25	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/01/23 12:06	02/06/23 14:37	7440-41-7	
Boron	**0.47**	mg/L	0.040	0.0086	1	02/01/23 12:06	02/06/23 14:37	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/01/23 12:06	02/03/23 21:25	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/01/23 12:06	02/06/23 14:37	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/01/23 12:06	02/03/23 21:25	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/01/23 12:06	02/03/23 21:25	7439-92-1	
Lithium	**0.0025J**	mg/L	0.030	0.00073	1	02/01/23 12:06	02/03/23 21:25	7439-93-2	
Molybdenum	**0.0012J**	mg/L	0.010	0.00074	1	02/01/23 12:06	02/03/23 21:25	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/01/23 12:06	02/03/23 21:25	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/01/23 12:06	02/03/23 21:25	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/08/23 15:40	02/09/23 12:24	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**412**	mg/L	25.0	25.0	1		01/31/23 12:49		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**38.0**	mg/L	1.0	0.60	1		02/01/23 15:23	16887-00-6	
Fluoride	**0.083J**	mg/L	0.10	0.050	1		02/01/23 15:23	16984-48-8	
Sulfate	**152**	mg/L	3.0	1.5	3		02/04/23 14:40	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92649377

Sample: HAM-MW-25D **Lab ID: 92649377011** Collected: 01/26/23 10:14 Received: 01/30/23 11:58 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Customer**				1		01/30/23 16:48		
pH	**7.74**	Std. Units			1		01/30/23 16:48		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**21.8**	mg/L	1.0	0.12	1	03/20/23 12:41	03/21/23 17:58	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	0.00078	1	02/01/23 12:06	02/03/23 21:31	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/01/23 12:06	02/03/23 21:31	7440-38-2	
Barium	**0.65**	mg/L	0.0050	0.00067	1	02/01/23 12:06	02/03/23 21:31	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/01/23 12:06	02/06/23 14:43	7440-41-7	
Boron	**0.30**	mg/L	0.040	0.0086	1	02/01/23 12:06	02/06/23 14:43	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/01/23 12:06	02/03/23 21:31	7440-43-9	
Chromium	**0.0012J**	mg/L	0.0050	0.0011	1	02/01/23 12:06	02/06/23 14:43	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/01/23 12:06	02/03/23 21:31	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/01/23 12:06	02/03/23 21:31	7439-92-1	
Lithium	**0.036**	mg/L	0.030	0.00073	1	02/01/23 12:06	02/03/23 21:31	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/01/23 12:06	02/03/23 21:31	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/01/23 12:06	02/03/23 21:31	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/01/23 12:06	02/03/23 21:31	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/08/23 15:40	02/09/23 12:26	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**346**	mg/L	25.0	25.0	1		01/31/23 12:49		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**17.2**	mg/L	1.0	0.60	1		02/02/23 13:14	16887-00-6	
Fluoride	**1.6**	mg/L	0.10	0.050	1		02/02/23 13:14	16984-48-8	
Sulfate	**0.59J**	mg/L	1.0	0.50	1		02/02/23 13:14	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92649377

Sample: HAM-MW-26D **Lab ID: 92649377012** Collected: 01/26/23 16:32 Received: 01/30/23 11:58 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Customer**				1		01/30/23 16:48		
pH	**7.14**	Std. Units			1		01/30/23 16:48		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**179**	mg/L	1.0	0.12	1	03/20/23 12:41	03/21/23 18:13	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/01/23 12:06	02/03/23 21:37	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/01/23 12:06	02/03/23 21:37	7440-38-2	
Barium	**0.065**	mg/L	0.0050	0.00067	1	02/01/23 12:06	02/03/23 21:37	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/01/23 12:06	02/06/23 14:49	7440-41-7	
Boron	**1.8**	mg/L	0.040	0.0086	1	02/01/23 12:06	02/06/23 14:49	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/01/23 12:06	02/03/23 21:37	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/01/23 12:06	02/06/23 14:49	7440-47-3	
Cobalt	**0.00051J**	mg/L	0.0050	0.00039	1	02/01/23 12:06	02/03/23 21:37	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/01/23 12:06	02/03/23 21:37	7439-92-1	
Lithium	**0.0031J**	mg/L	0.030	0.00073	1	02/01/23 12:06	02/03/23 21:37	7439-93-2	
Molybdenum	**0.028**	mg/L	0.010	0.00074	1	02/01/23 12:06	02/03/23 21:37	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/01/23 12:06	02/03/23 21:37	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/01/23 12:06	02/03/23 21:37	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/08/23 15:40	02/09/23 12:29	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**741**	mg/L	25.0	25.0	1		01/31/23 12:49		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**83.6**	mg/L	1.0	0.60	1		02/02/23 13:33	16887-00-6	
Fluoride	**0.11**	mg/L	0.10	0.050	1		02/02/23 13:33	16984-48-8	
Sulfate	**240**	mg/L	5.0	2.5	5		02/02/23 16:23	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92649377

Sample: HAM-MW-28D **Lab ID: 92649377013** Collected: 01/26/23 17:33 Received: 01/30/23 11:58 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Customer**				1		02/15/23 12:06		
pH	**7.67**	Std. Units			1		02/15/23 12:06		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**64.4**	mg/L	1.0	0.12	1	03/20/23 12:41	03/21/23 18:18	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	0.00078	1	02/01/23 12:06	02/03/23 21:43	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/01/23 12:06	02/03/23 21:43	7440-38-2	
Barium	**0.80**	mg/L	0.0050	0.00067	1	02/01/23 12:06	02/03/23 21:43	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/01/23 12:06	02/06/23 14:55	7440-41-7	
Boron	**0.29**	mg/L	0.040	0.0086	1	02/01/23 12:06	02/06/23 14:55	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/01/23 12:06	02/03/23 21:43	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/01/23 12:06	02/06/23 14:55	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/01/23 12:06	02/03/23 21:43	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/01/23 12:06	02/03/23 21:43	7439-92-1	
Lithium	**0.011J**	mg/L	0.030	0.00073	1	02/01/23 12:06	02/03/23 21:43	7439-93-2	
Molybdenum	**0.0025J**	mg/L	0.010	0.00074	1	02/01/23 12:06	02/03/23 21:43	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/01/23 12:06	02/03/23 21:43	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/01/23 12:06	02/03/23 21:43	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/23 08:15	02/14/23 11:41	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**349**	mg/L	25.0	25.0	1		01/31/23 12:50		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**27.7**	mg/L	1.0	0.60	1		02/02/23 13:51	16887-00-6	
Fluoride	**0.22**	mg/L	0.10	0.050	1		02/02/23 13:51	16984-48-8	
Sulfate	**40.8**	mg/L	1.0	0.50	1		02/02/23 13:51	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92649377

Sample: HAM-MW-29 **Lab ID: 92649377014** Collected: 01/26/23 15:19 Received: 01/30/23 11:58 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Customer**				1		01/30/23 16:48		
pH	**7.22**	Std. Units			1		01/30/23 16:48		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**146**	mg/L	1.0	0.12	1	03/20/23 12:41	03/21/23 18:23	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	0.00078	1	02/01/23 12:06	02/03/23 22:01	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/01/23 12:06	02/03/23 22:01	7440-38-2	
Barium	**0.076**	mg/L	0.0050	0.00067	1	02/01/23 12:06	02/03/23 22:01	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/01/23 12:06	02/06/23 15:13	7440-41-7	
Boron	**1.0**	mg/L	0.040	0.0086	1	02/01/23 12:06	02/06/23 15:13	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/01/23 12:06	02/03/23 22:01	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/01/23 12:06	02/06/23 15:13	7440-47-3	
Cobalt	**0.00056J**	mg/L	0.0050	0.00039	1	02/01/23 12:06	02/03/23 22:01	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/01/23 12:06	02/03/23 22:01	7439-92-1	
Lithium	**0.0019J**	mg/L	0.030	0.00073	1	02/01/23 12:06	02/03/23 22:01	7439-93-2	
Molybdenum	**0.0029J**	mg/L	0.010	0.00074	1	02/01/23 12:06	02/03/23 22:01	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/01/23 12:06	02/03/23 22:01	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/01/23 12:06	02/03/23 22:01	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/23 08:15	02/14/23 11:52	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**632**	mg/L	25.0	25.0	1		01/31/23 12:51		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**62.4**	mg/L	1.0	0.60	1		02/02/23 14:10	16887-00-6	
Fluoride	**0.068J**	mg/L	0.10	0.050	1		02/02/23 14:10	16984-48-8	
Sulfate	**161**	mg/L	3.0	1.5	3		02/02/23 17:00	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92649377

Sample: HAM-AP-1-FD-01 **Lab ID: 92649377015** Collected: 01/26/23 14:48 Received: 01/30/23 11:58 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**113**	mg/L	1.0	0.12	1	03/20/23 12:41	03/21/23 18:28	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	0.00078	1	02/01/23 12:06	02/03/23 22:07	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/01/23 12:06	02/03/23 22:07	7440-38-2	
Barium	**0.031**	mg/L	0.0050	0.00067	1	02/01/23 12:06	02/03/23 22:07	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/01/23 12:06	02/06/23 15:19	7440-41-7	
Boron	**0.51**	mg/L	0.040	0.0086	1	02/01/23 12:06	02/06/23 15:19	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/01/23 12:06	02/03/23 22:07	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/01/23 12:06	02/06/23 15:19	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/01/23 12:06	02/03/23 22:07	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/01/23 12:06	02/03/23 22:07	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/01/23 12:06	02/03/23 22:07	7439-93-2	
Molybdenum	**0.022**	mg/L	0.010	0.00074	1	02/01/23 12:06	02/03/23 22:07	7439-98-7	
Selenium	**0.0095**	mg/L	0.0050	0.0014	1	02/01/23 12:06	02/03/23 22:07	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/01/23 12:06	02/03/23 22:07	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/23 08:15	02/14/23 11:54	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**509**	mg/L	25.0	25.0	1		01/31/23 12:51		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**9.2**	mg/L	1.0	0.60	1		02/02/23 14:29	16887-00-6	
Fluoride	**0.20**	mg/L	0.10	0.050	1		02/02/23 14:29	16984-48-8	
Sulfate	**221**	mg/L	4.0	2.0	4		02/02/23 17:19	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92649377

Sample: HAM-HGWC-7 **Lab ID: 92649377016** Collected: 01/27/23 13:15 Received: 01/30/23 11:58 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Customer**				1		01/30/23 16:50		
pH	**7.25**	Std. Units			1		01/30/23 16:50		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**124**	mg/L	1.0	0.12	1	03/20/23 12:41	03/21/23 18:32	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/01/23 12:06	02/03/23 22:13	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/01/23 12:06	02/03/23 22:13	7440-38-2	
Barium	**0.065**	mg/L	0.0050	0.00067	1	02/01/23 12:06	02/03/23 22:13	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/01/23 12:06	02/06/23 15:25	7440-41-7	
Boron	**0.93**	mg/L	0.040	0.0086	1	02/01/23 12:06	02/06/23 15:25	7440-42-8	
Cadmium	**0.00019J**	mg/L	0.00050	0.00011	1	02/01/23 12:06	02/03/23 22:13	7440-43-9	
Chromium	**0.0014J**	mg/L	0.0050	0.0011	1	02/01/23 12:06	02/06/23 15:25	7440-47-3	
Cobalt	**0.00067J**	mg/L	0.0050	0.00039	1	02/01/23 12:06	02/03/23 22:13	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/01/23 12:06	02/03/23 22:13	7439-92-1	
Lithium	**0.0018J**	mg/L	0.030	0.00073	1	02/01/23 12:06	02/03/23 22:13	7439-93-2	
Molybdenum	**0.039**	mg/L	0.010	0.00074	1	02/01/23 12:06	02/03/23 22:13	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/01/23 12:06	02/03/23 22:13	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/01/23 12:06	02/03/23 22:13	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/23 08:15	02/14/23 11:57	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**473**	mg/L	25.0	25.0	1		01/31/23 12:52		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**40.0**	mg/L	1.0	0.60	1		02/02/23 14:48	16887-00-6	
Fluoride	**0.10**	mg/L	0.10	0.050	1		02/02/23 14:48	16984-48-8	
Sulfate	**119**	mg/L	2.0	1.0	2		02/02/23 17:38	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92649377

Sample: HAM-HGWC-10 **Lab ID: 92649377017** Collected: 01/27/23 15:01 Received: 01/30/23 11:58 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Customer**				1		01/30/23 16:50		
pH	**6.89**	Std. Units			1		01/30/23 16:50		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**60.4**	mg/L	1.0	0.12	1	03/20/23 12:41	03/21/23 18:37	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/01/23 12:06	02/03/23 22:19	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/01/23 12:06	02/03/23 22:19	7440-38-2	
Barium	**0.041**	mg/L	0.0050	0.00067	1	02/01/23 12:06	02/03/23 22:19	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/01/23 12:06	02/06/23 15:31	7440-41-7	
Boron	**0.065**	mg/L	0.040	0.0086	1	02/01/23 12:06	02/06/23 15:31	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/01/23 12:06	02/03/23 22:19	7440-43-9	
Chromium	**0.0012J**	mg/L	0.0050	0.0011	1	02/01/23 12:06	02/06/23 15:31	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/01/23 12:06	02/03/23 22:19	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/01/23 12:06	02/03/23 22:19	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/01/23 12:06	02/03/23 22:19	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/01/23 12:06	02/03/23 22:19	7439-98-7	
Selenium	**0.0035J**	mg/L	0.0050	0.0014	1	02/01/23 12:06	02/03/23 22:19	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/01/23 12:06	02/03/23 22:19	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/23 08:15	02/14/23 11:59	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**188**	mg/L	25.0	25.0	1		02/02/23 19:15		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.6**	mg/L	1.0	0.60	1		02/02/23 15:07	16887-00-6	
Fluoride	**0.16**	mg/L	0.10	0.050	1		02/02/23 15:07	16984-48-8	
Sulfate	**37.3**	mg/L	1.0	0.50	1		02/02/23 15:07	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92649377

Sample: HAM-MW-27D **Lab ID: 92649377018** Collected: 01/27/23 17:35 Received: 01/30/23 11:58 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Customer**				1		01/30/23 16:50		
pH	**7.80**	Std. Units			1		01/30/23 16:50		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**28.1**	mg/L	1.0	0.12	1	03/20/23 12:41	03/21/23 18:42	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/01/23 12:06	02/03/23 22:25	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/01/23 12:06	02/03/23 22:25	7440-38-2	
Barium	**0.94**	mg/L	0.0050	0.00067	1	02/01/23 12:06	02/03/23 22:25	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/01/23 12:06	02/06/23 15:37	7440-41-7	
Boron	**0.12**	mg/L	0.040	0.0086	1	02/01/23 12:06	02/06/23 15:37	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/01/23 12:06	02/03/23 22:25	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/01/23 12:06	02/06/23 15:37	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/01/23 12:06	02/03/23 22:25	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/01/23 12:06	02/03/23 22:25	7439-92-1	
Lithium	**0.0072J**	mg/L	0.030	0.00073	1	02/01/23 12:06	02/03/23 22:25	7439-93-2	
Molybdenum	**0.0014J**	mg/L	0.010	0.00074	1	02/01/23 12:06	02/03/23 22:25	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/01/23 12:06	02/03/23 22:25	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/01/23 12:06	02/03/23 22:25	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/23 08:15	02/14/23 12:07	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**255**	mg/L	25.0	25.0	1		02/02/23 19:16		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**32.5**	mg/L	1.0	0.60	1		02/03/23 15:41	16887-00-6	
Fluoride	**0.30**	mg/L	0.10	0.050	1		02/03/23 15:41	16984-48-8	
Sulfate	**9.1**	mg/L	1.0	0.50	1		02/03/23 15:41	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92649377

Sample: HAM-HGWC-8 **Lab ID: 92649377019** Collected: 02/01/23 10:02 Received: 02/03/23 12:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Customer**				1		02/15/23 12:07		
pH	**6.60**	Std. Units			1		02/15/23 12:07		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**110**	mg/L	1.0	0.12	1	02/13/23 17:06	02/14/23 20:38	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/14/23 17:00	02/16/23 21:20	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/14/23 17:00	02/16/23 21:20	7440-38-2	
Barium	**0.058**	mg/L	0.0050	0.00067	1	02/14/23 17:00	02/16/23 21:20	7440-39-3	
Beryllium	**0.000056J**	mg/L	0.00050	0.000054	1	02/14/23 17:00	02/16/23 21:20	7440-41-7	
Boron	**1.9**	mg/L	0.040	0.0086	1	02/14/23 17:00	02/16/23 21:20	7440-42-8	
Cadmium	**0.00014J**	mg/L	0.00050	0.00011	1	02/14/23 17:00	02/16/23 21:20	7440-43-9	
Chromium	ND	mg/L	0.025	0.0055	5	02/14/23 17:00	02/17/23 18:36	7440-47-3	D3
Cobalt	ND	mg/L	0.025	0.0020	5	02/14/23 17:00	02/17/23 18:36	7440-48-4	D3
Lead	ND	mg/L	0.0010	0.00089	1	02/14/23 17:00	02/16/23 21:20	7439-92-1	
Lithium	**0.0015J**	mg/L	0.030	0.00073	1	02/14/23 17:00	02/16/23 21:20	7439-93-2	
Molybdenum	**0.29**	mg/L	0.010	0.00074	1	02/14/23 17:00	02/16/23 21:20	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/14/23 17:00	02/16/23 21:20	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/14/23 17:00	02/16/23 21:20	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/23 08:15	02/14/23 12:10	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**528**	mg/L	25.0	25.0	1		02/07/23 18:40		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**52.4**	mg/L	1.0	0.60	1		02/07/23 22:32	16887-00-6	
Fluoride	**0.40**	mg/L	0.10	0.050	1		02/07/23 22:32	16984-48-8	
Sulfate	**179**	mg/L	4.0	2.0	4		02/08/23 11:47	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92649377

Sample: HAM-AP-1-EB-01 **Lab ID: 92649377020** Collected: 02/01/23 14:50 Received: 02/03/23 12:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.12	1	02/13/23 17:06	02/14/23 20:48	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/14/23 17:00	02/16/23 21:26	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/14/23 17:00	02/16/23 21:26	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	02/14/23 17:00	02/16/23 21:26	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/14/23 17:00	02/16/23 21:26	7440-41-7	
Boron	**0.022J**	mg/L	0.040	0.0086	1	02/14/23 17:00	02/16/23 21:26	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/14/23 17:00	02/16/23 21:26	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/14/23 17:00	02/17/23 17:01	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/14/23 17:00	02/17/23 17:01	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/14/23 17:00	02/16/23 21:26	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/14/23 17:00	02/16/23 21:26	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/14/23 17:00	02/16/23 21:26	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/14/23 17:00	02/16/23 21:26	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/14/23 17:00	02/16/23 21:26	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/23 08:15	02/14/23 12:13	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		02/07/23 18:41		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		02/07/23 22:48	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/07/23 22:48	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/07/23 22:48	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92649377

Sample: HAM-AP-1-FB-01 **Lab ID: 92649377021** Collected: 02/01/23 14:40 Received: 02/03/23 12:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.12	1	02/13/23 17:06	02/14/23 20:53	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/14/23 17:00	02/16/23 21:32	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/14/23 17:00	02/16/23 21:32	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	02/14/23 17:00	02/16/23 21:32	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/14/23 17:00	02/16/23 21:32	7440-41-7	
Boron	**0.011J**	mg/L	0.040	0.0086	1	02/14/23 17:00	02/16/23 21:32	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/14/23 17:00	02/16/23 21:32	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/14/23 17:00	02/17/23 17:07	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/14/23 17:00	02/17/23 17:07	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/14/23 17:00	02/16/23 21:32	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/14/23 17:00	02/16/23 21:32	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/14/23 17:00	02/16/23 21:32	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/14/23 17:00	02/16/23 21:32	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/14/23 17:00	02/16/23 21:32	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/23 08:15	02/14/23 12:15	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**28.0**	mg/L	25.0	25.0	1		02/07/23 18:41		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		02/07/23 23:04	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/07/23 23:04	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/07/23 23:04	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92649377

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: 92649377019, 92649377020, 92649377021

METHOD BLANK: 3925569 Matrix: Water
Associated Lab Samples: 92649377019, 92649377020, 92649377021

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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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92649377

QC Batch: 762460
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92649377001, 92649377002, 92649377003, 92649377004, 92649377005, 92649377006, 92649377007, 92649377008, 92649377009, 92649377010, 92649377011, 92649377012, 92649377013, 92649377014, 92649377015, 92649377016, 92649377017, 92649377018

METHOD BLANK: 3959969 Matrix: Water
Associated Lab Samples: 92649377001, 92649377002, 92649377003, 92649377004, 92649377005, 92649377006, 92649377007, 92649377008, 92649377009, 92649377010, 92649377011, 92649377012, 92649377013, 92649377014, 92649377015, 92649377016, 92649377017, 92649377018

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

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92649377

QC Batch: 753122
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92649377001, 92649377002, 92649377003, 92649377004, 92649377005, 92649377006, 92649377007, 92649377008, 92649377009, 92649377010, 92649377011, 92649377012, 92649377013, 92649377014, 92649377015, 92649377016, 92649377017, 92649377018

METHOD BLANK: 3912997
Matrix: Water
Associated Lab Samples: 92649377001, 92649377002, 92649377003, 92649377004, 92649377005, 92649377006, 92649377007, 92649377008, 92649377009, 92649377010, 92649377011, 92649377012, 92649377013, 92649377014, 92649377015, 92649377016, 92649377017, 92649377018

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	02/03/23 19:38	
Arsenic	mg/L	ND	0.0050	0.0022	02/03/23 19:38	
Barium	mg/L	ND	0.0050	0.00067	02/03/23 19:38	
Beryllium	mg/L	ND	0.00050	0.000054	02/06/23 12:56	
Boron	mg/L	ND	0.040	0.0086	02/03/23 19:38	
Cadmium	mg/L	ND	0.00050	0.00011	02/03/23 19:38	
Chromium	mg/L	ND	0.0050	0.0011	02/06/23 12:56	
Cobalt	mg/L	ND	0.0050	0.00039	02/03/23 19:38	
Lead	mg/L	ND	0.0010	0.00089	02/03/23 19:38	
Lithium	mg/L	ND	0.030	0.00073	02/03/23 19:38	
Molybdenum	mg/L	ND	0.010	0.00074	02/03/23 19:38	
Selenium	mg/L	ND	0.0050	0.0014	02/03/23 19:38	
Thallium	mg/L	ND	0.0010	0.00018	02/03/23 19:38	

LABORATORY CONTROL SAMPLE: 3912998

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.12	117	80-120	
Arsenic	mg/L	0.1	0.10	101	80-120	
Barium	mg/L	0.1	0.10	104	80-120	
Beryllium	mg/L	0.1	0.10	104	80-120	
Boron	mg/L	1	0.93	93	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	0.098	98	80-120	
Lead	mg/L	0.1	0.11	108	80-120	
Lithium	mg/L	0.1	0.096	96	80-120	
Molybdenum	mg/L	0.1	0.11	107	80-120	
Selenium	mg/L	0.1	0.11	107	80-120	
Thallium	mg/L	0.1	0.11	108	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92649377

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3912999 3913000

Parameter	Units	92649235012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.12	0.12	119	118	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	105	102	75-125	3	20	
Barium	mg/L	0.034	0.1	0.1	0.13	0.13	100	99	75-125	1	20	
Beryllium	mg/L	0.00010J	0.1	0.1	0.10	0.099	100	99	75-125	1	20	
Boron	mg/L	0.45	1	1	1.3	1.4	89	97	75-125	5	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	0.11	0.10	106	103	75-125	3	20	
Cobalt	mg/L	ND	0.1	0.1	0.094	0.095	94	95	75-125	0	20	
Lead	mg/L	ND	0.1	0.1	0.11	0.10	105	104	75-125	1	20	
Lithium	mg/L	ND	0.1	0.1	0.096	0.10	96	100	75-125	4	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	105	104	75-125	1	20	
Selenium	mg/L	0.0022J	0.1	0.1	0.11	0.11	106	103	75-125	3	20	
Thallium	mg/L	0.00019J	0.1	0.1	0.11	0.10	105	105	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92649377

QC Batch: 755827
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92649377019, 92649377020, 92649377021

METHOD BLANK: 3926998 Matrix: Water
Associated Lab Samples: 92649377019, 92649377020, 92649377021

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	
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	
Molybdenum	mg/L	ND	0.010	0.00074	02/16/23 19:33	
Selenium	mg/L	ND	0.0050	0.0014	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	
Lead	mg/L	0.1	0.10	104	80-120	
Lithium	mg/L	0.1	0.12	117	80-120	
Molybdenum	mg/L	0.1	0.11	109	80-120	
Selenium	mg/L	0.1	0.10	104	80-120	
Thallium	mg/L	0.1	0.11	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3927000 3927001

Parameter	Units	92648451007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	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	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92649377

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3927000 3927001

Parameter	Units	92648451007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.017	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	
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	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	103	101	75-125	3	20	
Selenium	mg/L	0.0036J	0.1	0.1	0.11	0.11	110	108	75-125	2	20	
Thallium	mg/L	0.00047J	0.1	0.1	0.096	0.093	95	93	75-125	3	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92649377

QC Batch: 754635 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92649377001, 92649377002, 92649377003, 92649377004, 92649377005, 92649377006, 92649377007, 92649377008, 92649377009, 92649377010, 92649377011, 92649377012

METHOD BLANK: 3920549 Matrix: Water
Associated Lab Samples: 92649377001, 92649377002, 92649377003, 92649377004, 92649377005, 92649377006, 92649377007, 92649377008, 92649377009, 92649377010, 92649377011, 92649377012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/09/23 11:41	

LABORATORY CONTROL SAMPLE: 3920550

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: 3920551 3920552

Parameter	Units	92649377001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0025	0.0025	101	98	75-125	3	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92649377

QC Batch: 755636 — Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A — Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92649377013, 92649377014, 92649377015, 92649377016, 92649377017, 92649377018, 92649377019, 92649377020, 92649377021

METHOD BLANK: 3925965 — Matrix: Water
Associated Lab Samples: 92649377013, 92649377014, 92649377015, 92649377016, 92649377017, 92649377018, 92649377019, 92649377020, 92649377021

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/14/23 11:36	

LABORATORY CONTROL SAMPLE: 3925966

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3925967 3925968

Parameter	Units	92649377013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0023	0.0024	93	95	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92649377

QC Batch: 752849
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92649377001, 92649377002, 92649377003, 92649377004, 92649377005, 92649377006, 92649377007, 92649377008, 92649377009, 92649377010, 92649377011, 92649377012, 92649377013, 92649377014, 92649377015, 92649377016

METHOD BLANK: 3911476 Matrix: Water
Associated Lab Samples: 92649377001, 92649377002, 92649377003, 92649377004, 92649377005, 92649377006, 92649377007, 92649377008, 92649377009, 92649377010, 92649377011, 92649377012, 92649377013, 92649377014, 92649377015, 92649377016

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	01/31/23 12:38	

LABORATORY CONTROL SAMPLE: 3911477

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

SAMPLE DUPLICATE: 3911478

Parameter	Units	92649235011 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	396	414	4	10	

SAMPLE DUPLICATE: 3911479

Parameter	Units	92649377007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	89.0	93.0	4	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92649377

QC Batch: 753439
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92649377017, 92649377018

METHOD BLANK: 3914561 Matrix: Water
Associated Lab Samples: 92649377017, 92649377018

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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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92649377

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: 92649377019, 92649377020, 92649377021

METHOD BLANK: 3917651 Matrix: Water
Associated Lab Samples: 92649377019, 92649377020, 92649377021

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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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92649377

QC Batch: 752813
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92649377001, 92649377002, 92649377003, 92649377004, 92649377005, 92649377006, 92649377007, 92649377008, 92649377009, 92649377010, 92649377011, 92649377012, 92649377013, 92649377014, 92649377015, 92649377016, 92649377017

METHOD BLANK: 3911193 Matrix: Water
Associated Lab Samples: 92649377001, 92649377002, 92649377003, 92649377004, 92649377005, 92649377006, 92649377007, 92649377008, 92649377009, 92649377010, 92649377011, 92649377012, 92649377013, 92649377014, 92649377015, 92649377016, 92649377017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/01/23 08:25	
Fluoride	mg/L	ND	0.10	0.050	02/01/23 08:25	
Sulfate	mg/L	ND	1.0	0.50	02/01/23 08:25	

LABORATORY CONTROL SAMPLE: 3911194

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	2.6	102	90-110	
Sulfate	mg/L	50	48.2	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3911195 3911196

Parameter	Units	92649235018 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	ND	50	50	51.2	51.7	102	103	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.6	102	103	90-110	1	10	
Sulfate	mg/L	0.57J	50	50	49.3	50.0	97	99	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3911197 3911198

Parameter	Units	92649377008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	7.7	50	50	59.0	59.3	103	103	90-110	0	10	
Fluoride	mg/L	0.098J	2.5	2.5	2.6	2.6	99	101	90-110	1	10	
Sulfate	mg/L	214	50	50	262	265	96	101	90-110	1	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92649377

QC Batch: 753396
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92649377018

METHOD BLANK: 3914289 Matrix: Water
Associated Lab Samples: 92649377018

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 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	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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92649377

QC Batch: 754257
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92649377019, 92649377020, 92649377021

METHOD BLANK: 3918313 Matrix: Water
Associated Lab Samples: 92649377019, 92649377020, 92649377021

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 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	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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: Hammond AP-1
Pace Project No.: 92649377

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.

Pace Analytical Services, LLC
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-1
Pace Project No.: 92649377

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92649377001	**HAM-HGWC-9**				
92649377002	**HAM-HGWC-11**				
92649377003	**HAM-HGWC-12**				
92649377004	**HAM-HGWC-13**				
92649377005	**HAM-MW-5**				
92649377006	**HAM-MW-6**				
92649377007	**HAM-MW-7**				
92649377008	**HAM-MW-19**				
92649377009	**HAM-MW-20**				
92649377010	**HAM-MW-24D**				
92649377011	**HAM-MW-25D**				
92649377012	**HAM-MW-26D**				
92649377013	**HAM-MW-28D**				
92649377014	**HAM-MW-29**				
92649377016	**HAM-HGWC-7**				
92649377017	**HAM-HGWC-10**				
92649377018	**HAM-MW-27D**				
92649377019	**HAM-HGWC-8**				
92649377001	**HAM-HGWC-9**	EPA 3010A	762460	EPA 6010D	762514
92649377002	**HAM-HGWC-11**	EPA 3010A	762460	EPA 6010D	762514
92649377003	**HAM-HGWC-12**	EPA 3010A	762460	EPA 6010D	762514
92649377004	**HAM-HGWC-13**	EPA 3010A	762460	EPA 6010D	762514
92649377005	**HAM-MW-5**	EPA 3010A	762460	EPA 6010D	762514
92649377006	**HAM-MW-6**	EPA 3010A	762460	EPA 6010D	762514
92649377007	**HAM-MW-7**	EPA 3010A	762460	EPA 6010D	762514
92649377008	**HAM-MW-19**	EPA 3010A	762460	EPA 6010D	762514
92649377009	**HAM-MW-20**	EPA 3010A	762460	EPA 6010D	762514
92649377010	**HAM-MW-24D**	EPA 3010A	762460	EPA 6010D	762514
92649377011	**HAM-MW-25D**	EPA 3010A	762460	EPA 6010D	762514
92649377012	**HAM-MW-26D**	EPA 3010A	762460	EPA 6010D	762514
92649377013	**HAM-MW-28D**	EPA 3010A	762460	EPA 6010D	762514
92649377014	**HAM-MW-29**	EPA 3010A	762460	EPA 6010D	762514
92649377015	**HAM-AP-1-FD-01**	EPA 3010A	762460	EPA 6010D	762514
92649377016	**HAM-HGWC-7**	EPA 3010A	762460	EPA 6010D	762514
92649377017	**HAM-HGWC-10**	EPA 3010A	762460	EPA 6010D	762514
92649377018	**HAM-MW-27D**	EPA 3010A	762460	EPA 6010D	762514
92649377019	**HAM-HGWC-8**	EPA 3010A	755531	EPA 6010D	755685
92649377020	**HAM-AP-1-EB-01**	EPA 3010A	755531	EPA 6010D	755685
92649377021	**HAM-AP-1-FB-01**	EPA 3010A	755531	EPA 6010D	755685
92649377001	**HAM-HGWC-9**	EPA 3005A	753122	EPA 6020B	753262
92649377002	**HAM-HGWC-11**	EPA 3005A	753122	EPA 6020B	753262
92649377003	**HAM-HGWC-12**	EPA 3005A	753122	EPA 6020B	753262
92649377004	**HAM-HGWC-13**	EPA 3005A	753122	EPA 6020B	753262
92649377005	**HAM-MW-5**	EPA 3005A	753122	EPA 6020B	753262
92649377006	**HAM-MW-6**	EPA 3005A	753122	EPA 6020B	753262
92649377007	**HAM-MW-7**	EPA 3005A	753122	EPA 6020B	753262
92649377008	**HAM-MW-19**	EPA 3005A	753122	EPA 6020B	753262

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-1
Pace Project No.: 92649377

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92649377009	HAM-MW-20	EPA 3005A	753122	EPA 6020B	753262
92649377010	HAM-MW-24D	EPA 3005A	753122	EPA 6020B	753262
92649377011	HAM-MW-25D	EPA 3005A	753122	EPA 6020B	753262
92649377012	HAM-MW-26D	EPA 3005A	753122	EPA 6020B	753262
92649377013	HAM-MW-28D	EPA 3005A	753122	EPA 6020B	753262
92649377014	HAM-MW-29	EPA 3005A	753122	EPA 6020B	753262
92649377015	HAM-AP-1-FD-01	EPA 3005A	753122	EPA 6020B	753262
92649377016	HAM-HGWC-7	EPA 3005A	753122	EPA 6020B	753262
92649377017	HAM-HGWC-10	EPA 3005A	753122	EPA 6020B	753262
92649377018	HAM-MW-27D	EPA 3005A	753122	EPA 6020B	753262
92649377019	HAM-HGWC-8	EPA 3005A	755827	EPA 6020B	755853
92649377020	HAM-AP-1-EB-01	EPA 3005A	755827	EPA 6020B	755853
92649377021	HAM-AP-1-FB-01	EPA 3005A	755827	EPA 6020B	755853
92649377001	HAM-HGWC-9	EPA 7470A	754635	EPA 7470A	754885
92649377002	HAM-HGWC-11	EPA 7470A	754635	EPA 7470A	754885
92649377003	HAM-HGWC-12	EPA 7470A	754635	EPA 7470A	754885
92649377004	HAM-HGWC-13	EPA 7470A	754635	EPA 7470A	754885
92649377005	HAM-MW-5	EPA 7470A	754635	EPA 7470A	754885
92649377006	HAM-MW-6	EPA 7470A	754635	EPA 7470A	754885
92649377007	HAM-MW-7	EPA 7470A	754635	EPA 7470A	754885
92649377008	HAM-MW-19	EPA 7470A	754635	EPA 7470A	754885
92649377009	HAM-MW-20	EPA 7470A	754635	EPA 7470A	754885
92649377010	HAM-MW-24D	EPA 7470A	754635	EPA 7470A	754885
92649377011	HAM-MW-25D	EPA 7470A	754635	EPA 7470A	754885
92649377012	HAM-MW-26D	EPA 7470A	754635	EPA 7470A	754885
92649377013	HAM-MW-28D	EPA 7470A	755636	EPA 7470A	755687
92649377014	HAM-MW-29	EPA 7470A	755636	EPA 7470A	755687
92649377015	HAM-AP-1-FD-01	EPA 7470A	755636	EPA 7470A	755687
92649377016	HAM-HGWC-7	EPA 7470A	755636	EPA 7470A	755687
92649377017	HAM-HGWC-10	EPA 7470A	755636	EPA 7470A	755687
92649377018	HAM-MW-27D	EPA 7470A	755636	EPA 7470A	755687
92649377019	HAM-HGWC-8	EPA 7470A	755636	EPA 7470A	755687
92649377020	HAM-AP-1-EB-01	EPA 7470A	755636	EPA 7470A	755687
92649377021	HAM-AP-1-FB-01	EPA 7470A	755636	EPA 7470A	755687
92649377001	HAM-HGWC-9	SM 2540C-2015	752849		
92649377002	HAM-HGWC-11	SM 2540C-2015	752849		
92649377003	HAM-HGWC-12	SM 2540C-2015	752849		
92649377004	HAM-HGWC-13	SM 2540C-2015	752849		
92649377005	HAM-MW-5	SM 2540C-2015	752849		
92649377006	HAM-MW-6	SM 2540C-2015	752849		
92649377007	HAM-MW-7	SM 2540C-2015	752849		
92649377008	HAM-MW-19	SM 2540C-2015	752849		
92649377009	HAM-MW-20	SM 2540C-2015	752849		
92649377010	HAM-MW-24D	SM 2540C-2015	752849		
92649377011	HAM-MW-25D	SM 2540C-2015	752849		
92649377012	HAM-MW-26D	SM 2540C-2015	752849		
92649377013	HAM-MW-28D	SM 2540C-2015	752849		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-1
Pace Project No.: 92649377

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92649377014	**HAM-MW-29**	SM 2540C-2015	752849		
92649377015	**HAM-AP-1-FD-01**	SM 2540C-2015	752849		
92649377016	**HAM-HGWC-7**	SM 2540C-2015	752849		
92649377017	**HAM-HGWC-10**	SM 2540C-2015	753439		
92649377018	**HAM-MW-27D**	SM 2540C-2015	753439		
92649377019	**HAM-HGWC-8**	SM 2540C-2015	754118		
92649377020	**HAM-AP-1-EB-01**	SM 2540C-2015	754118		
92649377021	**HAM-AP-1-FB-01**	SM 2540C-2015	754118		
92649377001	**HAM-HGWC-9**	EPA 300.0 Rev 2.1 1993	752813		
92649377002	**HAM-HGWC-11**	EPA 300.0 Rev 2.1 1993	752813		
92649377003	**HAM-HGWC-12**	EPA 300.0 Rev 2.1 1993	752813		
92649377004	**HAM-HGWC-13**	EPA 300.0 Rev 2.1 1993	752813		
92649377005	**HAM-MW-5**	EPA 300.0 Rev 2.1 1993	752813		
92649377006	**HAM-MW-6**	EPA 300.0 Rev 2.1 1993	752813		
92649377007	**HAM-MW-7**	EPA 300.0 Rev 2.1 1993	752813		
92649377008	**HAM-MW-19**	EPA 300.0 Rev 2.1 1993	752813		
92649377009	**HAM-MW-20**	EPA 300.0 Rev 2.1 1993	752813		
92649377010	**HAM-MW-24D**	EPA 300.0 Rev 2.1 1993	752813		
92649377011	**HAM-MW-25D**	EPA 300.0 Rev 2.1 1993	752813		
92649377012	**HAM-MW-26D**	EPA 300.0 Rev 2.1 1993	752813		
92649377013	**HAM-MW-28D**	EPA 300.0 Rev 2.1 1993	752813		
92649377014	**HAM-MW-29**	EPA 300.0 Rev 2.1 1993	752813		
92649377015	**HAM-AP-1-FD-01**	EPA 300.0 Rev 2.1 1993	752813		
92649377016	**HAM-HGWC-7**	EPA 300.0 Rev 2.1 1993	752813		
92649377017	**HAM-HGWC-10**	EPA 300.0 Rev 2.1 1993	752813		
92649377018	**HAM-MW-27D**	EPA 300.0 Rev 2.1 1993	753396		
92649377019	**HAM-HGWC-8**	EPA 300.0 Rev 2.1 1993	754257		
92649377020	**HAM-AP-1-EB-01**	EPA 300.0 Rev 2.1 1993	754257		
92649377021	**HAM-AP-1-FB-01**	EPA 300.0 Rev 2.1 1993	754257		

REPORT OF LABORATORY ANALYSIS

Pace ANALYTICAL SERVICES	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# : 92649377

92649377

Courier: ☐ Commercial ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☑ 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

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☐ IR Gun ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ **Date:** _____

Project Manager SRF Review: _____ **Date:** _____

WO# : 92649377

PM: BV Due Date: 02/13/23

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-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)	BP1N	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	—			1	X																		2	X			
2		1	1			1	X																		2	X			
3		1	1			1	X																		2	X			
4		1	1			1	X																		2	X			
5		1	1			1	X																		2	X			
6		1	1			1	X																		2	X			
7		1	1			1	X																		2	X			
8		1	1			1	X																		2	X			
9		1	1			1	X																		2	X			
10		1	1			1	X																		2	X			
11		1	1			1	X																		2	X			
12		1	1			1	X																		2	X			

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.

*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# : 92649377**

PM: BV Due Date: 02/13/23

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)	BP	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			1	✓																		2				
2		1	1			1	✓																		2				
3		1	1			1	✓																		2				
4																													
5																													
6																													
7																													
8																													
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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.

Collected 1/26/23

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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 2

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Geosyntec Contacts	Company Name:	
				Address:	
Email To:	SCS Contacts	Purchase Order No.:		Pace Quote Reference:	
Phone:	Fax:	Project Name:	Hammond AP-1	Pace Project Manager:	Bonnie Vang
Requested Due Date/TAT:	10 Day	Project Number:		Pace Profile #:	10839

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☑ OTHER CCR

Site Location STATE: GA

Section D Required Client Information

Valid Matrix Codes

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

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate	Full App. III and IV metals	RAD 226/228	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 92649377
1	HAM-HGWC-9	WG	G	1/26/2023	1524			17	5	2		3						X	X	X	X	X	N	pH = 7.07 1
2	HAM-HGWC-11	WG	G	1/26/2023	1427			16	5	2		3						X	X	X	X	X	N	pH = 6.23 2
3	HAM-HGWC-12	WG	G	1/26/2023	1225			17	5	2		3						X	X	X	X	X	N	pH = 7.10 3
4	HAM-HGWC-13	WG	G	1/26/2023	1330			16	5	2		3						X	X	X	X	X	N	pH = 6.90 4
5	HAM-MW-5	WG	G	1/26/2023	1114			17	5	2		3						X	X	X	X	X	N	pH = 6.07 5
6	HAM-MW-6	WG	G	1/26/2023	1240			18	5	2		3						X	X	X	X	X	N	pH = 6.90 6
7	HAM-MW-7	WG	G	1/26/2023	1404			16	5	2		3						X	X	X	X	X	N	pH = 6.23 7
8	HAM-MW-19	WG	G	1/26/2023	1605			17	5	2		3						X	X	X	X	X	N	pH = 6.13 8
9	HAM-MW-20	WG	G	1/26/2023	0949			17	5	2		3						X	X	X	X	X	N	pH = 6.95 9
10	HAM-MW-24D	WG	G	1/26/2023	1131			17	5	2		3						X	X	X	X	X	N	pH = 7.60 10
11	HAM-MW-25D	WG	G	1/26/2023	1014			15	5	2		3						X	X	X	X	X	N	pH = 7.74 11
12	HAM-MW-26D	WG	G	1/26/2023	1632	TJ	1/26/2023	17	5	2		3						X	X	X	X	X	N	pH = 7.14 12

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-2023S1	Anthony Gerrit / Geosyntec	1/30/2023	11:50	Ryan Williams / Pace	1/30/2023	1150	
	Ryan Williams / Pace	1/30/2023	1438		1130/23	1438	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Anthony Gerrit, Connor Lutz, TJ Kessler / Geosyntec Consultants, Inc.

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 01/26/2023

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.

Pace Analytical
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CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 2 of 2

Section A Required Client Information:

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

Section B Required Project Information:

Report To:	SCS Contacts
Copy To:	Geosyntec Contacts
Purchase Order No.:	
Project Name:	Hammond AP-1
Project Number:	

Section C Invoice Information:

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

REGULATORY AGENCY

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

Site Location STATE: GA

Requested Analysis Filtered (Y/N)

Section D Required Client Information

Valid Matrix Codes

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

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chlorides, Fluoride, Sulfate	Full App. III and IV metals	RAD 226/228	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	HAM-MW-28D	WG	G	1/26/2023	1733				17	5	2		3						N	X	X	X	X	N	92649377 pH = 7.67 13
2	HAM-MW-29	WG	G	1/26/2023	1519				15	5	2		3						N	X	X	X	X	N	pH = 7.22 M
3	HAM-AP-1-FD-01	WQ	G	1/26/2023	1448				17	5	2		3						N	X	X	X	X	N	N/A 15
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									

TJ 1/26/2023

TJ 1/26/2023

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-2023S1	Anthony Sweat / Geosyntec	1/30/2023	11:50	Ryan Williams / Pace	1/30/2023	1150	
	Ryan Williams / Pace	1/30/2023	1438		1/30/23	1438	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Anthony Sweat, Connor Lam, TJ Kuehl / Geosyntec Consultants, Inc.

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 01/26/2023

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 invoice not paid within 30 days.

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

Collected 1/27/23

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 1 of 1

Section A Required Client Information:

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

Section B Required Project Information:

Report To:	SCS Contacts
Copy To:	Geosyntec Contacts
Purchase Order No.:	
Project Name:	Hammond AP-1
Project Number:	

Section C Invoice Information:

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

REGULATORY AGENCY

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

Site Location STATE: GA

Section D Required Client Information

Valid Matrix Codes

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

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

Requested Analysis Filtered (Y/N)

Pace Project No./ Lab I.D.: 92649377

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate (N)	Full App. III and IV metals (N)	RAD 226/228 (N)	TDS (N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	HAM-HGWC-7	WG	G	1/27/2023	1315			18	5	2		3							X	X	X	X	N	pH = 7.25 16
2	HAM-HGWC-10	WG	G	1/27/2023	1501			18	5	2		3							X	X	X	X	N	pH = 6.89 17
3	HAM-MW-27D	WG	G	1/27/2023	1735			17	5	2		3							X	X	X	X	N	pH = 7.80 18
4						TJ 1/27/2023																		
5																								
6																								
7																								
8																								
9						TJ 1/27/2023																		
10																								
11																								
12																								

ADDITIONAL COMMENTS: Task Code: HAM-CCR-ASSMT-2023S1

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anthony Seurst / Geosyntec	1/30/2023	11:50	Ryan William / Pace	1/30/2023	1150	
Ryan William / Pace	1/31/2023	1438	[illegible] / Pace	1/30/23	1438	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Anthony Seurst, Consultant / Geosyntec Consultants, Inc.

SIGNATURE of SAMPLER: [signature], Consultant DATE Signed (MM/DD/YY): 01/27/2023

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.

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

CHAIN-OF-CUSTODY / Analytical Request Document

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Pace Analytical™ www.pacelabs.com

Section A Required Client Information:

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

Section B Required Project Information:

Report To:	SCS Contacts
Copy To:	Geosyntec Contacts
Purchase Order No.:	
Project Name:	Hammond AP-1
Project Number:	

Section C Invoice Information:

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

REGULATORY AGENCY

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

Site Location STATE: GA

Section D Required Client Information

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

Valid Matrix Codes

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Requested Analysis Filtered (Y/N): Chloride, Fluoride, Sulfate	Full App. III and IV metals	RAD 226/228	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	HAM-HGWC-8	WG	G	2/1/2023	1002			16	5	2		3							X	X	X	X	N	pH = 6.60
2	HAM-AP-1-EB-01	WQ	G	2/1/2023	1450			16	5	2		3							X	X	X	X	N	N/A
3	HAM-AP-1-FB-01	WQ	G	2/1/2023	1440			16	5	2		3							X	X	X	X	N	N/A
4					TJ 2/1/2023																			Last sample
5																								
6																								
7																								
8					TJ 2/1/2023																			
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-2023S1☐	Thomas Hessler / Geosyntec	2/3/2023	1230	Christine Hess / Geosyntec	2/3/23	1230	
	Christine Hess / Geosyntec	2/3/2023	1250	Ryan William / Pace	2/3/23	1250	
	Ryan William / Pace	2/3/2023	1400				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Hessler, Anthony Senior Consultant / Geosyntec Consultants, Inc.

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 02/01/2023

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.

Pace ANALYTICAL SERVICES	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: ☐ 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 CM

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

Temp should be above freezing to 6°C

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

Cooler Temp Corrected (°C): 2.4

USDA Regulated Soil (☐ N/A, water sample)

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ **Date:** _____

Project Manager SRF Review: _____ **Date:** _____

***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#	RP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)	BP1N	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			1																		2				
2		1	1			1																		2				
3		1	1			1																		2				
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

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

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

April 27, 2023

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

RE: Project: Plant Hammond Pooled Upgradien
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92648446

Pace Analytical Services Charlotte
South Carolina Laboratory ID: 99006
9800 Kincey 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

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

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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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

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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

Pace Analytical Services, LLC
110 Technology Parkway
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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
92648446001	**HAM-HGWA-3**					
	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	
92648446002	**HAM-HGWA-2**					
	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	
92648446003	**HAM-HGWA-43D**					
	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	
92648446004	**HAM-HGWA-44D**					
	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

Pace Analytical Services, LLC
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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
92648446004	**HAM-HGWA-44D**					
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	
92648446005	**HAM-HGWA-1**					
	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

Pace Analytical Services, LLC
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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
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Customer**				1		02/15/23 10:56		
pH	**7.32**	Std. Units			1		02/15/23 10:56		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**85.0**	mg/L	1.0	0.12	1	01/30/23 15:10	01/30/23 23:50	7440-70-2	M1
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	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	**0.13**	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	**0.012J**	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	**0.0030J**	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	
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 13:37	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**293**	mg/L	25.0	25.0	1		01/27/23 14:04		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.6**	mg/L	1.0	0.60	1		01/25/23 23:05	16887-00-6	
Fluoride	**0.061J**	mg/L	0.10	0.050	1		01/25/23 23:05	16984-48-8	
Sulfate	**39.5**	mg/L	1.0	0.50	1		01/25/23 23:05	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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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
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Customer**				1		02/15/23 10:56		
pH	**5.22**	Std. Units			1		02/15/23 10:56		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**29.4**	mg/L	1.0	0.12	1	01/31/23 17:09	02/02/23 21:19	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	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	**0.088**	mg/L	0.0050	0.00067	1	02/01/23 10:17	02/01/23 18:48	7440-39-3	
Beryllium	**0.00016J**	mg/L	0.00050	0.000054	1	02/01/23 10:17	02/01/23 18:48	7440-41-7	
Boron	**0.046**	mg/L	0.040	0.0086	1	02/01/23 10:17	02/01/23 18:48	7440-42-8	
Cadmium	**0.00021J**	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	**0.024**	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	**0.0014J**	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	
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 13:40	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**164**	mg/L	25.0	25.0	1		01/27/23 14:08		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**7.1**	mg/L	1.0	0.60	1		01/29/23 17:10	16887-00-6	
Fluoride	**0.053J**	mg/L	0.10	0.050	1		01/29/23 17:10	16984-48-8	
Sulfate	**79.7**	mg/L	1.0	0.50	1		01/29/23 17:10	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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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
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Customer**				1		02/15/23 10:57		
pH	**7.56**	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	**56.6**	mg/L	1.0	0.12	1	01/31/23 17:09	02/02/23 21:33	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	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	**0.28**	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	**0.037J**	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	**0.0020J**	mg/L	0.030	0.00073	1	02/01/23 10:17	02/01/23 18:54	7439-93-2	
Molybdenum	**0.0027J**	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	
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 13:42	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**271**	mg/L	25.0	25.0	1		01/27/23 14:08		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.3**	mg/L	1.0	0.60	1		01/29/23 17:34	16887-00-6	
Fluoride	**0.23**	mg/L	0.10	0.050	1		01/29/23 17:34	16984-48-8	
Sulfate	**34.7**	mg/L	1.0	0.50	1		01/29/23 17:34	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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Peachtree Corners, GA 30092
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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
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Customer**				1		02/15/23 10:57		
pH	**8.22**	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	**13.2**	mg/L	1.0	0.12	1	01/31/23 17:09	02/02/23 21:38	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/01/23 10:17	02/01/23 19:00	7440-36-0	
Arsenic	**0.0027J**	mg/L	0.0050	0.0022	1	02/01/23 10:17	02/01/23 19:00	7440-38-2	
Barium	**0.18**	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	**0.44**	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	**0.064**	mg/L	0.030	0.00073	1	02/01/23 10:17	02/01/23 19:00	7439-93-2	
Molybdenum	**0.0026J**	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	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**363**	mg/L	25.0	25.0	1		01/27/23 14:08		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**24.9**	mg/L	1.0	0.60	1		01/31/23 01:07	16887-00-6	
Fluoride	**1.3**	mg/L	0.10	0.050	1		01/31/23 01:07	16984-48-8	
Sulfate	**10.1**	mg/L	1.0	0.50	1		01/31/23 01:07	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Customer**				1		02/15/23 10:58		
pH	**6.76**	Std. Units			1		02/15/23 10:58		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**117**	mg/L	1.0	0.12	1	01/31/23 17:09	02/02/23 21:43	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	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	**0.033**	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	**0.015J**	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	**0.00092J**	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	
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 13:47	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**369**	mg/L	25.0	25.0	1		01/27/23 14:08		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**9.0**	mg/L	1.0	0.60	1		01/31/23 01:33	16887-00-6	
Fluoride	**0.089J**	mg/L	0.10	0.050	1		01/31/23 01:33	16984-48-8	
Sulfate	**48.3**	mg/L	1.0	0.50	1		01/31/23 01:33	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92648446

QC Batch: 752651
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
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	92648446001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	85.0	1	1	80.4	83.9	-467	-112	75-125	4	20	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92648446

QC Batch: 752956
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
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	92649037012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L		1	1	4.1	4.3	96	117	75-125	5	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92648446

QC Batch: 752599
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
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	92648446001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	101	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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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92648446

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3910297 3910298

Parameter	Units	92648446001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.13	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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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92648446

QC Batch: 753097
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
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	92649067001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92648446

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
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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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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	92648451002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0022	0.0022	88	88	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92648446

QC Batch: 751618
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 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	92648208001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	8.7	50	50	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	92648324002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92648446

QC Batch: 752456
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 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 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	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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max 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

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92648446

QC Batch: 752690
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 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	92648913001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.7	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	92649042009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	ND	50	50	51.0	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	

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92648446

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.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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		

Pace	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# : 92648446

92648446

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 (JH)

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

Cooler Temp Corrected (°C): 4.4

Temp should be above freezing to 6°C

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

USDA Regulated Soil (☐ N/A, water sample)

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ **Date:** _____

Project Manager SRF Review: _____ **Date:** _____

Pace ANALYTICAL SERVICES	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)	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			1																						
2																												
3																												
4																												
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8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

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

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

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

Section A Required Client Information:

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

Section B Required Project Information:

Report To:	SCS Contacts
Copy To:	Geosyntec Contacts
	Task Code: HAM-CCR-ASSMT-2023S1
Purchase Order No.:	
Project Name:	Plant Hammond Pooled Upgradient
Project Number:	

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Nicole D'Oleo
Pace Profile #:	10839

REGULATORY AGENCY

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

Site Location STATE: GA

Section D Required Client Information

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

Valid Matrix Codes

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate	Full App. III and IV metals	RAD 226/228	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Y/N	N	N	N	N		92648446
1	HAM-HGWA-3	WG	G	1/23/2023	1849				17	5	2		3						X	X	X	X	N	pH = 7.32
2						TJ 1/23/2023																		
3																								
4																								
5																								
6																								
7						TJ 1/23/2023																		
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
HAM-CCR-ASSMT-2023S1	Thomas Kreeger / Geosyntec	1/24/2023	[illegible]	Ryan Williams / Pace	1/24/2023	1040	
	Ryan Williams / Pace	1/24/2023	1238	[signature]	1/24/23	1238	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: [illegible] / Geosyntec Consultants, Inc

SIGNATURE of SAMPLER: CC DATE Signed (MM/DD/YY): 01/23/23

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 invoices not paid within 30 days.

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

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mec ☐ ☐

WO#: 92648446
PM: BV Due Date: 02/07/23
CLIENT: GA-GA Power

Sample Condition Upon Receipt

Client Name: Georgia Power **Project #:**

Courier: ☐ Commercial ☑ Fed Ex ☐ UPS ☐ USPS ☑ Pace ☐ Other:___ ☐ Client

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ **Date:** _____

Project Manager SRF Review: _____ **Date:** _____

Pace	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)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)	BP1N	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			1																			2				
2		1	1			1																			2				
3		1	1			1																			2				
4		1	1			1																			2				
5																													
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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.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

Section A Required Client Information:

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

Section B Required Project Information:

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

Section C Invoice Information:

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

REGULATORY AGENCY

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

Site Location STATE: GA

Section D Required Client Information

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

Valid Matrix Codes

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N	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.
																			N	N	N	N		
1	HAM-HGWA-2	WG	G	1/24/2023	0935				16	5	2	3							X	X	X	X	N	92648446 002 pH = 5.22
2	HAM-HGWA-43D	WG	G	1/24/2023	1055				16	5	2	3							X	X	X	X	N	003 pH = 7.56
3	HAM-HGWA-44D	WG	G	1/24/2023	1057				15	5	2	3							X	X	X	X	N	004 pH = 8.22
4	HAM-HGWA-1	WG	G	1/24/2023		TJ 1/24/2023			16	5	2	3							X	X	X	X		005 pH = 6.76
5																								
6																								
7																								
8						TJ 1/24/2023																		
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	1/26/23	1100	/ GPC	1/26/23	1100	
	/ Geosyntec	1/26/23	1115	Ryan Williams / Pace	1/26/2023	1115	
	Ryan Williams / Pace	1/26/2023	1435		1/26/23	1435	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Hester / Connie Lewis / Geosyntec Consultants, Inc.

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 1/24/2023

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.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

March 23, 2023

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

RE: Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between January 30, 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

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CERTIFICATIONS

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

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

Pace Analytical Services, LLC
110 Technology Parkway
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SAMPLE SUMMARY

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92649924001	**HAM-HGWC-9**	Water	01/26/23 15:24	01/30/23 14:38
92649924002	**HAM-HGWC-11**	Water	01/26/23 14:27	01/30/23 14:38
92649924003	**HAM-HGWC-12**	Water	01/26/23 12:25	01/30/23 14:38
92649924004	**HAM-HGWC-13**	Water	01/26/23 13:30	01/30/23 14:38
92649924005	**HAM-MW-5**	Water	01/26/23 11:14	01/30/23 14:38
92649924006	**HAM-MW-6**	Water	01/26/23 12:40	01/30/23 14:38
92649924007	**HAM-MW-7**	Water	01/26/23 14:04	01/30/23 14:38
92649924008	**HAM-MW-19**	Water	01/26/23 16:05	01/30/23 14:38
92649924009	**HAM-MW-20**	Water	01/26/23 09:49	01/30/23 14:38
92649924010	**HAM-MW-24D**	Water	01/26/23 11:31	01/30/23 14:38
92649924011	**HAM-MW-25D**	Water	01/26/23 10:14	01/30/23 14:38
92649924012	**HAM-MW-26D**	Water	01/26/23 16:32	01/30/23 14:38
92649924013	**HAM-MW-28D**	Water	01/26/23 17:33	01/30/23 14:38
92649924014	**HAM-MW-29**	Water	01/26/23 15:19	01/30/23 14:38
92649924015	**HAM-AP1-FD-01**	Water	01/26/23 14:48	01/30/23 14:38
92649924016	**HAM-HGWC-7**	Water	01/27/23 13:15	01/30/23 14:38
92649924017	**HAM-HGWC-10**	Water	01/27/23 15:01	01/30/23 14:38
92649924018	**HAM-MW-27D**	Water	01/27/23 17:35	01/30/23 14:38
92649924019	**HAM-HGWC-8**	Water	02/01/23 10:02	02/03/23 12:50
92649924020	**HAM-AP1-EB-01**	Water	02/01/23 14:50	02/03/23 12:50
92649924021	**HAM-AP1-FB-01**	Water	02/01/23 14:40	02/03/23 12:50

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92649924001	HAM-HGWC-9	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92649924002	HAM-HGWC-11	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92649924003	HAM-HGWC-12	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92649924004	HAM-HGWC-13	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92649924005	HAM-MW-5	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92649924006	HAM-MW-6	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92649924007	HAM-MW-7	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92649924008	HAM-MW-19	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92649924009	HAM-MW-20	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92649924010	HAM-MW-24D	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92649924011	HAM-MW-25D	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92649924012	HAM-MW-26D	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92649924013	HAM-MW-28D	EPA 9315	RMS	1	PASI-PA

Pace Analytical Services, LLC
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(770)734-4200

SAMPLE ANALYTE COUNT

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92649924014	**HAM-MW-29**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92649924015	**HAM-AP1-FD-01**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92649924016	**HAM-HGWC-7**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92649924017	**HAM-HGWC-10**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92649924018	**HAM-MW-27D**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92649924019	**HAM-HGWC-8**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92649924020	**HAM-AP1-EB-01**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92649924021	**HAM-AP1-FB-01**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92649924001	**HAM-HGWC-9**					
EPA 9315	Radium-226	0.0570 ± 0.0782 (0.164) C:93% T:NA	pCi/L		02/16/23 10:17	
EPA 9320	Radium-228	0.459 ± 0.279 (0.500) C:82% T:86%	pCi/L		02/10/23 12:01	
Total Radium Calculation	Total Radium	0.516 ± 0.357 (0.664)	pCi/L		03/14/23 14:23	
92649924002	**HAM-HGWC-11**					
EPA 9315	Radium-226	0.103 ± 0.0962 (0.173) C:93% T:NA	pCi/L		02/16/23 09:05	
EPA 9320	Radium-228	0.338 ± 0.312 (0.634) C:82% T:85%	pCi/L		02/10/23 12:01	
Total Radium Calculation	Total Radium	0.441 ± 0.408 (0.807)	pCi/L		03/14/23 14:23	
92649924003	**HAM-HGWC-12**					
EPA 9315	Radium-226	0.280 ± 0.139 (0.173) C:98% T:NA	pCi/L		02/16/23 09:05	
EPA 9320	Radium-228	0.597 ± 0.308 (0.525) C:81% T:89%	pCi/L		02/10/23 12:01	
Total Radium Calculation	Total Radium	0.877 ± 0.447 (0.698)	pCi/L		03/14/23 14:23	
92649924004	**HAM-HGWC-13**					
EPA 9315	Radium-226	0.163 ± 0.108 (0.165) C:99% T:NA	pCi/L		02/16/23 09:05	
EPA 9320	Radium-228	0.556 ± 0.306 (0.531) C:80% T:87%	pCi/L		02/10/23 12:01	
Total Radium Calculation	Total Radium	0.719 ± 0.414 (0.696)	pCi/L		03/14/23 14:23	

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92649924005	**HAM-MW-5**					
EPA 9315	Radium-226	0.0644 ± 0.0894 (0.189) C:90% T:NA	pCi/L		02/16/23 09:05	
EPA 9320	Radium-228	0.845 ± 0.402 (0.676) C:79% T:86%	pCi/L		02/10/23 14:34	
Total Radium Calculation	Total Radium	0.909 ± 0.491 (0.865)	pCi/L		03/14/23 14:23	
92649924006	**HAM-MW-6**					
EPA 9315	Radium-226	0.0685 ± 0.0832 (0.167) C:93% T:NA	pCi/L		02/16/23 12:08	
EPA 9320	Radium-228	0.424 ± 0.339 (0.675) C:87% T:86%	pCi/L		02/10/23 14:34	
Total Radium Calculation	Total Radium	0.493 ± 0.422 (0.842)	pCi/L		03/14/23 14:23	
92649924007	**HAM-MW-7**					
EPA 9315	Radium-226	0.131 ± 0.108 (0.193) C:93% T:NA	pCi/L		02/16/23 12:08	
EPA 9320	Radium-228	0.187 ± 0.289 (0.624) C:83% T:87%	pCi/L		02/10/23 14:34	
Total Radium Calculation	Total Radium	0.318 ± 0.397 (0.817)	pCi/L		03/14/23 14:23	
92649924008	**HAM-MW-19**					
EPA 9315	Radium-226	0.0959 ± 0.0908 (0.164) C:91% T:NA	pCi/L		02/16/23 12:08	
EPA 9320	Radium-228	0.237 ± 0.279 (0.584) C:85% T:82%	pCi/L		02/10/23 14:34	
Total Radium Calculation	Total Radium	0.333 ± 0.370 (0.748)	pCi/L		03/14/23 14:23	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92649924009	**HAM-MW-20**					
EPA 9315	Radium-226	0.186 ± 0.118 (0.172) C:93% T:NA	pCi/L		02/16/23 12:08	
EPA 9320	Radium-228	0.375 ± 0.350 (0.714) C:82% T:88%	pCi/L		02/10/23 15:08	
Total Radium Calculation	Total Radium	0.561 ± 0.468 (0.886)	pCi/L		03/14/23 14:23	
92649924010	**HAM-MW-24D**					
EPA 9315	Radium-226	-0.00601 ± 0.0547 (0.167) C:90% T:NA	pCi/L		02/16/23 12:08	
EPA 9320	Radium-228	0.0906 ± 0.273 (0.616) C:82% T:88%	pCi/L		02/10/23 15:08	
Total Radium Calculation	Total Radium	0.0906 ± 0.328 (0.783)	pCi/L		03/14/23 14:23	
92649924011	**HAM-MW-25D**					
EPA 9315	Radium-226	0.713 ± 0.220 (0.158) C:95% T:NA	pCi/L		02/16/23 12:08	
EPA 9320	Radium-228	0.391 ± 0.304 (0.594) C:81% T:90%	pCi/L		02/10/23 15:08	
Total Radium Calculation	Total Radium	1.10 ± 0.524 (0.752)	pCi/L		03/14/23 14:23	
92649924012	**HAM-MW-26D**					
EPA 9315	Radium-226	0.0343 ± 0.0947 (0.229) C:91% T:NA	pCi/L		02/16/23 12:08	
EPA 9320	Radium-228	0.352 ± 0.330 (0.670) C:77% T:88%	pCi/L		02/10/23 15:08	
Total Radium Calculation	Total Radium	0.386 ± 0.425 (0.899)	pCi/L		03/14/23 14:23	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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SUMMARY OF DETECTION

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92649924013	**HAM-MW-28D**					
EPA 9315	Radium-226	0.421 ± 0.167 (0.182) C:107% T:NA	pCi/L		02/14/23 19:09	
EPA 9320	Radium-228	0.400 ± 0.312 (0.608) C:79% T:90%	pCi/L		02/09/23 13:53	
Total Radium Calculation	Total Radium	0.821 ± 0.479 (0.790)	pCi/L		03/14/23 14:23	
92649924014	**HAM-MW-29**					
EPA 9315	Radium-226	0.0895 ± 0.0928 (0.175) C:92% T:NA	pCi/L		02/14/23 19:09	
EPA 9320	Radium-228	0.703 ± 0.387 (0.690) C:80% T:85%	pCi/L		02/09/23 13:53	
Total Radium Calculation	Total Radium	0.793 ± 0.480 (0.865)	pCi/L		03/14/23 14:23	
92649924015	**HAM-AP1-FD-01**					
EPA 9315	Radium-226	0.144 ± 0.109 (0.179) C:95% T:NA	pCi/L		02/14/23 19:09	
EPA 9320	Radium-228	0.414 ± 0.396 (0.811) C:76% T:83%	pCi/L		02/09/23 13:53	
Total Radium Calculation	Total Radium	0.558 ± 0.505 (0.990)	pCi/L		03/14/23 14:23	
92649924016	**HAM-HGWC-7**					
EPA 9315	Radium-226	0.229 ± 0.135 (0.186) C:85% T:NA	pCi/L		02/14/23 19:09	
EPA 9320	Radium-228	0.221 ± 0.294 (0.626) C:79% T:91%	pCi/L		02/09/23 13:53	
Total Radium Calculation	Total Radium	0.450 ± 0.429 (0.812)	pCi/L		03/14/23 14:23	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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SUMMARY OF DETECTION

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92649924017	**HAM-HGWC-10**					
EPA 9315	Radium-226	0.148 ± 0.107 (0.167) C:95% T:NA	pCi/L		02/14/23 19:09	
EPA 9320	Radium-228	1.05 ± 0.404 (0.587) C:86% T:81%	pCi/L		02/13/23 11:52	
Total Radium Calculation	Total Radium	1.20 ± 0.511 (0.754)	pCi/L		03/14/23 14:23	
92649924018	**HAM-MW-27D**					
EPA 9315	Radium-226	0.372 ± 0.172 (0.233) C:98% T:NA	pCi/L		02/14/23 19:09	
EPA 9320	Radium-228	0.728 ± 0.350 (0.569) C:83% T:83%	pCi/L		02/13/23 11:52	
Total Radium Calculation	Total Radium	1.10 ± 0.522 (0.802)	pCi/L		03/14/23 14:23	
92649924019	**HAM-HGWC-8**					
EPA 9315	Radium-226	0.215 ± 0.127 (0.177) C:92% T:NA	pCi/L		02/27/23 19:20	
EPA 9320	Radium-228	0.0256 ± 0.352 (0.808) C:90% T:84%	pCi/L		02/21/23 15:12	
Total Radium Calculation	Total Radium	0.241 ± 0.479 (0.985)	pCi/L		02/28/23 15:11	
92649924020	**HAM-AP1-EB-01**					
EPA 9315	Radium-226	0.0947 ± 0.117 (0.247) C:92% T:NA	pCi/L		02/27/23 19:20	
EPA 9320	Radium-228	0.572 ± 0.386 (0.746) C:82% T:93%	pCi/L		02/21/23 15:12	
Total Radium Calculation	Total Radium	0.667 ± 0.503 (0.993)	pCi/L		02/28/23 15:11	

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SUMMARY OF DETECTION

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92649924021	**HAM-AP1-FB-01**					
EPA 9315	Radium-226	-0.000718 ± 0.0588 (0.173) C:90% T:NA	pCi/L		02/27/23 18:33	
EPA 9320	Radium-228	0.250 ± 0.331 (0.708) C:81% T:94%	pCi/L		02/21/23 15:12	
Total Radium Calculation	Total Radium	0.250 ± 0.390 (0.881)	pCi/L		02/28/23 15:11	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Sample: HAM-HGWC-9 **Lab ID: 92649924001** Collected: 01/26/23 15:24 Received: 01/30/23 14:38 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0570 ± 0.0782 (0.164) C:93% T:NA**	pCi/L	02/16/23 10:17	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.459 ± 0.279 (0.500) C:82% T:86%**	pCi/L	02/10/23 12:01	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.516 ± 0.357 (0.664)**	pCi/L	03/14/23 14:23	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Sample: HAM-HGWC-11 **Lab ID: 92649924002** Collected: 01/26/23 14:27 Received: 01/30/23 14:38 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.103 ± 0.0962 (0.173) C:93% T:NA**	pCi/L	02/16/23 09:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.338 ± 0.312 (0.634) C:82% T:85%**	pCi/L	02/10/23 12:01	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.441 ± 0.408 (0.807)**	pCi/L	03/14/23 14:23	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Sample: HAM-HGWC-12 **Lab ID: 92649924003** Collected: 01/26/23 12:25 Received: 01/30/23 14:38 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.280 ± 0.139 (0.173) C:98% T:NA**	pCi/L	02/16/23 09:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.597 ± 0.308 (0.525) C:81% T:89%**	pCi/L	02/10/23 12:01	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.877 ± 0.447 (0.698)**	pCi/L	03/14/23 14:23	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Sample: HAM-HGWC-13 **Lab ID: 92649924004** Collected: 01/26/23 13:30 Received: 01/30/23 14:38 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.163 ± 0.108 (0.165) C:99% T:NA**	pCi/L	02/16/23 09:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.556 ± 0.306 (0.531) C:80% T:87%**	pCi/L	02/10/23 12:01	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.719 ± 0.414 (0.696)**	pCi/L	03/14/23 14:23	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Sample: HAM-MW-5 **Lab ID: 92649924005** Collected: 01/26/23 11:14 Received: 01/30/23 14:38 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0644 ± 0.0894 (0.189) C:90% T:NA**	pCi/L	02/16/23 09:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.845 ± 0.402 (0.676) C:79% T:86%**	pCi/L	02/10/23 14:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.909 ± 0.491 (0.865)**	pCi/L	03/14/23 14:23	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Sample: HAM-MW-6 **Lab ID: 92649924006** Collected: 01/26/23 12:40 Received: 01/30/23 14:38 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0685 ± 0.0832 (0.167) C:93% T:NA**	pCi/L	02/16/23 12:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.424 ± 0.339 (0.675) C:87% T:86%**	pCi/L	02/10/23 14:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.493 ± 0.422 (0.842)**	pCi/L	03/14/23 14:23	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Sample: HAM-MW-7 **Lab ID: 92649924007** Collected: 01/26/23 14:04 Received: 01/30/23 14:38 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.131 ± 0.108 (0.193) C:93% T:NA**	pCi/L	02/16/23 12:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.187 ± 0.289 (0.624) C:83% T:87%**	pCi/L	02/10/23 14:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.318 ± 0.397 (0.817)**	pCi/L	03/14/23 14:23	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Sample: HAM-MW-19 **Lab ID: 92649924008** Collected: 01/26/23 16:05 Received: 01/30/23 14:38 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0959 ± 0.0908 (0.164) C:91% T:NA**	pCi/L	02/16/23 12:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.237 ± 0.279 (0.584) C:85% T:82%**	pCi/L	02/10/23 14:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.333 ± 0.370 (0.748)**	pCi/L	03/14/23 14:23	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Sample: HAM-MW-20 **Lab ID: 92649924009** Collected: 01/26/23 09:49 Received: 01/30/23 14:38 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.186 ± 0.118 (0.172) C:93% T:NA**	pCi/L	02/16/23 12:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.375 ± 0.350 (0.714) C:82% T:88%**	pCi/L	02/10/23 15:08	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.561 ± 0.468 (0.886)**	pCi/L	03/14/23 14:23	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Sample: HAM-MW-24D **Lab ID: 92649924010** Collected: 01/26/23 11:31 Received: 01/30/23 14:38 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.00601 ± 0.0547 (0.167) C:90% T:NA**	pCi/L	02/16/23 12:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0906 ± 0.273 (0.616) C:82% T:88%**	pCi/L	02/10/23 15:08	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.0906 ± 0.328 (0.783)**	pCi/L	03/14/23 14:23	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Sample: HAM-MW-25D **Lab ID: 92649924011** Collected: 01/26/23 10:14 Received: 01/30/23 14:38 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.713 ± 0.220 (0.158) C:95% T:NA**	pCi/L	02/16/23 12:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.391 ± 0.304 (0.594) C:81% T:90%**	pCi/L	02/10/23 15:08	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.10 ± 0.524 (0.752)**	pCi/L	03/14/23 14:23	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Sample: HAM-MW-26D **Lab ID: 92649924012** Collected: 01/26/23 16:32 Received: 01/30/23 14:38 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0343 ± 0.0947 (0.229) C:91% T:NA**	pCi/L	02/16/23 12:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.352 ± 0.330 (0.670) C:77% T:88%**	pCi/L	02/10/23 15:08	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.386 ± 0.425 (0.899)**	pCi/L	03/14/23 14:23	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Sample: HAM-MW-28D **Lab ID: 92649924013** Collected: 01/26/23 17:33 Received: 01/30/23 14:38 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.421 ± 0.167 (0.182) C:107% T:NA**	pCi/L	02/14/23 19:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.400 ± 0.312 (0.608) C:79% T:90%**	pCi/L	02/09/23 13:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.821 ± 0.479 (0.790)**	pCi/L	03/14/23 14:23	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Sample: HAM-MW-29 **Lab ID: 92649924014** Collected: 01/26/23 15:19 Received: 01/30/23 14:38 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0895 ± 0.0928 (0.175) C:92% T:NA**	pCi/L	02/14/23 19:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.703 ± 0.387 (0.690) C:80% T:85%**	pCi/L	02/09/23 13:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.793 ± 0.480 (0.865)**	pCi/L	03/14/23 14:23	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Sample: HAM-AP1-FD-01 **Lab ID: 92649924015** Collected: 01/26/23 14:48 Received: 01/30/23 14:38 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.144 ± 0.109 (0.179) C:95% T:NA**	pCi/L	02/14/23 19:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.414 ± 0.396 (0.811) C:76% T:83%**	pCi/L	02/09/23 13:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.558 ± 0.505 (0.990)**	pCi/L	03/14/23 14:23	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Sample: HAM-HGWC-7 **Lab ID: 92649924016** Collected: 01/27/23 13:15 Received: 01/30/23 14:38 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.229 ± 0.135 (0.186) C:85% T:NA**	pCi/L	02/14/23 19:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.221 ± 0.294 (0.626) C:79% T:91%**	pCi/L	02/09/23 13:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.450 ± 0.429 (0.812)**	pCi/L	03/14/23 14:23	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Sample: HAM-HGWC-10 **Lab ID: 92649924017** Collected: 01/27/23 15:01 Received: 01/30/23 14:38 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.148 ± 0.107 (0.167) C:95% T:NA**	pCi/L	02/14/23 19:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.05 ± 0.404 (0.587) C:86% T:81%**	pCi/L	02/13/23 11:52	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.20 ± 0.511 (0.754)**	pCi/L	03/14/23 14:23	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Sample: HAM-MW-27D **Lab ID: 92649924018** Collected: 01/27/23 17:35 Received: 01/30/23 14:38 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.372 ± 0.172 (0.233) C:98% T:NA**	pCi/L	02/14/23 19:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.728 ± 0.350 (0.569) C:83% T:83%**	pCi/L	02/13/23 11:52	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.10 ± 0.522 (0.802)**	pCi/L	03/14/23 14:23	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Sample: HAM-HGWC-8 **Lab ID: 92649924019** Collected: 02/01/23 10:02 Received: 02/03/23 12:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.215 ± 0.127 (0.177) C:92% T:NA**	pCi/L	02/27/23 19:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0256 ± 0.352 (0.808) C:90% T:84%**	pCi/L	02/21/23 15:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.241 ± 0.479 (0.985)**	pCi/L	02/28/23 15:11	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Sample: HAM-AP1-EB-01 **Lab ID: 92649924020** Collected: 02/01/23 14:50 Received: 02/03/23 12:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0947 ± 0.117 (0.247) C:92% T:NA**	pCi/L	02/27/23 19:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.572 ± 0.386 (0.746) C:82% T:93%**	pCi/L	02/21/23 15:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.667 ± 0.503 (0.993)**	pCi/L	02/28/23 15:11	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Sample: HAM-AP1-FB-01 **Lab ID: 92649924021** Collected: 02/01/23 14:40 Received: 02/03/23 12:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.000718 ± 0.0588 (0.173) C:90% T:NA**	pCi/L	02/27/23 18:33	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.250 ± 0.331 (0.708) C:81% T:94%**	pCi/L	02/21/23 15:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.250 ± 0.390 (0.881)**	pCi/L	02/28/23 15:11	7440-14-4	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

QC Batch: 565964
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92649924019, 92649924020, 92649924021

METHOD BLANK: 2748587 Matrix: Water
Associated Lab Samples: 92649924019, 92649924020, 92649924021

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	

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: Hammond AP-1 - RADS
Pace Project No.: 92649924

QC Batch: 565965
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92649924019, 92649924020, 92649924021

METHOD BLANK: 2748588 Matrix: Water
Associated Lab Samples: 92649924019, 92649924020, 92649924021

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	

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

QC Batch: 564181 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92649924001, 92649924002, 92649924003, 92649924004, 92649924005, 92649924006, 92649924007, 92649924008, 92649924009, 92649924010, 92649924011, 92649924012

METHOD BLANK: 2739754 Matrix: Water
Associated Lab Samples: 92649924001, 92649924002, 92649924003, 92649924004, 92649924005, 92649924006, 92649924007, 92649924008, 92649924009, 92649924010, 92649924011, 92649924012

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0555 ± 0.0776 (0.164) C:96% T:NA	pCi/L	02/16/23 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.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

QC Batch: 564276
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92649924013, 92649924014, 92649924015, 92649924016, 92649924017, 92649924018

METHOD BLANK: 2740044 Matrix: Water
Associated Lab Samples: 92649924013, 92649924014, 92649924015, 92649924016, 92649924017, 92649924018

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	

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

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: 92649924013, 92649924014, 92649924015, 92649924016, 92649924017, 92649924018

METHOD BLANK: 2740043 Matrix: Water
Associated Lab Samples: 92649924013, 92649924014, 92649924015, 92649924016, 92649924017, 92649924018

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	

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

QC Batch: 564182
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92649924001, 92649924002, 92649924003, 92649924004, 92649924005, 92649924006, 92649924007, 92649924008, 92649924009, 92649924010, 92649924011, 92649924012

METHOD BLANK: 2739757 Matrix: Water
Associated Lab Samples: 92649924001, 92649924002, 92649924003, 92649924004, 92649924005, 92649924006, 92649924007, 92649924008, 92649924009, 92649924010, 92649924011, 92649924012

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.348 ± 0.296 (0.591) C:84% T:90%	pCi/L	02/10/23 11:28	

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

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.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92649924001	**HAM-HGWC-9**	EPA 9315	564181		
92649924002	**HAM-HGWC-11**	EPA 9315	564181		
92649924003	**HAM-HGWC-12**	EPA 9315	564181		
92649924004	**HAM-HGWC-13**	EPA 9315	564181		
92649924005	**HAM-MW-5**	EPA 9315	564181		
92649924006	**HAM-MW-6**	EPA 9315	564181		
92649924007	**HAM-MW-7**	EPA 9315	564181		
92649924008	**HAM-MW-19**	EPA 9315	564181		
92649924009	**HAM-MW-20**	EPA 9315	564181		
92649924010	**HAM-MW-24D**	EPA 9315	564181		
92649924011	**HAM-MW-25D**	EPA 9315	564181		
92649924012	**HAM-MW-26D**	EPA 9315	564181		
92649924013	**HAM-MW-28D**	EPA 9315	564275		
92649924014	**HAM-MW-29**	EPA 9315	564275		
92649924015	**HAM-AP1-FD-01**	EPA 9315	564275		
92649924016	**HAM-HGWC-7**	EPA 9315	564275		
92649924017	**HAM-HGWC-10**	EPA 9315	564275		
92649924018	**HAM-MW-27D**	EPA 9315	564275		
92649924019	**HAM-HGWC-8**	EPA 9315	565964		
92649924020	**HAM-AP1-EB-01**	EPA 9315	565964		
92649924021	**HAM-AP1-FB-01**	EPA 9315	565964		
92649924001	**HAM-HGWC-9**	EPA 9320	564182		
92649924002	**HAM-HGWC-11**	EPA 9320	564182		
92649924003	**HAM-HGWC-12**	EPA 9320	564182		
92649924004	**HAM-HGWC-13**	EPA 9320	564182		
92649924005	**HAM-MW-5**	EPA 9320	564182		
92649924006	**HAM-MW-6**	EPA 9320	564182		
92649924007	**HAM-MW-7**	EPA 9320	564182		
92649924008	**HAM-MW-19**	EPA 9320	564182		
92649924009	**HAM-MW-20**	EPA 9320	564182		
92649924010	**HAM-MW-24D**	EPA 9320	564182		
92649924011	**HAM-MW-25D**	EPA 9320	564182		
92649924012	**HAM-MW-26D**	EPA 9320	564182		
92649924013	**HAM-MW-28D**	EPA 9320	564276		
92649924014	**HAM-MW-29**	EPA 9320	564276		
92649924015	**HAM-AP1-FD-01**	EPA 9320	564276		
92649924016	**HAM-HGWC-7**	EPA 9320	564276		
92649924017	**HAM-HGWC-10**	EPA 9320	564276		
92649924018	**HAM-MW-27D**	EPA 9320	564276		
92649924019	**HAM-HGWC-8**	EPA 9320	565965		
92649924020	**HAM-AP1-EB-01**	EPA 9320	565965		
92649924021	**HAM-AP1-FB-01**	EPA 9320	565965		
92649924001	**HAM-HGWC-9**	Total Radium Calculation	573736		
92649924002	**HAM-HGWC-11**	Total Radium Calculation	573736		
92649924003	**HAM-HGWC-12**	Total Radium Calculation	573736		
92649924004	**HAM-HGWC-13**	Total Radium Calculation	573736		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-1 - RADS
Pace Project No.: 92649924

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92649924005	**HAM-MW-5**	Total Radium Calculation	573736		
92649924006	**HAM-MW-6**	Total Radium Calculation	573736		
92649924007	**HAM-MW-7**	Total Radium Calculation	573736		
92649924008	**HAM-MW-19**	Total Radium Calculation	573736		
92649924009	**HAM-MW-20**	Total Radium Calculation	573736		
92649924010	**HAM-MW-24D**	Total Radium Calculation	573736		
92649924011	**HAM-MW-25D**	Total Radium Calculation	573736		
92649924012	**HAM-MW-26D**	Total Radium Calculation	573736		
92649924013	**HAM-MW-28D**	Total Radium Calculation	573736		
92649924014	**HAM-MW-29**	Total Radium Calculation	573736		
92649924015	**HAM-AP1-FD-01**	Total Radium Calculation	573736		
92649924016	**HAM-HGWC-7**	Total Radium Calculation	573736		
92649924017	**HAM-HGWC-10**	Total Radium Calculation	573736		
92649924018	**HAM-MW-27D**	Total Radium Calculation	573736		
92649924019	**HAM-HGWC-8**	Total Radium Calculation	570492		
92649924020	**HAM-AP1-EB-01**	Total Radium Calculation	570492		
92649924021	**HAM-AP1-FB-01**	Total Radium Calculation	570492		

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA power

Project #: WO# : 92649924

92649924

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

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☑ No

Date/Initials Person Examining Contents: MT

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ **Date:** _____

Project Manager SRF Review: _____ **Date:** _____

Pace ANALYTICAL SERVICES	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 ☐

Sample Condition Upon Receipt

Client Name: GA power

Project: WO#: 92649924

PM: BV Due Date: 02/14/23

CLIENT: GA-GA Power

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

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☐ IR Gun ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ **Date:** _____

Project Manager SRF Review: _____ **Date:** _____

***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# : 92649924**

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)	BP1N	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
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10		—	—			—																			2				
11		—	—			—																			2				
12		—	—			—																			2				

pH Adjustment Log for Preserved Samples

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

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

*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# : 92649924

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)	BP1N	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
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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.

*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, ELHg

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

***Check all unpreserved Nitrates for chlorine

Project # WO#: 92649924

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)	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)	BP1V	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																													
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10																													
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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.

Collected: 1/26/23

Pace Analytical
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CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 1 of 2

Section A Required Client Information:

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

Section B Required Project Information:

Report To:	SCS Contacts
Copy To:	Geosyntec Contacts
Purchase Order No.:	
Project Name:	Hammond AP-1
Project Number:	

Section C Invoice Information:

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

REGULATORY AGENCY

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

Site Location STATE: GA

Section D Required Client Information

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

Valid Matrix Codes

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate	Full App. III and IV metals	RAD 226/228	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Requested Analysis Filtered (Y/N)	N	N	N	N		92649524
1	HAM-HGWC-9	WG	G	1/26/2023	1524			17	5	2		3							X	X	X	X	N	pH = 7.07
2	HAM-HGWC-11	WG	G	1/26/2023	1427			16	5	2		3							X	X	X	X	N	pH = 6.23
3	HAM-HGWC-12	WG	G	1/26/2023	1225			17	5	2		3							X	X	X	X	N	pH = 7.10
4	HAM-HGWC-13	WG	G	1/26/2023	1330			16	5	2		3							X	X	X	X	N	pH = 6.90
5	HAM-MW-5	WG	G	1/26/2023	1114			17	5	2		3							X	X	X	X	N	pH = 6.07
6	HAM-MW-6	WG	G	1/26/2023	1240			18	5	2		3							X	X	X	X	N	pH = 6.90
7	HAM-MW-7	WG	G	1/26/2023	1404			16	5	2		3							X	X	X	X	N	pH = 6.23
8	HAM-MW-19	WG	G	1/26/2023	1505			17	5	2		3							X	X	X	X	N	pH = 6.13
9	HAM-MW-20	WG	G	1/26/2023	0949			17	5	2		3							X	X	X	X	N	pH = 6.96
10	HAM-MW-24D	WG	G	1/26/2023	1131			17	5	2		3							X	X	X	X	N	pH = 7.80
11	HAM-MW-25D	WG	G	1/26/2023	1014			16	5	2		3							X	X	X	X	N	pH = 7.74
12	HAM-MW-26D	WG	G	1/26/2023	1632	TJ 1/26/2023		17	5	2		3							X	X	X	X	N	pH = 7.14

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-2023S10	Anthony Sprunt / Geosyntec	1/30/2023	11:50	Ryan Williams / Pace	1/30/2023	1150	
	Ryan Williams / Pace	1/30/2023	1438		1/30/23	1438	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Anthony Sprunt, Cameron Lacy, TJ Kessler / Geosyntec Consultants, Inc.

SIGNATURE of SAMPLER: Anthony Sprunt, Cameron Lacy, TJ Kessler DATE Signed (MM/DD/YY): 01/26/2023

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.

Pace Analytical
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CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 2 of 2

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Phone:	Fax:
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Report To:	SCS Contacts
Copy To:	Geosyntec Contacts
Purchase Order No.:	
Project Name:	Hammond AP-1
Project Number:	

Section C Invoice Information:

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

REGULATORY AGENCY

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

Site Location STATE: GA

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information: SAMPLE ID (A-Z, 0-9 / , -) Sample IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX / CODE: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test: Y/N	Chlorides, Fluoride, Sulfate	Full App. III and IV metals	RAD 226/228	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																				Y/N	N	N	N	N		92649524
1	HAM-MW-28D		WG	G	1/26/2023	1733			17	5	2		3							X	X	X	X	N	pH = 7.67
2	HAM-MW-29		WG	G	1/26/2023	1519			18	5	2		3							X	X	X	X	N	pH = 7.22
3	HAM-AP-1-FD-01		WQ	G	1/26/2023	1448			17	5	2		3							X	X	X	X	N	N/A
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									

TJ 1/26/2023

TJ 1/26/2023

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-2023S1	Anthony Stewart / Geosyntec	1/30/2023	11:50	Ryan Williams / Pace	1/30/2023	1150	
	Ryan Williams / Pace	1/30/2023	1438		1/30/23	1438	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Anthony Stewart, Connie Lam, TJ Shuler / Geosyntec Consultants, Inc.

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 01/26/2023

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 invoice not paid within 30 days.

Collected 1/27/23

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 1 of 1

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

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Report To:	SCS Contacts
Copy To:	Geosyntec Contacts
Purchase Order No.:	
Project Name:	Hammond AP-1
Project Number:	

Section C Invoice Information:

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

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☑ OTHER CCR

Site Location STATE: GA

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END DATE	COLLECTED COMPOSITE END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chlorides, Fluoride, Sulfate	Full App. III and IV metals	RAD 226/228	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
	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																Y/N	N	N	N	N		92649924
1	HAM-HGWC-7	WG	G	1/27/2023	1315				18	5	2	3						X	X	X	X	N	pH = 7.25
2	HAM-HGWC-10	WG	G	1/27/2023	1501				18	5	2	3						X	X	X	X	N	pH = 8.89
3	HAM-MW-27D	WG	G	1/27/2023	1735				17	5	2	3						X	X	X	X	N	pH = 7.80
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

TJ 1/27/2023

TJ 1/27/2023

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-2023S1☐	Anthony Schmitz / Geosyntec	1/30/2023	11:50	Ryan William / Pace	1/30/2023	1150	
	Ryan William / Pace	1/30/2023	1438		1/30/23	1438	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Anthony Schmitz, Consultant / Geosyntec Consultants, Inc.

SIGNATURE of SAMPLER: Anthony Schmitz, Consultant DATE Signed (MM/DD/YY): 01/27/2023

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.

Pace ANALYTICAL SERVICES	**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# : 92649924**

PM: BV **Due Date: 02/14/23**

CLIENT: GA-GA Power

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

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☐ No

Date/Initials Person Examining Contents: 2/3/23 tzy

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

Temp should be above freezing to 6°C

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

Cooler Temp Corrected (°C): 2.4

USDA Regulated Soil (☐ N/A, water sample)

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ **Date/Time:** _____

Project Manager SCURF Review: _____ **Date:** _____

Project Manager SRF Review: _____ **Date:** _____

*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#: 92649924

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)	BP1N	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			1																			2				
2		1	1			1																			2				
3		1	1			1																			2				
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pH Adjustment Log for Preserved Samples

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

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

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

REGULATORY AGENCY

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

Site Location STATE: GA

Section D Required Client Information

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

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

Requested Analysis Filtered (Y/N): N, N, N, N

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	TIME	COMPOSITE END/GRAB DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Chloride, Fluoride, Sulfate	Full App. III and IV metals	RAD 226/228	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	HAM-HGWC-8	WG	G	2/1/2023	1002			16	5	2		3						X	X	X	X	N	016 pH = 6.60
2	HAM-AP-1-EB-01	WQ	G	2/1/2023	1450			16	5	2		3						X	X	X	X	N	020 N/A
3	HAM-AP-1-FB-01	WQ	G	2/1/2023	1440			16	5	2		3						X	X	X	X	N	021 N/A
4				TJ 2/1/2023																			Last sample
5																							
6																							
7																							
8				TJ 2/1/2023																			
9																							
10																							
11																							
12																							

92649924

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-2023S1	Thomas Kessler / Geosyntec	2/3/2023	1230	Christine Hung / Geosyntec	2/3/23	1230	
	Christine Hung / Geosyntec	2/3/2023	1250	Ryan William / Pace	2/3/23	1250	
	Ryan William / Pace	2/3/2023	1400				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Kessler, Anthony Svenstrup [illegible] / Geosyntec Consultants, Inc.

SIGNATURE of SAMPLER: [signatures] DATE Signed (MM/DD/YY): 02/01/2023

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

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: Plant Hammond Pooled - RADS
Pace Project No.: 92648448

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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

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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

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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
92648448001	**HAM-HGWA-3**					
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	
92648448002	**HAM-HGWA-2**					
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	
92648448003	**HAM-HGWA-43D**					
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	
92648448004	**HAM-HGWA-44D**					
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

Pace Analytical Services, LLC
110 Technology Parkway
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(770)734-4200

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
92648448005	**HAM-HGWA-1**					
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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled - RADS
Pace Project No.: 92648448

Sample: HAM-HGWA-3 **Lab ID: 92648448001** Collected: 01/23/23 16:49 Received: 01/24/23 12:38 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0154 ± 0.0951 (0.254) C:94% T:NA**	pCi/L	02/20/23 10:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.296 ± 0.260 (0.535) C:94% T:91%**	pCi/L	02/06/23 14:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.311 ± 0.355 (0.789)**	pCi/L	03/21/23 16:16	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled - RADS
Pace Project No.: 92648448

Sample: HAM-HGWA-2 **Lab ID: 92648448002** Collected: 01/24/23 09:35 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	**0.230 ± 0.165 (0.266) C:92% T:NA**	pCi/L	02/20/23 10:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.599 ± 0.364 (0.677) C:84% T:89%**	pCi/L	02/08/23 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.829 ± 0.529 (0.943)**	pCi/L	03/21/23 16:16	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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(770)734-4200

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	**0.304 ± 0.186 (0.279) C:95% T:NA**	pCi/L	02/20/23 10:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.950 ± 0.437 (0.730) C:81% T:84%**	pCi/L	02/08/23 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.25 ± 0.623 (1.01)**	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	**0.112 ± 0.122 (0.232) C:96% T:NA**	pCi/L	02/20/23 10:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.309 ± 0.319 (0.657) C:83% T:82%**	pCi/L	02/08/23 14:39	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.421 ± 0.441 (0.889)**	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-1 **Lab ID: 92648448005** Collected: 01/24/23 09:35 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	**0.0747 ± 0.114 (0.248) C:96% T:NA**	pCi/L	02/20/23 10:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.474 ± 0.314 (0.587) C:84% T:86%**	pCi/L	02/08/23 14:39	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.549 ± 0.428 (0.835)**	pCi/L	03/21/23 16:16	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Hammond Pooled - RADS
Pace Project No.: 92648448

QC Batch: 567003
QC Batch Method: EPA 9315
Analysis 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

QC Batch: 567029
QC Batch Method: EPA 9320
Analysis 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

Pace Analytical Services, LLC
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QUALIFIERS

Project: Plant Hammond Pooled - RADS
Pace Project No.: 92648448

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

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

TNI - The NELAC Institute.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Hammond Pooled - 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		

Pace	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# : 92648448

92648448

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 (HH)

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

Cooler Temp Corrected (°C): 4.4

Temp should be above freezing to 6°C

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

USDA Regulated Soil (☐ N/A, water sample)

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ **Date:** _____

Project Manager SRF Review: _____ **Date:** _____

Pace ANALYTICAL SERVICES	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	1			1																		3				
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

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

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

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Geosyntec Contacts	Company Name:	
			Task Code: HAM-CCR-ASSMT-2023S1	Address:	
Email To:	SCS Contacts	Purchase Order No.:		Pace Quote Reference:	
Phone:	Fax:	Project Name:	Plant Hammond Pooled Upgradient	Pace Project Manager:	Nicole D'Oleo
Requested Due Date/TAT:	10 Day	Project Number:		Pace Profile #:	10839

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☑ OTHER CCR

Site Location STATE: GA

Section D Required Client Information

Valid Matrix Codes

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

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate	Full App. III and IV metals	RAD 226/228	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	HAM-HGWA-3	WG	G	1/23/2023	1649	TJ 1/23/2023		17	5	2		3						N	X	X	X	X	N	92648448
2																								pH = 7.32
3																								
4																								
5																								
6																								
7						TJ 1/23/2023																		
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
1-HAM-CCR-ASSMT-2023S1	Thomas Kessler / Geosyntec	1/24/2023	1040	Ryan Williams / Pace	1/24/2023	1040	
	Ryan Williams / Pace	1/24/2023	1238		1/24/23	1238	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: [illegible] / Geosyntec Consultants, Inc

SIGNATURE of SAMPLER: CC DATE Signed (MM/DD/YY): 01/23/23

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 invoices not paid within 30 days.

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

Pace ANALYTICAL SERVICES

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 ☑ Pace ☐ UPS ☐ USPS ☐ Other:____ ☐ Client

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ **Date:** _____

Project Manager SRF Review: _____ **Date:** _____

Qualtrax ID: 69614

Pace	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.**

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

Project #

****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)	BP1U	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			1																			2				
2		1	1			1																			2				
3		1	1			1																			2				
4		1	1			1																			2				
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

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

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

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

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

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☑ OTHER CCR

Site Location STATE: GA

Section D Required Client Information

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

Valid Matrix Codes

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate	Full App. III and IV metals	RAD 226/228	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Y/N	N	N	N	N		92648448
1	HAM-HGWA-2	WG	G	1/24/2023	0935				10	5	2		3						X	X	X	X	N	005 pH = 5.22
2	HAM-HGWA-43D	WG	G	1/24/2023	1055				10	5	2		3						X	X	X	X	N	003 pH = 7.56
3	HAM-HGWA-44D	WG	G	1/24/2023	1057				15	5	2		3						X	X	X	X	N	004 pH = 8.22
4	HAM-HGWA-1	WG	G	1/24/2023		TJ 1/24/2023			10	5	2		3						X	X	X	X		005 pH = 6.76
5																								
6																								
7																								
8						TJ 1/24/2023																			
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	/ GEOSYNTEC	1/24/23	1100	
	/ Geosyntec	1/26/23	1115	Ryan Williams / Pace	1/26/2023	1115	
	Ryan Williams / Pace	1/26/2023	1435		1/26/23	1435	

SAMPLER NAME AND SIGNATURE

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

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 1/24/2023

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.

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

August 2023

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

October 03, 2023

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

RE: Project: Hammond AP-1
Pace Project No.: 92682927

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory between August 11, 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

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

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

CERTIFICATIONS

Project: Hammond AP-1
Pace Project No.: 92682927

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

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

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Hammond AP-1
Pace Project No.: 92682927

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92682398001	**HAM-HGWC-10**	Water	08/10/23 17:03	08/11/23 13:12
92682398002	**HAM-HGWC-11**	Water	08/10/23 11:31	08/11/23 13:12
92682398003	**HAM-HGWC-12**	Water	08/10/23 11:10	08/11/23 13:12
92682398004	**HAM-MW-5**	Water	08/10/23 11:42	08/11/23 13:12
92682398005	**HAM-MW-6**	Water	08/10/23 14:22	08/11/23 13:12
92682398006	**HAM-MW-7**	Water	08/10/23 12:56	08/11/23 13:12
92682398007	**HAM-MW-19**	Water	08/10/23 15:03	08/11/23 13:12
92682398008	**HAM-MW-20**	Water	08/10/23 10:19	08/11/23 13:12
92682398009	**HAM-MW-25D**	Water	08/10/23 12:57	08/11/23 13:12
92682398010	**HAM-MW-29**	Water	08/10/23 16:15	08/11/23 13:12
92682397009	**HAM-HGWC-7**	Water	08/12/23 14:35	08/14/23 11:15
92682397010	**HAM-HGWC-8**	Water	08/12/23 09:32	08/14/23 11:15
92682397011	**HAM-HGWC-13**	Water	08/12/23 12:05	08/14/23 11:15
92682397012	**HAM-MW-24D**	Water	08/12/23 10:15	08/14/23 11:15
92682397013	**HAM-MW-27D**	Water	08/12/23 14:20	08/14/23 11:15
92682397014	**HAM-AP1-EB-01**	Water	08/12/23 13:35	08/14/23 11:15
92682397015	**HAM-AP1-FB-01**	Water	08/12/23 13:30	08/14/23 11:15
92682397016	**HAM-HGWC-9**	Water	08/11/23 17:03	08/14/23 11:15
92682397017	**HAM-MW-26D**	Water	08/11/23 16:54	08/14/23 11:15
92682397018	**HAM-MW-28D**	Water	08/11/23 15:14	08/14/23 11:15
92682927022	**HAM-AP1-FD-01**	Water	08/12/23 00:00	08/14/23 13:22

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: Hammond AP-1
Pace Project No.: 92682927

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92682398001	**HAM-HGWC-10**	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	CDC	3
92682398002	**HAM-HGWC-11**	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
92682398003	**HAM-HGWC-12**	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
92682398004	**HAM-MW-5**	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
92682398005	**HAM-MW-6**	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
92682398006	**HAM-MW-7**	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13

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(704)875-9092

SAMPLE ANALYTE COUNT

Project: Hammond AP-1
Pace Project No.: 92682927

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
92682398007	**HAM-MW-19**	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
92682398008	**HAM-MW-20**	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
92682398009	**HAM-MW-25D**	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
92682398010	**HAM-MW-29**	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
92682397009	**HAM-HGWC-7**	EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Hammond AP-1
Pace Project No.: 92682927

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92682397010	**HAM-HGWC-8**	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	CDC	3
92682397011	**HAM-HGWC-13**	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	CDC	3
92682397012	**HAM-MW-24D**	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	CDC	3
92682397013	**HAM-MW-27D**	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	CDC	3
92682397014	**HAM-AP1-EB-01**	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
92682397015	**HAM-AP1-FB-01**	EPA 6010D	DRB	1

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Hammond AP-1
Pace Project No.: 92682927

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92682397016	**HAM-HGWC-9**	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	CDC	3
92682397017	**HAM-MW-26D**	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	CDC	3
92682397018	**HAM-MW-28D**	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	CDC	3
92682927022	**HAM-AP1-FD-01**	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

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

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92682927

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92682398001	**HAM-HGWC-10**					
EPA 6010D	Manganese	0.33	mg/L	0.040	08/18/23 21:08	
EPA 6010D	Potassium	2.2	mg/L	0.50	08/18/23 21:08	
EPA 6010D	Sodium	9.4	mg/L	1.0	08/18/23 21:08	
EPA 6010D	Calcium	155	mg/L	1.0	08/18/23 21:08	
EPA 6010D	Magnesium	10.8	mg/L	0.050	08/18/23 21:08	
EPA 6020B	Barium	0.045	mg/L	0.0050	08/22/23 16:36	
EPA 6020B	Boron	0.65	mg/L	0.20	08/23/23 19:19	
EPA 6020B	Molybdenum	0.0014J	mg/L	0.010	08/22/23 16:36	
SM 2540C-2015	Total Dissolved Solids	504	mg/L	25.0	08/16/23 14:51	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	270	mg/L	5.0	08/17/23 11:41	
SM 2320B-2011	Alkalinity, Total as CaCO3	270	mg/L	5.0	08/17/23 11:41	
EPA 300.0 Rev 2.1 1993	Chloride	13.4	mg/L	1.0	08/15/23 21:47	
EPA 300.0 Rev 2.1 1993	Fluoride	0.050J	mg/L	0.10	08/15/23 21:47	
EPA 300.0 Rev 2.1 1993	Sulfate	128	mg/L	3.0	08/16/23 09:02	
92682398002	**HAM-HGWC-11**					
EPA 6010D	Sodium	5.9	mg/L	1.0	08/17/23 21:31	
EPA 6010D	Potassium	2.6	mg/L	0.50	08/18/23 15:22	
EPA 6010D	Calcium	100	mg/L	1.0	08/18/23 15:22	M1
EPA 6010D	Magnesium	11.8	mg/L	0.050	08/18/23 15:22	M1
EPA 6020B	Barium	0.027	mg/L	0.0050	08/22/23 16:47	
EPA 6020B	Beryllium	0.000069J	mg/L	0.00050	08/22/23 16:47	
EPA 6020B	Boron	0.44	mg/L	0.40	08/23/23 19:42	
EPA 6020B	Molybdenum	0.014	mg/L	0.010	08/22/23 16:47	
EPA 6020B	Selenium	0.0089	mg/L	0.0050	08/22/23 16:47	
SM 2540C-2015	Total Dissolved Solids	438	mg/L	25.0	08/16/23 14:51	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	80.0	mg/L	5.0	08/16/23 20:59	
SM 2320B-2011	Alkalinity, Total as CaCO3	80.0	mg/L	5.0	08/16/23 20:59	
EPA 300.0 Rev 2.1 1993	Chloride	6.5	mg/L	1.0	08/15/23 23:28	
EPA 300.0 Rev 2.1 1993	Fluoride	0.15	mg/L	0.10	08/15/23 23:28	
EPA 300.0 Rev 2.1 1993	Sulfate	190	mg/L	4.0	08/16/23 10:13	
92682398003	**HAM-HGWC-12**					
EPA 6010D	Manganese	1.5	mg/L	0.040	08/17/23 22:00	
EPA 6010D	Sodium	8.3	mg/L	1.0	08/17/23 22:00	
EPA 6010D	Iron	0.028J	mg/L	0.040	08/18/23 16:28	
EPA 6010D	Potassium	7.4	mg/L	0.50	08/18/23 16:28	
EPA 6010D	Calcium	156	mg/L	1.0	08/18/23 16:28	
EPA 6010D	Magnesium	14.7	mg/L	0.050	08/18/23 16:28	
EPA 6020B	Barium	0.075	mg/L	0.0050	08/22/23 16:54	
EPA 6020B	Boron	1.4	mg/L	0.40	08/23/23 19:54	
EPA 6020B	Cobalt	0.0012J	mg/L	0.0050	08/22/23 16:54	
EPA 6020B	Lithium	0.0075J	mg/L	0.030	08/22/23 16:54	
EPA 6020B	Molybdenum	0.050	mg/L	0.010	08/22/23 16:54	
SM 2540C-2015	Total Dissolved Solids	683	mg/L	25.0	08/16/23 14:52	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	199	mg/L	5.0	08/16/23 21:16	
SM 2320B-2011	Alkalinity, Total as CaCO3	199	mg/L	5.0	08/16/23 21:16	
EPA 300.0 Rev 2.1 1993	Chloride	30.6	mg/L	1.0	08/16/23 00:26	

Pace Analytical Services, LLC
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SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92682927

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92682398003	**HAM-HGWC-12**					
EPA 300.0 Rev 2.1 1993	Fluoride	0.17	mg/L	0.10	08/16/23 00:26	
EPA 300.0 Rev 2.1 1993	Sulfate	209	mg/L	5.0	08/16/23 10:42	
92682398004	**HAM-MW-5**					
EPA 6010D	Potassium	1.0	mg/L	0.50	08/18/23 16:33	
EPA 6010D	Calcium	99.7	mg/L	1.0	08/18/23 16:33	
EPA 6010D	Magnesium	10.9	mg/L	0.050	08/18/23 16:33	
EPA 6010D	Sodium	19.5	mg/L	1.0	08/17/23 22:05	
EPA 6020B	Barium	0.048	mg/L	0.0050	08/22/23 16:58	
EPA 6020B	Boron	0.037J	mg/L	0.040	08/23/23 13:29	
EPA 6020B	Chromium	0.0020J	mg/L	0.0050	08/22/23 16:58	
EPA 6020B	Selenium	0.0020J	mg/L	0.0050	08/22/23 16:58	
SM 2540C-2015	Total Dissolved Solids	423	mg/L	25.0	08/16/23 14:52	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	179	mg/L	5.0	08/16/23 21:28	
SM 2320B-2011	Alkalinity, Total as CaCO3	179	mg/L	5.0	08/16/23 21:28	M1
EPA 300.0 Rev 2.1 1993	Chloride	0.86J	mg/L	1.0	08/16/23 00:40	
EPA 300.0 Rev 2.1 1993	Fluoride	0.066J	mg/L	0.10	08/16/23 00:40	
EPA 300.0 Rev 2.1 1993	Sulfate	137	mg/L	3.0	08/16/23 10:56	
92682398005	**HAM-MW-6**					
EPA 6010D	Calcium	179	mg/L	5.0	08/18/23 16:43	
EPA 6010D	Manganese	0.43	mg/L	0.040	08/17/23 22:10	
EPA 6010D	Sodium	13.0	mg/L	1.0	08/17/23 22:10	
EPA 6010D	Iron	0.23	mg/L	0.040	08/18/23 16:38	
EPA 6010D	Potassium	1.3	mg/L	0.50	08/18/23 16:38	
EPA 6010D	Magnesium	13.4	mg/L	0.050	08/18/23 16:38	
EPA 6020B	Barium	0.066	mg/L	0.0050	08/22/23 17:16	
EPA 6020B	Boron	0.65	mg/L	0.20	08/23/23 20:00	
EPA 6020B	Cobalt	0.00041J	mg/L	0.0050	08/22/23 17:16	
EPA 6020B	Molybdenum	0.0026J	mg/L	0.010	08/22/23 17:16	
SM 2540C-2015	Total Dissolved Solids	626	mg/L	25.0	08/16/23 14:52	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	298	mg/L	5.0	08/17/23 11:50	
SM 2320B-2011	Alkalinity, Total as CaCO3	298	mg/L	5.0	08/17/23 11:50	
EPA 300.0 Rev 2.1 1993	Chloride	26.9	mg/L	1.0	08/16/23 00:55	
EPA 300.0 Rev 2.1 1993	Fluoride	0.053J	mg/L	0.10	08/16/23 00:55	
EPA 300.0 Rev 2.1 1993	Sulfate	174	mg/L	4.0	08/16/23 11:10	
92682398006	**HAM-MW-7**					
EPA 6010D	Sodium	7.1	mg/L	1.0	08/17/23 22:15	
EPA 6010D	Potassium	0.74	mg/L	0.50	08/18/23 16:48	
EPA 6010D	Calcium	81.2	mg/L	1.0	08/18/23 16:48	
EPA 6010D	Magnesium	6.9	mg/L	0.050	08/18/23 16:48	
EPA 6020B	Barium	0.059	mg/L	0.0050	08/22/23 17:19	
EPA 6020B	Boron	0.13	mg/L	0.040	08/24/23 14:52	
EPA 6020B	Chromium	0.0015J	mg/L	0.0050	08/22/23 17:19	
EPA 6020B	Molybdenum	0.0022J	mg/L	0.010	08/22/23 17:19	
SM 2540C-2015	Total Dissolved Solids	305	mg/L	25.0	08/16/23 14:53	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	175	mg/L	5.0	08/17/23 15:32	
SM 2320B-2011	Alkalinity, Total as CaCO3	175	mg/L	5.0	08/17/23 15:32	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92682927

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92682398006	**HAM-MW-7**					
EPA 300.0 Rev 2.1 1993	Chloride	3.3	mg/L	1.0	08/16/23 01:09	
EPA 300.0 Rev 2.1 1993	Sulfate	67.3	mg/L	1.0	08/16/23 01:09	
92682398007	**HAM-MW-19**					
EPA 6010D	Manganese	3.2	mg/L	0.040	08/17/23 22:19	
EPA 6010D	Sodium	5.5	mg/L	1.0	08/17/23 22:19	
EPA 6010D	Potassium	3.1	mg/L	0.50	08/18/23 16:52	
EPA 6010D	Calcium	127	mg/L	1.0	08/18/23 16:52	
EPA 6010D	Magnesium	12.5	mg/L	0.050	08/18/23 16:52	
EPA 6020B	Barium	0.032	mg/L	0.0050	08/22/23 19:53	
EPA 6020B	Boron	0.53	mg/L	0.040	08/22/23 19:53	
EPA 6020B	Cadmium	0.00018J	mg/L	0.00050	08/22/23 19:53	
EPA 6020B	Cobalt	0.027	mg/L	0.0050	08/22/23 19:53	
EPA 6020B	Lithium	0.011J	mg/L	0.030	08/22/23 19:53	
EPA 6020B	Molybdenum	0.033	mg/L	0.010	08/22/23 19:53	
EPA 6020B	Selenium	0.0038J	mg/L	0.0050	08/22/23 19:53	
SM 2540C-2015	Total Dissolved Solids	524	mg/L	25.0	08/16/23 14:55	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	133	mg/L	5.0	08/17/23 15:43	
SM 2320B-2011	Alkalinity, Total as CaCO3	133	mg/L	5.0	08/17/23 15:43	
EPA 300.0 Rev 2.1 1993	Chloride	11.2	mg/L	1.0	08/16/23 01:23	
EPA 300.0 Rev 2.1 1993	Fluoride	0.14	mg/L	0.10	08/16/23 01:23	
EPA 300.0 Rev 2.1 1993	Sulfate	210	mg/L	5.0	08/16/23 11:53	
92682398008	**HAM-MW-20**					
EPA 6010D	Iron	2.7	mg/L	0.040	08/18/23 16:57	
EPA 6010D	Potassium	0.26J	mg/L	0.50	08/18/23 16:57	
EPA 6010D	Calcium	123	mg/L	1.0	08/18/23 16:57	
EPA 6010D	Magnesium	8.8	mg/L	0.050	08/18/23 16:57	
EPA 6010D	Manganese	0.13	mg/L	0.040	08/17/23 22:24	
EPA 6010D	Sodium	12.2	mg/L	1.0	08/17/23 22:24	
EPA 6020B	Barium	0.093	mg/L	0.0050	08/22/23 19:59	
EPA 6020B	Boron	0.10	mg/L	0.040	08/22/23 19:59	
SM 2540C-2015	Total Dissolved Solids	429	mg/L	25.0	08/16/23 14:57	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	249	mg/L	5.0	08/17/23 19:31	
SM 2320B-2011	Alkalinity, Total as CaCO3	249	mg/L	5.0	08/17/23 19:31	
SM 4500-S2D-2011	Sulfide	0.024J	mg/L	0.10	08/15/23 06:46	
EPA 300.0 Rev 2.1 1993	Chloride	28.4	mg/L	1.0	08/16/23 01:38	
EPA 300.0 Rev 2.1 1993	Sulfate	100	mg/L	1.0	08/16/23 01:38	
92682398009	**HAM-MW-25D**					
EPA 6010D	Iron	1.9	mg/L	0.040	08/18/23 17:02	
EPA 6010D	Potassium	0.47J	mg/L	0.50	08/18/23 17:02	
EPA 6010D	Calcium	86.1	mg/L	1.0	08/18/23 17:02	
EPA 6010D	Magnesium	8.8	mg/L	0.050	08/18/23 17:02	
EPA 6010D	Manganese	0.016J	mg/L	0.040	08/17/23 22:29	
EPA 6010D	Sodium	111	mg/L	1.0	08/17/23 22:29	
EPA 6020B	Barium	0.71	mg/L	0.0050	08/22/23 20:05	
EPA 6020B	Boron	0.31	mg/L	0.040	08/22/23 20:05	
EPA 6020B	Lithium	0.038	mg/L	0.030	08/22/23 20:05	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92682927

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92682398009	**HAM-MW-25D**					
EPA 7470A	Mercury	0.00013J	mg/L	0.00020	08/22/23 16:38	M1
SM 2540C-2015	Total Dissolved Solids	325	mg/L	25.0	08/16/23 14:57	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	304	mg/L	5.0	08/17/23 19:40	
SM 2320B-2011	Alkalinity, Total as CaCO3	304	mg/L	5.0	08/17/23 19:40	
SM 4500-S2D-2011	Sulfide	0.16	mg/L	0.10	08/15/23 06:48	
EPA 300.0 Rev 2.1 1993	Chloride	13.6	mg/L	1.0	08/16/23 01:52	
EPA 300.0 Rev 2.1 1993	Fluoride	1.5	mg/L	0.10	08/16/23 01:52	
EPA 300.0 Rev 2.1 1993	Sulfate	0.62J	mg/L	1.0	08/16/23 01:52	
92682398010	**HAM-MW-29**					
EPA 6010D	Manganese	0.86	mg/L	0.040	08/17/23 22:44	
EPA 6010D	Potassium	1.2	mg/L	0.50	08/17/23 22:44	
EPA 6010D	Sodium	12.7	mg/L	1.0	08/17/23 22:44	
EPA 6010D	Magnesium	11.9	mg/L	0.050	08/17/23 22:44	
EPA 6010D	Iron	0.049	mg/L	0.040	08/18/23 17:53	
EPA 6010D	Calcium	147	mg/L	1.0	08/18/23 17:53	
EPA 6020B	Barium	0.066	mg/L	0.0050	08/22/23 20:11	
EPA 6020B	Boron	1.1	mg/L	0.040	08/22/23 20:11	
EPA 6020B	Lithium	0.0019J	mg/L	0.030	08/22/23 20:11	
EPA 6020B	Molybdenum	0.0030J	mg/L	0.010	08/22/23 20:11	
EPA 7470A	Mercury	0.00017J	mg/L	0.00020	08/22/23 17:12	
SM 2540C-2015	Total Dissolved Solids	564	mg/L	25.0	08/16/23 15:00	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	208	mg/L	5.0	08/17/23 16:13	
SM 2320B-2011	Alkalinity, Total as CaCO3	208	mg/L	5.0	08/17/23 16:13	
EPA 300.0 Rev 2.1 1993	Chloride	56.1	mg/L	1.0	08/16/23 02:35	
EPA 300.0 Rev 2.1 1993	Sulfate	134	mg/L	3.0	08/16/23 12:08	
92682397009	**HAM-HGWC-7**					
EPA 6010D	Iron	0.073	mg/L	0.040	08/18/23 23:00	
EPA 6010D	Manganese	0.20	mg/L	0.040	08/18/23 23:00	
EPA 6010D	Potassium	2.1	mg/L	0.50	08/18/23 23:00	
EPA 6010D	Sodium	12.7	mg/L	1.0	08/18/23 23:00	
EPA 6010D	Calcium	101	mg/L	1.0	08/18/23 23:00	
EPA 6010D	Magnesium	9.6	mg/L	0.050	08/18/23 23:00	
EPA 6020B	Barium	0.060	mg/L	0.0050	08/22/23 17:02	
EPA 6020B	Boron	0.82	mg/L	0.040	08/22/23 17:02	
EPA 6020B	Cobalt	0.00061J	mg/L	0.0050	08/22/23 17:02	
EPA 6020B	Lithium	0.0023J	mg/L	0.030	08/22/23 17:02	
EPA 6020B	Molybdenum	0.033	mg/L	0.010	08/22/23 17:02	
SM 2540C-2015	Total Dissolved Solids	378	mg/L	25.0	08/16/23 15:00	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	210	mg/L	5.0	08/17/23 21:35	
SM 2320B-2011	Alkalinity, Total as CaCO3	210	mg/L	5.0	08/17/23 21:35	
EPA 300.0 Rev 2.1 1993	Chloride	33.3	mg/L	1.0	08/16/23 13:51	
EPA 300.0 Rev 2.1 1993	Fluoride	0.071J	mg/L	0.10	08/16/23 13:51	
EPA 300.0 Rev 2.1 1993	Sulfate	84.2	mg/L	1.0	08/16/23 13:51	
92682397010	**HAM-HGWC-8**					
EPA 6010D	Iron	0.058	mg/L	0.040	08/18/23 23:05	
EPA 6010D	Manganese	0.30	mg/L	0.040	08/18/23 23:05	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92682927

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92682397010	**HAM-HGWC-8**					
EPA 6010D	Potassium	7.6	mg/L	0.50	08/18/23 23:05	
EPA 6010D	Sodium	9.7	mg/L	1.0	08/18/23 23:05	
EPA 6010D	Calcium	122	mg/L	1.0	08/18/23 23:05	
EPA 6010D	Magnesium	17.3	mg/L	0.050	08/18/23 23:05	
EPA 6020B	Barium	0.052	mg/L	0.0050	08/22/23 17:08	
EPA 6020B	Boron	1.7	mg/L	0.040	08/22/23 17:08	
EPA 6020B	Cadmium	0.00044J	mg/L	0.00050	08/22/23 17:08	
EPA 6020B	Cobalt	0.0016J	mg/L	0.0050	08/22/23 17:08	
EPA 6020B	Lithium	0.0014J	mg/L	0.030	08/22/23 17:08	
EPA 6020B	Molybdenum	0.34	mg/L	0.010	08/22/23 17:08	
SM 2540C-2015	Total Dissolved Solids	564	mg/L	25.0	08/18/23 17:06	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	145	mg/L	5.0	08/17/23 21:47	
SM 2320B-2011	Alkalinity, Total as CaCO3	145	mg/L	5.0	08/17/23 21:47	
EPA 300.0 Rev 2.1 1993	Chloride	53.1	mg/L	1.0	08/16/23 14:06	
EPA 300.0 Rev 2.1 1993	Fluoride	0.59	mg/L	0.10	08/16/23 14:06	
EPA 300.0 Rev 2.1 1993	Sulfate	170	mg/L	4.0	08/17/23 05:08	
92682397011	**HAM-HGWC-13**					
EPA 6010D	Iron	6.9	mg/L	0.040	08/18/23 23:10	
EPA 6010D	Manganese	9.0	mg/L	0.040	08/18/23 23:10	
EPA 6010D	Potassium	5.9	mg/L	0.50	08/18/23 23:10	
EPA 6010D	Sodium	6.9	mg/L	1.0	08/18/23 23:10	
EPA 6010D	Calcium	172	mg/L	1.0	08/18/23 23:10	
EPA 6010D	Magnesium	19.2	mg/L	0.050	08/18/23 23:10	
EPA 6020B	Arsenic	0.54	mg/L	0.010	08/22/23 17:14	
EPA 6020B	Barium	0.057	mg/L	0.0050	08/22/23 17:14	
EPA 6020B	Beryllium	0.00010J	mg/L	0.00050	08/22/23 17:14	
EPA 6020B	Boron	1.0	mg/L	0.040	08/22/23 17:14	
EPA 6020B	Cobalt	0.018	mg/L	0.0050	08/22/23 17:14	
EPA 6020B	Lithium	0.051	mg/L	0.030	08/22/23 17:14	
EPA 6020B	Molybdenum	0.016	mg/L	0.010	08/22/23 17:14	
EPA 6020B	Thallium	0.00028J	mg/L	0.0010	08/22/23 17:14	
SM 2540C-2015	Total Dissolved Solids	803	mg/L	25.0	08/18/23 17:06	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	145	mg/L	5.0	08/17/23 21:57	
SM 2320B-2011	Alkalinity, Total as CaCO3	145	mg/L	5.0	08/17/23 21:57	
EPA 300.0 Rev 2.1 1993	Chloride	15.3	mg/L	1.0	08/16/23 14:20	
EPA 300.0 Rev 2.1 1993	Fluoride	0.32	mg/L	0.10	08/16/23 14:20	
EPA 300.0 Rev 2.1 1993	Sulfate	347	mg/L	7.0	08/17/23 05:51	
92682397012	**HAM-MW-24D**					
EPA 6010D	Iron	0.19	mg/L	0.040	08/18/23 23:15	
EPA 6010D	Manganese	0.062	mg/L	0.040	08/18/23 23:15	
EPA 6010D	Potassium	0.68	mg/L	0.50	08/18/23 23:15	
EPA 6010D	Sodium	12.5	mg/L	1.0	08/18/23 23:15	
EPA 6010D	Calcium	105	mg/L	1.0	08/18/23 23:15	
EPA 6010D	Magnesium	6.3	mg/L	0.050	08/18/23 23:15	
EPA 6020B	Barium	0.053	mg/L	0.0050	08/22/23 17:19	
EPA 6020B	Boron	0.55	mg/L	0.040	08/22/23 17:19	

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SUMMARY OF DETECTION

Project: Hammond AP-1
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Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92682397012	**HAM-MW-24D**					
EPA 6020B	Lithium	0.0030J	mg/L	0.030	08/22/23 17:19	
EPA 6020B	Molybdenum	0.0019J	mg/L	0.010	08/22/23 17:19	
SM 2540C-2015	Total Dissolved Solids	449	mg/L	25.0	08/18/23 17:06	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	105	mg/L	5.0	08/17/23 22:07	
SM 2320B-2011	Alkalinity, Total as CaCO3	105	mg/L	5.0	08/17/23 22:07	
EPA 300.0 Rev 2.1 1993	Chloride	35.1	mg/L	1.0	08/16/23 15:04	
EPA 300.0 Rev 2.1 1993	Fluoride	0.080J	mg/L	0.10	08/16/23 15:04	
EPA 300.0 Rev 2.1 1993	Sulfate	146	mg/L	3.0	08/17/23 06:05	
92682397013	**HAM-MW-27D**					
EPA 6010D	Iron	0.29	mg/L	0.040	08/18/23 23:20	
EPA 6010D	Manganese	0.11	mg/L	0.040	08/18/23 23:20	
EPA 6010D	Potassium	0.88	mg/L	0.50	08/18/23 23:20	
EPA 6010D	Sodium	31.5	mg/L	1.0	08/18/23 23:20	
EPA 6010D	Calcium	27.8	mg/L	1.0	08/18/23 23:20	
EPA 6010D	Magnesium	18.1	mg/L	0.050	08/18/23 23:20	
EPA 6020B	Barium	0.98	mg/L	0.0050	08/22/23 17:54	
EPA 6020B	Boron	0.13	mg/L	0.040	08/22/23 17:54	
EPA 6020B	Lithium	0.0072J	mg/L	0.030	08/22/23 17:54	
EPA 6020B	Molybdenum	0.0019J	mg/L	0.010	08/22/23 17:54	
SM 2540C-2015	Total Dissolved Solids	238	mg/L	25.0	08/18/23 17:06	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	181	mg/L	5.0	08/17/23 22:16	
SM 2320B-2011	Alkalinity, Total as CaCO3	181	mg/L	5.0	08/17/23 22:16	
EPA 300.0 Rev 2.1 1993	Chloride	29.0	mg/L	1.0	08/16/23 15:18	
EPA 300.0 Rev 2.1 1993	Fluoride	0.26	mg/L	0.10	08/16/23 15:18	
EPA 300.0 Rev 2.1 1993	Sulfate	7.6	mg/L	1.0	08/16/23 15:18	
92682397016	**HAM-HGWC-9**					
EPA 6010D	Iron	0.052	mg/L	0.040	08/18/23 23:45	
EPA 6010D	Manganese	0.57	mg/L	0.040	08/18/23 23:45	
EPA 6010D	Potassium	3.4	mg/L	0.50	08/18/23 23:45	
EPA 6010D	Sodium	12.3	mg/L	1.0	08/18/23 23:45	
EPA 6010D	Calcium	168	mg/L	1.0	08/18/23 23:45	
EPA 6010D	Magnesium	17.5	mg/L	0.050	08/18/23 23:45	
EPA 6020B	Barium	0.068	mg/L	0.0050	08/22/23 18:12	
EPA 6020B	Boron	2.1	mg/L	0.040	08/22/23 18:12	
EPA 6020B	Cobalt	0.00057J	mg/L	0.0050	08/22/23 18:12	
EPA 6020B	Lithium	0.0035J	mg/L	0.030	08/22/23 18:12	
EPA 6020B	Molybdenum	0.030	mg/L	0.010	08/22/23 18:12	
SM 2540C-2015	Total Dissolved Solids	757	mg/L	25.0	08/17/23 11:18	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	204	mg/L	5.0	08/17/23 22:35	
SM 2320B-2011	Alkalinity, Total as CaCO3	204	mg/L	5.0	08/17/23 22:35	
EPA 300.0 Rev 2.1 1993	Chloride	78.9	mg/L	1.0	08/16/23 16:02	M1
EPA 300.0 Rev 2.1 1993	Fluoride	0.12	mg/L	0.10	08/16/23 16:02	M1
EPA 300.0 Rev 2.1 1993	Sulfate	197	mg/L	4.0	08/17/23 06:19	M1
92682397017	**HAM-MW-26D**					
EPA 6010D	Iron	0.11	mg/L	0.040	08/18/23 23:49	
EPA 6010D	Manganese	0.13	mg/L	0.040	08/18/23 23:49	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92682927

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92682397017	**HAM-MW-26D**					
EPA 6010D	Potassium	1.9	mg/L	0.50	08/18/23 23:49	
EPA 6010D	Sodium	12.9	mg/L	1.0	08/18/23 23:49	
EPA 6010D	Calcium	152	mg/L	1.0	08/18/23 23:49	
EPA 6010D	Magnesium	15.5	mg/L	0.050	08/18/23 23:49	
EPA 6020B	Barium	0.059	mg/L	0.0050	08/22/23 18:24	
EPA 6020B	Boron	1.6	mg/L	0.040	08/22/23 18:24	
EPA 6020B	Lithium	0.0029J	mg/L	0.030	08/22/23 18:24	
EPA 6020B	Molybdenum	0.014	mg/L	0.010	08/22/23 18:24	
SM 2540C-2015	Total Dissolved Solids	706	mg/L	25.0	08/17/23 11:18	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	177	mg/L	5.0	08/17/23 22:48	
SM 2320B-2011	Alkalinity, Total as CaCO3	177	mg/L	5.0	08/17/23 22:48	
EPA 300.0 Rev 2.1 1993	Chloride	87.6	mg/L	1.0	08/16/23 16:45	
EPA 300.0 Rev 2.1 1993	Fluoride	0.083J	mg/L	0.10	08/16/23 16:45	
EPA 300.0 Rev 2.1 1993	Sulfate	159	mg/L	3.0	08/17/23 07:02	
92682397018	**HAM-MW-28D**					
EPA 6010D	Iron	0.034J	mg/L	0.040	08/18/23 23:54	
EPA 6010D	Potassium	1.4	mg/L	0.50	08/18/23 23:54	
EPA 6010D	Sodium	24.3	mg/L	1.0	08/18/23 23:54	
EPA 6010D	Calcium	49.6	mg/L	1.0	08/18/23 23:54	
EPA 6010D	Magnesium	26.7	mg/L	0.050	08/18/23 23:54	
EPA 6020B	Barium	2.2	mg/L	0.050	08/25/23 14:49	M1
EPA 6020B	Boron	0.12	mg/L	0.040	08/24/23 15:40	
EPA 6020B	Lithium	0.016J	mg/L	0.030	08/24/23 15:40	
EPA 6020B	Molybdenum	0.0011J	mg/L	0.010	08/24/23 15:40	
SM 2540C-2015	Total Dissolved Solids	296	mg/L	25.0	08/17/23 11:18	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	269	mg/L	5.0	08/18/23 09:15	
SM 2320B-2011	Alkalinity, Total as CaCO3	269	mg/L	5.0	08/18/23 09:15	
SM 4500-S2D-2011	Sulfide	3.5	mg/L	1.0	08/18/23 04:32	
EPA 300.0 Rev 2.1 1993	Chloride	17.0	mg/L	1.0	08/16/23 17:00	
EPA 300.0 Rev 2.1 1993	Fluoride	0.26	mg/L	0.10	08/16/23 17:00	
EPA 300.0 Rev 2.1 1993	Sulfate	15.4	mg/L	1.0	08/16/23 17:00	
92682927022	**HAM-AP1-FD-01**					
EPA 6010D	Iron	0.16	mg/L	0.040	08/24/23 18:58	
EPA 6010D	Manganese	0.054	mg/L	0.040	08/24/23 18:58	
EPA 6010D	Potassium	0.75	mg/L	0.50	08/24/23 18:58	B
EPA 6010D	Sodium	12.3	mg/L	1.0	08/24/23 18:58	M1
EPA 6010D	Calcium	107	mg/L	1.0	08/24/23 18:58	M1
EPA 6010D	Magnesium	6.3	mg/L	0.050	08/24/23 18:58	M1
EPA 6020B	Barium	0.049	mg/L	0.0050	08/24/23 18:54	
EPA 6020B	Boron	0.52	mg/L	0.040	08/24/23 18:54	
EPA 6020B	Lithium	0.0028J	mg/L	0.030	08/24/23 18:54	
EPA 6020B	Molybdenum	0.0016J	mg/L	0.010	08/24/23 18:54	
EPA 7470A	Mercury	0.00017J	mg/L	0.00020	08/22/23 17:15	
SM 2540C-2015	Total Dissolved Solids	437	mg/L	25.0	08/18/23 17:07	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	103	mg/L	5.0	08/23/23 18:18	
SM 2320B-2011	Alkalinity, Total as CaCO3	103	mg/L	5.0	08/23/23 18:18	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92682927

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92682927022	**HAM-AP1-FD-01**					
EPA 300.0 Rev 2.1 1993	Chloride	35.2	mg/L	1.0	08/18/23 19:48	
EPA 300.0 Rev 2.1 1993	Sulfate	135	mg/L	3.0	08/19/23 16:22	

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PROJECT NARRATIVE

Project: Hammond AP-1
Pace Project No.: 92682927

Date: October 03, 2023

HAM-MW-25D (Lab ID: 92682398009)

- For MW-25D (92682398009), Calcium did not confirm per instrument cross check and the result is estimated.

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PROJECT NARRATIVE

Project: Hammond AP-1
Pace Project No.: 92682927

Method: **EPA 6010D**
Description: 6010D ATL ICP
Client: Georgia Power- Hammond
Date: October 03, 2023

General Information:
21 samples were analyzed for EPA 6010D by Pace Analytical Services Peachtree Corners, GA. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 795463

B: Analyte was detected in the associated method blank.

- BLANK for HBN 795463 [GMPR/852 (Lab ID: 4121755)
  - Potassium

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 793618

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92682392001

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

- MS (Lab ID: 4112491)
  - Calcium
  - Magnesium
  - Sodium

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PROJECT NARRATIVE

Project: Hammond AP-1
Pace Project No.: 92682927

Method: **EPA 6010D**
Description: 6010D ATL ICP
Client: Georgia Power- Hammond
Date: October 03, 2023

QC Batch: 793869

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92682398002

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

- MS (Lab ID: 4113557)
  - Calcium
  - Magnesium
- MSD (Lab ID: 4113558)
  - Calcium
  - Magnesium

QC Batch: 794188

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92682552001

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

- MS (Lab ID: 4115155)
  - Calcium
- MSD (Lab ID: 4115156)
  - Calcium
  - Magnesium
  - Sodium

QC Batch: 795463

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92682927022

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

- MS (Lab ID: 4121757)
  - Calcium
  - Magnesium
  - Sodium
- MSD (Lab ID: 4121758)
  - Calcium

Additional Comments:

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PROJECT NARRATIVE

Project: Hammond AP-1
Pace Project No.: 92682927

Method: **EPA 6020B**
Description: 6020 MET ICPMS
Client: Georgia Power- Hammond
Date: October 03, 2023

General Information:
21 samples were analyzed for EPA 6020B by Pace Analytical Services Peachtree Corners, GA. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 794002

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92682396010

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

- MS (Lab ID: 4114216)
  - Lead
  - Thallium
- MSD (Lab ID: 4114217)
  - Boron
  - Lead
  - Thallium

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: Hammond AP-1
Pace Project No.: 92682927

Method: **EPA 6020B**
Description: 6020 MET ICPMS
Client: Georgia Power- Hammond
Date: October 03, 2023

QC Batch: 794885

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92682397018

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

- MS (Lab ID: 4118632)
  - Barium

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: Hammond AP-1
Pace Project No.: 92682927

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Georgia Power- Hammond
Date: October 03, 2023

General Information:
21 samples were analyzed for EPA 7470A by Pace Analytical Services Peachtree Corners, GA. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 795036

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92682398009

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

- MS (Lab ID: 4119608)
  - Mercury
- MSD (Lab ID: 4119609)
  - Mercury

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: Hammond AP-1
Pace Project No.: 92682927

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Georgia Power- Hammond
Date: October 03, 2023

General Information:
21 samples were analyzed for SM 2540C-2015 by Pace Analytical Services Peachtree Corners, GA. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: 794562

D6: The precision between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 4117072)
  - Total Dissolved Solids

Additional Comments:

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PROJECT NARRATIVE

Project: Hammond AP-1
Pace Project No.: 92682927

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Georgia Power- Hammond
Date: October 03, 2023

General Information:
19 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 793988

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92682398004,92682398005

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

- MSD (Lab ID: 4114124)
  - Alkalinity, Total as CaCO3

QC Batch: 794234

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92682576004,92682576005

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

- MSD (Lab ID: 4115459)
  - Alkalinity, Total as CaCO3

QC Batch: 794235

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92681886006,92681886007

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

- MS (Lab ID: 4115468)
  - Alkalinity, Total as CaCO3
- MSD (Lab ID: 4115469)
  - Alkalinity, Total as CaCO3

Additional Comments:

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PROJECT NARRATIVE

Project: Hammond AP-1
Pace Project No.: 92682927

Method: **SM 4500-S2D-2011**
Description: 4500S2D Sulfide Water
Client: Georgia Power- Hammond
Date: October 03, 2023

General Information:
19 samples were analyzed for SM 4500-S2D-2011 by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 793501

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92682393002,92682398007

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

- MS (Lab ID: 4111966)
  - Sulfide

Additional Comments:

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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PROJECT NARRATIVE

Project: Hammond AP-1
Pace Project No.: 92682927

Method: **EPA 300.0 Rev 2.1 1993**
Description: 300.0 IC Anions 28 Days
Client: Georgia Power- Hammond
Date: October 03, 2023

General Information:
21 samples were analyzed for EPA 300.0 Rev 2.1 1993 by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 793550

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92682198001,92682396003

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

- MS (Lab ID: 4112130)
  - Chloride
  - Sulfate
- MSD (Lab ID: 4112131)
  - Chloride
  - Sulfate

QC Batch: 793553

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92682397002,92682398009

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

- MS (Lab ID: 4112137)
  - Sulfate
- MSD (Lab ID: 4112138)
  - Sulfate

QC Batch: 793837

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92682397016,92682815002

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

- MS (Lab ID: 4113452)
  - Chloride
  - Fluoride
  - Sulfate
- MS (Lab ID: 4113454)
  - Chloride
  - Fluoride

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PROJECT NARRATIVE

Project: Hammond AP-1
Pace Project No.: 92682927

Method: **EPA 300.0 Rev 2.1 1993**
Description: 300.0 IC Anions 28 Days
Client: Georgia Power- Hammond
Date: October 03, 2023

QC Batch: 793837

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92682397016,92682815002

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

- Sulfate
- MSD (Lab ID: 4113453)
  - Chloride
  - Fluoride
  - Sulfate
- MSD (Lab ID: 4113455)
  - Chloride
  - Fluoride
  - Sulfate

QC Batch: 794487

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92682998003,92683111001

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

- MS (Lab ID: 4116656)
  - Chloride
  - Fluoride
  - Sulfate
- MS (Lab ID: 4116658)
  - Chloride
  - Sulfate
- MSD (Lab ID: 4116657)
  - Chloride
  - Fluoride
  - Sulfate
- MSD (Lab ID: 4116659)
  - Chloride
  - Sulfate

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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(704)875-9092

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-HGWC-10 **Lab ID: 92682398001** Collected: 08/10/23 17:03 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	ND	mg/L	0.040	0.025	1	08/18/23 10:36	08/18/23 21:08	7439-89-6	
Manganese	**0.33**	mg/L	0.040	0.011	1	08/18/23 10:36	08/18/23 21:08	7439-96-5	
Potassium	**2.2**	mg/L	0.50	0.15	1	08/18/23 10:36	08/18/23 21:08	7440-09-7	
Sodium	**9.4**	mg/L	1.0	0.58	1	08/18/23 10:36	08/18/23 21:08	7440-23-5	
Calcium	**155**	mg/L	1.0	0.12	1	08/18/23 10:36	08/18/23 21:08	7440-70-2	
Magnesium	**10.8**	mg/L	0.050	0.012	1	08/18/23 10:36	08/18/23 21:08	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 16:36	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/16/23 14:27	08/22/23 16:36	7440-38-2	
Barium	**0.045**	mg/L	0.0050	0.00067	1	08/16/23 14:27	08/22/23 16:36	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/16/23 14:27	08/22/23 16:36	7440-41-7	
Boron	**0.65**	mg/L	0.20	0.043	5	08/16/23 14:27	08/23/23 19:19	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 14:27	08/22/23 16:36	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 14:27	08/22/23 16:36	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/16/23 14:27	08/22/23 16:36	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 14:27	08/22/23 16:36	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/16/23 14:27	08/22/23 16:36	7439-93-2	
Molybdenum	**0.0014J**	mg/L	0.010	0.00074	1	08/16/23 14:27	08/22/23 16:36	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/16/23 14:27	08/22/23 16:36	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/16/23 14:27	08/22/23 16:36	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	08/22/23 10:15	08/22/23 15:20	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**504**	mg/L	25.0	25.0	1		08/16/23 14:51		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**270**	mg/L	5.0	5.0	1		08/17/23 11:41		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/17/23 11:41		
Alkalinity, Total as CaCO3	**270**	mg/L	5.0	5.0	1		08/17/23 11:41		
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 06:41	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**13.4**	mg/L	1.0	0.60	1		08/15/23 21:47	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-HGWC-10 **Lab ID: 92682398001** Collected: 08/10/23 17:03 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.050J**	mg/L	0.10	0.050	1		08/15/23 21:47	16984-48-8	
Sulfate	**128**	mg/L	3.0	1.5	3		08/16/23 09:02	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-HGWC-11 **Lab ID: 92682398002** Collected: 08/10/23 11:31 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Manganese	ND	mg/L	0.040	0.011	1	08/16/23 11:06	08/17/23 21:31	7439-96-5	
Sodium	**5.9**	mg/L	1.0	0.58	1	08/16/23 11:06	08/17/23 21:31	7440-23-5	
Iron	ND	mg/L	0.040	0.025	1	08/16/23 11:06	08/18/23 15:22	7439-89-6	
Potassium	**2.6**	mg/L	0.50	0.15	1	08/16/23 11:06	08/18/23 15:22	7440-09-7	
Calcium	**100**	mg/L	1.0	0.12	1	08/16/23 11:06	08/18/23 15:22	7440-70-2	M1
Magnesium	**11.8**	mg/L	0.050	0.012	1	08/16/23 11:06	08/18/23 15:22	7439-95-4	M1
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.0012	1	08/16/23 14:27	08/22/23 16:47	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/16/23 14:27	08/22/23 16:47	7440-38-2	
Barium	**0.027**	mg/L	0.0050	0.00067	1	08/16/23 14:27	08/22/23 16:47	7440-39-3	
Beryllium	**0.000069J**	mg/L	0.00050	0.000054	1	08/16/23 14:27	08/22/23 16:47	7440-41-7	
Boron	**0.44**	mg/L	0.40	0.086	10	08/16/23 14:27	08/23/23 19:42	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 14:27	08/22/23 16:47	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 14:27	08/22/23 16:47	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/16/23 14:27	08/22/23 16:47	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 14:27	08/22/23 16:47	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/16/23 14:27	08/22/23 16:47	7439-93-2	
Molybdenum	**0.014**	mg/L	0.010	0.00074	1	08/16/23 14:27	08/22/23 16:47	7439-98-7	
Selenium	**0.0089**	mg/L	0.0050	0.0014	1	08/16/23 14:27	08/22/23 16:47	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/16/23 14:27	08/22/23 16:47	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	08/22/23 10:15	08/22/23 15:30	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**438**	mg/L	25.0	25.0	1		08/16/23 14:51		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**80.0**	mg/L	5.0	5.0	1		08/16/23 20:59		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 20:59		
Alkalinity, Total as CaCO3	**80.0**	mg/L	5.0	5.0	1		08/16/23 20:59		
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 06:42	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**6.5**	mg/L	1.0	0.60	1		08/15/23 23:28	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-HGWC-11 **Lab ID: 92682398002** Collected: 08/10/23 11:31 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.15**	mg/L	0.10	0.050	1		08/15/23 23:28	16984-48-8	
Sulfate	**190**	mg/L	4.0	2.0	4		08/16/23 10:13	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-HGWC-12 **Lab ID: 92682398003** Collected: 08/10/23 11:10 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Manganese	**1.5**	mg/L	0.040	0.011	1	08/16/23 11:06	08/17/23 22:00	7439-96-5	
Sodium	**8.3**	mg/L	1.0	0.58	1	08/16/23 11:06	08/17/23 22:00	7440-23-5	
Iron	**0.028J**	mg/L	0.040	0.025	1	08/16/23 11:06	08/18/23 16:28	7439-89-6	
Potassium	**7.4**	mg/L	0.50	0.15	1	08/16/23 11:06	08/18/23 16:28	7440-09-7	
Calcium	**156**	mg/L	1.0	0.12	1	08/16/23 11:06	08/18/23 16:28	7440-70-2	
Magnesium	**14.7**	mg/L	0.050	0.012	1	08/16/23 11:06	08/18/23 16:28	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.0012	1	08/16/23 14:27	08/22/23 16:54	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/16/23 14:27	08/22/23 16:54	7440-38-2	
Barium	**0.075**	mg/L	0.0050	0.00067	1	08/16/23 14:27	08/22/23 16:54	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/16/23 14:27	08/22/23 16:54	7440-41-7	
Boron	**1.4**	mg/L	0.40	0.086	10	08/16/23 14:27	08/23/23 19:54	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 14:27	08/22/23 16:54	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 14:27	08/22/23 16:54	7440-47-3	
Cobalt	**0.0012J**	mg/L	0.0050	0.00039	1	08/16/23 14:27	08/22/23 16:54	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 14:27	08/22/23 16:54	7439-92-1	
Lithium	**0.0075J**	mg/L	0.030	0.00073	1	08/16/23 14:27	08/22/23 16:54	7439-93-2	
Molybdenum	**0.050**	mg/L	0.010	0.00074	1	08/16/23 14:27	08/22/23 16:54	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/16/23 14:27	08/22/23 16:54	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/16/23 14:27	08/22/23 16:54	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/22/23 10:15	08/22/23 15:33	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**683**	mg/L	25.0	25.0	1		08/16/23 14:52		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**199**	mg/L	5.0	5.0	1		08/16/23 21:16		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 21:16		
Alkalinity, Total as CaCO3	**199**	mg/L	5.0	5.0	1		08/16/23 21:16		
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 06:43	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**30.6**	mg/L	1.0	0.60	1		08/16/23 00:26	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-HGWC-12 **Lab ID: 92682398003** Collected: 08/10/23 11:10 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.17**	mg/L	0.10	0.050	1		08/16/23 00:26	16984-48-8	
Sulfate	**209**	mg/L	5.0	2.5	5		08/16/23 10:42	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-MW-5 **Lab ID: 92682398004** Collected: 08/10/23 11:42 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	ND	mg/L	0.040	0.025	1	08/16/23 11:06	08/18/23 16:33	7439-89-6	
Potassium	**1.0**	mg/L	0.50	0.15	1	08/16/23 11:06	08/18/23 16:33	7440-09-7	
Calcium	**99.7**	mg/L	1.0	0.12	1	08/16/23 11:06	08/18/23 16:33	7440-70-2	
Magnesium	**10.9**	mg/L	0.050	0.012	1	08/16/23 11:06	08/18/23 16:33	7439-95-4	
Manganese	ND	mg/L	0.040	0.011	1	08/16/23 11:06	08/17/23 22:05	7439-96-5	
Sodium	**19.5**	mg/L	1.0	0.58	1	08/16/23 11:06	08/17/23 22:05	7440-23-5	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.0012	1	08/16/23 14:27	08/22/23 16:58	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/16/23 14:27	08/22/23 16:58	7440-38-2	
Barium	**0.048**	mg/L	0.0050	0.00067	1	08/16/23 14:27	08/22/23 16:58	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/16/23 14:27	08/22/23 16:58	7440-41-7	
Boron	**0.037J**	mg/L	0.040	0.0086	1	08/16/23 14:27	08/23/23 13:29	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 14:27	08/22/23 16:58	7440-43-9	
Chromium	**0.0020J**	mg/L	0.0050	0.0011	1	08/16/23 14:27	08/22/23 16:58	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/16/23 14:27	08/22/23 16:58	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 14:27	08/22/23 16:58	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/16/23 14:27	08/22/23 16:58	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/16/23 14:27	08/22/23 16:58	7439-98-7	
Selenium	**0.0020J**	mg/L	0.0050	0.0014	1	08/16/23 14:27	08/22/23 16:58	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/16/23 14:27	08/22/23 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	08/22/23 10:15	08/22/23 15:35	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**423**	mg/L	25.0	25.0	1		08/16/23 14:52		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**179**	mg/L	5.0	5.0	1		08/16/23 21:28		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 21:28		
Alkalinity, Total as CaCO3	**179**	mg/L	5.0	5.0	1		08/16/23 21:28		M1
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 06:43	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**0.86J**	mg/L	1.0	0.60	1		08/16/23 00:40	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-MW-5 **Lab ID: 92682398004** Collected: 08/10/23 11:42 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.066J**	mg/L	0.10	0.050	1		08/16/23 00:40	16984-48-8	
Sulfate	**137**	mg/L	3.0	1.5	3		08/16/23 10:56	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-MW-6 **Lab ID: 92682398005** Collected: 08/10/23 14:22 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**179**	mg/L	5.0	0.61	5	08/16/23 11:06	08/18/23 16:43	7440-70-2	
Manganese	**0.43**	mg/L	0.040	0.011	1	08/16/23 11:06	08/17/23 22:10	7439-96-5	
Sodium	**13.0**	mg/L	1.0	0.58	1	08/16/23 11:06	08/17/23 22:10	7440-23-5	
Iron	**0.23**	mg/L	0.040	0.025	1	08/16/23 11:06	08/18/23 16:38	7439-89-6	
Potassium	**1.3**	mg/L	0.50	0.15	1	08/16/23 11:06	08/18/23 16:38	7440-09-7	
Magnesium	**13.4**	mg/L	0.050	0.012	1	08/16/23 11:06	08/18/23 16:38	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 17:16	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/16/23 14:27	08/22/23 17:16	7440-38-2	
Barium	**0.066**	mg/L	0.0050	0.00067	1	08/16/23 14:27	08/22/23 17:16	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/16/23 14:27	08/22/23 17:16	7440-41-7	
Boron	**0.65**	mg/L	0.20	0.043	5	08/16/23 14:27	08/23/23 20:00	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 14:27	08/22/23 17:16	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 14:27	08/22/23 17:16	7440-47-3	
Cobalt	**0.00041J**	mg/L	0.0050	0.00039	1	08/16/23 14:27	08/22/23 17:16	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 14:27	08/22/23 17:16	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/16/23 14:27	08/22/23 17:16	7439-93-2	
Molybdenum	**0.0026J**	mg/L	0.010	0.00074	1	08/16/23 14:27	08/22/23 17:16	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/16/23 14:27	08/22/23 17:16	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/16/23 14:27	08/22/23 17:16	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	08/22/23 10:15	08/22/23 15:38	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**626**	mg/L	25.0	25.0	1		08/16/23 14:52		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**298**	mg/L	5.0	5.0	1		08/17/23 11:50		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/17/23 11:50		
Alkalinity, Total as CaCO3	**298**	mg/L	5.0	5.0	1		08/17/23 11:50		
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 06:44	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**26.9**	mg/L	1.0	0.60	1		08/16/23 00:55	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-MW-6 **Lab ID: 92682398005** Collected: 08/10/23 14:22 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.053J**	mg/L	0.10	0.050	1		08/16/23 00:55	16984-48-8	
Sulfate	**174**	mg/L	4.0	2.0	4		08/16/23 11:10	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-MW-7 **Lab ID: 92682398006** Collected: 08/10/23 12:56 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Manganese	ND	mg/L	0.040	0.011	1	08/16/23 11:06	08/17/23 22:15	7439-96-5	
Sodium	**7.1**	mg/L	1.0	0.58	1	08/16/23 11:06	08/17/23 22:15	7440-23-5	
Iron	ND	mg/L	0.040	0.025	1	08/16/23 11:06	08/18/23 16:48	7439-89-6	
Potassium	**0.74**	mg/L	0.50	0.15	1	08/16/23 11:06	08/18/23 16:48	7440-09-7	
Calcium	**81.2**	mg/L	1.0	0.12	1	08/16/23 11:06	08/18/23 16:48	7440-70-2	
Magnesium	**6.9**	mg/L	0.050	0.012	1	08/16/23 11:06	08/18/23 16:48	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.0012	1	08/16/23 14:27	08/22/23 17:19	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/16/23 14:27	08/22/23 17:19	7440-38-2	
Barium	**0.059**	mg/L	0.0050	0.00067	1	08/16/23 14:27	08/22/23 17:19	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/16/23 14:27	08/22/23 17:19	7440-41-7	
Boron	**0.13**	mg/L	0.040	0.0086	1	08/16/23 14:27	08/24/23 14:52	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 14:27	08/22/23 17:19	7440-43-9	
Chromium	**0.0015J**	mg/L	0.0050	0.0011	1	08/16/23 14:27	08/22/23 17:19	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/16/23 14:27	08/22/23 17:19	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 14:27	08/22/23 17:19	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/16/23 14:27	08/22/23 17:19	7439-93-2	
Molybdenum	**0.0022J**	mg/L	0.010	0.00074	1	08/16/23 14:27	08/22/23 17:19	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/16/23 14:27	08/22/23 17:19	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/16/23 14:27	08/22/23 17:19	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/22/23 10:15	08/22/23 15:46	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**305**	mg/L	25.0	25.0	1		08/16/23 14:53		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**175**	mg/L	5.0	5.0	1		08/17/23 15:32		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/17/23 15:32		
Alkalinity, Total as CaCO3	**175**	mg/L	5.0	5.0	1		08/17/23 15:32		
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 06:44	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.3**	mg/L	1.0	0.60	1		08/16/23 01:09	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-MW-7 **Lab ID: 92682398006** Collected: 08/10/23 12:56 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		08/16/23 01:09	16984-48-8	
Sulfate	**67.3**	mg/L	1.0	0.50	1		08/16/23 01:09	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-MW-19 **Lab ID: 92682398007** Collected: 08/10/23 15:03 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Manganese	**3.2**	mg/L	0.040	0.011	1	08/16/23 11:06	08/17/23 22:19	7439-96-5	
Sodium	**5.5**	mg/L	1.0	0.58	1	08/16/23 11:06	08/17/23 22:19	7440-23-5	
Iron	ND	mg/L	0.040	0.025	1	08/16/23 11:06	08/18/23 16:52	7439-89-6	
Potassium	**3.1**	mg/L	0.50	0.15	1	08/16/23 11:06	08/18/23 16:52	7440-09-7	
Calcium	**127**	mg/L	1.0	0.12	1	08/16/23 11:06	08/18/23 16:52	7440-70-2	
Magnesium	**12.5**	mg/L	0.050	0.012	1	08/16/23 11:06	08/18/23 16:52	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.0012	1	08/17/23 10:25	08/22/23 19:53	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/17/23 10:25	08/22/23 19:53	7440-38-2	
Barium	**0.032**	mg/L	0.0050	0.00067	1	08/17/23 10:25	08/22/23 19:53	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/17/23 10:25	08/22/23 19:53	7440-41-7	
Boron	**0.53**	mg/L	0.040	0.0086	1	08/17/23 10:25	08/22/23 19:53	7440-42-8	
Cadmium	**0.00018J**	mg/L	0.00050	0.00011	1	08/17/23 10:25	08/22/23 19:53	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/17/23 10:25	08/23/23 17:02	7440-47-3	
Cobalt	**0.027**	mg/L	0.0050	0.00039	1	08/17/23 10:25	08/22/23 19:53	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/17/23 10:25	08/22/23 19:53	7439-92-1	
Lithium	**0.011J**	mg/L	0.030	0.00073	1	08/17/23 10:25	08/22/23 19:53	7439-93-2	
Molybdenum	**0.033**	mg/L	0.010	0.00074	1	08/17/23 10:25	08/22/23 19:53	7439-98-7	
Selenium	**0.0038J**	mg/L	0.0050	0.0014	1	08/17/23 10:25	08/22/23 19:53	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/17/23 10:25	08/22/23 19:53	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/22/23 10:15	08/22/23 15:49	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**524**	mg/L	25.0	25.0	1		08/16/23 14:55		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**133**	mg/L	5.0	5.0	1		08/17/23 15:43		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/17/23 15:43		
Alkalinity, Total as CaCO3	**133**	mg/L	5.0	5.0	1		08/17/23 15:43		
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 06:45	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**11.2**	mg/L	1.0	0.60	1		08/16/23 01:23	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-MW-19 **Lab ID: 92682398007** Collected: 08/10/23 15:03 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.14**	mg/L	0.10	0.050	1		08/16/23 01:23	16984-48-8	
Sulfate	**210**	mg/L	5.0	2.5	5		08/16/23 11:53	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-MW-20 **Lab ID: 92682398008** Collected: 08/10/23 10:19 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**2.7**	mg/L	0.040	0.025	1	08/16/23 11:06	08/18/23 16:57	7439-89-6	
Potassium	**0.26J**	mg/L	0.50	0.15	1	08/16/23 11:06	08/18/23 16:57	7440-09-7	
Calcium	**123**	mg/L	1.0	0.12	1	08/16/23 11:06	08/18/23 16:57	7440-70-2	
Magnesium	**8.8**	mg/L	0.050	0.012	1	08/16/23 11:06	08/18/23 16:57	7439-95-4	
Manganese	**0.13**	mg/L	0.040	0.011	1	08/16/23 11:06	08/17/23 22:24	7439-96-5	
Sodium	**12.2**	mg/L	1.0	0.58	1	08/16/23 11:06	08/17/23 22:24	7440-23-5	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.0012	1	08/17/23 10:25	08/22/23 19:59	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/17/23 10:25	08/22/23 19:59	7440-38-2	
Barium	**0.093**	mg/L	0.0050	0.00067	1	08/17/23 10:25	08/22/23 19:59	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/17/23 10:25	08/22/23 19:59	7440-41-7	
Boron	**0.10**	mg/L	0.040	0.0086	1	08/17/23 10:25	08/22/23 19:59	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/17/23 10:25	08/22/23 19:59	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/17/23 10:25	08/23/23 17:13	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/17/23 10:25	08/22/23 19:59	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/17/23 10:25	08/22/23 19:59	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/17/23 10:25	08/22/23 19:59	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/17/23 10:25	08/22/23 19:59	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/17/23 10:25	08/22/23 19:59	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/17/23 10:25	08/22/23 19:59	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	08/22/23 10:15	08/22/23 15:51	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**429**	mg/L	25.0	25.0	1		08/16/23 14:57		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**249**	mg/L	5.0	5.0	1		08/17/23 19:31		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/17/23 19:31		
Alkalinity, Total as CaCO3	**249**	mg/L	5.0	5.0	1		08/17/23 19:31		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	**0.024J**	mg/L	0.10	0.022	1		08/15/23 06:46	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**28.4**	mg/L	1.0	0.60	1		08/16/23 01:38	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-MW-20 **Lab ID: 92682398008** Collected: 08/10/23 10:19 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		08/16/23 01:38	16984-48-8	
Sulfate	**100**	mg/L	1.0	0.50	1		08/16/23 01:38	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-MW-25D **Lab ID: 92682398009** Collected: 08/10/23 12:57 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**1.9**	mg/L	0.040	0.025	1	08/16/23 11:06	08/18/23 17:02	7439-89-6	
Potassium	**0.47J**	mg/L	0.50	0.15	1	08/16/23 11:06	08/18/23 17:02	7440-09-7	
Calcium	**86.1**	mg/L	1.0	0.12	1	08/16/23 11:06	08/18/23 17:02	7440-70-2	
Magnesium	**8.8**	mg/L	0.050	0.012	1	08/16/23 11:06	08/18/23 17:02	7439-95-4	
Manganese	**0.016J**	mg/L	0.040	0.011	1	08/16/23 11:06	08/17/23 22:29	7439-96-5	
Sodium	**111**	mg/L	1.0	0.58	1	08/16/23 11:06	08/17/23 22:29	7440-23-5	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.0012	1	08/17/23 10:25	08/22/23 20:05	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/17/23 10:25	08/22/23 20:05	7440-38-2	
Barium	**0.71**	mg/L	0.0050	0.00067	1	08/17/23 10:25	08/22/23 20:05	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/17/23 10:25	08/22/23 20:05	7440-41-7	
Boron	**0.31**	mg/L	0.040	0.0086	1	08/17/23 10:25	08/22/23 20:05	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/17/23 10:25	08/22/23 20:05	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/17/23 10:25	08/23/23 17:16	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/17/23 10:25	08/22/23 20:05	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/17/23 10:25	08/22/23 20:05	7439-92-1	
Lithium	**0.038**	mg/L	0.030	0.00073	1	08/17/23 10:25	08/22/23 20:05	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/17/23 10:25	08/22/23 20:05	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/17/23 10:25	08/22/23 20:05	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/17/23 10:25	08/22/23 20:05	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00013J**	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 16:38	7439-97-6	M1
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**325**	mg/L	25.0	25.0	1		08/16/23 14:57		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**304**	mg/L	5.0	5.0	1		08/17/23 19:40		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/17/23 19:40		
Alkalinity, Total as CaCO3	**304**	mg/L	5.0	5.0	1		08/17/23 19:40		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	**0.16**	mg/L	0.10	0.022	1		08/15/23 06:48	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**13.6**	mg/L	1.0	0.60	1		08/16/23 01:52	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-MW-25D **Lab ID: 92682398009** Collected: 08/10/23 12:57 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**1.5**	mg/L	0.10	0.050	1		08/16/23 01:52	16984-48-8	
Sulfate	**0.62J**	mg/L	1.0	0.50	1		08/16/23 01:52	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-MW-29 **Lab ID: 92682398010** Collected: 08/10/23 16:15 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Manganese	**0.86**	mg/L	0.040	0.011	1	08/16/23 11:06	08/17/23 22:44	7439-96-5	
Potassium	**1.2**	mg/L	0.50	0.15	1	08/16/23 11:06	08/17/23 22:44	7440-09-7	
Sodium	**12.7**	mg/L	1.0	0.58	1	08/16/23 11:06	08/17/23 22:44	7440-23-5	
Magnesium	**11.9**	mg/L	0.050	0.012	1	08/16/23 11:06	08/17/23 22:44	7439-95-4	
Iron	**0.049**	mg/L	0.040	0.025	1	08/16/23 11:06	08/18/23 17:53	7439-89-6	
Calcium	**147**	mg/L	1.0	0.12	1	08/16/23 11:06	08/18/23 17:53	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.0012	1	08/17/23 10:25	08/22/23 20:11	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/17/23 10:25	08/22/23 20:11	7440-38-2	
Barium	**0.066**	mg/L	0.0050	0.00067	1	08/17/23 10:25	08/22/23 20:11	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/17/23 10:25	08/22/23 20:11	7440-41-7	
Boron	**1.1**	mg/L	0.040	0.0086	1	08/17/23 10:25	08/22/23 20:11	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/17/23 10:25	08/22/23 20:11	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/17/23 10:25	08/23/23 17:20	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/17/23 10:25	08/22/23 20:11	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/17/23 10:25	08/22/23 20:11	7439-92-1	
Lithium	**0.0019J**	mg/L	0.030	0.00073	1	08/17/23 10:25	08/22/23 20:11	7439-93-2	
Molybdenum	**0.0030J**	mg/L	0.010	0.00074	1	08/17/23 10:25	08/22/23 20:11	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/17/23 10:25	08/22/23 20:11	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/17/23 10:25	08/22/23 20:11	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00017J**	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 17:12	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**564**	mg/L	25.0	25.0	1		08/16/23 15:00		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**208**	mg/L	5.0	5.0	1		08/17/23 16:13		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/17/23 16:13		
Alkalinity, Total as CaCO3	**208**	mg/L	5.0	5.0	1		08/17/23 16:13		
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 06:48	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**56.1**	mg/L	1.0	0.60	1		08/16/23 02:35	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-MW-29 **Lab ID: 92682398010** Collected: 08/10/23 16:15 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		08/16/23 02:35	16984-48-8	
Sulfate	**134**	mg/L	3.0	1.5	3		08/16/23 12:08	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-HGWC-7 **Lab ID: 92682397009** Collected: 08/12/23 14:35 Received: 08/14/23 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.073**	mg/L	0.040	0.025	1	08/18/23 10:59	08/18/23 23:00	7439-89-6	
Manganese	**0.20**	mg/L	0.040	0.011	1	08/18/23 10:59	08/18/23 23:00	7439-96-5	
Potassium	**2.1**	mg/L	0.50	0.15	1	08/18/23 10:59	08/18/23 23:00	7440-09-7	
Sodium	**12.7**	mg/L	1.0	0.58	1	08/18/23 10:59	08/18/23 23:00	7440-23-5	
Calcium	**101**	mg/L	1.0	0.12	1	08/18/23 10:59	08/18/23 23:00	7440-70-2	
Magnesium	**9.6**	mg/L	0.050	0.012	1	08/18/23 10:59	08/18/23 23:00	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	08/17/23 11:45	08/22/23 17:02	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/17/23 11:45	08/22/23 17:02	7440-38-2	
Barium	**0.060**	mg/L	0.0050	0.00067	1	08/17/23 11:45	08/22/23 17:02	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/17/23 11:45	08/22/23 17:02	7440-41-7	
Boron	**0.82**	mg/L	0.040	0.0086	1	08/17/23 11:45	08/22/23 17:02	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/17/23 11:45	08/22/23 17:02	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/17/23 11:45	08/22/23 17:02	7440-47-3	
Cobalt	**0.00061J**	mg/L	0.0050	0.00039	1	08/17/23 11:45	08/22/23 17:02	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/17/23 11:45	08/22/23 17:02	7439-92-1	
Lithium	**0.0023J**	mg/L	0.030	0.00073	1	08/17/23 11:45	08/22/23 17:02	7439-93-2	
Molybdenum	**0.033**	mg/L	0.010	0.00074	1	08/17/23 11:45	08/22/23 17:02	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/17/23 11:45	08/22/23 17:02	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/17/23 11:45	08/22/23 17:02	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/22/23 10:15	08/22/23 15:54	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**378**	mg/L	25.0	25.0	1		08/16/23 15:00		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**210**	mg/L	5.0	5.0	1		08/17/23 21:35		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/17/23 21:35		
Alkalinity, Total as CaCO3	**210**	mg/L	5.0	5.0	1		08/17/23 21:35		
4500S2D Sulfide Water	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	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**33.3**	mg/L	1.0	0.60	1		08/16/23 13:51	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-HGWC-7 **Lab ID: 92682397009** Collected: 08/12/23 14:35 Received: 08/14/23 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.071J**	mg/L	0.10	0.050	1		08/16/23 13:51	16984-48-8	
Sulfate	**84.2**	mg/L	1.0	0.50	1		08/16/23 13:51	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-HGWC-8 **Lab ID: 92682397010** Collected: 08/12/23 09:32 Received: 08/14/23 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.058**	mg/L	0.040	0.025	1	08/18/23 10:59	08/18/23 23:05	7439-89-6	
Manganese	**0.30**	mg/L	0.040	0.011	1	08/18/23 10:59	08/18/23 23:05	7439-96-5	
Potassium	**7.6**	mg/L	0.50	0.15	1	08/18/23 10:59	08/18/23 23:05	7440-09-7	
Sodium	**9.7**	mg/L	1.0	0.58	1	08/18/23 10:59	08/18/23 23:05	7440-23-5	
Calcium	**122**	mg/L	1.0	0.12	1	08/18/23 10:59	08/18/23 23:05	7440-70-2	
Magnesium	**17.3**	mg/L	0.050	0.012	1	08/18/23 10:59	08/18/23 23:05	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	08/17/23 11:45	08/22/23 17:08	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/17/23 11:45	08/22/23 17:08	7440-38-2	
Barium	**0.052**	mg/L	0.0050	0.00067	1	08/17/23 11:45	08/22/23 17:08	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/17/23 11:45	08/22/23 17:08	7440-41-7	
Boron	**1.7**	mg/L	0.040	0.0086	1	08/17/23 11:45	08/22/23 17:08	7440-42-8	
Cadmium	**0.00044J**	mg/L	0.00050	0.00011	1	08/17/23 11:45	08/22/23 17:08	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/17/23 11:45	08/22/23 17:08	7440-47-3	
Cobalt	**0.0016J**	mg/L	0.0050	0.00039	1	08/17/23 11:45	08/22/23 17:08	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/17/23 11:45	08/22/23 17:08	7439-92-1	
Lithium	**0.0014J**	mg/L	0.030	0.00073	1	08/17/23 11:45	08/22/23 17:08	7439-93-2	
Molybdenum	**0.34**	mg/L	0.010	0.00074	1	08/17/23 11:45	08/22/23 17:08	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/17/23 11:45	08/22/23 17:08	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/17/23 11:45	08/22/23 17:08	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/22/23 10:15	08/22/23 15:56	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**564**	mg/L	25.0	25.0	1		08/18/23 17:06		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**145**	mg/L	5.0	5.0	1		08/17/23 21:47		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/17/23 21:47		
Alkalinity, Total as CaCO3	**145**	mg/L	5.0	5.0	1		08/17/23 21:47		
4500S2D Sulfide Water	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	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**53.1**	mg/L	1.0	0.60	1		08/16/23 14:06	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-HGWC-8 **Lab ID: 92682397010** Collected: 08/12/23 09:32 Received: 08/14/23 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.59**	mg/L	0.10	0.050	1		08/16/23 14:06	16984-48-8	
Sulfate	**170**	mg/L	4.0	2.0	4		08/17/23 05:08	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-HGWC-13 **Lab ID: 92682397011** Collected: 08/12/23 12:05 Received: 08/14/23 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**6.9**	mg/L	0.040	0.025	1	08/18/23 10:59	08/18/23 23:10	7439-89-6	
Manganese	**9.0**	mg/L	0.040	0.011	1	08/18/23 10:59	08/18/23 23:10	7439-96-5	
Potassium	**5.9**	mg/L	0.50	0.15	1	08/18/23 10:59	08/18/23 23:10	7440-09-7	
Sodium	**6.9**	mg/L	1.0	0.58	1	08/18/23 10:59	08/18/23 23:10	7440-23-5	
Calcium	**172**	mg/L	1.0	0.12	1	08/18/23 10:59	08/18/23 23:10	7440-70-2	
Magnesium	**19.2**	mg/L	0.050	0.012	1	08/18/23 10:59	08/18/23 23:10	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	08/17/23 11:45	08/22/23 17:14	7440-36-0	
Arsenic	**0.54**	mg/L	0.010	0.0037	1	08/17/23 11:45	08/22/23 17:14	7440-38-2	
Barium	**0.057**	mg/L	0.0050	0.00067	1	08/17/23 11:45	08/22/23 17:14	7440-39-3	
Beryllium	**0.00010J**	mg/L	0.00050	0.000054	1	08/17/23 11:45	08/22/23 17:14	7440-41-7	
Boron	**1.0**	mg/L	0.040	0.0086	1	08/17/23 11:45	08/22/23 17:14	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/17/23 11:45	08/22/23 17:14	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/17/23 11:45	08/22/23 17:14	7440-47-3	
Cobalt	**0.018**	mg/L	0.0050	0.00039	1	08/17/23 11:45	08/22/23 17:14	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/17/23 11:45	08/22/23 17:14	7439-92-1	
Lithium	**0.051**	mg/L	0.030	0.00073	1	08/17/23 11:45	08/22/23 17:14	7439-93-2	
Molybdenum	**0.016**	mg/L	0.010	0.00074	1	08/17/23 11:45	08/22/23 17:14	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/17/23 11:45	08/22/23 17:14	7782-49-2	
Thallium	**0.00028J**	mg/L	0.0010	0.00018	1	08/17/23 11:45	08/22/23 17:14	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/22/23 10:15	08/22/23 15:59	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**803**	mg/L	25.0	25.0	1		08/18/23 17:06		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**145**	mg/L	5.0	5.0	1		08/17/23 21:57		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/17/23 21:57		
Alkalinity, Total as CaCO3	**145**	mg/L	5.0	5.0	1		08/17/23 21:57		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		08/18/23 04:36	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**15.3**	mg/L	1.0	0.60	1		08/16/23 14:20	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-HGWC-13 **Lab ID: 92682397011** Collected: 08/12/23 12:05 Received: 08/14/23 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.32**	mg/L	0.10	0.050	1		08/16/23 14:20	16984-48-8	
Sulfate	**347**	mg/L	7.0	3.5	7		08/17/23 05:51	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-MW-24D **Lab ID: 92682397012** Collected: 08/12/23 10:15 Received: 08/14/23 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.19**	mg/L	0.040	0.025	1	08/18/23 10:59	08/18/23 23:15	7439-89-6	
Manganese	**0.062**	mg/L	0.040	0.011	1	08/18/23 10:59	08/18/23 23:15	7439-96-5	
Potassium	**0.68**	mg/L	0.50	0.15	1	08/18/23 10:59	08/18/23 23:15	7440-09-7	
Sodium	**12.5**	mg/L	1.0	0.58	1	08/18/23 10:59	08/18/23 23:15	7440-23-5	
Calcium	**105**	mg/L	1.0	0.12	1	08/18/23 10:59	08/18/23 23:15	7440-70-2	
Magnesium	**6.3**	mg/L	0.050	0.012	1	08/18/23 10:59	08/18/23 23:15	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.0012	1	08/17/23 11:45	08/22/23 17:19	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/17/23 11:45	08/22/23 17:19	7440-38-2	
Barium	**0.053**	mg/L	0.0050	0.00067	1	08/17/23 11:45	08/22/23 17:19	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/17/23 11:45	08/22/23 17:19	7440-41-7	
Boron	**0.55**	mg/L	0.040	0.0086	1	08/17/23 11:45	08/22/23 17:19	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/17/23 11:45	08/22/23 17:19	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/17/23 11:45	08/22/23 17:19	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/17/23 11:45	08/22/23 17:19	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/17/23 11:45	08/22/23 17:19	7439-92-1	
Lithium	**0.0030J**	mg/L	0.030	0.00073	1	08/17/23 11:45	08/22/23 17:19	7439-93-2	
Molybdenum	**0.0019J**	mg/L	0.010	0.00074	1	08/17/23 11:45	08/22/23 17:19	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/17/23 11:45	08/22/23 17:19	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/17/23 11:45	08/22/23 17:19	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/22/23 10:15	08/22/23 16:02	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**449**	mg/L	25.0	25.0	1		08/18/23 17:06		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**105**	mg/L	5.0	5.0	1		08/17/23 22:07		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/17/23 22:07		
Alkalinity, Total as CaCO3	**105**	mg/L	5.0	5.0	1		08/17/23 22:07		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		08/18/23 04:38	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**35.1**	mg/L	1.0	0.60	1		08/16/23 15:04	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-MW-24D **Lab ID: 92682397012** Collected: 08/12/23 10:15 Received: 08/14/23 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.080J**	mg/L	0.10	0.050	1		08/16/23 15:04	16984-48-8	
Sulfate	**146**	mg/L	3.0	1.5	3		08/17/23 06:05	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-MW-27D **Lab ID: 92682397013** Collected: 08/12/23 14:20 Received: 08/14/23 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.29**	mg/L	0.040	0.025	1	08/18/23 10:59	08/18/23 23:20	7439-89-6	
Manganese	**0.11**	mg/L	0.040	0.011	1	08/18/23 10:59	08/18/23 23:20	7439-96-5	
Potassium	**0.88**	mg/L	0.50	0.15	1	08/18/23 10:59	08/18/23 23:20	7440-09-7	
Sodium	**31.5**	mg/L	1.0	0.58	1	08/18/23 10:59	08/18/23 23:20	7440-23-5	
Calcium	**27.8**	mg/L	1.0	0.12	1	08/18/23 10:59	08/18/23 23:20	7440-70-2	
Magnesium	**18.1**	mg/L	0.050	0.012	1	08/18/23 10:59	08/18/23 23:20	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.0012	1	08/17/23 11:45	08/22/23 17:54	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/17/23 11:45	08/22/23 17:54	7440-38-2	
Barium	**0.98**	mg/L	0.0050	0.00067	1	08/17/23 11:45	08/22/23 17:54	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/17/23 11:45	08/22/23 17:54	7440-41-7	
Boron	**0.13**	mg/L	0.040	0.0086	1	08/17/23 11:45	08/22/23 17:54	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/17/23 11:45	08/22/23 17:54	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/17/23 11:45	08/23/23 18:05	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/17/23 11:45	08/22/23 17:54	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/17/23 11:45	08/22/23 17:54	7439-92-1	
Lithium	**0.0072J**	mg/L	0.030	0.00073	1	08/17/23 11:45	08/22/23 17:54	7439-93-2	
Molybdenum	**0.0019J**	mg/L	0.010	0.00074	1	08/17/23 11:45	08/22/23 17:54	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/17/23 11:45	08/22/23 17:54	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/17/23 11:45	08/22/23 17:54	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/22/23 10:15	08/22/23 16:04	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**238**	mg/L	25.0	25.0	1		08/18/23 17:06		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**181**	mg/L	5.0	5.0	1		08/17/23 22:16		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/17/23 22:16		
Alkalinity, Total as CaCO3	**181**	mg/L	5.0	5.0	1		08/17/23 22:16		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		08/18/23 04:40	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**29.0**	mg/L	1.0	0.60	1		08/16/23 15:18	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-MW-27D **Lab ID: 92682397013** Collected: 08/12/23 14:20 Received: 08/14/23 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.26**	mg/L	0.10	0.050	1		08/16/23 15:18	16984-48-8	
Sulfate	**7.6**	mg/L	1.0	0.50	1		08/16/23 15:18	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-AP1-EB-01 **Lab ID: 92682397014** Collected: 08/12/23 13:35 Received: 08/14/23 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.12	1	08/18/23 10:59	08/18/23 23:25	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.0012	1	08/17/23 11:45	08/22/23 18:00	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/17/23 11:45	08/22/23 18:00	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	08/17/23 11:45	08/22/23 18:00	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/17/23 11:45	08/22/23 18:00	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/17/23 11:45	08/22/23 18:00	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/17/23 11:45	08/22/23 18:00	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/17/23 11:45	08/23/23 18:09	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/17/23 11:45	08/22/23 18:00	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/17/23 11:45	08/22/23 18:00	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/17/23 11:45	08/22/23 18:00	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/17/23 11:45	08/22/23 18:00	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/17/23 11:45	08/22/23 18:00	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/17/23 11:45	08/22/23 18:00	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	08/22/23 10:15	08/22/23 16:07	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		08/18/23 17:06		
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		08/16/23 15:33	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/16/23 15:33	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		08/16/23 15:33	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-AP1-FB-01 **Lab ID: 92682397015** Collected: 08/12/23 13:30 Received: 08/14/23 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.12	1	08/18/23 10:59	08/18/23 23:30	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	08/17/23 11:45	08/22/23 18:06	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/17/23 11:45	08/22/23 18:06	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	08/17/23 11:45	08/22/23 18:06	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/17/23 11:45	08/22/23 18:06	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/17/23 11:45	08/22/23 18:06	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/17/23 11:45	08/22/23 18:06	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/17/23 11:45	08/23/23 18:12	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/17/23 11:45	08/22/23 18:06	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/17/23 11:45	08/22/23 18:06	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/17/23 11:45	08/22/23 18:06	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/17/23 11:45	08/22/23 18:06	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/17/23 11:45	08/22/23 18:06	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/17/23 11:45	08/22/23 18:06	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/22/23 10:15	08/22/23 16:09	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		08/18/23 17:07		
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		08/16/23 15:47	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/16/23 15:47	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		08/16/23 15:47	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-HGWC-9 **Lab ID: 92682397016** Collected: 08/11/23 17:03 Received: 08/14/23 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.052**	mg/L	0.040	0.025	1	08/18/23 10:59	08/18/23 23:45	7439-89-6	
Manganese	**0.57**	mg/L	0.040	0.011	1	08/18/23 10:59	08/18/23 23:45	7439-96-5	
Potassium	**3.4**	mg/L	0.50	0.15	1	08/18/23 10:59	08/18/23 23:45	7440-09-7	
Sodium	**12.3**	mg/L	1.0	0.58	1	08/18/23 10:59	08/18/23 23:45	7440-23-5	
Calcium	**168**	mg/L	1.0	0.12	1	08/18/23 10:59	08/18/23 23:45	7440-70-2	
Magnesium	**17.5**	mg/L	0.050	0.012	1	08/18/23 10:59	08/18/23 23:45	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.0012	1	08/17/23 11:45	08/22/23 18:12	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/17/23 11:45	08/22/23 18:12	7440-38-2	
Barium	**0.068**	mg/L	0.0050	0.00067	1	08/17/23 11:45	08/22/23 18:12	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/17/23 11:45	08/22/23 18:12	7440-41-7	
Boron	**2.1**	mg/L	0.040	0.0086	1	08/17/23 11:45	08/22/23 18:12	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/17/23 11:45	08/22/23 18:12	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/17/23 11:45	08/23/23 18:16	7440-47-3	
Cobalt	**0.00057J**	mg/L	0.0050	0.00039	1	08/17/23 11:45	08/22/23 18:12	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/17/23 11:45	08/22/23 18:12	7439-92-1	
Lithium	**0.0035J**	mg/L	0.030	0.00073	1	08/17/23 11:45	08/22/23 18:12	7439-93-2	
Molybdenum	**0.030**	mg/L	0.010	0.00074	1	08/17/23 11:45	08/22/23 18:12	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/17/23 11:45	08/22/23 18:12	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/17/23 11:45	08/22/23 18:12	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	08/22/23 10:15	08/22/23 16:17	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**757**	mg/L	25.0	25.0	1		08/17/23 11:18		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**204**	mg/L	5.0	5.0	1		08/17/23 22:35		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/17/23 22:35		
Alkalinity, Total as CaCO3	**204**	mg/L	5.0	5.0	1		08/17/23 22:35		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		08/18/23 04:31	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**78.9**	mg/L	1.0	0.60	1		08/16/23 16:02	16887-00-6	M1

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-HGWC-9 **Lab ID: 92682397016** Collected: 08/11/23 17:03 Received: 08/14/23 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.12**	mg/L	0.10	0.050	1		08/16/23 16:02	16984-48-8	M1
Sulfate	**197**	mg/L	4.0	2.0	4		08/17/23 06:19	14808-79-8	M1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-MW-26D **Lab ID: 92682397017** Collected: 08/11/23 16:54 Received: 08/14/23 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.11**	mg/L	0.040	0.025	1	08/18/23 10:59	08/18/23 23:49	7439-89-6	
Manganese	**0.13**	mg/L	0.040	0.011	1	08/18/23 10:59	08/18/23 23:49	7439-96-5	
Potassium	**1.9**	mg/L	0.50	0.15	1	08/18/23 10:59	08/18/23 23:49	7440-09-7	
Sodium	**12.9**	mg/L	1.0	0.58	1	08/18/23 10:59	08/18/23 23:49	7440-23-5	
Calcium	**152**	mg/L	1.0	0.12	1	08/18/23 10:59	08/18/23 23:49	7440-70-2	
Magnesium	**15.5**	mg/L	0.050	0.012	1	08/18/23 10:59	08/18/23 23:49	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	08/17/23 11:45	08/22/23 18:24	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/17/23 11:45	08/22/23 18:24	7440-38-2	
Barium	**0.059**	mg/L	0.0050	0.00067	1	08/17/23 11:45	08/22/23 18:24	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/17/23 11:45	08/22/23 18:24	7440-41-7	
Boron	**1.6**	mg/L	0.040	0.0086	1	08/17/23 11:45	08/22/23 18:24	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/17/23 11:45	08/22/23 18:24	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/17/23 11:45	08/23/23 18:20	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/17/23 11:45	08/22/23 18:24	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/17/23 11:45	08/22/23 18:24	7439-92-1	
Lithium	**0.0029J**	mg/L	0.030	0.00073	1	08/17/23 11:45	08/22/23 18:24	7439-93-2	
Molybdenum	**0.014**	mg/L	0.010	0.00074	1	08/17/23 11:45	08/22/23 18:24	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/17/23 11:45	08/22/23 18:24	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/17/23 11:45	08/22/23 18:24	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	08/22/23 10:15	08/22/23 16:20	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**706**	mg/L	25.0	25.0	1		08/17/23 11:18		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**177**	mg/L	5.0	5.0	1		08/17/23 22:48		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/17/23 22:48		
Alkalinity, Total as CaCO3	**177**	mg/L	5.0	5.0	1		08/17/23 22:48		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		08/18/23 04:31	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**87.6**	mg/L	1.0	0.60	1		08/16/23 16:45	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-MW-26D **Lab ID: 92682397017** Collected: 08/11/23 16:54 Received: 08/14/23 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.083J**	mg/L	0.10	0.050	1		08/16/23 16:45	16984-48-8	
Sulfate	**159**	mg/L	3.0	1.5	3		08/17/23 07:02	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-MW-28D **Lab ID: 92682397018** Collected: 08/11/23 15:14 Received: 08/14/23 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.034J**	mg/L	0.040	0.025	1	08/18/23 10:59	08/18/23 23:54	7439-89-6	
Manganese	ND	mg/L	0.040	0.011	1	08/18/23 10:59	08/18/23 23:54	7439-96-5	
Potassium	**1.4**	mg/L	0.50	0.15	1	08/18/23 10:59	08/18/23 23:54	7440-09-7	
Sodium	**24.3**	mg/L	1.0	0.58	1	08/18/23 10:59	08/18/23 23:54	7440-23-5	
Calcium	**49.6**	mg/L	1.0	0.12	1	08/18/23 10:59	08/18/23 23:54	7440-70-2	
Magnesium	**26.7**	mg/L	0.050	0.012	1	08/18/23 10:59	08/18/23 23:54	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.0012	1	08/21/23 10:22	08/24/23 15:40	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/21/23 10:22	08/24/23 15:40	7440-38-2	
Barium	**2.2**	mg/L	0.050	0.0067	10	08/21/23 10:22	08/25/23 14:49	7440-39-3	M1
Beryllium	ND	mg/L	0.00050	0.000054	1	08/21/23 10:22	08/24/23 15:40	7440-41-7	
Boron	**0.12**	mg/L	0.040	0.0086	1	08/21/23 10:22	08/24/23 15:40	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 10:22	08/24/23 15:40	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 10:22	08/24/23 15:40	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 10:22	08/24/23 15:40	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 10:22	08/24/23 15:40	7439-92-1	
Lithium	**0.016J**	mg/L	0.030	0.00073	1	08/21/23 10:22	08/24/23 15:40	7439-93-2	
Molybdenum	**0.0011J**	mg/L	0.010	0.00074	1	08/21/23 10:22	08/24/23 15:40	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 10:22	08/24/23 15:40	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 10:22	08/24/23 15:40	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/22/23 10:15	08/22/23 16:25	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**296**	mg/L	25.0	25.0	1		08/17/23 11:18		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**269**	mg/L	5.0	5.0	1		08/18/23 09:15		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/18/23 09:15		
Alkalinity, Total as CaCO3	**269**	mg/L	5.0	5.0	1		08/18/23 09:15		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	**3.5**	mg/L	1.0	0.22	10		08/18/23 04:32	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**17.0**	mg/L	1.0	0.60	1		08/16/23 17:00	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-MW-28D **Lab ID: 92682397018** Collected: 08/11/23 15:14 Received: 08/14/23 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.26**	mg/L	0.10	0.050	1		08/16/23 17:00	16984-48-8	
Sulfate	**15.4**	mg/L	1.0	0.50	1		08/16/23 17:00	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-AP1-FD-01 **Lab ID: 92682927022** Collected: 08/12/23 00:00 Received: 08/14/23 13:22 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.16**	mg/L	0.040	0.025	1	08/24/23 09:50	08/24/23 18:58	7439-89-6	
Manganese	**0.054**	mg/L	0.040	0.011	1	08/24/23 09:50	08/24/23 18:58	7439-96-5	
Potassium	**0.75**	mg/L	0.50	0.15	1	08/24/23 09:50	08/24/23 18:58	7440-09-7	B
Sodium	**12.3**	mg/L	1.0	0.58	1	08/24/23 09:50	08/24/23 18:58	7440-23-5	M1
Calcium	**107**	mg/L	1.0	0.12	1	08/24/23 09:50	08/24/23 18:58	7440-70-2	M1
Magnesium	**6.3**	mg/L	0.050	0.012	1	08/24/23 09:50	08/24/23 18:58	7439-95-4	M1
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.0012	1	08/21/23 10:22	08/24/23 18:54	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/21/23 10:22	08/24/23 18:54	7440-38-2	
Barium	**0.049**	mg/L	0.0050	0.00067	1	08/21/23 10:22	08/24/23 18:54	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/21/23 10:22	08/24/23 18:54	7440-41-7	
Boron	**0.52**	mg/L	0.040	0.0086	1	08/21/23 10:22	08/24/23 18:54	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 10:22	08/24/23 18:54	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 10:22	08/24/23 18:54	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 10:22	08/24/23 18:54	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 10:22	08/24/23 18:54	7439-92-1	
Lithium	**0.0028J**	mg/L	0.030	0.00073	1	08/21/23 10:22	08/24/23 18:54	7439-93-2	
Molybdenum	**0.0016J**	mg/L	0.010	0.00074	1	08/21/23 10:22	08/24/23 18:54	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 10:22	08/24/23 18:54	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 10:22	08/24/23 18:54	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00017J**	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 17:15	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**437**	mg/L	25.0	25.0	1		08/18/23 17:07		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**103**	mg/L	5.0	5.0	1		08/23/23 18:18		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/23/23 18:18		
Alkalinity, Total as CaCO3	**103**	mg/L	5.0	5.0	1		08/23/23 18:18		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		08/18/23 05:00	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**35.2**	mg/L	1.0	0.60	1		08/18/23 19:48	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92682927

Sample: HAM-AP1-FD-01 **Lab ID: 92682927022** Collected: 08/12/23 00:00 Received: 08/14/23 13:22 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		08/18/23 19:48	16984-48-8	
Sulfate	**135**	mg/L	3.0	1.5	3		08/19/23 16:22	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92682927

QC Batch: 793618
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92682398001

METHOD BLANK: 4112489 Matrix: Water
Associated Lab Samples: 92682398001

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	92682392001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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

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-1
Pace Project No.: 92682927

QC Batch: 793869
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92682398002, 92682398003, 92682398004, 92682398005, 92682398006, 92682398007, 92682398008, 92682398009, 92682398010

METHOD BLANK: 4113555 Matrix: Water
Associated Lab Samples: 92682398002, 92682398003, 92682398004, 92682398005, 92682398006, 92682398007, 92682398008, 92682398009, 92682398010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/18/23 15:12	
Iron	mg/L	ND	0.040	0.025	08/18/23 15:12	
Magnesium	mg/L	ND	0.050	0.012	08/18/23 15:12	
Manganese	mg/L	ND	0.040	0.011	08/17/23 21:21	
Potassium	mg/L	ND	0.50	0.15	08/18/23 15:12	
Sodium	mg/L	ND	1.0	0.58	08/17/23 21:21	

LABORATORY CONTROL SAMPLE: 4113556

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	103	80-120	
Iron	mg/L	1	0.97	97	80-120	
Magnesium	mg/L	1	0.96	96	80-120	
Manganese	mg/L	1	0.98	98	80-120	
Potassium	mg/L	1	1.1	107	80-120	
Sodium	mg/L	1	1.2	118	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4113557 4113558

Parameter	Units	92682398002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	100	1	1	101	100	7	-30	75-125	0	20	M1
Iron	mg/L	ND	1	1	0.95	0.98	93	96	75-125	3	20	
Magnesium	mg/L	11.8	1	1	12.4	12.4	66	62	75-125	0	20	M1
Manganese	mg/L	ND	1	1	0.95	0.96	94	96	75-125	1	20	
Potassium	mg/L	2.6	1	1	3.6	3.7	104	117	75-125	4	20	
Sodium	mg/L	5.9	1	1	7.0	7.0	109	106	75-125	0	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-1
Pace Project No.: 92682927

QC Batch: 794188
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92682397009, 92682397010, 92682397011, 92682397012, 92682397013, 92682397014, 92682397015, 92682397016, 92682397017, 92682397018

METHOD BLANK: 4115153 Matrix: Water
Associated Lab Samples: 92682397009, 92682397010, 92682397011, 92682397012, 92682397013, 92682397014, 92682397015, 92682397016, 92682397017, 92682397018

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	92682552001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(704)875-9092

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92682927

QC Batch: 795463
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92682927022

METHOD BLANK: 4121755 Matrix: Water
Associated Lab Samples: 92682927022

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/24/23 18:37	
Iron	mg/L	ND	0.040	0.025	08/24/23 18:37	
Magnesium	mg/L	ND	0.050	0.012	08/24/23 18:37	
Manganese	mg/L	ND	0.040	0.011	08/24/23 18:37	
Potassium	mg/L	0.17J	0.50	0.15	08/24/23 18:37	
Sodium	mg/L	ND	1.0	0.58	08/24/23 18:37	

LABORATORY CONTROL SAMPLE: 4121756

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	100	80-120	
Iron	mg/L	1	0.97	97	80-120	
Magnesium	mg/L	1	1.0	102	80-120	
Manganese	mg/L	1	0.97	97	80-120	
Potassium	mg/L	1	1.0	103	80-120	
Sodium	mg/L	1	1.1	110	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4121757 4121758

Parameter	Units	92682927022 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	107	1	1	100	103	-623	-414	75-125	2	20	M1
Iron	mg/L	0.16	1	1	1.1	1.1	98	98	75-125	0	20	
Magnesium	mg/L	6.3	1	1	7.0	7.2	71	99	75-125	4	20	M1
Manganese	mg/L	0.054	1	1	1.0	1.0	96	98	75-125	2	20	
Potassium	mg/L	0.75	1	1	1.5	1.6	77	81	75-125	2	20	
Sodium	mg/L	12.3	1	1	12.8	13.4	51	110	75-125	4	20	M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92682927

QC Batch: 794002
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92682398001, 92682398002, 92682398003, 92682398004, 92682398005, 92682398006

METHOD BLANK: 4114214 Matrix: Water
Associated Lab Samples: 92682398001, 92682398002, 92682398003, 92682398004, 92682398005, 92682398006

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	92682396010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.0014J	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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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92682927

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4114216 4114217

Parameter	Units	92682396010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.042	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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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92682927

QC Batch: 794177
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92682398007, 92682398008, 92682398009, 92682398010

METHOD BLANK: 4115107 Matrix: Water
Associated Lab Samples: 92682398007, 92682398008, 92682398009, 92682398010

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 Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92682927

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4115109 4115110

Parameter	Units	92681886001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.039	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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REPORT OF LABORATORY ANALYSIS

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(704)875-9092

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92682927

QC Batch: 794178
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92682397009, 92682397010, 92682397011, 92682397012, 92682397013, 92682397014, 92682397015, 92682397016, 92682397017

METHOD BLANK: 4115112 Matrix: Water
Associated Lab Samples: 92682397009, 92682397010, 92682397011, 92682397012, 92682397013, 92682397014, 92682397015, 92682397016, 92682397017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.0012	08/22/23 15:06	
Arsenic	mg/L	ND	0.010	0.0037	08/22/23 15:06	
Barium	mg/L	ND	0.0050	0.00067	08/22/23 15:06	
Beryllium	mg/L	ND	0.00050	0.000054	08/22/23 15:06	
Boron	mg/L	ND	0.040	0.0086	08/22/23 15:06	
Cadmium	mg/L	ND	0.00050	0.00011	08/22/23 15:06	
Chromium	mg/L	ND	0.0050	0.0011	08/22/23 15:06	
Cobalt	mg/L	ND	0.0050	0.00039	08/22/23 15:06	
Lead	mg/L	ND	0.0010	0.00012	08/22/23 15:06	
Lithium	mg/L	ND	0.030	0.00073	08/22/23 15:06	
Molybdenum	mg/L	ND	0.010	0.00074	08/22/23 15:06	
Selenium	mg/L	ND	0.0050	0.0014	08/22/23 15:06	
Thallium	mg/L	ND	0.0010	0.00018	08/22/23 15:06	

LABORATORY CONTROL SAMPLE: 4115113

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	105	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	0.098	98	80-120	
Boron	mg/L	1	1.0	101	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.10	103	80-120	
Lead	mg/L	0.1	0.10	100	80-120	
Lithium	mg/L	0.1	0.099	99	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	0.099	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4115114 4115115

Parameter	Units	92682576001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	109	107	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92682927

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4115114 4115115

Parameter	Units	92682576001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	103	99	75-125	3	20	
Barium	mg/L	0.036	0.1	0.1	0.14	0.14	105	104	75-125	1	20	
Beryllium	mg/L	0.000070J	0.1	0.1	0.10	0.098	100	98	75-125	1	20	
Boron	mg/L	0.16	1	1	1.2	1.2	104	102	75-125	2	20	
Cadmium	mg/L	0.00015J	0.1	0.1	0.10	0.099	103	99	75-125	4	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.098	104	98	75-125	6	20	
Cobalt	mg/L	0.0028J	0.1	0.1	0.11	0.10	103	98	75-125	5	20	
Lead	mg/L	ND	0.1	0.1	0.099	0.097	99	97	75-125	2	20	
Lithium	mg/L	ND	0.1	0.1	0.10	0.10	103	101	75-125	2	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	104	104	75-125	0	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	0.099	0.096	99	96	75-125	3	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92682927

QC Batch: 794885
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92682397018, 92682927022

METHOD BLANK: 4118630 Matrix: Water
Associated Lab Samples: 92682397018, 92682927022

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	92682397018 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	107	106	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	103	102	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92682927

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4118632 4118633

Parameter	Units	92682397018 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92682927

QC Batch: 795034
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92682397009, 92682397010, 92682397011, 92682397012, 92682397013, 92682397014, 92682397015, 92682397016, 92682397017, 92682397018, 92682398001, 92682398002, 92682398003, 92682398004, 92682398005, 92682398006, 92682398007, 92682398008

METHOD BLANK: 4119602 Matrix: Water
Associated Lab Samples: 92682397009, 92682397010, 92682397011, 92682397012, 92682397013, 92682397014, 92682397015, 92682397016, 92682397017, 92682397018, 92682398001, 92682398002, 92682398003, 92682398004, 92682398005, 92682398006, 92682398007, 92682398008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	08/22/23 15:12	

LABORATORY CONTROL SAMPLE: 4119603

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: 4119604 4119605

Parameter	Units	92682398001 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	0.0030	0.0029	121	117	75-125	4	20	

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92682927

QC Batch: 795036
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92682398009, 92682398010, 92682927022

METHOD BLANK: 4119606 Matrix: Water
Associated Lab Samples: 92682398009, 92682398010, 92682927022

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	08/22/23 16:32	

LABORATORY CONTROL SAMPLE: 4119607

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0023	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4119608 4119609

Parameter	Units	92682398009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00013J	0.0025	0.0025	0.0034	0.0034	131	132	75-125	0	20	M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92682927

QC Batch: 793918
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92682397009, 92682398001, 92682398002, 92682398003, 92682398004, 92682398005, 92682398006, 92682398007, 92682398008, 92682398009, 92682398010

METHOD BLANK: 4113746 Matrix: Water
Associated Lab Samples: 92682397009, 92682398001, 92682398002, 92682398003, 92682398004, 92682398005, 92682398006, 92682398007, 92682398008, 92682398009, 92682398010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	08/16/23 14:47	

LABORATORY CONTROL SAMPLE: 4113747

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	379	95	80-120	

SAMPLE DUPLICATE: 4113748

Parameter	Units	92682392001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	80.0	75.0	6	10	

SAMPLE DUPLICATE: 4113749

Parameter	Units	92682398005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	626	638	2	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92682927

QC Batch: 794085
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92682397016, 92682397017, 92682397018

METHOD BLANK: 4114862 Matrix: Water
Associated Lab Samples: 92682397016, 92682397017, 92682397018

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	08/17/23 11:09	

LABORATORY CONTROL SAMPLE: 4114863

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	387	97	80-120	

SAMPLE DUPLICATE: 4114864

Parameter	Units	92682552001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	361	382	6	10	

SAMPLE DUPLICATE: 4114865

Parameter	Units	92682576008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	346	340	2	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92682927

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: 92682397010, 92682397011, 92682397012, 92682397013, 92682397014, 92682397015, 92682927022

METHOD BLANK: 4117070 Matrix: Water
Associated Lab Samples: 92682397010, 92682397011, 92682397012, 92682397013, 92682397014, 92682397015, 92682927022

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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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92682927

QC Batch: 793988
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92682398001, 92682398002, 92682398003, 92682398004, 92682398005

METHOD BLANK: 4114120 Matrix: Water
Associated Lab Samples: 92682398001, 92682398002, 92682398003, 92682398004, 92682398005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	08/16/23 18:28	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	08/16/23 18:28	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	08/16/23 18:28	

LABORATORY CONTROL SAMPLE: 4114121

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.3	105	80-120	

LABORATORY CONTROL SAMPLE: 4114122

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4114123 4114124

Parameter	Units	92682398004 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	179	50	50	238	240	116	121	80-120	1	25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4114125 4114126

Parameter	Units	92682398005 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	298	50	50	339	344	82	92	80-120	1	25	

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92682927

QC Batch: 794234
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92682398006, 92682398007, 92682398008, 92682398009, 92682398010

METHOD BLANK: 4115455 Matrix: Water
Associated Lab Samples: 92682398006, 92682398007, 92682398008, 92682398009, 92682398010

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	92682576004 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	162	50	50	221	225	117	125	80-120	2	25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4115460 4115461

Parameter	Units	92682576005 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	79.7	50	50	135	134	110	108	80-120	1	25	

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92682927

QC Batch: 794235
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92682397009, 92682397010, 92682397011, 92682397012, 92682397013, 92682397016, 92682397017, 92682397018

METHOD BLANK: 4115463 Matrix: Water
Associated Lab Samples: 92682397009, 92682397010, 92682397011, 92682397012, 92682397013, 92682397016, 92682397017, 92682397018

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	92681886006 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	246	50	50	291	299	90	106	80-120	3	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4115468 4115469

Parameter	Units	92681886007 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	210	50	50	271	274	122	128	80-120	1	25	M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92682927

QC Batch: 794644
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92682927022

METHOD BLANK: 4117720 Matrix: Water
Associated Lab Samples: 92682927022

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 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	51.7	52.4	103	104	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4117725 4117726

Parameter	Units	92682671001 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	14.6	50	50	68.5	66.9	108	105	80-120	2	25	

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92682927

QC Batch: 793501
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92682398001, 92682398002, 92682398003, 92682398004, 92682398005, 92682398006, 92682398007, 92682398008, 92682398009, 92682398010

METHOD BLANK: 4111964 Matrix: Water
Associated Lab Samples: 92682398001, 92682398002, 92682398003, 92682398004, 92682398005, 92682398006, 92682398007, 92682398008, 92682398009, 92682398010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	08/15/23 06:38	

LABORATORY CONTROL SAMPLE: 4111965

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: 4111966 4111967

Parameter	Units	92682393002 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	0.39	0.42	77	83	80-120	7	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4111968 4111969

Parameter	Units	92682398007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.46	0.48	92	94	80-120	3	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92682927

QC Batch: 794102
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92682397009, 92682397010, 92682397011, 92682397016, 92682397017, 92682397018

METHOD BLANK: 4114896 Matrix: Water
Associated Lab Samples: 92682397009, 92682397010, 92682397011, 92682397016, 92682397017, 92682397018

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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.47	0.44	93	87	80-120	6	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4114900 4114901

Parameter	Units	92682576011 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	0.50	98	98	80-120	1	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92682927

QC Batch: 794103
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92682397012, 92682397013

METHOD BLANK: 4114902 Matrix: Water
Associated Lab Samples: 92682397012, 92682397013

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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REPORT OF LABORATORY ANALYSIS

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(704)875-9092

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92682927

QC Batch: 794424
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92682927022

METHOD BLANK: 4116502 Matrix: Water
Associated Lab Samples: 92682927022

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	08/18/23 04:59	

LABORATORY CONTROL SAMPLE: 4116503

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.47	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4116504 4116505

Parameter	Units	92682927022 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.47	0.47	92	93	80-120	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4116506 4116507

Parameter	Units	92683141010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.47	0.52	94	104	80-120	10	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92682927

QC Batch: 793550
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92682398001

METHOD BLANK: 4112126 Matrix: Water
Associated Lab Samples: 92682398001

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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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92682927

QC Batch: 793553
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92682398002, 92682398003, 92682398004, 92682398005, 92682398006, 92682398007, 92682398008, 92682398009, 92682398010

METHOD BLANK: 4112135 Matrix: Water
Associated Lab Samples: 92682398002, 92682398003, 92682398004, 92682398005, 92682398006, 92682398007, 92682398008, 92682398009, 92682398010

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	92682397002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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	92682398009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	13.6	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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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92682927

QC Batch: 793837
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92682397009, 92682397010, 92682397011, 92682397012, 92682397013, 92682397014, 92682397015, 92682397016, 92682397017, 92682397018

METHOD BLANK: 4113450 Matrix: Water
Associated Lab Samples: 92682397009, 92682397010, 92682397011, 92682397012, 92682397013, 92682397014, 92682397015, 92682397016, 92682397017, 92682397018

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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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92682927

QC Batch: 794487
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92682927022

METHOD BLANK: 4116654 Matrix: Water
Associated Lab Samples: 92682927022

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/18/23 16:41	
Fluoride	mg/L	ND	0.10	0.050	08/18/23 16:41	
Sulfate	mg/L	ND	1.0	0.50	08/18/23 16:41	

LABORATORY CONTROL SAMPLE: 4116655

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	101	90-110	
Sulfate	mg/L	50	48.1	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4116656 4116657

Parameter	Units	92683111001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	101	50	50	140	143	79	84	90-110	2	10	M1
Fluoride	mg/L	8.0	2.5	2.5	9.2	9.3	48	53	90-110	1	10	M1
Sulfate	mg/L	555	50	50	590	596	70	82	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4116658 4116659

Parameter	Units	92682998003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	216	50	50	259	257	86	81	90-110	1	10	M1
Fluoride	mg/L	0.12	2.5	2.5	2.4	2.4	91	93	90-110	2	10	
Sulfate	mg/L	96.1	50	50	128	127	64	62	90-110	1	10	M1

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QUALIFIERS

Project: Hammond AP-1
Pace Project No.: 92682927

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-1
Pace Project No.: 92682927

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92682398001	**HAM-HGWC-10**	EPA 3010A	793618	EPA 6010D	794582
92682398002	**HAM-HGWC-11**	EPA 3010A	793869	EPA 6010D	793991
92682398003	**HAM-HGWC-12**	EPA 3010A	793869	EPA 6010D	793991
92682398004	**HAM-MW-5**	EPA 3010A	793869	EPA 6010D	793991
92682398005	**HAM-MW-6**	EPA 3010A	793869	EPA 6010D	793991
92682398006	**HAM-MW-7**	EPA 3010A	793869	EPA 6010D	793991
92682398007	**HAM-MW-19**	EPA 3010A	793869	EPA 6010D	793991
92682398008	**HAM-MW-20**	EPA 3010A	793869	EPA 6010D	793991
92682398009	**HAM-MW-25D**	EPA 3010A	793869	EPA 6010D	793991
92682398010	**HAM-MW-29**	EPA 3010A	793869	EPA 6010D	793991
92682397009	**HAM-HGWC-7**	EPA 3010A	794188	EPA 6010D	794575
92682397010	**HAM-HGWC-8**	EPA 3010A	794188	EPA 6010D	794575
92682397011	**HAM-HGWC-13**	EPA 3010A	794188	EPA 6010D	794575
92682397012	**HAM-MW-24D**	EPA 3010A	794188	EPA 6010D	794575
92682397013	**HAM-MW-27D**	EPA 3010A	794188	EPA 6010D	794575
92682397014	**HAM-AP1-EB-01**	EPA 3010A	794188	EPA 6010D	794575
92682397015	**HAM-AP1-FB-01**	EPA 3010A	794188	EPA 6010D	794575
92682397016	**HAM-HGWC-9**	EPA 3010A	794188	EPA 6010D	794575
92682397017	**HAM-MW-26D**	EPA 3010A	794188	EPA 6010D	794575
92682397018	**HAM-MW-28D**	EPA 3010A	794188	EPA 6010D	794575
92682927022	**HAM-AP1-FD-01**	EPA 3010A	795463	EPA 6010D	795706
92682398001	**HAM-HGWC-10**	EPA 3005A	794002	EPA 6020B	794064
92682398002	**HAM-HGWC-11**	EPA 3005A	794002	EPA 6020B	794064
92682398003	**HAM-HGWC-12**	EPA 3005A	794002	EPA 6020B	794064
92682398004	**HAM-MW-5**	EPA 3005A	794002	EPA 6020B	794064
92682398005	**HAM-MW-6**	EPA 3005A	794002	EPA 6020B	794064
92682398006	**HAM-MW-7**	EPA 3005A	794002	EPA 6020B	794064
92682398007	**HAM-MW-19**	EPA 3005A	794177	EPA 6020B	794304
92682398008	**HAM-MW-20**	EPA 3005A	794177	EPA 6020B	794304
92682398009	**HAM-MW-25D**	EPA 3005A	794177	EPA 6020B	794304
92682398010	**HAM-MW-29**	EPA 3005A	794177	EPA 6020B	794304
92682397009	**HAM-HGWC-7**	EPA 3005A	794178	EPA 6020B	794303
92682397010	**HAM-HGWC-8**	EPA 3005A	794178	EPA 6020B	794303
92682397011	**HAM-HGWC-13**	EPA 3005A	794178	EPA 6020B	794303
92682397012	**HAM-MW-24D**	EPA 3005A	794178	EPA 6020B	794303
92682397013	**HAM-MW-27D**	EPA 3005A	794178	EPA 6020B	794303
92682397014	**HAM-AP1-EB-01**	EPA 3005A	794178	EPA 6020B	794303
92682397015	**HAM-AP1-FB-01**	EPA 3005A	794178	EPA 6020B	794303
92682397016	**HAM-HGWC-9**	EPA 3005A	794178	EPA 6020B	794303
92682397017	**HAM-MW-26D**	EPA 3005A	794178	EPA 6020B	794303
92682397018	**HAM-MW-28D**	EPA 3005A	794885	EPA 6020B	794961
92682927022	**HAM-AP1-FD-01**	EPA 3005A	794885	EPA 6020B	794961
92682398001	**HAM-HGWC-10**	EPA 7470A	795034	EPA 7470A	795160
92682398002	**HAM-HGWC-11**	EPA 7470A	795034	EPA 7470A	795160
92682398003	**HAM-HGWC-12**	EPA 7470A	795034	EPA 7470A	795160

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-1
Pace Project No.: 92682927

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92682398004	**HAM-MW-5**	EPA 7470A	795034	EPA 7470A	795160
92682398005	**HAM-MW-6**	EPA 7470A	795034	EPA 7470A	795160
92682398006	**HAM-MW-7**	EPA 7470A	795034	EPA 7470A	795160
92682398007	**HAM-MW-19**	EPA 7470A	795034	EPA 7470A	795160
92682398008	**HAM-MW-20**	EPA 7470A	795034	EPA 7470A	795160
92682398009	**HAM-MW-25D**	EPA 7470A	795036	EPA 7470A	795161
92682398010	**HAM-MW-29**	EPA 7470A	795036	EPA 7470A	795161
92682397009	**HAM-HGWC-7**	EPA 7470A	795034	EPA 7470A	795160
92682397010	**HAM-HGWC-8**	EPA 7470A	795034	EPA 7470A	795160
92682397011	**HAM-HGWC-13**	EPA 7470A	795034	EPA 7470A	795160
92682397012	**HAM-MW-24D**	EPA 7470A	795034	EPA 7470A	795160
92682397013	**HAM-MW-27D**	EPA 7470A	795034	EPA 7470A	795160
92682397014	**HAM-AP1-EB-01**	EPA 7470A	795034	EPA 7470A	795160
92682397015	**HAM-AP1-FB-01**	EPA 7470A	795034	EPA 7470A	795160
92682397016	**HAM-HGWC-9**	EPA 7470A	795034	EPA 7470A	795160
92682397017	**HAM-MW-26D**	EPA 7470A	795034	EPA 7470A	795160
92682397018	**HAM-MW-28D**	EPA 7470A	795034	EPA 7470A	795160
92682927022	**HAM-AP1-FD-01**	EPA 7470A	795036	EPA 7470A	795161
92682398001	**HAM-HGWC-10**	SM 2540C-2015	793918		
92682398002	**HAM-HGWC-11**	SM 2540C-2015	793918		
92682398003	**HAM-HGWC-12**	SM 2540C-2015	793918		
92682398004	**HAM-MW-5**	SM 2540C-2015	793918		
92682398005	**HAM-MW-6**	SM 2540C-2015	793918		
92682398006	**HAM-MW-7**	SM 2540C-2015	793918		
92682398007	**HAM-MW-19**	SM 2540C-2015	793918		
92682398008	**HAM-MW-20**	SM 2540C-2015	793918		
92682398009	**HAM-MW-25D**	SM 2540C-2015	793918		
92682398010	**HAM-MW-29**	SM 2540C-2015	793918		
92682397009	**HAM-HGWC-7**	SM 2540C-2015	793918		
92682397010	**HAM-HGWC-8**	SM 2540C-2015	794562		
92682397011	**HAM-HGWC-13**	SM 2540C-2015	794562		
92682397012	**HAM-MW-24D**	SM 2540C-2015	794562		
92682397013	**HAM-MW-27D**	SM 2540C-2015	794562		
92682397014	**HAM-AP1-EB-01**	SM 2540C-2015	794562		
92682397015	**HAM-AP1-FB-01**	SM 2540C-2015	794562		
92682397016	**HAM-HGWC-9**	SM 2540C-2015	794085		
92682397017	**HAM-MW-26D**	SM 2540C-2015	794085		
92682397018	**HAM-MW-28D**	SM 2540C-2015	794085		
92682927022	**HAM-AP1-FD-01**	SM 2540C-2015	794562		
92682398001	**HAM-HGWC-10**	SM 2320B-2011	793988		
92682398002	**HAM-HGWC-11**	SM 2320B-2011	793988		
92682398003	**HAM-HGWC-12**	SM 2320B-2011	793988		
92682398004	**HAM-MW-5**	SM 2320B-2011	793988		
92682398005	**HAM-MW-6**	SM 2320B-2011	793988		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-1
Pace Project No.: 92682927

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92682398006	**HAM-MW-7**	SM 2320B-2011	794234		
92682398007	**HAM-MW-19**	SM 2320B-2011	794234		
92682398008	**HAM-MW-20**	SM 2320B-2011	794234		
92682398009	**HAM-MW-25D**	SM 2320B-2011	794234		
92682398010	**HAM-MW-29**	SM 2320B-2011	794234		
92682397009	**HAM-HGWC-7**	SM 2320B-2011	794235		
92682397010	**HAM-HGWC-8**	SM 2320B-2011	794235		
92682397011	**HAM-HGWC-13**	SM 2320B-2011	794235		
92682397012	**HAM-MW-24D**	SM 2320B-2011	794235		
92682397013	**HAM-MW-27D**	SM 2320B-2011	794235		
92682397016	**HAM-HGWC-9**	SM 2320B-2011	794235		
92682397017	**HAM-MW-26D**	SM 2320B-2011	794235		
92682397018	**HAM-MW-28D**	SM 2320B-2011	794235		
92682927022	**HAM-AP1-FD-01**	SM 2320B-2011	794644		
92682398001	**HAM-HGWC-10**	SM 4500-S2D-2011	793501		
92682398002	**HAM-HGWC-11**	SM 4500-S2D-2011	793501		
92682398003	**HAM-HGWC-12**	SM 4500-S2D-2011	793501		
92682398004	**HAM-MW-5**	SM 4500-S2D-2011	793501		
92682398005	**HAM-MW-6**	SM 4500-S2D-2011	793501		
92682398006	**HAM-MW-7**	SM 4500-S2D-2011	793501		
92682398007	**HAM-MW-19**	SM 4500-S2D-2011	793501		
92682398008	**HAM-MW-20**	SM 4500-S2D-2011	793501		
92682398009	**HAM-MW-25D**	SM 4500-S2D-2011	793501		
92682398010	**HAM-MW-29**	SM 4500-S2D-2011	793501		
92682397009	**HAM-HGWC-7**	SM 4500-S2D-2011	794102		
92682397010	**HAM-HGWC-8**	SM 4500-S2D-2011	794102		
92682397011	**HAM-HGWC-13**	SM 4500-S2D-2011	794102		
92682397012	**HAM-MW-24D**	SM 4500-S2D-2011	794103		
92682397013	**HAM-MW-27D**	SM 4500-S2D-2011	794103		
92682397016	**HAM-HGWC-9**	SM 4500-S2D-2011	794102		
92682397017	**HAM-MW-26D**	SM 4500-S2D-2011	794102		
92682397018	**HAM-MW-28D**	SM 4500-S2D-2011	794102		
92682927022	**HAM-AP1-FD-01**	SM 4500-S2D-2011	794424		
92682398001	**HAM-HGWC-10**	EPA 300.0 Rev 2.1 1993	793550		
92682398002	**HAM-HGWC-11**	EPA 300.0 Rev 2.1 1993	793553		
92682398003	**HAM-HGWC-12**	EPA 300.0 Rev 2.1 1993	793553		
92682398004	**HAM-MW-5**	EPA 300.0 Rev 2.1 1993	793553		
92682398005	**HAM-MW-6**	EPA 300.0 Rev 2.1 1993	793553		
92682398006	**HAM-MW-7**	EPA 300.0 Rev 2.1 1993	793553		
92682398007	**HAM-MW-19**	EPA 300.0 Rev 2.1 1993	793553		
92682398008	**HAM-MW-20**	EPA 300.0 Rev 2.1 1993	793553		
92682398009	**HAM-MW-25D**	EPA 300.0 Rev 2.1 1993	793553		
92682398010	**HAM-MW-29**	EPA 300.0 Rev 2.1 1993	793553		
92682397009	**HAM-HGWC-7**	EPA 300.0 Rev 2.1 1993	793837		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-1
Pace Project No.: 92682927

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92682397010	**HAM-HGWC-8**	EPA 300.0 Rev 2.1 1993	793837		
92682397011	**HAM-HGWC-13**	EPA 300.0 Rev 2.1 1993	793837		
92682397012	**HAM-MW-24D**	EPA 300.0 Rev 2.1 1993	793837		
92682397013	**HAM-MW-27D**	EPA 300.0 Rev 2.1 1993	793837		
92682397014	**HAM-AP1-EB-01**	EPA 300.0 Rev 2.1 1993	793837		
92682397015	**HAM-AP1-FB-01**	EPA 300.0 Rev 2.1 1993	793837		
92682397016	**HAM-HGWC-9**	EPA 300.0 Rev 2.1 1993	793837		
92682397017	**HAM-MW-26D**	EPA 300.0 Rev 2.1 1993	793837		
92682397018	**HAM-MW-28D**	EPA 300.0 Rev 2.1 1993	793837		
92682927022	**HAM-AP1-FD-01**	EPA 300.0 Rev 2.1 1993	794487		

Pace ANALYTICAL SERVICES

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 ☑ ... ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO# : 92682927

92682927

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☑ ~~Pace~~ ☐ Other:

Custody Seal Present? ☐ Yes ☑ ~~No~~ **Seals Intact?** ☐ Yes ☐ No

Date/Initials Person Examining Contents: 9/11/23 TH

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ ~~None~~ ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ ~~N/A~~

Thermometer: ☑ ~~IR Gun~~ ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 3.1 **Correction Factor:** Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 3.1

Temp should be above freezing to 6°C

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

USDA Regulated Soil (☐ N/A, water sample)

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

*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# : 92682927**

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

pH Adjustment Log for Preserved Samples

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

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

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

Section A Required Client Information:

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

Section B Required Project Information:

Report To:	SCS Contacts
Copy To:	Geosyntec Contacts
Purchase Order No.:	
Project Name:	Hammond AP-1
Project Number:	

Section C Invoice Information:

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

REGULATORY AGENCY

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

Site Location STATE: GA

Section D Required Client Information

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

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

Requested Analysis Filtered (Y/N): N N N N N

Pace Project No./ Lab I.D.: 92682398

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	TIME	COMPOSITE END/GRAB DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate	Full App. III and IV metals	RAD 226/228	TDS	Major Ions (Profile 10839-2):	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	HAM-HGWC-10	WG	G	8/10/2023	1703			22	7	3		3					1		X	X	X	X	X	N	001
2	HAM-HGWC-11	WG	G	8/10/2023	1131			21	7	3		3					1		X	X	X	X	X	N	002
3	HAM-HGWC-12	WG	G	8/10/2023	1110			20	7	3		3					1		X	X	X	X	X	N	003
4	HAM-MW-5	WG	G	8/10/2023	1142			19	7	3		3					1		X	X	X	X	X	N	004
5	HAM-MW-6	WG	G	8/10/2023	1422			22	7	3		3					1		X	X	X	X	X	N	005
6	HAM-MW-7	WG	G	8/10/2023	1258			19	7	3		3					1		X	X	X	X	X	N	006
7	HAM-MW-19	WG	G	8/10/2023	1503			23	7	3		3					1		X	X	X	X	X	N	007
8	HAM-MW-20	WG	G	8/10/2023	1019			19	7	3		3					1		X	X	X	X	X	N	008
9	HAM-MW-25D	WG	G	8/10/2023	1257			20	7	3		3					1		X	X	X	X	X	N	009
10	HAM-MW-29	WG	G	8/10/2023	1615	TK 8/10/2023		21	7	3		3					1		X	X	X	X	X	N	010
11						TK 8/10/2023																			
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-2023S2	Ashley Smit / Geosyntec	8/11/2023	1312	Ryan William / Pace	8/11/2023	1312	
	Ryan William / Pace	8/11/2023	1535	[illegible signature]	8/11/23	1535	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ashley Smit, Thomas Kessler, Elisabeth McDowell / Geosyntec Consultants, Inc.

SIGNATURE of SAMPLER: [signatures] DATE Signed (MM/DD/YY): 08/10/2023

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.

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

Pace	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: GC Power

Project #: WO#: 92682927

PM: BV Due Date: 08/25/23

CLIENT: 92- GP-HAM

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

Custody Seal Present? ☑ Yes ☐ No **Seals Intact?** ☑ Yes ☐ No

Date/Initials Person Examining Contents: 8-14-23 JC

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: 3.9 **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): 3.9

USDA Regulated Soil (☐ N/A, water sample)

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

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

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☑ Yes	☐ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9. HAM-AP-HFD-01 taken 08/22/23 @ 000
-Includes Date/Time/ID/Analysis Matrix: WG				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10. Not listed on COC
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ **Date:** _____

Project Manager SRF Review: _____ **Date:** _____

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

WO#: 92682927

PM: BV **Due Date: 08/25/23**

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)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)	BP1N	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		2	1			1	1																		2				
2		2	1			1	1																		2				
3		2	1			1	1																		2				
4		2	1			1	1																		2				
5		2	1			1	1																		2				
6		2	1			1	1																		2				
7		2	1			1	1																		2				
8		2	1			1	1																		2				
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

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

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.

Pace Analytical® www.pacelabs.com

Page: 1 of 1

Section A Required Client Information:

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

Section B Required Project Information:

Report To:	SCS Contacts
Copy To:	Geosyntec Contacts
Purchase Order No.:	
Project Name:	Hammond AP-1
Project Number:	

Section C Invoice Information:

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

REGULATORY AGENCY

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

Site Location STATE: GA

Section D Required Client Information

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

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COMPOSITE DATE	COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate (N)	Full App. III and IV metals (N)	RAD 226/228 (N)	TDS (N)	Major Ions (Profile 10839-2): (N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 92682397
1	HAM-HGWC-7	WG	G	8/12/2023	1435			22	7	3		3					1		X	X	X	X	X	N	009
2	HAM-HGWC-8	WG	G	8/12/2023	0932			20	7	3		3					1		X	X	X	X	X	N	010
3	HAM-HGWC-13	WG	G	8/12/2023	1205			22	7	3		3					1		X	X	X	X	X	N	011
4	HAM-MW-24D	WG	G	8/12/2023	1015			20	7	3		3					1		X	X	X	X	X	N	012
5	HAM-MW-27D	WG	G	8/12/2023	1420			22	7	3		3					1		X	X	X	X	X	N	013
6	HAM-AP1-EB-01	WQ	G	8/12/2023	1335			21	7	3		3					1		X	X	X	X		N	014
7	HAM-AP1-FB-01	WQ	G	8/12/2023	1330	TK 8/12/2023		21	7	3		3					1		X	X	X	X		N	015 Last Sample
8																									
9																									
10						TK 8/12/2023																			
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-2023S2	Thomas Kessler / Geosyntec	08/14/2023	1115	Ryan Williams / Pace	8/14/2023	1115	
	Ryan Williams / Pace	8/14/2023	1332	JCC / Pace	8/14/23	1332	

SAMPLER NAME AND SIGNATURE

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

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 08/12/23

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 invoices not paid within 30 days.

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

Pace ANALYTICAL SERVICES	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 ☑

Sample Condition Upon Receipt

Client Name: Ga Power

Project # WO#: 92682927

PM: BV **Due Date:** 08/25/23

CLIENT: 92- GP-HAM

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

Custody Seal Present? ☑ Yes ☐ No **Seals Intact?** ☑ Yes ☐ No

Date/Initials Person Examining Contents: 8-14-23 JC

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: 3.9 **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): 3.9

USDA Regulated Soil (☐ N/A, water sample)

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

*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#: 92682927

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)	BP1U	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	1																	2					
2		2	1			1	1																	2					
3		2	1			1	1																	2					
4																								2					
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

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

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

Pace Analytical
www.paceanalytical.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

Section A Required Client Information:

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

Section B Required Project Information:

Report To:	SCS Contacts
Copy To:	Geosyntec Contacts
Purchase Order No.:	
Project Name:	Hammond AP-1
Project Number:	

Section C Invoice Information:

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

REGULATORY AGENCY

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

Site Location STATE: GA

Section D Required Client Information

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

Valid Matrix Codes

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test → W/N	Chloride, Fluoride, Sulfate	Full App. III and IV metals	RAD 228/226	TDS	Major Ions (Profile 10839-2):									Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 92682397
1	HAM-HGWC-9	WG	G	8/11/2023	1703			22	7	3		3					1		X	X	X	X	X								N	016
2	HAM-MW-26D	WG	G	8/11/2023	1654			21	7	3		3					1		X	X	X	X	X								N	017
3	HAM-MW-28D	WG	G	8/11/2023	1514	TK 8/11/2023		22	7	3		3					1		X	X	X	X	X								N	018
4																															
5																															
6																															
7																															
8																															
9																															
10						TK 8/11/2023																										
11																															
12																															

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-2023S2	Thomas Vassler / Geosyntec	08/11/2023	1115	Ryan Williams / Pace	8/14/2023	1115	
	Ryan Williams / Pace	8/14/2023	1332	TCC / Pace	8/14/23	1332	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Vassler, Ryan Gan / Geosyntec Consultants, Inc.

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 08/11/23

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 invoices not paid within 30 days.

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

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

September 14, 2023

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

RE: Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory between August 11, 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

Pace Analytical Services, LLC
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CERTIFICATIONS

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

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

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

SAMPLE SUMMARY

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92682401001	**HAM-HGWC-10**	Water	08/10/23 17:03	08/11/23 13:12
92682401002	**HAM-HGWC-11**	Water	08/10/23 11:31	08/11/23 13:12
92682401003	**HAM-HGWC-12**	Water	08/10/23 11:10	08/11/23 13:12
92682401004	**HAM-MW-5**	Water	08/10/23 11:42	08/11/23 13:12
92682401005	**HAM-MW-6**	Water	08/10/23 14:22	08/11/23 13:12
92682401006	**HAM-MW-7**	Water	08/10/23 12:55	08/11/23 13:12
92682401007	**HAM-MW-19**	Water	08/10/23 15:03	08/11/23 13:12
92682401008	**HAM-MW-20**	Water	08/10/23 10:19	08/11/23 13:12
92682401009	**HAM-MW-25D**	Water	08/10/23 12:57	08/11/23 13:12
92682401010	**HAM-MW-29**	Water	08/10/23 16:15	08/11/23 13:12
92682401011	**HAM-HGWC-7**	Water	08/12/23 14:35	08/14/23 11:15
92682401012	**HAM-HGWC-8**	Water	08/12/23 09:32	08/14/23 11:15
92682401013	**HAM-HGWC-13**	Water	08/12/23 12:05	08/14/23 11:15
92682401014	**HAM-MW-24D**	Water	08/12/23 10:15	08/14/23 11:15
92682401015	**HAM-MW-27D**	Water	08/12/23 14:20	08/14/23 11:15
92682401016	**HAM-AP1-EB-01**	Water	08/12/23 13:35	08/14/23 11:15
92682401017	**HAM-AP1-FB-01**	Water	08/12/23 13:30	08/14/23 11:15
92682401018	**HAM-HGWC-9**	Water	08/11/23 17:03	08/14/23 11:15
92682401019	**HAM-MW-26D**	Water	08/11/23 16:54	08/14/23 11:15
92682401020	**HAM-MW-28D**	Water	08/11/23 15:14	08/14/23 11:15
92682401021	**HAM-AP1-FD-01**	Water	08/12/23 00:00	08/14/23 13:22

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(704)875-9092

SAMPLE ANALYTE COUNT

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92682401001	**HAM-HGWC-10**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92682401002	**HAM-HGWC-11**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92682401003	**HAM-HGWC-12**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92682401004	**HAM-MW-5**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92682401005	**HAM-MW-6**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92682401006	**HAM-MW-7**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92682401007	**HAM-MW-19**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92682401008	**HAM-MW-20**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92682401009	**HAM-MW-25D**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92682401010	**HAM-MW-29**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92682401011	**HAM-HGWC-7**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92682401012	**HAM-HGWC-8**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92682401013	**HAM-HGWC-13**	EPA 9315	SLC	1	PASI-PA

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92682401014	**HAM-MW-24D**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92682401015	**HAM-MW-27D**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92682401016	**HAM-AP1-EB-01**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92682401017	**HAM-AP1-FB-01**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92682401018	**HAM-HGWC-9**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92682401019	**HAM-MW-26D**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92682401020	**HAM-MW-28D**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92682401021	**HAM-AP1-FD-01**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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

SUMMARY OF DETECTION

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92682401001	**HAM-HGWC-10**					
EPA 9315	Radium-226	0.192U ± 0.182 (0.357) C:82% T:NA	pCi/L		09/06/23 10:19	
EPA 9320	Radium-228	0.639U ± 0.452 (0.883) C:88% T:71%	pCi/L		08/31/23 12:14	
Total Radium Calculation	Total Radium	0.831U ± 0.634 (1.24)	pCi/L		09/06/23 15:35	
92682401002	**HAM-HGWC-11**					
EPA 9315	Radium-226	0.273U ± 0.186 (0.311) C:89% T:NA	pCi/L		09/06/23 10:20	
EPA 9320	Radium-228	-0.191U ± 0.420 (1.00) C:82% T:75%	pCi/L		08/31/23 12:14	
Total Radium Calculation	Total Radium	0.273U ± 0.606 (1.31)	pCi/L		09/06/23 15:35	
92682401003	**HAM-HGWC-12**					
EPA 9315	Radium-226	0.178U ± 0.190 (0.393) C:92% T:NA	pCi/L		09/06/23 10:18	
EPA 9320	Radium-228	0.275U ± 0.582 (1.29) C:87% T:45%	pCi/L		08/31/23 12:14	
Total Radium Calculation	Total Radium	0.453U ± 0.772 (1.68)	pCi/L		09/06/23 15:35	
92682401004	**HAM-MW-5**					
EPA 9315	Radium-226	0.280U ± 0.181 (0.290) C:90% T:NA	pCi/L		09/06/23 10:18	
EPA 9320	Radium-228	0.319U ± 0.331 (0.679) C:82% T:73%	pCi/L		08/31/23 12:15	
Total Radium Calculation	Total Radium	0.599U ± 0.512 (0.969)	pCi/L		09/06/23 15:35	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92682401005	**HAM-MW-6**					
EPA 9315	Radium-226	0.127U ± 0.153 (0.319) C:87% T:NA	pCi/L		09/06/23 10:18	
EPA 9320	Radium-228	0.712 ± 0.378 (0.643) C:81% T:75%	pCi/L		08/31/23 12:15	
Total Radium Calculation	Total Radium	0.839U ± 0.531 (0.962)	pCi/L		09/06/23 15:35	
92682401006	**HAM-MW-7**					
EPA 9315	Radium-226	0.232U ± 0.180 (0.319) C:83% T:NA	pCi/L		09/06/23 10:18	
EPA 9320	Radium-228	0.00694U ± 0.313 (0.732) C:86% T:76%	pCi/L		08/31/23 12:15	
Total Radium Calculation	Total Radium	0.239U ± 0.493 (1.05)	pCi/L		09/06/23 15:35	
92682401007	**HAM-MW-19**					
EPA 9315	Radium-226	0.172U ± 0.159 (0.307) C:94% T:NA	pCi/L		09/06/23 10:18	
EPA 9320	Radium-228	0.265U ± 0.362 (0.775) C:82% T:76%	pCi/L		08/31/23 12:15	
Total Radium Calculation	Total Radium	0.437U ± 0.521 (1.08)	pCi/L		09/06/23 15:35	
92682401008	**HAM-MW-20**					
EPA 9315	Radium-226	-0.00522U ± 0.142 (0.382) C:76% T:NA	pCi/L		09/06/23 18:47	
EPA 9320	Radium-228	0.469U ± 0.379 (0.745) C:83% T:68%	pCi/L		08/31/23 12:15	
Total Radium Calculation	Total Radium	0.469U ± 0.521 (1.13)	pCi/L		09/11/23 09:31	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(704)875-9092

SUMMARY OF DETECTION

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92682401009	**HAM-MW-25D**					
EPA 9315	Radium-226	0.740 ± 0.264 (0.278) C:95% T:NA	pCi/L		09/06/23 18:48	
EPA 9320	Radium-228	0.232U ± 0.305 (0.649) C:79% T:87%	pCi/L		08/31/23 12:15	
Total Radium Calculation	Total Radium	0.972 ± 0.569 (0.927)	pCi/L		09/11/23 09:31	
92682401010	**HAM-MW-29**					
EPA 9315	Radium-226	0.0392U ± 0.111 (0.271) C:89% T:NA	pCi/L		09/06/23 18:49	
EPA 9320	Radium-228	0.205U ± 0.361 (0.788) C:83% T:72%	pCi/L		08/31/23 12:15	
Total Radium Calculation	Total Radium	0.244U ± 0.472 (1.06)	pCi/L		09/11/23 09:31	
92682401011	**HAM-HGWC-7**					
EPA 9315	Radium-226	0.223U ± 0.284 (0.605) C:81% T:NA	pCi/L		09/13/23 10:03	
EPA 9320	Radium-228	0.506U ± 0.308 (0.563) C:88% T:93%	pCi/L		09/06/23 15:48	
Total Radium Calculation	Total Radium	0.729U ± 0.592 (1.17)	pCi/L		09/13/23 14:27	
92682401012	**HAM-HGWC-8**					
EPA 9315	Radium-226	0.266U ± 0.265 (0.522) C:88% T:NA	pCi/L		09/13/23 10:03	
EPA 9320	Radium-228	0.501U ± 0.346 (0.661) C:82% T:87%	pCi/L		09/06/23 15:48	
Total Radium Calculation	Total Radium	0.767U ± 0.611 (1.18)	pCi/L		09/13/23 14:27	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SUMMARY OF DETECTION

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92682401013	**HAM-HGWC-13**					
EPA 9315	Radium-226	0.212U ± 0.251 (0.522) C:87% T:NA	pCi/L		09/13/23 10:03	
EPA 9320	Radium-228	0.368U ± 0.306 (0.604) C:88% T:80%	pCi/L		09/06/23 15:48	
Total Radium Calculation	Total Radium	0.580U ± 0.557 (1.13)	pCi/L		09/13/23 14:27	
92682401014	**HAM-MW-24D**					
EPA 9315	Radium-226	-0.0136U ± 0.255 (0.718) C:55% T:NA	pCi/L		09/13/23 10:03	
EPA 9320	Radium-228	0.481U ± 0.320 (0.604) C:87% T:89%	pCi/L		09/06/23 15:48	
Total Radium Calculation	Total Radium	0.481U ± 0.575 (1.32)	pCi/L		09/13/23 14:27	
92682401015	**HAM-MW-27D**					
EPA 9315	Radium-226	0.426U ± 0.304 (0.529) C:94% T:NA	pCi/L		09/13/23 10:03	
EPA 9320	Radium-228	0.219U ± 0.310 (0.665) C:84% T:91%	pCi/L		09/06/23 15:48	
Total Radium Calculation	Total Radium	0.645U ± 0.614 (1.19)	pCi/L		09/13/23 14:27	
92682401016	**HAM-AP1-EB-01**					
EPA 9315	Radium-226	0.0390U ± 0.239 (0.614) C:76% T:NA	pCi/L		09/13/23 10:03	
EPA 9320	Radium-228	0.644U ± 0.378 (0.694) C:81% T:91%	pCi/L		09/06/23 15:45	
Total Radium Calculation	Total Radium	0.683U ± 0.617 (1.31)	pCi/L		09/13/23 14:27	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92682401017	**HAM-AP1-FB-01**					
EPA 9315	Radium-226	-0.0993U ± 0.147 (0.498) C:83% T:NA	pCi/L		09/13/23 10:04	
EPA 9320	Radium-228	0.551U ± 0.317 (0.565) C:86% T:94%	pCi/L		09/06/23 15:45	
Total Radium Calculation	Total Radium	0.551U ± 0.464 (1.06)	pCi/L		09/13/23 14:27	
92682401018	**HAM-HGWC-9**					
EPA 9315	Radium-226	0.231U ± 0.256 (0.516) C:80% T:NA	pCi/L		09/13/23 10:04	
EPA 9320	Radium-228	0.636 ± 0.329 (0.563) C:85% T:81%	pCi/L		09/07/23 11:47	
Total Radium Calculation	Total Radium	0.867U ± 0.585 (1.08)	pCi/L		09/13/23 14:27	
92682401019	**HAM-MW-26D**					
EPA 9315	Radium-226	0.298U ± 0.255 (0.454) C:81% T:NA	pCi/L		09/13/23 10:04	
EPA 9320	Radium-228	0.252U ± 0.270 (0.559) C:84% T:85%	pCi/L		09/07/23 11:47	
Total Radium Calculation	Total Radium	0.550U ± 0.525 (1.01)	pCi/L		09/13/23 14:27	
92682401020	**HAM-MW-28D**					
EPA 9315	Radium-226	1.16 ± 0.443 (0.538) C:97% T:NA	pCi/L		09/13/23 10:04	
EPA 9320	Radium-228	1.50 ± 0.514 (0.749) C:82% T:92%	pCi/L		09/07/23 11:47	
Total Radium Calculation	Total Radium	2.66 ± 0.957 (1.29)	pCi/L		09/13/23 14:27	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92682401021	**HAM-AP1-FD-01**					
EPA 9315	Radium-226	-0.0521U ± 0.198 (0.578) C:72% T:NA	pCi/L		09/13/23 10:04	
EPA 9320	Radium-228	0.302U ± 0.351 (0.740) C:80% T:88%	pCi/L		09/07/23 11:47	
Total Radium Calculation	Total Radium	0.302U ± 0.549 (1.32)	pCi/L		09/13/23 14:27	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Sample: HAM-HGWC-10 **Lab ID: 92682401001** Collected: 08/10/23 17:03 Received: 08/11/23 13:12 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.192U ± 0.182 (0.357) C:82% T:NA**	pCi/L	09/06/23 10:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.639U ± 0.452 (0.883) C:88% T:71%**	pCi/L	08/31/23 12:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.831U ± 0.634 (1.24)**	pCi/L	09/06/23 15:35	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Sample: HAM-HGWC-11 **Lab ID: 92682401002** Collected: 08/10/23 11:31 Received: 08/11/23 13:12 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.273U ± 0.186 (0.311) C:89% T:NA**	pCi/L	09/06/23 10:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.191U ± 0.420 (1.00) C:82% T:75%**	pCi/L	08/31/23 12:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.273U ± 0.606 (1.31)**	pCi/L	09/06/23 15:35	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Sample: HAM-HGWC-12 **Lab ID: 92682401003** Collected: 08/10/23 11:10 Received: 08/11/23 13:12 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.178U ± 0.190 (0.393) C:92% T:NA**	pCi/L	09/06/23 10:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.275U ± 0.582 (1.29) C:87% T:45%**	pCi/L	08/31/23 12:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.453U ± 0.772 (1.68)**	pCi/L	09/06/23 15:35	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Sample: HAM-MW-5 **Lab ID: 92682401004** Collected: 08/10/23 11:42 Received: 08/11/23 13:12 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.280U ± 0.181 (0.290) C:90% T:NA**	pCi/L	09/06/23 10:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.319U ± 0.331 (0.679) C:82% T:73%**	pCi/L	08/31/23 12:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.599U ± 0.512 (0.969)**	pCi/L	09/06/23 15:35	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Sample: HAM-MW-6 **Lab ID: 92682401005** Collected: 08/10/23 14:22 Received: 08/11/23 13:12 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.127U ± 0.153 (0.319) C:87% T:NA**	pCi/L	09/06/23 10:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.712 ± 0.378 (0.643) C:81% T:75%**	pCi/L	08/31/23 12:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.839U ± 0.531 (0.962)**	pCi/L	09/06/23 15:35	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Sample: HAM-MW-7 **Lab ID: 92682401006** Collected: 08/10/23 12:55 Received: 08/11/23 13:12 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.232U ± 0.180 (0.319) C:83% T:NA**	pCi/L	09/06/23 10:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.00694U ± 0.313 (0.732) C:86% T:76%**	pCi/L	08/31/23 12:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.239U ± 0.493 (1.05)**	pCi/L	09/06/23 15:35	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Sample: HAM-MW-19 **Lab ID: 92682401007** Collected: 08/10/23 15:03 Received: 08/11/23 13:12 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.172U ± 0.159 (0.307) C:94% T:NA**	pCi/L	09/06/23 10:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.265U ± 0.362 (0.775) C:82% T:76%**	pCi/L	08/31/23 12:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.437U ± 0.521 (1.08)**	pCi/L	09/06/23 15:35	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Sample: HAM-MW-20 **Lab ID: 92682401008** Collected: 08/10/23 10:19 Received: 08/11/23 13:12 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.00522U ± 0.142 (0.382) C:76% T:NA**	pCi/L	09/06/23 18:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.469U ± 0.379 (0.745) C:83% T:68%**	pCi/L	08/31/23 12:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.469U ± 0.521 (1.13)**	pCi/L	09/11/23 09:31	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Sample: HAM-MW-25D **Lab ID: 92682401009** Collected: 08/10/23 12:57 Received: 08/11/23 13:12 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.740 ± 0.264 (0.278) C:95% T:NA**	pCi/L	09/06/23 18:48	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.232U ± 0.305 (0.649) C:79% T:87%**	pCi/L	08/31/23 12:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.972 ± 0.569 (0.927)**	pCi/L	09/11/23 09:31	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Sample: HAM-MW-29 **Lab ID: 92682401010** Collected: 08/10/23 16:15 Received: 08/11/23 13:12 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0392U ± 0.111 (0.271) C:89% T:NA**	pCi/L	09/06/23 18:49	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.205U ± 0.361 (0.788) C:83% T:72%**	pCi/L	08/31/23 12:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.244U ± 0.472 (1.06)**	pCi/L	09/11/23 09:31	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Sample: HAM-HGWC-7 **Lab ID: 92682401011** Collected: 08/12/23 14:35 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	**0.223U ± 0.284 (0.605) C:81% T:NA**	pCi/L	09/13/23 10:03	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.506U ± 0.308 (0.563) C:88% T:93%**	pCi/L	09/06/23 15:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.729U ± 0.592 (1.17)**	pCi/L	09/13/23 14:27	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Sample: HAM-HGWC-8 **Lab ID: 92682401012** Collected: 08/12/23 09:32 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	**0.266U ± 0.265 (0.522) C:88% T:NA**	pCi/L	09/13/23 10:03	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.501U ± 0.346 (0.661) C:82% T:87%**	pCi/L	09/06/23 15:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.767U ± 0.611 (1.18)**	pCi/L	09/13/23 14:27	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Sample: HAM-HGWC-13 **Lab ID: 92682401013** Collected: 08/12/23 12:05 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	**0.212U ± 0.251 (0.522) C:87% T:NA**	pCi/L	09/13/23 10:03	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.368U ± 0.306 (0.604) C:88% T:80%**	pCi/L	09/06/23 15:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.580U ± 0.557 (1.13)**	pCi/L	09/13/23 14:27	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Sample: HAM-MW-24D **Lab ID: 92682401014** Collected: 08/12/23 10:15 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	**-0.0136U ± 0.255 (0.718) C:55% T:NA**	pCi/L	09/13/23 10:03	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.481U ± 0.320 (0.604) C:87% T:89%**	pCi/L	09/06/23 15:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.481U ± 0.575 (1.32)**	pCi/L	09/13/23 14:27	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Sample: HAM-MW-27D **Lab ID: 92682401015** Collected: 08/12/23 14:20 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	**0.426U ± 0.304 (0.529) C:94% T:NA**	pCi/L	09/13/23 10:03	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.219U ± 0.310 (0.665) C:84% T:91%**	pCi/L	09/06/23 15:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.645U ± 0.614 (1.19)**	pCi/L	09/13/23 14:27	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Sample: HAM-AP1-EB-01 **Lab ID: 92682401016** Collected: 08/12/23 13:35 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	**0.0390U ± 0.239 (0.614) C:76% T:NA**	pCi/L	09/13/23 10:03	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.644U ± 0.378 (0.694) C:81% T:91%**	pCi/L	09/06/23 15:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.683U ± 0.617 (1.31)**	pCi/L	09/13/23 14:27	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Sample: HAM-AP1-FB-01 **Lab ID: 92682401017** Collected: 08/12/23 13:30 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	**-0.0993U ± 0.147 (0.498) C:83% T:NA**	pCi/L	09/13/23 10:04	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.551U ± 0.317 (0.565) C:86% T:94%**	pCi/L	09/06/23 15:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.551U ± 0.464 (1.06)**	pCi/L	09/13/23 14:27	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Sample: HAM-HGWC-9 **Lab ID: 92682401018** Collected: 08/11/23 17:03 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	**0.231U ± 0.256 (0.516) C:80% T:NA**	pCi/L	09/13/23 10:04	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.636 ± 0.329 (0.563) C:85% T:81%**	pCi/L	09/07/23 11:47	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.867U ± 0.585 (1.08)**	pCi/L	09/13/23 14:27	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Sample: HAM-MW-26D **Lab ID: 92682401019** Collected: 08/11/23 16:54 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	**0.298U ± 0.255 (0.454) C:81% T:NA**	pCi/L	09/13/23 10:04	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.252U ± 0.270 (0.559) C:84% T:85%**	pCi/L	09/07/23 11:47	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.550U ± 0.525 (1.01)**	pCi/L	09/13/23 14:27	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Sample: HAM-MW-28D **Lab ID: 92682401020** Collected: 08/11/23 15:14 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	**1.16 ± 0.443 (0.538) C:97% T:NA**	pCi/L	09/13/23 10:04	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.50 ± 0.514 (0.749) C:82% T:92%**	pCi/L	09/07/23 11:47	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.66 ± 0.957 (1.29)**	pCi/L	09/13/23 14:27	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Sample: HAM-AP1-FD-01 **Lab ID: 92682401021** Collected: 08/12/23 00:00 Received: 08/14/23 13:22 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.0521U ± 0.198 (0.578) C:72% T:NA**	pCi/L	09/13/23 10:04	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.302U ± 0.351 (0.740) C:80% T:88%**	pCi/L	09/07/23 11:47	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.302U ± 0.549 (1.32)**	pCi/L	09/13/23 14:27	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

QC Batch: 611587
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92682401018, 92682401019, 92682401020, 92682401021

METHOD BLANK: 2976848 Matrix: Water
Associated Lab Samples: 92682401018, 92682401019, 92682401020, 92682401021

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.386 ± 0.277 (0.528) C:83% T:92%	pCi/L	09/07/23 11:47	

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

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

QC Batch: 610549
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92682401001, 92682401002, 92682401003, 92682401004, 92682401005, 92682401006, 92682401007, 92682401008, 92682401009, 92682401010

METHOD BLANK: 2971498 Matrix: Water
Associated Lab Samples: 92682401001, 92682401002, 92682401003, 92682401004, 92682401005, 92682401006, 92682401007, 92682401008, 92682401009, 92682401010

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	

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REPORT OF LABORATORY ANALYSIS

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(704)875-9092

QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

QC Batch: 611586
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92682401011, 92682401012, 92682401013, 92682401014, 92682401015, 92682401016, 92682401017

METHOD BLANK: 2976847
Matrix: Water
Associated Lab Samples: 92682401011, 92682401012, 92682401013, 92682401014, 92682401015, 92682401016, 92682401017

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.

REPORT OF LABORATORY ANALYSIS

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(704)875-9092

QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

QC Batch: 612651
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92682401011, 92682401012, 92682401013, 92682401014, 92682401015, 92682401016, 92682401017, 92682401018, 92682401019, 92682401020, 92682401021

METHOD BLANK: 2982186
Matrix: Water
Associated Lab Samples: 92682401011, 92682401012, 92682401013, 92682401014, 92682401015, 92682401016, 92682401017, 92682401018, 92682401019, 92682401020, 92682401021

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.

REPORT OF LABORATORY ANALYSIS

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(704)875-9092

QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

QC Batch: 610646
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92682401001, 92682401002, 92682401003, 92682401004, 92682401005, 92682401006, 92682401007, 92682401008, 92682401009, 92682401010

METHOD BLANK: 2971911 Matrix: Water
Associated Lab Samples: 92682401001, 92682401002, 92682401003, 92682401004, 92682401005, 92682401006, 92682401007, 92682401008, 92682401009, 92682401010

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.

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
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QUALIFIERS

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

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.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92682401001	**HAM-HGWC-10**	EPA 9315	610646		
92682401002	**HAM-HGWC-11**	EPA 9315	610646		
92682401003	**HAM-HGWC-12**	EPA 9315	610646		
92682401004	**HAM-MW-5**	EPA 9315	610646		
92682401005	**HAM-MW-6**	EPA 9315	610646		
92682401006	**HAM-MW-7**	EPA 9315	610646		
92682401007	**HAM-MW-19**	EPA 9315	610646		
92682401008	**HAM-MW-20**	EPA 9315	610646		
92682401009	**HAM-MW-25D**	EPA 9315	610646		
92682401010	**HAM-MW-29**	EPA 9315	610646		
92682401011	**HAM-HGWC-7**	EPA 9315	612651		
92682401012	**HAM-HGWC-8**	EPA 9315	612651		
92682401013	**HAM-HGWC-13**	EPA 9315	612651		
92682401014	**HAM-MW-24D**	EPA 9315	612651		
92682401015	**HAM-MW-27D**	EPA 9315	612651		
92682401016	**HAM-AP1-EB-01**	EPA 9315	612651		
92682401017	**HAM-AP1-FB-01**	EPA 9315	612651		
92682401018	**HAM-HGWC-9**	EPA 9315	612651		
92682401019	**HAM-MW-26D**	EPA 9315	612651		
92682401020	**HAM-MW-28D**	EPA 9315	612651		
92682401021	**HAM-AP1-FD-01**	EPA 9315	612651		
92682401001	**HAM-HGWC-10**	EPA 9320	610549		
92682401002	**HAM-HGWC-11**	EPA 9320	610549		
92682401003	**HAM-HGWC-12**	EPA 9320	610549		
92682401004	**HAM-MW-5**	EPA 9320	610549		
92682401005	**HAM-MW-6**	EPA 9320	610549		
92682401006	**HAM-MW-7**	EPA 9320	610549		
92682401007	**HAM-MW-19**	EPA 9320	610549		
92682401008	**HAM-MW-20**	EPA 9320	610549		
92682401009	**HAM-MW-25D**	EPA 9320	610549		
92682401010	**HAM-MW-29**	EPA 9320	610549		
92682401011	**HAM-HGWC-7**	EPA 9320	611586		
92682401012	**HAM-HGWC-8**	EPA 9320	611586		
92682401013	**HAM-HGWC-13**	EPA 9320	611586		
92682401014	**HAM-MW-24D**	EPA 9320	611586		
92682401015	**HAM-MW-27D**	EPA 9320	611586		
92682401016	**HAM-AP1-EB-01**	EPA 9320	611586		
92682401017	**HAM-AP1-FB-01**	EPA 9320	611586		
92682401018	**HAM-HGWC-9**	EPA 9320	611587		
92682401019	**HAM-MW-26D**	EPA 9320	611587		
92682401020	**HAM-MW-28D**	EPA 9320	611587		
92682401021	**HAM-AP1-FD-01**	EPA 9320	611587		
92682401001	**HAM-HGWC-10**	Total Radium Calculation	613658		
92682401002	**HAM-HGWC-11**	Total Radium Calculation	613658		
92682401003	**HAM-HGWC-12**	Total Radium Calculation	613658		
92682401004	**HAM-MW-5**	Total Radium Calculation	613658		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-1 RAD
Pace Project No.: 92682401

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92682401005	**HAM-MW-6**	Total Radium Calculation	613658		
92682401006	**HAM-MW-7**	Total Radium Calculation	613658		
92682401007	**HAM-MW-19**	Total Radium Calculation	613658		
92682401008	**HAM-MW-20**	Total Radium Calculation	614459		
92682401009	**HAM-MW-25D**	Total Radium Calculation	614459		
92682401010	**HAM-MW-29**	Total Radium Calculation	614459		
92682401011	**HAM-HGWC-7**	Total Radium Calculation	615223		
92682401012	**HAM-HGWC-8**	Total Radium Calculation	615223		
92682401013	**HAM-HGWC-13**	Total Radium Calculation	615223		
92682401014	**HAM-MW-24D**	Total Radium Calculation	615223		
92682401015	**HAM-MW-27D**	Total Radium Calculation	615223		
92682401016	**HAM-AP1-EB-01**	Total Radium Calculation	615223		
92682401017	**HAM-AP1-FB-01**	Total Radium Calculation	615223		
92682401018	**HAM-HGWC-9**	Total Radium Calculation	615223		
92682401019	**HAM-MW-26D**	Total Radium Calculation	615223		
92682401020	**HAM-MW-28D**	Total Radium Calculation	615223		
92682401021	**HAM-AP1-FD-01**	Total Radium Calculation	615223		

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# 92682401

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

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☐ No

Date/Initials Person Examining Contents: 4/11/23 PP

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 3.1 **Correction Factor:** Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 3.1

Temp should be above freezing to 6°C

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

USDA Regulated Soil (☐ N/A, water sample)

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

Qualtrax ID: 69614

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

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

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

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

Project #

WO#: 92682401

PM: BV Due Date: 09/01/23

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)	DG9H-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)	BP	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																									2				
8																									2				
9																									2				
10																									2				
11																									2				
12																													

pH Adjustment Log for Preserved Samples

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

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

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

Section A Required Client Information:

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

Section B Required Project Information:

Report To: SCS Contacts
Copy To: Geosyntec Contacts
Purchase Order No.:
Project Name: Hammond AP-1
Project Number:

Section C Invoice Information:

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

REGULATORY AGENCY

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

Site Location STATE: GA

Section D Required Client Information

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

Valid Matrix Codes

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS Unpreserved	Preservatives H_2SO_4	Preservatives HNO_3	Preservatives HCl	Preservatives NaOH	Preservatives $Na_2S_2O_3$	Preservatives Methanol	Preservatives Other	Analysis Test Y/N	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
				DATE	TIME	DATE	TIME													
1	HAM-HGWC-10	WG	G	8/10/2023	1703			22	7	3		3				1		X X X X X	N	40
2	HAM-HGWC-11	WG	G	8/10/2023	1131			21	7	3		3				1		X X X X X	N	002
3	HAM-HGWC-12	WG	G	8/10/2023	1110			20	7	3		3				1		X X X X X	N	003
4	HAM-MW-5	WG	G	8/10/2023	1142			19	7	3		3				1		X X X X X	N	004
5	HAM-MW-6	WG	G	8/10/2023	1422			22	7	3		3				1		X X X X X	N	005
6	HAM-MW-7	WG	G	8/10/2023	1258			19	7	3		3				1		X X X X X	N	006
7	HAM-MW-19	WG	G	8/10/2023	1503			23	7	3		3				1		X X X X X	N	007
8	HAM-MW-20	WG	G	8/10/2023	1019			19	7	3		3				1		X X X X X	N	008
9	HAM-MW-25D	WG	G	8/10/2023	1257			20	7	3		3				1		X X X X X	N	009
10	HAM-MW-29	WG	G	8/10/2023	1615	TK 8/10/2023		21	7	3		3				1		X X X X X	N	010
11						TK 8/10/2023														
12																				

9268240

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-2023S2	Anthony Saint / Geosyntec	8/11/2023	1312	Ryan Williams / Pace	8/11/2023	1312	
	Ryan Williams / Pace	8/11/2023	1535	[signature]	8/11/23	1535	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Anthony Saint, Thomas Kessler, Elizabeth Mcdonald / Geosyntec Consultants, Inc.
SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 08/10/2023

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.

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GC Power

Project #: WO#: 92682401

PM: BV Due Date: 09/01/23

CLIENT: 92-GP-HAM

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

Custody Seal Present? ☑ Yes ☐ No **Seals Intact?** ☑ Yes ☐ No

Date/Initials Person Examining Contents: 8-14-23 JC

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: 3.9 **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): 3.9

USDA Regulated Soil (☐ N/A, water sample)

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

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

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☑ Yes	☐ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9. HAM-AP-1FD-01 taken @ 08/22/23 @ 000
-Includes Date/Time/ID/Analysis Matrix: WG				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10. Not listed on COC
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

WO#: 92682401

PM: BV Due Date: 09/01/23

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

Project #

****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)	SPST-125 mL Sterile Plastic (N/A – lab)	SPZT-250 mL Sterile Plastic (N/A – lab)	BP1N	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	V5GU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		2	1			1	1																	2	1				
2		2	1			1	1																	2	1				
3		2	1			1	1																	2	1				
4		2	1			1	1																	2	1				
5		2	1			1	1																	2	1				
6		2	1			1	1																	2	1				
7		2	1			1	1																	2	1				
8		2	1			1	1																	2	1				
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

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

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

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

Section A
Required Client Information:

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

Section B
Required Project Information:

Report To:	SCS Contacts
Copy To:	Geosyntec Contacts
Purchase Order No.:	
Project Name:	Hammond AP-1
Project Number:	

Section C
Invoice Information:

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

REGULATORY AGENCY

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

Site Location STATE: GA

Section D
Required Client Information

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

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	TIME	COMPOSITE END/GRAB DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate (N)	Full App. III and IV metals (N)	RAD 226/228 (N)	TDS (N)	Major Ions (Profile 10839-2) (N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 92682401
1	HAM-HGWC-7	WG	G	8/12/2023	1435			22	7	3		3					1		X	X	X	X	X	N	011
2	HAM-HGWC-8	WG	G	8/12/2023	0932			20	7	3		3					1		X	X	X	X	X	N	012
3	HAM-HGWC-13	WG	G	8/12/2023	1205			22	7	3		3					1		X	X	X	X	X	N	013
4	HAM-MW-24D	WG	G	8/12/2023	1015			20	7	3		3					1		X	X	X	X	X	N	014
5	HAM-MW-27D	WG	G	8/12/2023	1420			22	7	3		3					1		X	X	X	X	X	N	015
6	HAM-AP1-EB-01	WQ	G	8/12/2023	1335			21	7	3		3					1		X	X	X	X		N	016
7	HAM-AP1-FB-01	WQ	G	8/12/2023	1330	TK 8/12/2023		21	7	3		3					1		X	X	X	X		N	017 Last Sample
8																									
9																									
10						TK 8/12/2023																			
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-2023S2	Thomas Kessler / Geosyntec	08/14/2023	1115	Ryan Williams / Pace	8/14/2023	1116	
	Ryan Williams / Pace	8/14/2023	1332	JCC / Pace	8/14/23	1331	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Kessler, Anthony Sawstiwal Geosyntec Consultants, Inc.
SIGNATURE of SAMPLER: [signatures]
DATE Signed (MM/DD/YY): 08/12/23

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 invoices not paid within 30 days.

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

Pace ANALYTICAL SERVICES

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#: 92682401

PM: BV Due Date: 09/01/23

CLIENT: 92-GP-HAM

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

Custody Seal Present? ☑ Yes ☐ No **Seals Intact?** ☑ Yes ☐ No

Date/Initials Person Examining Contents: 8-14-23 JC

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: 3.9 **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): 3.9

USDA Regulated Soil (☐ N/A, water sample)

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

***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#: 92682401

PM: BV Due Date: 09/01/23

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			1	1																		2				
2		2	1			1	1																		2				
3		2	1			1	1																		2				
4																									2				
5																													
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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.

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

Section A Required Client Information:

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

Section B Required Project Information:

Report To:	SCS Contacts
Copy To:	Geosyntec Contacts
Purchase Order No.:	
Project Name:	Hammond AP-1
Project Number:	

Section C Invoice Information:

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

REGULATORY AGENCY

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

Site Location: STATE: GA

Section D Required Client Information

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

Valid Matrix Codes

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate	Full App. III and IV metals	RAD 226/228	TDS	Major Ions (Profile 10839-2):	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Requested Analysis Filtered (Y/N)	N	N	N	N	N		92622401
1	HAM-HGWC-9	WG	G	8/11/2023	1703			22	7	3		3					1		X	X	X	X	X	N	018
2	HAM-MW-26D	WG	G	8/11/2023	1654			21	7	3		3					1		X	X	X	X	X	N	019
3	HAM-MW-28D	WG	G	8/11/2023	1514	TK 8/11/2023		22	7	3		3					1		X	X	X	X	X	N	020
4																									
5																									
6																									
7																									
8																									
9																									
10						TK 8/11/2023																			
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-202352	Thomas Vissler / Geosyntec	08/11/2023	1115	Ryan Williams / Pace	8/14/2023	1115	
	Ryan Williams / Pace	8/14/2023	1332	TCC / Pace	8/14/23	1332	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Vissler Geosyntec Consultants, Inc.

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 08/11/23

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 invoices not paid within 30 days.

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JJS1
Date:	8/28/2023
Worklist:	74945
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	Y
	LCS74945	LCSD74945
Count Date:	8/31/2023	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	0.889
Numerical Performance Indicator:	-4.54	-1.84
Percent Recovery:	63.51%	82.32%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment		
Sample I.D.:	LCS74945	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD74945	
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%	

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

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

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.

VAM 9/5/23

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	ZPC
Date:	8/31/2023
Worklist:	75029
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	Y
	LCS75029	LCSD75029
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
Result (pCi/L, g, F):	3.930	3.696
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.909	0.843
Numerical Performance Indicator:	-2.00	-2.67
Percent Recovery:	80.39%	75.60%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS75029	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD75029	
Sample Result (pCi/L, g, F):	3.930	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.909	
Sample Duplicate Result (pCi/L, g, F):	3.696	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.843	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.370	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	6.14%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

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

Comments:
*The method blank result is below the reporting limit for this analysis and is acceptable.

VAL
9/8/23

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	8/31/2023
Worklist:	75030
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2976848
MB concentration:	0.386
M/B 2 Sigma CSU:	0.277
MB MDC:	0.528
MB Numerical Performance Indicator:	2.74
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75030	LCSD75030
Count Date:	9/7/2023	9/7/2023
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	39.920	39.920
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.817	0.819
Target Conc. (pCi/L, g, F):	4.886	4.873
Uncertainty (Calculated):	0.239	0.239
Result (pCi/L, g, F):	4.866	4.674
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.063	0.979
Numerical Performance Indicator:	-0.04	-0.39
Percent Recovery:	99.59%	95.92%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment		
Sample I.D.:	LCS75030	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD75030	
Sample Result (pCi/L, g, F):	4.866	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.063	
Sample Duplicate Result (pCi/L, g, F):	4.674	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.979	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.260	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	3.75%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

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

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

Comments:

VAL
9/8/23

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	9/2/2023
Worklist:	74954
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2971911
MB concentration:	0.078
M/B 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	LCSD (Y or N)?	Y
	LCS74954	LCSD74954
Count Date:	9/6/2023	9/6/2023
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.014	24.014
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.503	0.505
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%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS74954	92681881004
Duplicate Sample I.D.	LCSD74954	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%

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:

LAM 9/7/23

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	9/12/2023
Worklist:	75103
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2982186
MB concentration:	0.199
M/B 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	LCSD (Y or N)?	Y
	LCS75103	LCSD75103
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
Status vs Recovery:	N/A	N/A
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS75103	92682115021
Duplicate Sample I.D.	LCSD75103	92682115021DUP
Sample Result (pCi/L, g, F):	5.960	0.432
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.214	0.300
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%

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:

LAM 9/13/23

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

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

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

CERTIFICATIONS

Project: Pool Hammond Pooled Upgradient
Pace Project No.: 92681885

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

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

REPORT OF LABORATORY ANALYSIS

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

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

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

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

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

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
92681885001	**HAM-HGWA-1**					
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 (CaCO3)	331	mg/L	5.0	08/16/23 11:12	
SM 2320B-2011	Alkalinity, Total as CaCO3	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	
92681885002	**HAM-HGWA-2**					
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 (CaCO3)	20.2	mg/L	5.0	08/15/23 21:59	
SM 2320B-2011	Alkalinity, Total as CaCO3	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	
92681885003	**HAM-HGWA-3**					
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

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

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
92681885003	**HAM-HGWA-3**					
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	
92681885004	**HAM-HGWA-43D**					
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	
92681885005	**HAM-HGWA-44D**					
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	

REPORT OF LABORATORY ANALYSIS

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

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
6010D ATL ICP	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	
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 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	
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	08/15/23 10:30	08/15/23 15:03	7439-97-6	
2540C Total Dissolved Solids	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		
2320B Alkalinity	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		
4500S2D Sulfide Water	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	
300.0 IC Anions 28 Days	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	

REPORT OF LABORATORY ANALYSIS

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

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
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.088J**	mg/L	0.10	0.050	1		08/12/23 19:54	16984-48-8	
Sulfate	**67.7**	mg/L	1.0	0.50	1		08/12/23 19:54	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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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
6010D ATL ICP	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	
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 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	
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	08/15/23 10:30	08/15/23 15:06	7439-97-6	
2540C Total Dissolved Solids	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		
2320B Alkalinity	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		
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 06:16	18496-25-8	
300.0 IC Anions 28 Days	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	

REPORT OF LABORATORY ANALYSIS

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

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
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.070J**	mg/L	0.10	0.050	1		08/12/23 20:08	16984-48-8	
Sulfate	**89.9**	mg/L	1.0	0.50	1		08/12/23 20:08	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
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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
6010D ATL ICP	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	
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 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	
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	08/15/23 10:30	08/15/23 15:08	7439-97-6	
2540C Total Dissolved Solids	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		
2320B Alkalinity	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
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 06:16	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.3**	mg/L	1.0	0.60	1		08/12/23 20:23	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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

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
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.055J**	mg/L	0.10	0.050	1		08/12/23 20:23	16984-48-8	
Sulfate	**35.0**	mg/L	1.0	0.50	1		08/12/23 20:23	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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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
6010D ATL ICP	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	
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 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	
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	08/15/23 10:30	08/15/23 15:11	7439-97-6	
2540C Total Dissolved Solids	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		
2320B Alkalinity	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		
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 06:16	18496-25-8	
300.0 IC Anions 28 Days	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	

REPORT OF LABORATORY ANALYSIS

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

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
300.0 IC Anions 28 Days	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	

REPORT OF LABORATORY ANALYSIS

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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
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.065**	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	**2.6**	mg/L	0.50	0.15	1	08/11/23 14:21	08/12/23 06:13	7440-09-7	
Sodium	**135**	mg/L	1.0	0.58	1	08/11/23 14:21	08/12/23 06:13	7440-23-5	
Calcium	**8.1**	mg/L	1.0	0.12	1	08/11/23 14:21	08/12/23 06:13	7440-70-2	
Magnesium	**3.9**	mg/L	0.050	0.012	1	08/11/23 14:21	08/12/23 06:13	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 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	**0.12**	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	**0.55**	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	**0.092**	mg/L	0.030	0.00073	1	08/16/23 10:27	08/18/23 18:52	7439-93-2	
Molybdenum	**0.0013J**	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	
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	08/15/23 10:30	08/15/23 15:14	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**361**	mg/L	25.0	25.0	1		08/14/23 13:17		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**279**	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	**279**	mg/L	5.0	5.0	1		08/15/23 15:02		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	**0.14**	mg/L	0.10	0.022	1		08/15/23 06:17	18496-25-8	M1,R1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**27.0**	mg/L	1.0	0.60	1		08/12/23 21:23	16887-00-6	M1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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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
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	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Pool Hammond Pooled Upgradient
Pace Project No.: 92681885

QC Batch: 792418
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
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	92680804001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Pool Hammond Pooled Upgradient
Pace Project No.: 92681885

QC Batch: 793883
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
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	92681883002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.10	105	100	75-125	5	20	
Arsenic	mg/L	ND	0.1	0.1	0.11	0.10	106	100	75-125	6	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Pool Hammond Pooled Upgradient
Pace Project No.: 92681885

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4113582 4113583

Parameter	Units	92681883002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.032	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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REPORT OF LABORATORY ANALYSIS

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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	92680804007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0022	0.0023	82	87	75-125	5	20	

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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: 793055
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 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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REPORT OF LABORATORY ANALYSIS

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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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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Pool Hammond Pooled Upgradient
Pace Project No.: 92681885

QC Batch: 793564
QC Batch Method: SM 2320B-2011
Analysis 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 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	212	50	50	267	273	109	122	80-120	2	25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4112182 4112183

Parameter	Units	92681885004 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	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

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

QUALITY CONTROL DATA

Project: Pool Hammond Pooled Upgradient
Pace Project No.: 92681885

QC Batch: 793596
QC Batch Method: SM 2320B-2011
Analysis 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	92681908004 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	99.9	50	50	159	163	118	126	80-120	2	25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4112310 4112311

Parameter	Units	92681908005 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	5.3	50	50	58.0	58.8	105	107	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.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Pool Hammond Pooled Upgradient
Pace Project No.: 92681885

QC Batch: 793499
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	0.16	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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	0.14	0.5	0.5	0.53	0.60	79	93	80-120	12	10	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

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

QUALITY CONTROL DATA

Project: Pool Hammond Pooled Upgradient
Pace Project No.: 92681885

QC Batch: 793207
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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	

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

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

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.

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

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

Pace ANALYTICAL SERVICES

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

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 CDL

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

Cooler Temp Corrected (°C): 2.1

Temp should be above freezing to 6°C

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

USDA Regulated Soil (☐ N/A, water sample)

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

Qualtrax ID: 69614

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

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

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

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

Project # WO#: 92681885

PM: BV Due Date: 08/23/23

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)	BP1U	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	1																		2				
2		2	1			1	1																		2				
3		2	1			1	1																		2				
4		2	1			1	1																		2				
5		2	1			1	1																		2				
6																													
7																													
8																													
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

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

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

Pace Analytical
www.pacelabs.com

Chain-of-Custody / Analytical Request Document

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

Page: of

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: GA Power	Report To: SCS Contacts	Attention: Southern Co.
Address: Atlanta, GA	Copy To: Geosyntec Contacts	Company Name:
		Address:
Email To: SCS Contacts	Purchase Order No.:	Pace Quote Reference:
Phone: Fax	Project Name: Plant Hammond Pooled Upgradient	Pace Project Manager: Bonnie Vang
Requested Due Date/TAT: 10 Day	Project Number:	Pace Profile #: ~~16839~~ 16483-9,20

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☑ OTHER CCR

Site Location STATE: GA

Valid Matrix Codes: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

ITEM #	Section D Required Client Information: SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END DATE	COLLECTED COMPOSITE END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate	Full App. III and IV metals	RAD 226/228	TDS	Major Ions (Profile 10839-2):	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		N	N	N	N	N	N		
1	HAM-HGWA-1	WT	G	8/8/23	1047			19	7	3		3					1		X	X	X	X	X	N	92681685 W1
2	HAM-HGWA-2	WT	G	8/8/23	1608			19	7	3		3					1		X	X	X	X	X	N	W2
3	HAM-HGWA-3	WT	G	8/8/23	1445			19	7	3		3					1		X	X	X	X	X	N	W3
4	HAM-HGWA-43D	WT	G	8/8/23	1105			18	7	3		3					1		X	X	X	X	X	N	W4
5	HAM-HGWA-44D	WT	G	8/8/23	1059			19	7	3		3					1		X	X	X	X	X	N	W5
6						TK 8/8/2023																			Last Sample
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-2023S2	Thomas Kosteczko / GEOSYNTEC	8/9/23	0800	Elizabeth MacDonell (GSO)	8/9/23	800	
	Elizabeth MacDonell (GSO)	8/9/23	1140	Ryan William / Pace	8/9/23	1140	
	Ryan William / Pace	8/9/23	1415	Chuck Hale	8/9/23	1417	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: / Geosyntec Consultants, In

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)

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

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

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

Pace Analytical Services, LLC
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(704)875-9092

CERTIFICATIONS

Project: Plant Hammond Pooled Up- RADs
Pace Project No.: 92681881

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572023-03
New Hampshire/TNI Certification #: 297622
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad

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SAMPLE SUMMARY

Project: Plant Hammond Pooled 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

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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
92681881001	**HAM-HGWA-1**					
EPA 9315	Radium-226	0.0885U ± 0.147 (0.331) C:89% T:NA	pCi/L		09/06/23 18:49	
EPA 9320	Radium-228	0.106U ± 0.437 (0.985) C:85% T:73%	pCi/L		08/31/23 12:13	
Total Radium Calculation	Total Radium	0.195U ± 0.584 (1.32)	pCi/L		09/11/23 09:31	
92681881002	**HAM-HGWA-2**					
EPA 9315	Radium-226	0.175U ± 0.160 (0.305) C:89% T:NA	pCi/L		09/06/23 18:56	
EPA 9320	Radium-228	-0.273U ± 0.419 (1.02) C:87% T:68%	pCi/L		08/31/23 12:14	
Total Radium Calculation	Total Radium	0.175U ± 0.579 (1.33)	pCi/L		09/11/23 09:31	
92681881003	**HAM-HGWA-3**					
EPA 9315	Radium-226	0.140U ± 0.152 (0.308) C:79% T:NA	pCi/L		09/07/23 08:44	
EPA 9320	Radium-228	0.271U ± 0.371 (0.795) C:86% T:80%	pCi/L		08/31/23 12:13	
Total Radium Calculation	Total Radium	0.411U ± 0.523 (1.10)	pCi/L		09/11/23 09:31	
92681881004	**HAM-HGWA-43D**					
EPA 9315	Radium-226	0.377 ± 0.213 (0.334) C:90% T:NA	pCi/L		09/06/23 13:09	
EPA 9320	Radium-228	0.126U ± 0.398 (0.893) C:82% T:79%	pCi/L		08/31/23 12:12	
Total Radium Calculation	Total Radium	0.503U ± 0.611 (1.23)	pCi/L		09/11/23 09:31	

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
92681881005	**HAM-HGWA-44D**					
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	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled Up- RADs
Pace Project No.: 92681881

Sample: HAM-HGWA-1 **Lab ID: 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	**0.0885U ± 0.147 (0.331) C:89% T:NA**	pCi/L	09/06/23 18:49	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.106U ± 0.437 (0.985) C:85% T:73%**	pCi/L	08/31/23 12:13	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.195U ± 0.584 (1.32)**	pCi/L	09/11/23 09:31	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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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	**0.175U ± 0.160 (0.305) C:89% T:NA**	pCi/L	09/06/23 18:56	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.273U ± 0.419 (1.02) C:87% T:68%**	pCi/L	08/31/23 12:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.175U ± 0.579 (1.33)**	pCi/L	09/11/23 09:31	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled Up- RADs
Pace Project No.: 92681881

Sample: HAM-HGWA-3 **Lab ID: 92681881003** Collected: 08/08/23 14:45 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	**0.140U ± 0.152 (0.308) C:79% T:NA**	pCi/L	09/07/23 08:44	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.271U ± 0.371 (0.795) C:86% T:80%**	pCi/L	08/31/23 12:13	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.411U ± 0.523 (1.10)**	pCi/L	09/11/23 09:31	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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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	**0.377 ± 0.213 (0.334) C:90% T:NA**	pCi/L	09/06/23 13:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.126U ± 0.398 (0.893) C:82% T:79%**	pCi/L	08/31/23 12:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.503U ± 0.611 (1.23)**	pCi/L	09/11/23 09:31	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled Up- RADs
Pace Project No.: 92681881

Sample: HAM-HGWA-44D **Lab ID: 92681881005** Collected: 08/08/23 10:59 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	**0.163U ± 0.150 (0.285) C:89% T:NA**	pCi/L	09/07/23 15:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.116U ± 0.258 (0.640) C:86% T:83%**	pCi/L	08/31/23 15:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.163U ± 0.408 (0.925)**	pCi/L	09/08/23 17:15	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Hammond Pooled Up- RADs
Pace Project No.: 92681881

QC Batch: 610549
QC Batch Method: EPA 9320
Analysis 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.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Hammond Pooled Up- RADs
Pace Project No.: 92681881

QC Batch: 610551
QC Batch Method: EPA 9320
Analysis 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.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Hammond Pooled Up- RADs
Pace Project No.: 92681881

QC Batch: 611645
QC Batch Method: EPA 9315
Analysis 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.

REPORT OF LABORATORY ANALYSIS

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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.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Plant Hammond Pooled Up- RADs
Pace Project No.: 92681881

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

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

TNI - The NELAC Institute.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Hammond Pooled 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		

Pace ANALYTICAL SERVICES

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# : 92681881

92681881

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

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☐ No

Date/Initials Person Examining Contents: 8/9/23 CDK

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

Cooler Temp Corrected (°C): 2.1

Temp should be above freezing to 6°C

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

USDA Regulated Soil (☐ N/A, water sample)

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

Qualtrax ID: 69614

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

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

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

***Check all unpreserved Nitrates for chlorine

Project # **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 ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)	BP1N	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		2	1			1	1																		2				
2		2	1			1	1																		2				
3		2	1			1	1																		2				
4		2	1			1	1																		2				
5		2	1			1	1																		2				
6																													
7																													
8																													
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

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

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

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CHAIN OF CUSTODY / Analytical Request Document

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

Page: of

Section A Required Client Information:

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

Section B Required Project Information:

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

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Bonnie Vang
Pace Profile #:	10839 ~~10507-3,10~~ 16483-9,20

REGULATORY AGENCY

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

Site Location STATE: GA

Section D Required Client Information

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

Valid Matrix Codes

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate	Full App. III and IV metals	RAD 226/228	TDS	Major Ions (Profile 10839-2)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Y/N	N	N	N	N	N		92681891
1	HAM-HGWA-1	WT	G	8/8/23	1047			19	7	3		3					1		X	X	X	X	X	N	001
2	HAM-HGWA-2	WT	G	8/8/23	1608			19	7	3		3					1		X	X	X	X	X	N	002
3	HAM-HGWA-3	WT	G	8/8/23	1445	TK 8/8/2023		19	7	3		3					1		X	X	X	X	X	N	003
4	HAM-HGWA-43D	WT	G	8/8/23	1105			18	7	3		3					1		X	X	X	X	X	N	004
5	HAM-HGWA-44D	WT	G	8/8/23	1059			19	7	3		3					1		X	X	X	X	X	N	005
6						TK 8/8/2023																			Last Sample
7																									
8																									
9																									
10																									
11																									
12																									

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-2023S2	Thomas Kosakowski/GEOSYNTEC	8/9/23	0800	Elizabeth MacDonell (GSC)	8/9/23	800	
	Elizabeth MacDonell, GSC	8/7/23	1140	Ryan Williams / Pace	8/9/23	1140	
	Ryan Williams / Pace	8/9/23	1415	Chuck Hale	8/9/23	1417	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: / Geosyntec Consultants, In

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)

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

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JJS1
Date:	8/28/2023
Worklist:	74945
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	Y
	LCS74945	LCSD74945
Count Date:	8/31/2023	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	0.889
Numerical Performance Indicator:	-4.54	-1.84
Percent Recovery:	63.51%	82.32%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment		
Sample I.D.:	LCS74945	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD74945	
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%	

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

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

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.

VAM 9/5/23

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	ZPC
Date:	8/29/2023
Worklist:	74946
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	Y
	LCS74946	LCSD74946
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):	4.594	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
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS74946	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD74946	
Sample Result (pCi/L, g, F):	4.594	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.002	
Sample Duplicate Result (pCi/L, g, F):	4.915	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.070	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.429	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	6.70%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

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

Comments:

VAM 9/5/23

Quality Control Sample Performance Assessment

Pace Analytical
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Test:	Ra-226
Analyst:	SLC
Date:	9/2/2023
Worklist:	74954
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2971911
MB concentration:	0.078
M/B 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	LCSD (Y or N)?	Y
	LCS74954	LCSD74954
Count Date:	9/6/2023	9/6/2023
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.014	24.014
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.503	0.505
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%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS74954	92681881004
Duplicate Sample I.D.	LCSD74954	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%

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:

LAM 9/7/23

Quality Control Sample Performance Assessment

Pace Analytical
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Test:	Ra-226
Analyst:	SLC
Date:	9/2/2023
Worklist:	75040
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2977130
MB concentration:	0.086
M/B 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	LCSD (Y or N)?	Y
	LCS75040	LCSD75040
Count Date:	9/8/2023	9/8/2023
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):	0.503	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%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS75040	92681880014
Duplicate Sample I.D.	LCSD75040	92681880014DUP
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%

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:

9/8/23

VAN 9/8/23

VALIDATION REPORTS

January 2023

Geosyntec consultants

180A Market Place Boulevard
Knoxville, TN 37922
PH 865.330.0037
www.geosyntec.com

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

Valid Value	Description
1	Preservation requirement not met
2	Analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS or RPD recovery outside limits (LCS/LCSD)
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other
14	Lab flag removed or modified: no validation qualification required

LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample duplicate
RPD - Relative percent difference

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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 (1σ)] 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

Valid Value	Description
1	Preservation requirement not met
2	Analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS or RPD recovery outside limits (LCS/LCSD)
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other
14	Lab flag removed or modified: no validation qualification required

LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample duplicate
RPD - Relative percent difference

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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 92649377**

SITE: Plant Hammond AP-1

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 26 and 27 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 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 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
92649377001	HAM-HGWC-9
92649377002	HAM-HGWC-11
92649377003	HAM-HGWC-12
92649377004	HAM-HGWC-13
92649377005	HAM-MW-5
92649377006	HAM-MW-6
92649377007	HAM-MW-7
92649377008	HAM-MW-19
92649377009	HAM-MW-20
92649377010	HAM-MW-24D
92649377011	HAM-MW-25D

Laboratory ID	Client ID
92649377012	HAM-MW-26D
92649377013	HAM-MW-28D
92649377014	HAM-MW-29
92649377015	HAM-AP-1-FD-01
92649377016	HAM-HGWC-7
92649377017	HAM-HGWC-10
92649377018	HAM-MW-27D
92649377019	HAM-HGWC-8
92649377020	HAM-AP-1-EB-01
92649377021	HAM-AP-1-FB-01

The samples were received within 0-6 degrees Celsius (^{o}C). No sample preservation issues were noted by the laboratory.

The final receipt signature, affiliation, date, and time were not recorded on the chain of custody (COC) for the samples collected on 1 February 2023.

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%.

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 762460, 755531, 753122, 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).

One sample set specific MS/MSD pair was reported for calcium by US EPA method 6010D, using sample HAM-MW-19. The relative percent difference (RPD) result was within the laboratory specified acceptance criteria, and the recoveries of calcium in the MD/MSD pair using sample HAM-MW-19 were high and outside of the laboratory specified acceptance criteria. Since the

calcium concentration in sample HAM-MW-19 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 a 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 metals by US EPA method 6020B. 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). Four 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-1-EB-01. Metals were not detected in the equipment blank above the MDLs, with the following exception.

Boron was detected in the equipment blank at an estimated concentration greater than the MDL and less than the reporting limit (RL). Since the estimated boron concentration in the equipment blank was U qualified as not detected at the RL 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-AP-1-FB-01. Metals were not detected in the field blank above the MDLs, with the following exception.

Boron 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 samples HAM-MW-7 and HAM-AP-1-EB-01 were U qualified as not detected at the RL. Since boron was detected at concentrations greater than the RL in the remaining associated samples, 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-MW-7	Boron	0.033	J	0.04	U	3

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
HAM-AP-1-EB-01	Boron	0.022	J	0.04	U	3

mg/L-milligrams per liter
J- Estimated concentration greater than the MDL and less than the RL.
* Validation qualifiers are defined in Attachment 1 at the end of this report.
** Reason codes are defined in Attachment 2 at the end of this report.

1.8 Field Duplicate

One field duplicate sample was collected with the sample set, HAM-AP-1-FD-01. Acceptable precision (RPD $\leq$ 30%) was demonstrated between the field duplicate and the original sample, HAM-HGWC-11, with the following exception.

Chromium was detected at an estimated concentration greater than the MDL in sample HAM-HGWC-11 and not detected in field duplicate HAM-AP-1-FD-01, resulting in a noncalculable RPD between the results. Therefore, the estimated chromium concentration in sample HAM-HGWC-11 was J qualified as estimated, and the non-detect chromium result in field duplicate HAM-AP-1-FD-01 was UJ qualified as estimated less than the MDL.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	RPD	Validation Result (mg/L)	Validation Qualifier	Reason Code
HAM-HGWC-11	Chromium	0.0012	J	NC	0.0012	J	7
HAM-AP-1-FD-01	Chromium	0.0011	U		0.0011	UJ	7

mg/L-milligrams per liter
NC-Non-calculable
U- Not detected at or above RL.
J- Estimated concentration greater than or equal to the MDL and less than the RL.

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). Two method blanks were reported (batches 754635 and 755636). 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-HGWC-9 and HAM-MW-28D. The recovery and RPD results were within the laboratory specified acceptance criteria.

2.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two LCSs were reported. The recovery results were within the laboratory specified acceptance criteria.

2.6 Equipment Blank

One equipment blank was collected with the sample set, HAM-AP-1-EB-01. 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-1-FB-01. 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-1-FD-01. Acceptable precision (RPD $\leq$ 30%) was demonstrated between the field duplicate and the original sample, HAM-HGWC-11.

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). Three method blanks were reported for TDS (batches 752849, 753439, and 754118) and three method blanks were reported for the anions (batches 752813, 753396, and 754257). 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). One sample set specific MS/MSD pair was reported for anions, using sample HAM-MW-19. The recovery and RPD results were within the laboratory specified acceptance criteria.

Five 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). Three LCSs were reported for TDS and three LCSs were reported for anions. The recovery results were within the laboratory specified acceptance criteria.

3.6 Laboratory Duplicate

Three sample set specific laboratory duplicates were reported for TDS, using samples HAM-MW-7, HAM-HGWC-8, and HAM-HGWC-10. The RPD results were within the laboratory specified acceptance criteria.

Three 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-1-EB-01. 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-AP-1-FB-01. The wet chemistry parameters were not detected in the field blank above the MDLs, with the following exception.

TDS (28 mg/L) was detected in the field blank at a concentration greater than the RL. Therefore, the TDS concentration in samples HAM-MW-7, HAM-HGWC-10 and HAM-MW-27D were J+ qualified as estimated with high biases. Since TDS was either not detected or 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-MW-7	TDS	89	NA	89	J+	3
HAM-HGWC-10	TDS	188	NA	188	J+	3
HAM-MW-27D	TDS	255	NA	255	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-1-FD-01. Acceptable precision (RPD ≤ 30%) was demonstrated between the field duplicate and the original sample, HAM-HGWC-11.

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

Valid Value	Description
1	Preservation requirement not met
2	Analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS or RPD recovery outside limits (LCS/LCSD)
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other
14	Lab flag removed or modified: no validation qualification required

LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample duplicate
RPD - Relative percent difference

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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 92649924**

SITE: Plant Hammond AP-1 (RADS)

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 26 and 27 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
92649924001	HAM-HGWC-9
92649924002	HAM-HGWC-11
92649924003	HAM-HGWC-12
92649924004	HAM-HGWC-13
92649924005	HAM-MW-5
92649924006	HAM-MW-6
92649924007	HAM-MW-7
92649924008	HAM-MW-19
92649924009	HAM-MW-20
92649924010	HAM-MW-24D
92649924011	HAM-MW-25D

Laboratory ID	Client ID
92649924012	HAM-MW-26D
92649924013	HAM-MW-28D
92649924014	HAM-MW-29
92649924015	HAM-AP-1-FD-01
92649924016	HAM-HGWC-7
92649924017	HAM-HGWC-10
92649924018	HAM-MW-27D
92649924019	HAM-HGWC-8
92649924020	HAM-AP-1-EB-01
92649924021	HAM-AP-1-FB-01

The samples were received within 0-6 degrees Celsius (^{o}C). No sample preservation issues were noted by the laboratory.

The final receipt signature, affiliation, date, and time were not recorded on the chain of custody (COC) for the samples collected on 1 February 2023.

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). Three method blanks were reported for the radium-228 data (batches 564182, 564276, and 565965). Three method blanks were reported for the radium-226 data (batches 564181, 564275, and 565964). 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 pairs were not reported with the data.

1.5 Laboratory Control Sample (LCS)

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Three LCS/LCS duplicate (LCSD) pairs were reported for radium-226. Three LCS/LCSD pairs were reported for radium-228. The recovery and replicate error ratio (RER) [1 sigma (1σ)] results were within the laboratory specified acceptance criteria.

1.6 Laboratory Duplicate

Two 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-1-EB-01. 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-1-FB-01. 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-1-FD-01. Acceptable precision (RER (1σ) < 3) was demonstrated between the field duplicate and the original sample, HAM-HGWC-11.

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 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

Valid Value	Description
1	Preservation requirement not met
2	Analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS or RPD recovery outside limits (LCS/LCSD)
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other
14	Lab flag removed or modified: no validation qualification required

LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample duplicate
RPD - Relative percent difference

August 2023

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Memorandum

Date:	8 November 2023
To:	Thomas Kessler
From:	Derek Yeadon
CC:	Kristoffer Henderson
Subject:	**Hammond AP-1 - Stages 2A Validation - Level II Data Deliverable – Pace Analytical Services, Project Numbers: 92682927 and 92681885**

SITE: Plant Hammond AP-1 and Pooled Upgradient

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of twenty-three aqueous samples, one field duplicate, one field blank, and one equipment blank, collected 8 August and 10-12 August 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:

- Metals 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:

- Alkalinity by SM 400-S2D-2011
- Anions (Chloride, Fluoride and Sulfate) by USEPA Method 300.0
- Sulfide by SM 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
92682398001	HAM-HGWC-10
92682398002	HAM-HGWC-11
92682398003	HAM-HGWC-12
92682398004	HAM-MW-5
92682398005	HAM-MW-6
92682398006	HAM-MW-7
92682398007	HAM-MW-19
92682398008	HAM-MW-20
92682398009	HAM-MW-25D
92682398010	HAM-MW-29
92682397009	HAM-HGWC-7
92682397010	HAM-HGWC-8
92682397011	HAM-HGWC-13
92682397012	HAM-MW-24D
92682397013	HAM-MW-27D
92682397014	HAM-AP1-EB-01
92682397015	HAM-AP1-FB-01
92682397016	HAM-HGWC-9
92682397017	HAM-MW-26D
92682397018	HAM-MW-28D
92682927022	HAM-AP1-FD-01

The samples were received within 0-6 degrees Celsius (°C). No sample preservation issues were noted by the laboratory.

Sample HAM-AP1-FD-01 was not listed on the chain of custody (COC); sample was noted on Pace sample receipt form and logged in by the lab with a sampling time of 00:00.

The laboratory reports revised on 22 August and 3 October 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 laboratory noted the instrument cross check did not confirm the calcium concentration for sample HAM-MW-25D. Therefore, based on professional and technical judgment, the calcium concentration for sample MW-25D was J qualified as estimated.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
HAM-MW-25D	Calcium	86.1	NA	86.1	J	13

mg/L-milligrams per liter
NA-not applicable
* Validation qualifiers are defined in Attachment 1 at the end of this report
**Reason codes are defined in Attachment 2 at the end of this report

1.2 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). Ten method blanks were reported (batches 792418, 793883, 795463, 794002, 794177, 794178, 794885, 793618, 793869, and 794188). The metals were not detected in the method blanks at or above the method detection limit (MDL) with the following exceptions.

Potassium was detected in the method blank associated with batch 795463 above the MDL but below reporting limit (RL). Therefore, the potassium concentration was J+ qualified as estimated with high bias in sample HAM-AP1-FD-01.

Antimony (0.0043 mg/L) was detected in the method blank associated with batch 794002 at a concentration greater than the RL. Since antimony was not detected in the associated samples, no qualifications were applied to the data.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
HAM-AP1-FD-01	Potassium	0.75	B	0.75	J+	3

mg/L-milligrams per liter
B-Analyte was detected in the associated method blank.

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). Three sample set specific MS/MSD pairs were reported, using samples HAM-HGWC-11, HAM-MW-28D, and HAM-AP1-FD-01. The recovery and relative percent difference (RPD) results were within the laboratory specified acceptance criteria, with the following exceptions.

The recoveries of calcium and magnesium in the MS/MSD pair using sample HAM-HGWC-11 were low and outside the laboratory specified acceptance criteria. Since the calcium and

magnesium concentrations in sample HAM-HGWC-11 were greater than four times the spiked amount, no qualifications were applied to the data.

The recoveries of calcium, magnesium, and sodium in the MS/MSD pair using sample HAM-AP1-FD-01 were low and outside the laboratory specified acceptance criteria. Since the calcium, magnesium, and sodium concentrations in sample HAM-AP1-FD-01 were greater than four times the spiked amount, no qualifications were applied to the data.

The recovery of barium in the MS/MSD pair using sample HAM-MW-28D was low and outside the laboratory specified acceptance criteria. Since the barium concentration in sample HAM-MW-28D was greater than four times the spiked amount, no qualifications were applied to the data.

Seven batch MS/MSD pairs were also reported. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

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). Twelve 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-AP1-EB-01. Metals were not detected in the equipment blank above the MDLs. No qualifications were applied to the data.

1.7 Field Blank

One field blank was collected with the sample set, HAM-AP1-FB-01. Metals were not detected in the field blank above the MDLs. No additional qualifications were applied to the data.

1.8 Field Duplicate

One field duplicate sample was collected with the sample set, HAM-AP1-FD-01. Acceptable precision (RPD < 30%) was demonstrated between the field duplicate and the original sample, HAM-MW-24D.

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 793520, 795034, and 795036). 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-HGWC-10 and HAM-MW-25D. The recovery and RPD results were within the

laboratory specified acceptance criteria with the following exceptions.

The recoveries of mercury in the MS/MSD pair using sample HAM-MW-25D were high and outside the laboratory specified acceptance criteria. Therefore, the estimated mercury concentration in sample HAM-MW-25D was J qualified as estimated with low bias.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
HAM-MW-25D	Mercury	0.00013	J M1	0.00013	J	4

mg/L-milligrams per liter
J- Estimated concentration greater than or equal to the MDL and less than the RL.
M1-Matrix spike recovery exceeded QC limits. Batch accepted based on LCS recovery.

One batch MS/MSD pair was also reported. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

2.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two LCSs were reported. The recovery results were within the laboratory specified acceptance criteria.

2.6 Equipment Blank

One equipment blank was collected with the sample set, HAM-AP1-EB-01. 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-AP1-FB-01. 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-AP1-FD-01. Acceptable precision (RPD < 30%) was demonstrated between the field duplicate and the original sample, HAM-MW-24D.

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, sulfides 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%.

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). Five method blanks were reported for TDS (batches 793055, 793414, 793918, 794085, and 794562), six method blanks were reported for alkalinity (batches 793564, 793596, 793988, 794234, 794235, and 794644), five method blanks were reported for sulfide (batches 793499, 793501, 794102, 794103, and 794424), and five method blanks were reported for anions (batches 793207, 793550, 793553, 793837, and 794487). The wet chemistry parameters were not detected in the method blanks above the MDLs.

3.4 Matrix Spike/Matrix Spike Duplicate

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Four sample set specific MS/MSD pairs were reported for alkalinity, using samples HAM-HGWA-3, HAM-HGWA-43D, HAM-MW-5, and HAM-MW-6. Four sample set specific MS/MSD pairs were reported for sulfide, using samples HAM-HGWA-44D, HAM-MW-19, HAM-MW-24D, HAM-AP1-FD-01. Four sample set specific MS/MSD pairs were reported for anions, using samples HAM-HGWA-44D, HAM-MW-25D, HAM-HGWC-9, HAM-HGWC-12 and HAM-HGWA-44D HAM-HGWC-12. The recovery and relative percent difference (RPD) results were within the laboratory specified acceptance criteria, with the following exceptions:

The recovery of sulfide in the MSD and RPD for the MS/MSD pair using sample HAM-HGWA-44D were high and outside of the laboratory specified acceptance criteria. Therefore, the result for sulfide in sample HAM-HGWA-44D was J qualified as estimated.

The recoveries of chloride, fluoride, and sulfate in the MS/MSD pair using sample HAM-HGWC-9 were low and outside of the laboratory specified acceptance criteria. Therefore, the results for chloride, fluoride, and sulfate in sample HAM-HGWC-9 were J- qualified as estimated with low bias.

The recoveries of chloride and sulfate in the MS/MSD pair using sample HAM-HGWC-12 were low and outside of the laboratory specified acceptance criteria. Therefore, the results for sulfate in sample HAM-HGWC-12 was J- qualified as estimated with low bias. Since the chloride concentration in sample HAM-HGWC-12 was greater than four times the spiked amount, no qualifications were applied to the chloride results.

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 results for chloride and fluoride in sample HAM-HGWA-44D were J- qualified as estimated with low bias.

The recovery of alkalinity in the MSD using sample HAM-MW-5 was high and outside the laboratory specified acceptance criteria. Therefore, the total and bicarbonate alkalinity concentrations in sample HAM-MW-5 were J+ qualified as estimated with high bias.

The recovery of alkalinity in the MSD using sample HAM-MW-3 was high and outside the laboratory specified acceptance criteria. Since the alkalinity concentration in sample HAM-MW-3 was greater than four times the spiked amount, no qualifications were applied to the alkalinity results.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
HAM-HGWC-12	Sulfate	209	NA	209	J-	4
HAM-MW-5	Alkalinity, Bicarbonate (CaCO3)	179	NA	179	J+	4
HAM-MW-5	Alkalinity, Total as CaCO3	179	M1	179	J+	4
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

mg/L-milligrams per liter
R1-RPD value was outside control limits.
M1-Matrix spike recovery exceeded QC limits. Batch accepted based on LCS recovery.
NA-not applicable

Eight batch MS/MSD pairs were also reported for alkalinity. Six additional batch MS/MSD pairs were reported for sulfide. Six batch MS/MSD were also reported 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, twelve LCSs were reported for alkalinity, four LCSs were reported for sulfide, and five LCSs were reported for anions. The recovery results were within the laboratory specified acceptance criteria.

3.6 Laboratory Duplicate

Four sample set specific laboratory duplicates were reported for TDS, using samples HAM-HGWA-2, HAM-MW-6, and HAM-AP1-EB-01 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-AP1-EB-01. 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-AP-1-FB-01. 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-AP-1FD-01. Acceptable precision (RPD < 30%) was demonstrated between the field duplicate and the original sample, HAM-MW-24D.

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

Valid Value	Description
1	Preservation requirement not met
2	Analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS or RPD recovery outside limits (LCS/LCSD)
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other
14	Lab flag removed or modified: no validation qualification required

LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample duplicate
RPD - Relative percent difference

Geosyntec consultants

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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 92681881 and 92682401**

SITE: Plant Hammond AP-1 and Pooled Upgradient - RADS

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of twenty-three aqueous samples, collected 8 and 10-12 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
92682401001	HAM-HGWC-10
92682401002	HAM-HGWC-11
92682401003	HAM-HGWC-12
92682401004	HAM-MW-5
92682401005	HAM-MW-6
92682401006	HAM-MW-7
92682401007	HAM-MW-19
92682401008	HAM-MW-20

Laboratory ID	Client ID
92682401009	HAM-MW-25D
92682401010	HAM-MW-29
92682401011	HAM-HGWC-7
92682401012	HAM-HGWC-8
92682401013	HAM-HGWC-13
92682401014	HAM-MW-24D
92682401015	HAM-MW-27D
92682401016	HAM-AP1-EB-01
92682401017	HAM-AP1-FB-01
92682401018	HAM-HGWC-9
92682401019	HAM-MW-26D
92682401020	HAM-MW-28D
92682401021	HAM-AP1-FD-01

The samples were received within 0-6 degrees Celsius (^{o}C). No sample preservation issues were noted by the laboratory.

1.0 RADIOCHEMISTRY

The samples were analyzed for radium-226 by US EPA method 9315, radium-228 by US EPA method 9320 and total radium by calculation.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

⊗ Overall Assessment
✓ Holding Times
⊗ Method Blank
✓ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Laboratory Duplicate
✓ Tracers and Carriers
✓ Equipment Blank
✓ Field Blank
✓ Field Duplicate
✓ Sensitivity

✓ Electronic Data Deliverables Review

1.1 Overall Assessment

The radium-226 and radium-228 data reported in this data set are considered usable for supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this data set is 100%.

Radium-226 was detected at concentrations greater than the minimum detectable concentration (MDC) in samples HAM-HGWC-9 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-HGWC-9	Combined Radium 226 + 228	0.867	U	0.867	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). Four method blanks were reported for the radium-228 data (batches 610549, 610551, 611587 and 611586). Three method blanks were reported for the radium-226 data (batches 611645, 610646 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. Therefore, the radium-228 and combined radium 226+228 concentrations in sample HAM-MW-6 were J+ qualified as estimated with high bias.

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.

Sample	Analyte	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier	Reason Code
HAM-MW-6	Radium-228	0.712	NA	0.712	J+	3
HAM-MW-6	Combined Radium 226 + 228	0.839	U	0.839	J+	3

pCi/L – picocuries per liter
U – not detected at or above the MDC
NA – not applicable

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

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 (1σ)] results were within the laboratory specified acceptance criteria.

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.

Two 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-AP1-EB-01. 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-AP1-FB-01. 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-AP1-FD-01. Acceptable precision (RER (1σ) < 3) was demonstrated between the field duplicate and the original sample, HAM-HGWC-13.

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."

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J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
DATA VALIDATION REASON CODES
Assigned by Geosyntec's Data Validation Team

Valid Value	Description
1	Preservation requirement not met
2	Analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS or RPD recovery outside limits (LCS/LCSD)
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other
14	Lab flag removed or modified: no validation qualification required

LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample duplicate
RPD - Relative percent difference

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

Location Name: HGWA-1 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 22.49 ft** **Total Depth: 32.49 ft** **Initial Depth to Water: 10.05 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 27.49 ft** **Estimated Total Volume Pumped: 4 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.63 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883533**

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

Location Name: HGWA-2 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 17.95 ft** **Total Depth: 27.95 ft** **Initial Depth to Water: 7.96 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 22.95 ft** **Estimated Total Volume Pumped: 9 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 8.05 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 966090**

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

Location Name: HGWA-3 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 34.51 ft** **Total Depth: 44.51 ft** **Initial Depth to Water: 7.53 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 39.51 ft** **Estimated Total Volume Pumped: 6 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 966090**

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: 1/24/2023 10:20:06 AM
Project:GP-Plant Hammond
Operator Name: Connor Cain

Location Name: HGWA-43D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 51.25 ft** **Total Depth: 61.25 ft** **Initial Depth to Water: 10.02 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 22.95 ft** **Estimated Total Volume Pumped: 6 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 13.52 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 966090**

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 cm	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

Location Name: HGWA-44D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 103.5 ft** **Total Depth: 113.5 ft** **Initial Depth to Water: 10.72 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 103.5 ft** **Estimated Total Volume Pumped: 10 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 4.03 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850724**

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: 1/27/2023 12:05:23 PM
Project: GP-Plant Hammond
Operator Name: Connor Cain

Location Name: HGWC-7 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 17.96 ft** **Total Depth: 27.96 ft** **Initial Depth to Water: 6.63 cm**	**Pump Type: Peri** **Tubing Type: Poly** **Pump Intake From TOC: 22.96 ft** **Estimated Total Volume Pumped: 13 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.09 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 966090**

Test Notes:
Five bottles: Full App. III and IV.

Weather Conditions:
Sunny, 40 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
1/27/2023 12:05 PM	00:00	7.22 pH	17.66 °C	712.83 µS/cm	2.14 mg/L	1.97 NTU	48.3 mV	6.70 ft	200.00 ml/min
1/27/2023 12:10 PM	05:00	7.24 pH	17.80 °C	724.38 µS/cm	0.84 mg/L	3.17 NTU	24.1 mV	6.71 ft	200.00 ml/min
1/27/2023 12:15 PM	10:00	7.24 pH	17.83 °C	727.05 µS/cm	0.48 mg/L	4.46 NTU	19.7 mV	6.72 ft	200.00 ml/min
1/27/2023 12:20 PM	15:00	7.25 pH	17.98 °C	724.22 µS/cm	0.53 mg/L	6.13 NTU	18.5 mV	6.72 ft	200.00 ml/min
1/27/2023 12:25 PM	20:00	7.25 pH	18.06 °C	723.13 µS/cm	0.28 mg/L	29.60 NTU	17.7 mV	6.72 ft	200.00 ml/min
1/27/2023 12:30 PM	25:00	7.25 pH	18.02 °C	723.01 µS/cm	0.27 mg/L	24.50 NTU	17.1 mV	6.72 ft	200.00 ml/min
1/27/2023 12:35 PM	30:00	7.25 pH	18.17 °C	722.86 µS/cm	0.24 mg/L	21.20 NTU	16.7 mV	6.72 ft	200.00 ml/min
1/27/2023 12:40 PM	35:00	7.25 pH	17.96 °C	725.59 µS/cm	0.29 mg/L	16.00 NTU	16.2 mV	6.72 ft	200.00 ml/min
1/27/2023 12:45 PM	40:00	7.26 pH	18.20 °C	724.06 µS/cm	0.30 mg/L	12.50 NTU	15.9 mV	6.72 ft	200.00 ml/min
1/27/2023 12:50 PM	45:00	7.25 pH	18.06 °C	723.08 µS/cm	0.27 mg/L	8.60 NTU	16.0 mV	6.72 ft	200.00 ml/min
1/27/2023 12:55 PM	50:00	7.25 pH	18.11 °C	724.05 µS/cm	0.45 mg/L	5.92 NTU	15.6 mV	6.72 ft	200.00 ml/min
1/27/2023 1:00 PM	55:00	7.25 pH	18.20 °C	721.69 µS/cm	0.24 mg/L	4.80 NTU	15.3 mV	6.72 ft	200.00 ml/min
1/27/2023 1:05 PM	01:00:00	7.25 pH	18.22 °C	717.35 µS/cm	0.30 mg/L	3.73 NTU	15.3 mV	6.72 ft	200.00 ml/min

1/27/2023 1:10 PM	01:05:00	7.25 pH	18.22 °C	713.98 µS/cm	0.23 mg/L	3.44 NTU	15.3 mV	6.72 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-7	Grab.

Low-Flow Test Report:

Test Date / Time: 2/1/2023 9:27:41 AM
Project: GP-Plant Hammond
Operator Name: Anthony Szwast

Location Name: HGWC-8 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 15.51 ft** **Total Depth: 25.51 ft** **Initial Depth to Water: 7.75 ft**	**Pump Type: Peristaltic** **Tubing Type: Poly** **Pump Intake From TOC: 20.5 ft** **Estimated Total Volume Pumped: 8.75 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 250 ml/min** **Final Draw Down: 0.09 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883533**

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 9:27 AM	00:00	6.45 pH	15.26 °C	847.28 µS/cm	0.24 mg/L	11.70 NTU	95.3 mV	7.80 ft	250.00 ml/min
2/1/2023 9:32 AM	05:00	6.56 pH	15.84 °C	824.33 µS/cm	0.19 mg/L	3.30 NTU	74.0 mV	7.81 ft	250.00 ml/min
2/1/2023 9:37 AM	10:00	6.56 pH	15.89 °C	824.15 µS/cm	0.16 mg/L	2.57 NTU	90.4 mV	7.82 ft	250.00 ml/min
2/1/2023 9:42 AM	15:00	6.59 pH	15.93 °C	825.66 µS/cm	0.16 mg/L	1.53 NTU	88.4 mV	7.83 ft	250.00 ml/min
2/1/2023 9:47 AM	20:00	6.59 pH	16.00 °C	826.65 µS/cm	0.14 mg/L	1.50 NTU	87.5 mV	7.84 ft	250.00 ml/min
2/1/2023 9:52 AM	25:00	6.60 pH	15.98 °C	828.29 µS/cm	0.21 mg/L	1.41 NTU	86.6 mV	7.83 ft	250.00 ml/min
2/1/2023 9:57 AM	30:00	6.60 pH	16.16 °C	826.94 µS/cm	0.21 mg/L	1.30 NTU	85.9 mV	7.84 ft	250.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-8	Grab.

Low-Flow Test Report:

Test Date / Time: 1/26/2023 2:49:08 PM
Project: GP-Plant Hammond
Operator Name: Anthony Szwast

Location Name: HGWC-9 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 36.97 ft** **Total Depth: 46.97 ft** **Initial Depth to Water: 12.4 ft**	**Pump Type: Peristaltic** **Tubing Type: Poly** **Pump Intake From TOC: 41.97 ft** **Estimated Total Volume Pumped: 7 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.03 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883533**

Test Notes:
Five bottles: Full App. III and IV.

Weather Conditions:
Cloudy and windy, 45 deg F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
1/26/2023 2:49 PM	00:00	6.96 pH	16.47 °C	1,017.7 µS/cm	0.20 mg/L	1.04 NTU	27.1 mV	12.42 ft	200.00 ml/min
1/26/2023 2:54 PM	05:00	7.02 pH	16.53 °C	1,015.8 µS/cm	0.13 mg/L	1.52 NTU	27.1 mV	12.42 ft	200.00 ml/min
1/26/2023 2:59 PM	10:00	7.04 pH	16.44 °C	1,020.9 µS/cm	0.10 mg/L	1.56 NTU	25.0 mV	12.43 ft	200.00 ml/min
1/26/2023 3:04 PM	15:00	7.06 pH	16.47 °C	1,022.0 µS/cm	0.08 mg/L	1.70 NTU	23.9 mV	12.43 ft	200.00 ml/min
1/26/2023 3:09 PM	20:00	7.06 pH	16.52 °C	1,019.4 µS/cm	0.07 mg/L	2.12 NTU	23.4 mV	12.43 ft	200.00 ml/min
1/26/2023 3:14 PM	25:00	7.07 pH	16.56 °C	1,019.8 µS/cm	0.06 mg/L	1.32 NTU	23.1 mV	12.42 ft	200.00 ml/min
1/26/2023 3:19 PM	30:00	7.07 pH	17.10 °C	1,016.6 µS/cm	0.05 mg/L	1.45 NTU	22.7 mV	12.43 ft	200.00 ml/min

Samples

Sample ID:	Description:
HGWC-9	Grab.

Low-Flow Test Report:

Test Date / Time: 1/27/2023 2:26:28 PM
Project: GP-Plant Hammond
Operator Name: Connor Cain

Location Name: HGWC-10 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 12.94 ft** **Total Depth: 22.94 ft** **Initial Depth to Water: 9.93 cm**	**Pump Type: Peri** **Tubing Type: Poly** **Pump Intake From TOC: 22.94 ft** **Estimated Total Volume Pumped: 6 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.04 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 966090**

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	
1/27/2023 2:26 PM	00:00	6.88 pH	16.23 °C	269.31 µS/cm	5.42 mg/L	2.43 NTU	57.9 mV	9.96 cm	200.00 ml/min
1/27/2023 2:31 PM	05:00	6.90 pH	15.77 °C	313.01 µS/cm	5.16 mg/L	1.40 NTU	37.3 mV	9.96 cm	200.00 ml/min
1/27/2023 2:36 PM	10:00	6.91 pH	15.83 °C	311.34 µS/cm	5.18 mg/L	1.23 NTU	55.7 mV	9.97 cm	200.00 ml/min
1/27/2023 2:41 PM	15:00	6.89 pH	15.88 °C	315.65 µS/cm	5.14 mg/L	1.41 NTU	55.2 mV	9.97 cm	200.00 ml/min
1/27/2023 2:46 PM	20:00	6.90 pH	16.06 °C	312.98 µS/cm	5.10 mg/L	1.36 NTU	54.3 mV	9.97 cm	200.00 ml/min
1/27/2023 2:51 PM	25:00	6.90 pH	16.07 °C	314.46 µS/cm	5.05 mg/L	1.29 NTU	53.8 mV	9.97 cm	200.00 ml/min
1/27/2023 2:56 PM	30:00	6.89 pH	15.95 °C	317.10 µS/cm	5.05 mg/L	1.09 NTU	34.0 mV	9.97 cm	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-10	Grab.

Low-Flow Test Report:

Test Date / Time: 1/26/2023 1:37:13 PM
Project: GP-Plant Hammond
Operator Name: Connor Cain

Location Name: HGWC-11 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 15.78 ft** **Total Depth: 25.78 ft** **Initial Depth to Water: 13.57 cm**	**Pump Type: Peri** **Tubing Type: Poly** **Pump Intake From TOC: 20.57 ft** **Estimated Total Volume Pumped: 9 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.03 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 966090**

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	
1/26/2023 1:37 PM	00:00	6.18 pH	15.76 °C	674.05 µS/cm	1.36 mg/L	1.06 NTU	74.9 mV	13.60 ft	200.00 ml/min
1/26/2023 1:42 PM	05:00	6.20 pH	15.92 °C	661.24 µS/cm	1.23 mg/L	0.91 NTU	46.8 mV	13.60 ft	200.00 ml/min
1/26/2023 1:47 PM	10:00	6.20 pH	16.56 °C	663.20 µS/cm	1.11 mg/L	0.57 NTU	59.5 mV	13.60 cm	200.00 ml/min
1/26/2023 1:52 PM	15:00	6.20 pH	16.53 °C	665.73 µS/cm	1.35 mg/L	0.48 NTU	57.3 mV	13.60 ft	200.00 ml/min
1/26/2023 1:57 PM	20:00	6.21 pH	16.42 °C	664.26 µS/cm	1.14 mg/L	0.28 NTU	37.2 mV	13.60 ft	200.00 ml/min
1/26/2023 2:02 PM	25:00	6.21 pH	16.32 °C	669.84 µS/cm	1.16 mg/L	0.38 NTU	34.6 mV	13.60 ft	200.00 ml/min
1/26/2023 2:07 PM	30:00	6.22 pH	16.28 °C	635.97 µS/cm	1.28 mg/L	0.54 NTU	33.2 mV	13.60 ft	200.00 ml/min
1/26/2023 2:12 PM	35:00	6.22 pH	16.31 °C	671.45 µS/cm	1.23 mg/L	0.18 NTU	32.0 mV	13.60 ft	200.00 ml/min
1/26/2023 2:17 PM	40:00	6.23 pH	16.46 °C	673.54 µS/cm	1.34 mg/L	0.24 NTU	31.6 mV	13.60 ft	200.00 ml/min
1/26/2023 2:22 PM	45:00	6.23 pH	16.28 °C	668.22 µS/cm	1.20 mg/L	0.17 NTU	43.7 mV	13.60 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-11	Grab.
HAM-AP-1-FD-01	Grab.

Low-Flow Test Report:

Test Date / Time: 1/26/2023 11:50:34 AM
Project: GP-Plant Hammond
Operator Name: Connor Cain

Location Name: HGWC-12 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 25.42 ft** **Total Depth: 35.42 ft** **Initial Depth to Water: 13.67 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 30.42 ft** **Estimated Total Volume Pumped: 6 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 966090**

Test Notes:
Five bottles: Full App. III and IV.

Weather Conditions:
Cloudy, 41 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
1/26/2023 11:50 AM	00:00	7.17 pH	15.47 °C	893.47 µS/cm	3.56 mg/L	12.40 NTU	13.7 mV	13.67 ft	200.00 ml/min
1/26/2023 11:55 AM	05:00	7.09 pH	16.33 °C	903.45 µS/cm	0.92 mg/L	14.80 NTU	10.5 mV	13.67 ft	200.00 ml/min
1/26/2023 12:00 PM	10:00	7.10 pH	16.63 °C	892.42 µS/cm	0.91 mg/L	12.30 NTU	10.2 mV	13.67 ft	200.00 ml/min
1/26/2023 12:05 PM	15:00	7.10 pH	16.58 °C	908.14 µS/cm	0.98 mg/L	9.42 NTU	10.3 mV	13.67 ft	200.00 ml/min
1/26/2023 12:10 PM	20:00	7.09 pH	16.66 °C	901.27 µS/cm	0.61 mg/L	7.50 NTU	10.6 mV	13.67 ft	200.00 ml/min
1/26/2023 12:15 PM	25:00	7.09 pH	16.90 °C	922.52 µS/cm	0.66 mg/L	5.92 NTU	10.2 mV	13.67 ft	200.00 ml/min
1/26/2023 12:20 PM	30:00	7.10 pH	16.81 °C	914.09 µS/cm	0.74 mg/L	4.07 NTU	10.3 mV	13.67 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-12	Grab.

Low-Flow Test Report:

Test Date / Time: 1/26/2023 12:45:35 PM
Project: GP-Plant Hammond
Operator Name: Anthony Szwast

Location Name: HGWC-13 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 35.15 ft** **Total Depth: 45.15 ft** **Initial Depth to Water: 24.21 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 40.15 ft** **Estimated Total Volume Pumped: 9 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.04 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883533**

Test Notes:
Five 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	+/- 0.3	
1/26/2023 12:45 PM	00:00	6.78 pH	17.02 °C	1,220.7 µS/cm	0.75 mg/L	26.40 NTU	-39.3 mV	24.28 ft	200.00 ml/min
1/26/2023 12:50 PM	05:00	6.81 pH	17.02 °C	1,225.0 µS/cm	0.34 mg/L	20.20 NTU	-52.3 mV	24.28 ft	200.00 ml/min
1/26/2023 12:55 PM	10:00	6.82 pH	17.41 °C	1,226.2 µS/cm	0.23 mg/L	14.50 NTU	-74.9 mV	24.28 ft	200.00 ml/min
1/26/2023 1:00 PM	15:00	6.84 pH	17.38 °C	1,224.3 µS/cm	0.18 mg/L	12.44 NTU	-69.4 mV	24.25 ft	200.00 ml/min
1/26/2023 1:05 PM	20:00	6.85 pH	17.69 °C	1,222.4 µS/cm	0.16 mg/L	9.86 NTU	-75.5 mV	24.26 ft	200.00 ml/min
1/26/2023 1:10 PM	25:00	6.86 pH	17.89 °C	1,217.0 µS/cm	0.13 mg/L	7.47 NTU	-92.6 mV	24.25 ft	200.00 ml/min
1/26/2023 1:15 PM	30:00	6.88 pH	17.50 °C	1,222.1 µS/cm	0.12 mg/L	5.80 NTU	-82.4 mV	24.25 ft	200.00 ml/min
1/26/2023 1:20 PM	35:00	6.89 pH	17.63 °C	1,222.2 µS/cm	0.12 mg/L	5.09 NTU	-84.3 mV	24.25 ft	200.00 ml/min
1/26/2023 1:25 PM	40:00	6.90 pH	17.51 °C	1,224.7 µS/cm	0.11 mg/L	4.07 NTU	-85.8 mV	24.25 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-13	Grab.

Low-Flow Test Report:

Test Date / Time: 1/26/2023 10:18:51 AM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: MW-5 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 20.84 ft** **Total Depth: 30.84 ft** **Initial Depth to Water: 14.54 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 25.84 ft** **Estimated Total Volume Pumped: 11 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.21 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850724**

Test Notes:
Five bottles; Full app. III and IV.

Weather Conditions:
Cloudy, 42 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	+/- 5	
1/26/2023 10:18 AM	00:00	6.22 pH	16.20 °C	536.85 µS/cm	4.72 mg/L	0.90 NTU	82.9 mV	14.75 ft	200.00 ml/min
1/26/2023 10:23 AM	05:00	6.13 pH	16.47 °C	532.08 µS/cm	4.38 mg/L	0.44 NTU	116.8 mV	14.75 ft	200.00 ml/min
1/26/2023 10:28 AM	10:00	6.11 pH	16.70 °C	530.48 µS/cm	4.28 mg/L	0.46 NTU	102.3 mV	14.75 ft	200.00 ml/min
1/26/2023 10:33 AM	15:00	6.11 pH	16.74 °C	531.33 µS/cm	4.24 mg/L	0.52 NTU	104.4 mV	14.75 ft	200.00 ml/min
1/26/2023 10:38 AM	20:00	6.10 pH	16.78 °C	464.50 µS/cm	4.26 mg/L	0.39 NTU	107.2 mV	14.75 ft	200.00 ml/min
1/26/2023 10:43 AM	25:00	6.10 pH	16.52 °C	528.34 µS/cm	4.13 mg/L	0.52 NTU	108.3 mV	14.75 ft	200.00 ml/min
1/26/2023 10:48 AM	30:00	6.08 pH	16.56 °C	529.53 µS/cm	4.09 mg/L	0.40 NTU	109.2 mV	14.75 ft	200.00 ml/min
1/26/2023 10:53 AM	35:00	6.09 pH	16.69 °C	558.44 µS/cm	4.00 mg/L	0.38 NTU	141.3 mV	14.75 ft	200.00 ml/min
1/26/2023 10:58 AM	40:00	6.09 pH	16.56 °C	529.99 µS/cm	4.08 mg/L	0.45 NTU	142.7 mV	14.75 ft	200.00 ml/min
1/26/2023 11:03 AM	45:00	6.09 pH	16.61 °C	530.99 µS/cm	4.07 mg/L	0.64 NTU	144.3 mV	14.75 ft	200.00 ml/min
1/26/2023 11:08 AM	50:00	6.07 pH	16.65 °C	530.31 µS/cm	3.93 mg/L	0.27 NTU	145.3 mV	14.75 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-MW-5	Grab.

Low-Flow Test Report:

Test Date / Time: 1/26/2023 11:50:31 AM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: MW-6 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 22.96 ft** **Total Depth: 32.96 ft** **Initial Depth to Water: 14.55 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 27.96 ft** **Estimated Total Volume Pumped: 10 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.05 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850724**

Test Notes:
Five 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	
1/26/2023 11:50 AM	00:00	6.79 pH	17.63 °C	1,046.1 µS/cm	1.62 mg/L	61.20 NTU	-11.0 mV	14.60 ft	200.00 ml/min
1/26/2023 11:55 AM	05:00	6.83 pH	18.00 °C	1,031.6 µS/cm	1.10 mg/L	58.30 NTU	12.1 mV	14.60 ft	200.00 ml/min
1/26/2023 12:00 PM	10:00	6.86 pH	18.00 °C	1,024.8 µS/cm	1.11 mg/L	26.00 NTU	15.0 mV	14.60 ft	200.00 ml/min
1/26/2023 12:05 PM	15:00	6.86 pH	18.12 °C	1,025.3 µS/cm	1.07 mg/L	16.20 NTU	16.6 mV	14.60 ft	200.00 ml/min
1/26/2023 12:10 PM	20:00	6.87 pH	18.03 °C	1,021.3 µS/cm	0.96 mg/L	12.20 NTU	18.6 mV	14.60 ft	200.00 ml/min
1/26/2023 12:15 PM	25:00	6.88 pH	18.25 °C	1,015.2 µS/cm	0.85 mg/L	8.47 NTU	19.5 mV	14.60 ft	200.00 ml/min
1/26/2023 12:20 PM	30:00	6.89 pH	18.21 °C	1,024.6 µS/cm	0.92 mg/L	5.66 NTU	19.2 mV	14.60 ft	200.00 ml/min
1/26/2023 12:25 PM	35:00	6.89 pH	18.24 °C	1,012.3 µS/cm	0.89 mg/L	5.09 NTU	18.9 mV	14.60 ft	200.00 ml/min
1/26/2023 12:30 PM	40:00	6.90 pH	18.06 °C	974.27 µS/cm	1.00 mg/L	4.02 NTU	18.5 mV	14.60 ft	200.00 ml/min
1/26/2023 12:35 PM	45:00	6.90 pH	17.99 °C	1,010.2 µS/cm	0.90 mg/L	3.19 NTU	19.5 mV	14.60 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-MW-6	Grab.

Low-Flow Test Report:

Test Date / Time: 1/26/2023 1:28:56 PM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: MW-7 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 16.89 ft** **Total Depth: 26.89 ft** **Initial Depth to Water: 10.9 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 21.89 ft** **Estimated Total Volume Pumped: 7 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850724**

Test Notes:
Five 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	
1/26/2023 1:28 PM	00:00	6.31 pH	16.29 °C	143.30 µS/cm	3.64 mg/L	4.08 NTU	116.2 mV	10.90 ft	200.00 ml/min
1/26/2023 1:33 PM	05:00	6.18 pH	16.24 °C	143.78 µS/cm	3.58 mg/L	2.92 NTU	114.1 mV	10.90 ft	200.00 ml/min
1/26/2023 1:38 PM	10:00	6.16 pH	16.22 °C	144.64 µS/cm	3.53 mg/L	1.50 NTU	114.8 mV	10.90 ft	200.00 ml/min
1/26/2023 1:43 PM	15:00	6.17 pH	16.41 °C	146.86 µS/cm	3.53 mg/L	1.44 NTU	114.2 mV	10.90 ft	200.00 ml/min
1/26/2023 1:48 PM	20:00	6.19 pH	16.52 °C	147.27 µS/cm	3.53 mg/L	1.01 NTU	112.6 mV	10.90 ft	200.00 ml/min
1/26/2023 1:53 PM	25:00	6.20 pH	16.42 °C	150.64 µS/cm	3.45 mg/L	1.22 NTU	110.6 mV	10.90 ft	200.00 ml/min
1/26/2023 1:59 PM	30:44	6.23 pH	16.33 °C	152.78 µS/cm	3.54 mg/L	0.97 NTU	102.6 mV	10.90 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-MW-7	Grab.

Low-Flow Test Report:

Test Date / Time: 1/26/2023 3:30:09 PM
Project: GP-Plant Hammond
Operator Name: Connor Cain

Location Name: MW-19 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 19.53 ft** **Total Depth: 29.53 ft** **Initial Depth to Water: 11.67 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 29.53 ft** **Estimated Total Volume Pumped: 6 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 966090**

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	
1/26/2023 3:30 PM	00:00	6.12 pH	15.77 °C	668.72 µS/cm	2.02 mg/L	3.98 NTU	48.4 mV	11.67 ft	200.00 ml/min
1/26/2023 3:35 PM	05:00	6.09 pH	17.22 °C	654.23 µS/cm	1.49 mg/L	6.02 NTU	42.2 mV	11.67 ft	200.00 ml/min
1/26/2023 3:40 PM	10:00	6.10 pH	17.66 °C	633.69 µS/cm	1.15 mg/L	5.36 NTU	40.2 mV	11.67 ft	200.00 ml/min
1/26/2023 3:45 PM	15:00	6.10 pH	17.22 °C	628.16 µS/cm	1.06 mg/L	3.90 NTU	37.3 mV	11.67 ft	200.00 ml/min
1/26/2023 3:50 PM	20:00	6.10 pH	17.11 °C	634.70 µS/cm	0.95 mg/L	3.52 NTU	36.2 mV	11.67 ft	200.00 ml/min
1/26/2023 3:55 PM	25:00	6.11 pH	17.13 °C	651.12 µS/cm	1.02 mg/L	3.41 NTU	36.3 mV	11.67 ft	200.00 ml/min
1/26/2023 4:00 PM	30:00	6.13 pH	17.46 °C	657.88 µS/cm	0.95 mg/L	2.70 NTU	34.3 mV	11.67 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-MW-19	Grab.

Low-Flow Test Report:

Test Date / Time: 1/26/2023 9:13:22 AM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: MW-20 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 24.37 ft** **Total Depth: 34.37 ft** **Initial Depth to Water: 11.6 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 29.37 ft** **Estimated Total Volume Pumped: 7 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.22 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850724**

Test Notes:
Five bottles; Full app. III and IV.

Weather Conditions:
Sunny, 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	
1/26/2023 9:13 AM	00:00	6.64 pH	16.24 °C	700.59 µS/cm	2.33 mg/L	8.25 NTU	-51.8 mV	11.82 ft	200.00 ml/min
1/26/2023 9:18 AM	05:00	6.75 pH	16.86 °C	710.09 µS/cm	1.14 mg/L	5.26 NTU	-66.7 mV	11.82 ft	200.00 ml/min
1/26/2023 9:23 AM	10:00	6.84 pH	16.91 °C	728.56 µS/cm	1.09 mg/L	5.36 NTU	-73.7 mV	11.82 ft	200.00 ml/min
1/26/2023 9:28 AM	15:00	6.88 pH	17.09 °C	736.14 µS/cm	0.95 mg/L	5.29 NTU	-77.5 mV	11.82 ft	200.00 ml/min
1/26/2023 9:33 AM	20:00	6.92 pH	16.93 °C	736.47 µS/cm	0.86 mg/L	5.18 NTU	-78.7 mV	11.82 ft	200.00 ml/min
1/26/2023 9:38 AM	25:00	6.94 pH	16.92 °C	740.90 µS/cm	0.90 mg/L	4.67 NTU	-79.1 mV	11.82 ft	200.00 ml/min
1/26/2023 9:43 AM	30:00	6.95 pH	16.84 °C	742.45 µS/cm	0.75 mg/L	4.58 NTU	-78.7 mV	11.82 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-MW-20	Grab.

Low-Flow Test Report:

Test Date / Time: 1/26/2023 10:30:58 AM
Project: GP-Plant Hammond
Operator Name: Anthony Szwast

Location Name: MW-24D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 62.77 ft** **Total Depth: 72.77 ft** **Initial Depth to Water: 27.23 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 67.77 ft** **Estimated Total Volume Pumped: 12 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.05 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883533**

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	
1/26/2023 10:30 AM	00:00	7.51 pH	16.80 °C	617.14 µS/cm	1.10 mg/L	1.40 NTU	-24.6 mV	27.25 ft	200.00 ml/min
1/26/2023 10:35 AM	05:00	7.56 pH	17.31 °C	621.63 µS/cm	0.68 mg/L	2.40 NTU	-23.4 mV	27.28 ft	200.00 ml/min
1/26/2023 10:40 AM	10:00	7.57 pH	17.04 °C	620.87 µS/cm	0.43 mg/L	2.83 NTU	-35.8 mV	27.28 ft	200.00 ml/min
1/26/2023 10:45 AM	15:00	7.58 pH	17.07 °C	622.84 µS/cm	0.32 mg/L	3.47 NTU	-20.6 mV	27.28 ft	200.00 ml/min
1/26/2023 10:50 AM	20:00	7.58 pH	17.10 °C	621.68 µS/cm	0.26 mg/L	4.79 NTU	-32.4 mV	27.28 ft	200.00 ml/min
1/26/2023 10:55 AM	25:00	7.59 pH	17.19 °C	620.14 µS/cm	0.24 mg/L	6.57 NTU	-17.4 mV	27.28 ft	200.00 ml/min
1/26/2023 11:00 AM	30:00	7.59 pH	17.12 °C	620.59 µS/cm	0.23 mg/L	7.65 NTU	-15.7 mV	27.28 ft	200.00 ml/min
1/26/2023 11:05 AM	35:00	7.59 pH	17.14 °C	619.18 µS/cm	0.23 mg/L	8.46 NTU	-14.2 mV	27.28 ft	200.00 ml/min
1/26/2023 11:10 AM	40:00	7.59 pH	17.28 °C	620.18 µS/cm	0.22 mg/L	8.13 NTU	-13.1 mV	27.28 ft	200.00 ml/min
1/26/2023 11:15 AM	45:00	7.60 pH	17.10 °C	618.37 µS/cm	0.22 mg/L	6.62 NTU	-11.6 mV	27.28 ft	200.00 ml/min
1/26/2023 11:20 AM	50:00	7.59 pH	17.23 °C	620.14 µS/cm	0.22 mg/L	7.07 NTU	-10.6 mV	27.28 ft	200.00 ml/min
1/26/2023 11:25 AM	55:00	7.60 pH	17.10 °C	618.19 µS/cm	0.23 mg/L	4.92 NTU	-21.0 mV	27.28 ft	200.00 ml/min
1/26/2023 11:30 AM	01:00:00	7.61 pH	17.09 °C	619.68 µS/cm	0.61 mg/L		-20.5 mV	27.28 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-MW-24D	Grab.

Low-Flow Test Report:

Test Date / Time: 1/26/2023 9:34:00 AM
Project: GP-Plant Hammond
Operator Name: Connor Cain

Location Name: MW-25D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 53.21 ft** **Total Depth: 63.21 ft** **Initial Depth to Water: 13.75 ft**	**Pump Type: Peri** **Tubing Type: Poly** **Pump Intake From TOC: 35.26 ft** **Estimated Total Volume Pumped: 5.5 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 4.47 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 966090**

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	+/- 5	
1/26/2023 9:34 AM	00:00	7.51 pH	16.91 °C	586.34 µS/cm	0.56 mg/L	1.90 NTU	-88.7 mV	15.28 ft	200.00 ml/min
1/26/2023 9:39 AM	05:00	7.63 pH	16.91 °C	585.87 µS/cm	0.51 mg/L	0.80 NTU	-96.2 mV	16.20 ft	200.00 ml/min
1/26/2023 9:44 AM	10:00	7.68 pH	16.86 °C	584.23 µS/cm	0.47 mg/L	0.83 NTU	-100.5 mV	16.96 ft	200.00 ml/min
1/26/2023 9:49 AM	15:00	7.70 pH	17.19 °C	581.39 µS/cm	0.46 mg/L	0.69 NTU	-103.7 mV	17.82 ft	200.00 ml/min
1/26/2023 9:54 AM	20:00	7.70 pH	17.24 °C	581.47 µS/cm	0.86 mg/L	0.59 NTU	-103.8 mV	18.39 ft	200.00 ml/min
1/26/2023 9:59 AM	25:00	7.71 pH	16.08 °C	574.15 µS/cm	1.05 mg/L	0.50 NTU	-98.4 mV	18.35 ft	200.00 ml/min
1/26/2023 10:04 AM	30:00	7.73 pH	15.20 °C	578.01 µS/cm	1.07 mg/L	0.48 NTU	-145.4 mV	18.22 ft	200.00 ml/min
1/26/2023 10:09 AM	35:00	7.74 pH	15.24 °C	586.46 µS/cm	0.90 mg/L	0.39 NTU	-99.5 mV	18.22 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-MW-25D	Grab.

Low-Flow Test Report:

Test Date / Time: 1/26/2023 3:57:34 PM
Project: GP-Plant Hammond
Operator Name: Anthony Szwast

Location Name: MW-26D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 68.11 ft** **Total Depth: 78.11 ft** **Initial Depth to Water: 12.42 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 73.11 ft** **Estimated Total Volume Pumped: 7 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.16 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883533**

Test Notes:
Five bottles: Full App. III and IV.

Weather Conditions:
Cloudy, windy, 45 deg F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
1/26/2023 3:57 PM	00:00	7.27 pH	16.54 °C	984.88 µS/cm	0.93 mg/L	7.57 NTU	-147.3 mV	12.59 ft	200.00 ml/min
1/26/2023 4:02 PM	05:00	7.14 pH	16.89 °C	1,027.5 µS/cm	0.25 mg/L	12.29 NTU	-86.0 mV	12.60 ft	200.00 ml/min
1/26/2023 4:07 PM	10:00	7.14 pH	16.92 °C	1,028.2 µS/cm	0.16 mg/L	9.37 NTU	-88.2 mV	12.60 ft	200.00 ml/min
1/26/2023 4:12 PM	15:00	7.13 pH	17.36 °C	1,025.5 µS/cm	0.12 mg/L	5.41 NTU	-61.3 mV	12.59 ft	200.00 ml/min
1/26/2023 4:17 PM	20:00	7.14 pH	17.26 °C	1,026.0 µS/cm	0.09 mg/L	4.05 NTU	-56.1 mV	12.58 ft	200.00 ml/min
1/26/2023 4:22 PM	25:00	7.14 pH	17.10 °C	1,027.3 µS/cm	0.09 mg/L	3.97 NTU	-51.9 mV	12.58 ft	200.00 ml/min
1/26/2023 4:27 PM	30:00	7.14 pH	17.05 °C	1,027.9 µS/cm	0.09 mg/L	2.36 NTU	-48.8 mV	12.58 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-MW-26D	Grab.

Low-Flow Test Report:

Test Date / Time: 1/27/2023 11:50:36 AM
Project: GP-Plant Hammond
Operator Name: Anthony Szwast

Location Name: MW-27D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 53.19 ft** **Total Depth: 63.19 ft** **Initial Depth to Water: 7.73 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 58.19 ft** **Estimated Total Volume Pumped: 53.25 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 45.56 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883533**

Test Notes:
Five bottles: Full App. III and IV.

Weather Conditions:
Sunny, 40 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
1/27/2023 11:50 AM	00:00	7.48 pH	17.36 °C	463.75 µS/cm	1.20 mg/L	3.30 NTU	-104.7 mV	10.05 ft	250.00 ml/min
1/27/2023 11:55 AM	05:00	7.50 pH	17.81 °C	458.47 µS/cm	0.73 mg/L	2.06 NTU	-139.0 mV	11.83 ft	250.00 ml/min
1/27/2023 12:00 PM	10:00	7.51 pH	17.85 °C	456.90 µS/cm	0.53 mg/L	2.15 NTU	-164.8 mV	13.32 ft	250.00 ml/min
1/27/2023 12:05 PM	15:00	7.54 pH	17.92 °C	444.28 µS/cm	0.41 mg/L	3.13 NTU	-168.1 mV	14.94 ft	250.00 ml/min
1/27/2023 12:10 PM	20:00	7.56 pH	18.02 °C	428.83 µS/cm	0.35 mg/L	3.06 NTU	-154.5 mV	16.55 ft	250.00 ml/min
1/27/2023 12:15 PM	25:00	7.58 pH	18.05 °C	425.02 µS/cm	0.36 mg/L	3.49 NTU	-146.7 mV	18.21 ft	250.00 ml/min
1/27/2023 12:20 PM	30:00	7.59 pH	18.17 °C	423.01 µS/cm	0.40 mg/L	3.75 NTU	-141.1 mV	19.68 ft	250.00 ml/min
1/27/2023 12:25 PM	35:00	7.60 pH	18.20 °C	421.78 µS/cm	1.11 mg/L	3.91 NTU	-136.8 mV	21.38 ft	250.00 ml/min
1/27/2023 12:30 PM	40:00	7.60 pH	18.30 °C	421.75 µS/cm	2.19 mg/L	4.15 NTU	-119.5 mV	22.92 ft	250.00 ml/min
1/27/2023 12:35 PM	45:00	7.60 pH	18.33 °C	420.75 µS/cm	1.94 mg/L	3.76 NTU	-131.8 mV	24.47 ft	250.00 ml/min
1/27/2023 12:40 PM	50:00	7.61 pH	18.31 °C	422.93 µS/cm	1.80 mg/L	3.50 NTU	-130.3 mV	25.75 ft	250.00 ml/min
1/27/2023 12:45 PM	55:00	7.63 pH	18.48 °C	422.33 µS/cm	1.83 mg/L	3.90 NTU	-125.9 mV	27.32 ft	250.00 ml/min
1/27/2023 12:50 PM	01:00:00	7.67 pH	18.45 °C	423.26 µS/cm	2.17 mg/L	3.41 NTU	-118.9 mV	28.57 ft	250.00 ml/min

1/27/2023 12:55 PM	01:05:00	7.70 pH	18.16 °C	425.67 µS/cm	2.29 mg/L	3.91 NTU	-112.9 mV	30.40 ft	250.00 ml/min
1/27/2023 1:00 PM	01:10:00	7.72 pH	18.15 °C	425.51 µS/cm	2.37 mg/L	3.64 NTU	-108.8 mV	31.41 ft	250.00 ml/min
1/27/2023 1:05 PM	01:15:00	7.74 pH	18.25 °C	425.37 µS/cm	2.91 mg/L	3.70 NTU	-106.4 mV	32.87 ft	250.00 ml/min
1/27/2023 1:10 PM	01:20:00	7.75 pH	18.26 °C	426.45 µS/cm	3.31 mg/L	3.80 NTU	-105.8 mV	34.13 ft	250.00 ml/min
1/27/2023 1:15 PM	01:25:00	7.76 pH	18.25 °C	425.76 µS/cm	4.22 mg/L	3.86 NTU	-82.7 mV	35.40 ft	250.00 ml/min
1/27/2023 1:20 PM	01:30:00	7.77 pH	18.35 °C	425.28 µS/cm	4.41 mg/L	4.08 NTU	-79.6 mV	36.68 ft	250.00 ml/min
1/27/2023 1:25 PM	01:35:00	7.77 pH	18.39 °C	425.54 µS/cm	5.10 mg/L	3.49 NTU	-104.5 mV	37.91 ft	250.00 ml/min
1/27/2023 1:30 PM	01:40:00	7.76 pH	18.52 °C	426.88 µS/cm	4.79 mg/L	3.45 NTU	-108.6 mV	39.23 ft	250.00 ml/min
1/27/2023 1:35 PM	01:45:00	7.77 pH	18.45 °C	425.08 µS/cm	5.46 mg/L	3.24 NTU	-109.4 mV	40.45 ft	250.00 ml/min
1/27/2023 1:40 PM	01:50:00	7.78 pH	18.62 °C	424.99 µS/cm	5.05 mg/L	3.04 NTU	-110.2 mV	41.70 ft	250.00 ml/min
1/27/2023 1:45 PM	01:55:00	7.77 pH	18.67 °C	425.23 µS/cm	4.90 mg/L	2.78 NTU	-111.6 mV	42.75 ft	250.00 ml/min
1/27/2023 1:50 PM	02:00:00	7.77 pH	18.58 °C	423.19 µS/cm	5.43 mg/L	2.88 NTU	-113.4 mV	43.97 ft	250.00 ml/min
1/27/2023 1:55 PM	02:05:00	7.78 pH	18.17 °C	424.48 µS/cm	5.18 mg/L	2.14 NTU	-109.4 mV	44.40 ft	100.00 ml/min
1/27/2023 2:00 PM	02:10:00	7.78 pH	17.92 °C	425.34 µS/cm	3.82 mg/L	1.96 NTU	-94.9 mV	44.76 ft	100.00 ml/min
1/27/2023 2:05 PM	02:15:00	7.76 pH	17.86 °C	426.40 µS/cm	3.80 mg/L	1.90 NTU	-99.3 mV	44.99 ft	100.00 ml/min
1/27/2023 2:10 PM	02:20:00	7.75 pH	17.99 °C	428.21 µS/cm	5.92 mg/L	1.78 NTU	-100.4 mV	45.28 ft	100.00 ml/min
1/27/2023 2:15 PM	02:25:00	7.76 pH	17.97 °C	426.66 µS/cm	6.31 mg/L	1.76 NTU	-115.5 mV	45.54 ft	100.00 ml/min
1/27/2023 2:20 PM	02:30:00	7.76 pH	18.05 °C	425.21 µS/cm	2.99 mg/L	1.53 NTU	-90.7 mV	45.79 ft	100.00 ml/min
1/27/2023 2:25 PM	02:35:00	7.75 pH	18.02 °C	425.86 µS/cm	4.18 mg/L	1.11 NTU	-106.0 mV	46.01 ft	100.00 ml/min
1/27/2023 2:30 PM	02:40:00	7.75 pH	18.07 °C	426.44 µS/cm	3.85 mg/L	1.35 NTU	-110.7 mV	46.29 ft	100.00 ml/min
1/27/2023 2:35 PM	02:45:00	7.75 pH	18.08 °C	424.24 µS/cm	3.84 mg/L	0.33 NTU	-127.7 mV	46.51 ft	100.00 ml/min
1/27/2023 2:40 PM	02:50:00	7.76 pH	18.16 °C	424.77 µS/cm	2.43 mg/L	0.89 NTU	-112.8 mV	46.75 ft	100.00 ml/min
1/27/2023 2:45 PM	02:55:00	7.76 pH	18.19 °C	425.76 µS/cm	2.53 mg/L	1.10 NTU	-113.6 mV	46.99 ft	100.00 ml/min
1/27/2023 2:50 PM	03:00:00	7.76 pH	18.08 °C	425.11 µS/cm	2.26 mg/L	0.89 NTU	-113.5 mV	47.18 ft	100.00 ml/min
1/27/2023 2:55 PM	03:05:00	7.77 pH	18.19 °C	428.68 µS/cm	2.34 mg/L	1.01 NTU	-127.4 mV	47.45 ft	100.00 ml/min
1/27/2023 3:00 PM	03:10:00	7.76 pH	18.35 °C	429.12 µS/cm	2.53 mg/L	0.63 NTU	-110.9 mV	47.65 ft	100.00 ml/min
1/27/2023 3:05 PM	03:15:00	7.77 pH	18.10 °C	425.70 µS/cm	2.79 mg/L	0.33 NTU	-127.6 mV	47.88 ft	100.00 ml/min
1/27/2023 3:10 PM	03:20:00	7.77 pH	18.34 °C	426.72 µS/cm	3.24 mg/L	0.59 NTU	-110.5 mV	48.11 ft	100.00 ml/min
1/27/2023 3:15 PM	03:25:00	7.77 pH	18.27 °C	425.67 µS/cm	3.13 mg/L	0.76 NTU	-124.8 mV	48.32 ft	100.00 ml/min

1/27/2023 3:20 PM	03:30:00	7.78 pH	18.40 °C	425.74 µS/cm	2.95 mg/L	0.58 NTU	-124.8 mV	48.52 ft	100.00 ml/min
1/27/2023 3:25 PM	03:35:00	7.78 pH	18.37 °C	424.68 µS/cm	3.39 mg/L	0.90 NTU	-125.7 mV	48.74 ft	100.00 ml/min
1/27/2023 3:30 PM	03:40:00	7.78 pH	18.26 °C	426.13 µS/cm	2.69 mg/L	1.17 NTU	-127.5 mV	48.97 ft	100.00 ml/min
1/27/2023 3:35 PM	03:45:00	7.78 pH	18.21 °C	424.90 µS/cm	2.61 mg/L	0.63 NTU	-128.9 mV	49.17 ft	100.00 ml/min
1/27/2023 3:40 PM	03:50:00	7.78 pH	18.12 °C	423.73 µS/cm	2.68 mg/L	0.52 NTU	-131.5 mV	49.39 ft	100.00 ml/min
1/27/2023 3:45 PM	03:55:00	7.78 pH	17.96 °C	423.59 µS/cm	2.59 mg/L	0.57 NTU	-117.0 mV	49.59 ft	100.00 ml/min
1/27/2023 3:50 PM	04:00:00	7.78 pH	17.90 °C	423.27 µS/cm	2.51 mg/L	0.55 NTU	-131.4 mV	49.80 ft	100.00 ml/min
1/27/2023 3:55 PM	04:05:00	7.78 pH	18.16 °C	423.26 µS/cm	2.65 mg/L	0.54 NTU	-132.0 mV	50.00 ft	100.00 ml/min
1/27/2023 4:00 PM	04:10:00	7.78 pH	18.08 °C	422.43 µS/cm	2.53 mg/L	0.51 NTU	-132.9 mV	50.21 ft	100.00 ml/min
1/27/2023 4:05 PM	04:15:00	7.78 pH	18.08 °C	422.11 µS/cm	2.60 mg/L	0.64 NTU	-133.9 mV	50.41 ft	100.00 ml/min
1/27/2023 4:10 PM	04:20:00	7.79 pH	18.07 °C	421.36 µS/cm	2.50 mg/L	0.34 NTU	-132.3 mV	50.60 ft	100.00 ml/min
1/27/2023 4:15 PM	04:25:00	7.79 pH	17.99 °C	420.84 µS/cm	2.23 mg/L	0.38 NTU	-131.5 mV	50.79 ft	100.00 ml/min
1/27/2023 4:20 PM	04:30:00	7.79 pH	17.99 °C	420.43 µS/cm	2.65 mg/L	0.46 NTU	-118.0 mV	51.01 ft	100.00 ml/min
1/27/2023 4:25 PM	04:35:00	7.79 pH	17.94 °C	420.19 µS/cm	2.52 mg/L	1.66 NTU	-132.3 mV	51.19 ft	100.00 ml/min
1/27/2023 4:30 PM	04:40:00	7.79 pH	17.94 °C	420.43 µS/cm	2.50 mg/L	0.48 NTU	-132.4 mV	51.36 ft	100.00 ml/min
1/27/2023 4:35 PM	04:45:00	7.79 pH	17.80 °C	417.82 µS/cm	2.38 mg/L	0.95 NTU	-133.1 mV	51.53 ft	100.00 ml/min
1/27/2023 4:40 PM	04:50:00	7.79 pH	17.60 °C	417.36 µS/cm	2.51 mg/L	0.51 NTU	-134.6 mV	51.71 ft	100.00 ml/min
1/27/2023 4:45 PM	04:55:00	7.79 pH	17.32 °C	419.44 µS/cm	2.08 mg/L	0.38 NTU	-134.5 mV	51.89 ft	100.00 ml/min
1/27/2023 4:50 PM	05:00:00	7.79 pH	17.14 °C	420.52 µS/cm	2.39 mg/L	0.44 NTU	-121.1 mV	52.06 ft	100.00 ml/min
1/27/2023 4:55 PM	05:05:00	7.79 pH	17.08 °C	420.24 µS/cm	2.32 mg/L	0.43 NTU	-135.7 mV	52.25 ft	100.00 ml/min
1/27/2023 5:00 PM	05:10:00	7.80 pH	16.93 °C	419.55 µS/cm	2.42 mg/L	0.63 NTU	-135.4 mV	52.43 ft	100.00 ml/min
1/27/2023 5:05 PM	05:15:00	7.80 pH	16.87 °C	420.18 µS/cm	2.18 mg/L	0.51 NTU	-135.8 mV	52.61 ft	100.00 ml/min
1/27/2023 5:10 PM	05:20:00	7.80 pH	16.79 °C	419.00 µS/cm	2.06 mg/L	1.11 NTU	-135.3 mV	52.78 ft	100.00 ml/min
1/27/2023 5:15 PM	05:25:00	7.79 pH	16.74 °C	418.03 µS/cm	1.99 mg/L	0.58 NTU	-137.0 mV	52.96 ft	100.00 ml/min
1/27/2023 5:20 PM	05:30:00	7.80 pH	16.67 °C	417.54 µS/cm	1.84 mg/L	0.71 NTU	-137.9 mV	53.13 ft	100.00 ml/min
1/27/2023 5:25 PM	05:35:00	7.80 pH	16.60 °C	418.00 µS/cm	1.99 mg/L	0.53 NTU	-138.8 mV	53.24 ft	100.00 ml/min
1/27/2023 5:30 PM	05:40:00	7.80 pH	16.58 °C	416.98 µS/cm	1.95 mg/L	0.65 NTU	-126.9 mV	53.29 ft	100.00 ml/min

Samples

Sample ID:	Description:
HAM-MW-27D	Grab.

Low-Flow Test Report:

Test Date / Time: 1/26/2023 4:08:35 PM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: MW-28D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 48.21 ft** **Total Depth: 58.21 ft** **Initial Depth to Water: 6.12 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 53.21 ft** **Estimated Total Volume Pumped: 16000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.08 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850724**

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	+/- 5	
1/26/2023 4:08 PM	00:00	7.63 pH	16.04 °C	576.56 µS/cm	0.84 mg/L	62.50 NTU	-237.2 mV	6.20 ft	200.00 ml/min
1/26/2023 4:13 PM	05:00	7.69 pH	16.46 °C	548.18 µS/cm	0.73 mg/L	69.50 NTU	-254.2 mV	6.20 ft	200.00 ml/min
1/26/2023 4:18 PM	10:00	7.74 pH	16.56 °C	558.28 µS/cm	0.81 mg/L	51.20 NTU	-266.1 mV	6.20 ft	200.00 ml/min
1/26/2023 4:23 PM	15:00	7.75 pH	16.49 °C	570.62 µS/cm	0.79 mg/L	47.80 NTU	-277.9 mV	6.20 ft	200.00 ml/min
1/26/2023 4:28 PM	20:00	7.75 pH	16.57 °C	573.20 µS/cm	0.72 mg/L	49.70 NTU	-283.5 mV	6.20 ft	200.00 ml/min
1/26/2023 4:33 PM	25:00	7.74 pH	16.65 °C	578.28 µS/cm	0.81 mg/L	32.50 NTU	-286.0 mV	6.20 ft	200.00 ml/min
1/26/2023 4:38 PM	30:00	7.74 pH	16.92 °C	586.75 µS/cm	0.74 mg/L	18.70 NTU	-284.4 mV	6.20 ft	200.00 ml/min
1/26/2023 4:43 PM	35:00	7.72 pH	16.76 °C	587.27 µS/cm	0.73 mg/L	15.00 NTU	-280.0 mV	6.20 ft	200.00 ml/min
1/26/2023 4:48 PM	40:00	7.72 pH	16.56 °C	595.47 µS/cm	0.77 mg/L	14.70 NTU	-272.6 mV	6.20 ft	200.00 ml/min
1/26/2023 4:53 PM	45:00	7.70 pH	16.47 °C	592.17 µS/cm	0.79 mg/L	11.90 NTU	-276.6 mV	6.20 ft	200.00 ml/min
1/26/2023 4:58 PM	50:00	7.69 pH	16.29 °C	594.84 µS/cm	0.25 mg/L	10.42 NTU	-297.6 mV	6.20 ft	200.00 ml/min
1/26/2023 5:03 PM	55:00	7.69 pH	16.35 °C	599.00 µS/cm	0.26 mg/L	9.80 NTU	-286.1 mV	6.20 ft	200.00 ml/min
1/26/2023 5:08 PM	01:00:00	7.67 pH	16.47 °C	597.93 µS/cm	0.24 mg/L	9.47 NTU	-290.4 mV	6.20 ft	200.00 ml/min

1/26/2023 5:13 PM	01:05:00	7.67 pH	16.38 °C	597.16 µS/cm	0.24 mg/L	8.33 NTU	-288.6 mV	6.20 ft	200.00 ml/min
1/26/2023 5:18 PM	01:10:00	7.67 pH	16.41 °C	597.07 µS/cm	0.21 mg/L	8.06 NTU	-293.2 mV	6.20 ft	200.00 ml/min
1/26/2023 5:23 PM	01:15:00	7.67 pH	16.41 °C	597.22 µS/cm	0.23 mg/L	5.35 NTU	-294.3 mV	6.20 ft	200.00 ml/min
1/26/2023 5:28 PM	01:20:00	7.67 pH	16.58 °C	599.61 µS/cm	0.22 mg/L	4.88 NTU	-261.9 mV	6.20 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-MW-28D	Grab.

Low-Flow Test Report:

Test Date / Time: 1/26/2023 2:44:20 PM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: MW-29 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 18.25 ft** **Total Depth: 28.25 ft** **Initial Depth to Water: 4.25 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 23.25 ft** **Estimated Total Volume Pumped: 7 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.05 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850724**

Test Notes:
Five bottles; Full app. III and IV.

Weather Conditions:
Cloudy, 45 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	+/- 5	
1/26/2023 2:44 PM	00:00	7.15 pH	15.14 °C	769.36 µS/cm	1.96 mg/L	14.50 NTU	46.7 mV	4.30 ft	200.00 ml/min
1/26/2023 2:49 PM	05:00	7.19 pH	15.12 °C	907.64 µS/cm	2.07 mg/L	8.21 NTU	39.3 mV	4.30 ft	200.00 ml/min
1/26/2023 2:54 PM	10:00	7.21 pH	15.07 °C	897.48 µS/cm	2.00 mg/L	7.94 NTU	38.6 mV	4.30 ft	200.00 ml/min
1/26/2023 2:59 PM	15:00	7.22 pH	14.94 °C	899.36 µS/cm	1.73 mg/L	7.41 NTU	38.4 mV	4.30 ft	200.00 ml/min
1/26/2023 3:04 PM	20:00	7.22 pH	15.15 °C	932.56 µS/cm	1.76 mg/L	3.59 NTU	38.3 mV	4.30 ft	200.00 ml/min
1/26/2023 3:09 PM	25:00	7.23 pH	15.25 °C	898.66 µS/cm	1.74 mg/L	3.27 NTU	36.5 mV	4.30 ft	200.00 ml/min
1/26/2023 3:14 PM	30:00	7.22 pH	15.16 °C	899.96 µS/cm	1.59 mg/L	3.02 NTU	36.3 mV	4.30 ft	200.00 ml/min

Samples

Sample ID:	Description:
MW-29	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

Location Name: HGWA-1 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 22.49 ft** **Total Depth: 32.49 ft** **Initial Depth to Water: 22 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 27.49 m** **Estimated Total Volume Pumped: 7 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.56 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883553**

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

Location Name: HGWA-2 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 27.95 ft** **Total Depth: 28.45 ft** **Initial Depth to Water: 14.84 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 22.95 ft** **Estimated Total Volume Pumped: 7 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.06 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883553**

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

Location Name: HGWA-3 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 34.51 ft** **Total Depth: 45.20 ft** **Initial Depth to Water: 14.55 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 39.51 ft** **Estimated Total Volume Pumped: 7 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.01 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883553**

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 10:14:50 AM
Project: GP-Plant Hammond
Operator Name: Elisabeth McDonnell

Location Name: HGWA-43D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 51.25 ft** **Total Depth: 61.85 ft** **Initial Depth to Water: 21.84 ft**	**Pump Type: Bladder pump** **Tubing Type: Polly** **Pump Intake From TOC: 56.25 ft** **Estimated Total Volume Pumped: 10.4 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min Final Draw Down: 3.66 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 989630**

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:

HAM-HGWA-43D	Grab

Low-Flow Test Report:

Test Date / Time: 8/8/2023 10:09:47 AM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: HGWA-44D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 103.5 ft** **Total Depth: 111.16 ft** **Initial Depth to Water: 21.5 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 108.5 ft** **Estimated Total Volume Pumped: 6 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 2.6 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850724**

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:

HGWA-44D	Grab

Low-Flow Test Report:

Test Date / Time: 8/12/2023 1:40:22 PM
Project: GP-Plant Hammond
Operator Name: Connor Cain

Location Name: HGWC-7 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 17.96 ft** **Total Depth: 28.71 ft** **Initial Depth to Water: 13.3 ft**	**Pump Type: Peri** **Tubing Type: Poly** **Pump Intake From TOC: 22.96 ft** **Estimated Total Volume Pumped: 11 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.1 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883553**

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	
8/12/2023 1:40 PM	00:00	7.33 pH	27.84 °C	603.35 µS/cm	1.04 mg/L	2.43 NTU	16.7 mV	13.35 ft	200.00 ml/min
8/12/2023 1:45 PM	05:00	7.38 pH	23.44 °C	608.88 µS/cm	0.26 mg/L	4.25 NTU	23.1 mV	13.37 ft	200.00 ml/min
8/12/2023 1:50 PM	10:00	7.40 pH	22.18 °C	617.39 µS/cm	0.12 mg/L	9.67 NTU	19.2 mV	13.38 ft	200.00 ml/min
8/12/2023 1:55 PM	15:00	7.40 pH	21.95 °C	624.00 µS/cm	0.11 mg/L	23.50 NTU	21.9 mV	13.39 ft	200.00 ml/min
8/12/2023 2:00 PM	20:00	7.39 pH	21.84 °C	623.10 µS/cm	0.09 mg/L	25.50 NTU	28.3 mV	13.40 ft	200.00 ml/min
8/12/2023 2:05 PM	25:00	7.38 pH	21.78 °C	618.58 µS/cm	0.09 mg/L	19.90 NTU	26.7 mV	13.40 ft	200.00 ml/min
8/12/2023 2:10 PM	30:00	7.38 pH	21.77 °C	617.67 µS/cm	0.08 mg/L	12.80 NTU	25.9 mV	13.40 ft	200.00 ml/min
8/12/2023 2:15 PM	35:00	7.37 pH	21.84 °C	618.59 µS/cm	0.08 mg/L	10.19 NTU	28.4 mV	13.40 ft	200.00 ml/min
8/12/2023 2:20 PM	40:00	7.37 pH	21.73 °C	616.28 µS/cm	0.08 mg/L	7.18 NTU	27.0 mV	13.40 ft	200.00 ml/min
8/12/2023 2:25 PM	45:00	7.36 pH	21.69 °C	617.19 µS/cm	0.07 mg/L	5.13 NTU	29.0 mV	13.40 ft	200.00 ml/min
8/12/2023 2:30 PM	50:00	7.36 pH	21.73 °C	617.13 µS/cm	0.08 mg/L	3.50 NTU	29.5 mV	13.40 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-7	Grab

Low-Flow Test Report:

Test Date / Time: 8/12/2023 9:02:57 AM
Project: GP-Plant Hammond
Operator Name: Anthony Szwast

Location Name: HGWC-8 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 15.51 ft Total Depth: 25.04 ft** **Initial Depth to Water: 13.97 ft**	**Pump Type: Peri** **Tubing Type: Poly** **Pump Intake From TOC: 20.51 ft** **Estimated Total Volume Pumped: 6 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.05 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883530**

Test Notes:
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	+/- 10	+/- 10	+/- 0.3	
8/12/2023 9:02 AM	00:00	6.79 pH	21.08 °C	774.49 µS/cm	0.14 mg/L	0.41 NTU	64.6 mV	14.01 ft	200.00 ml/min
8/12/2023 9:07 AM	05:00	6.83 pH	20.78 °C	781.09 µS/cm	0.08 mg/L	4.49 NTU	372.6 mV	14.01 ft	200.00 ml/min
8/12/2023 9:12 AM	10:00	6.84 pH	20.52 °C	775.54 µS/cm	0.05 mg/L	5.62 NTU	475.1 mV	14.01 ft	200.00 ml/min
8/12/2023 9:17 AM	15:00	6.83 pH	20.58 °C	771.66 µS/cm	0.03 mg/L	2.08 NTU	461.9 mV	14.01 ft	200.00 ml/min
8/12/2023 9:22 AM	20:00	6.83 pH	20.71 °C	766.56 µS/cm	0.02 mg/L	1.54 NTU	460.5 mV	14.01 ft	200.00 ml/min
8/12/2023 9:27 AM	25:00	6.84 pH	20.49 °C	774.17 µS/cm	0.02 mg/L	1.82 NTU	510.0 mV	14.02 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-8	Grab

Low-Flow Test Report:

Test Date / Time: 8/11/2023 4:28:09 PM
Project: GP-Plant Hammond
Operator Name: Connor Cain

Location Name: HGWC-9 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 36.97 ft Total Depth: 47.65 ft** **Initial Depth to Water: 14.66 ft**	**Pump Type: Peri** **Tubing Type: Poly** **Pump Intake From TOC: 42.69 ft** **Estimated Total Volume Pumped: 7 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.06 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883553**

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	
8/11/2023 4:28 PM	00:00	7.11 pH	22.31 °C	974.44 µS/cm	0.24 mg/L	2.07 NTU	9.0 mV	14.72 ft	200.00 ml/min
8/11/2023 4:33 PM	05:00	7.13 pH	22.21 °C	987.36 µS/cm	0.20 mg/L	1.59 NTU	12.6 mV	14.72 ft	200.00 ml/min
8/11/2023 4:38 PM	10:00	7.13 pH	22.00 °C	988.45 µS/cm	0.17 mg/L	1.01 NTU	22.9 mV	14.72 ft	200.00 ml/min
8/11/2023 4:43 PM	15:00	7.12 pH	21.95 °C	986.85 µS/cm	0.16 mg/L	0.92 NTU	22.5 mV	14.72 ft	200.00 ml/min
8/11/2023 4:48 PM	20:00	7.11 pH	21.86 °C	988.04 µS/cm	0.14 mg/L	0.97 NTU	26.9 mV	14.72 ft	200.00 ml/min
8/11/2023 4:53 PM	25:00	7.10 pH	22.00 °C	990.27 µS/cm	0.13 mg/L	0.94 NTU	26.2 mV	14.72 ft	200.00 ml/min
8/11/2023 4:58 PM	30:00	7.09 pH	22.09 °C	987.23 µS/cm	0.12 mg/L	0.93 NTU	28.3 mV	14.72 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-9	Grab

Low-Flow Test Report:

Test Date / Time: 8/10/2023 4:14:53 PM
Project: GP-Plant Hammond
Operator Name: Elisabeth McDonnell

Location Name: HGWC-10 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 22.95 ft** **Total Depth: 22.70 ft** **Initial Depth to Water: 14.81 ft**	**Pump Type: Peri** **Tubing Type: Poly** **Pump Intake From TOC: 17.9 ft** **Estimated Total Volume Pumped: 9 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.06 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 989630**

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	
8/10/2023 4:14 PM	00:00	6.83 pH	22.23 °C	724.22 µS/cm	0.85 mg/L	0.68 NTU	88.2 mV	14.87 ft	200.00 ml/min
8/10/2023 4:19 PM	05:00	6.82 pH	22.22 °C	730.79 µS/cm	0.77 mg/L	0.43 NTU	61.8 mV	14.85 ft	200.00 ml/min
8/10/2023 4:24 PM	10:00	6.82 pH	22.17 °C	735.89 µS/cm	0.79 mg/L	1.12 NTU	59.1 mV	14.85 ft	200.00 ml/min
8/10/2023 4:29 PM	15:00	6.81 pH	22.15 °C	691.94 µS/cm	0.90 mg/L	0.00 NTU	58.2 mV	14.86 ft	200.00 ml/min
8/10/2023 4:34 PM	20:00	6.81 pH	21.84 °C	588.40 µS/cm	0.85 mg/L	0.00 NTU	57.9 mV	14.86 ft	200.00 ml/min
8/10/2023 4:39 PM	25:00	6.82 pH	21.81 °C	658.11 µS/cm	0.90 mg/L	0.28 NTU	57.0 mV	14.86 ft	200.00 ml/min
8/10/2023 4:44 PM	30:00	6.82 pH	21.99 °C	721.33 µS/cm	0.95 mg/L	0.22 NTU	56.4 mV	14.87 ft	200.00 ml/min
8/10/2023 4:49 PM	35:00	6.82 pH	22.00 °C	694.06 µS/cm	0.93 mg/L	0.00 NTU	74.7 mV	14.87 ft	200.00 ml/min
8/10/2023 4:54 PM	40:00	6.81 pH	21.91 °C	703.14 µS/cm	0.95 mg/L	0.90 NTU	74.3 mV	14.87 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-10	Grab

Low-Flow Test Report:

Test Date / Time: 8/10/2023 11:01:56 AM
Project: GP-Plant Hammond
Operator Name: Anthony Szwast

Location Name: HGWC-11 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 15.78 ft** **Total Depth: 25.96 ft** **Initial Depth to Water: 16.27 ft**	**Pump Type: Peri** **Tubing Type: Poly** **Pump Intake From TOC: 20.28 ft** **Estimated Total Volume Pumped: 6 liter** **Flow Cell Volume: 90 ml Final** **Flow Rate: 200 ml/min Final Draw Down: 0.06 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883530**

Test Notes:
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	+/- 10	+/- 10	+/- 0.3	
8/10/2023 11:01 AM	00:00	5.66 pH	21.05 °C	546.82 µS/cm	3.14 mg/L	5.29 NTU	196.4 mV	16.34 ft	200.00 ml/min
8/10/2023 11:06 AM	05:00	5.77 pH	21.04 °C	589.29 µS/cm	2.52 mg/L	2.43 NTU	329.9 mV	16.33 ft	200.00 ml/min
8/10/2023 11:11 AM	10:00	5.83 pH	21.12 °C	598.29 µS/cm	2.22 mg/L	0.98 NTU	483.8 mV	16.33 ft	200.00 ml/min
8/10/2023 11:16 AM	15:00	5.86 pH	21.05 °C	598.04 µS/cm	2.06 mg/L	0.70 NTU	376.0 mV	16.33 ft	200.00 ml/min
8/10/2023 11:21 AM	20:00	5.88 pH	20.93 °C	596.14 µS/cm	1.95 mg/L	0.81 NTU	524.3 mV	16.33 ft	200.00 ml/min
8/10/2023 11:26 AM	25:00	5.90 pH	20.98 °C	597.74 µS/cm	1.87 mg/L	0.96 NTU	397.0 mV	16.33 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-11	Grab

Low-Flow Test Report:

Test Date / Time: 8/10/2023 9:39:42 AM
Project: GP-Plant Hammond
Operator Name: Elisabeth McDonnell

Location Name: HGWC-12 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 22.95 ft** **Total Depth: 35.00 ft** **Initial Depth to Water: 16.34 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 30.42 ft** **Estimated Total Volume Pumped: 18 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0 m**	**Instrument Used: Aqua TROLL 400** **Serial Number: 989630**

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	
8/10/2023 9:39 AM	00:00	7.10 pH	19.92 °C	846.54 µS/cm	1.61 mg/L	50.10 NTU	18.9 mV	16.35 ft	200.00 ml/min
8/10/2023 9:44 AM	05:00	7.09 pH	19.59 °C	869.48 µS/cm	1.21 mg/L	34.20 NTU	29.6 mV	16.34 ft	200.00 ml/min
8/10/2023 9:49 AM	10:00	7.09 pH	19.54 °C	871.17 µS/cm	1.07 mg/L	27.10 NTU	31.8 mV	16.35 ft	200.00 ml/min
8/10/2023 9:54 AM	15:00	7.09 pH	19.50 °C	872.60 µS/cm	0.74 mg/L	17.70 NTU	31.9 mV	16.35 ft	200.00 ml/min
8/10/2023 9:59 AM	20:00	7.09 pH	19.49 °C	872.53 µS/cm	0.60 mg/L	11.40 NTU	33.5 mV	16.35 ft	200.00 ml/min
8/10/2023 10:04 AM	25:00	7.09 pH	19.50 °C	870.69 µS/cm	0.83 mg/L	9.37 NTU	32.3 mV	16.35 ft	200.00 ml/min
8/10/2023 10:09 AM	30:00	7.09 pH	19.55 °C	870.93 µS/cm	0.33 mg/L	6.21 NTU	33.3 mV	16.34 ft	200.00 ml/min
8/10/2023 10:14 AM	35:00	7.09 pH	19.60 °C	867.94 µS/cm	0.72 mg/L	5.95 NTU	32.1 mV	16.34 ft	200.00 ml/min
8/10/2023 10:19 AM	40:00	7.09 pH	19.57 °C	887.64 µS/cm	0.42 mg/L	2.96 NTU	32.1 mV	16.34 ft	200.00 ml/min
8/10/2023 10:24 AM	45:00	7.09 pH	19.54 °C	870.76 µS/cm	0.52 mg/L	3.74 NTU	34.1 mV	16.35 ft	200.00 ml/min
8/10/2023 10:29 AM	50:00	7.09 pH	19.54 °C	866.99 µS/cm	0.31 mg/L	2.71 NTU	34.5 mV	16.35 ft	200.00 ml/min
8/10/2023 10:34 AM	55:00	7.09 pH	19.55 °C	868.25 µS/cm	0.63 mg/L	2.68 NTU	34.8 mV	16.34 ft	200.00 ml/min
8/10/2023 10:39 AM	01:00:00	7.08 pH	19.51 °C	868.58 µS/cm	0.26 mg/L	2.65 NTU	35.0 mV	16.34 ft	200.00 ml/min
8/10/2023 10:44 AM	01:05:00	7.08 pH	19.54 °C	867.89 µS/cm	0.75 mg/L	2.22 NTU	32.4 mV	16.34 ft	200.00 ml/min
8/10/2023 10:49 AM	01:10:00	7.08 pH	19.59 °C	863.53 µS/cm	0.41 mg/L	2.64 NTU	32.2 mV	16.35 ft	200.00 ml/min

8/10/2023 10:54 AM	01:15:00	7.08 pH	19.60 °C	863.84 µS/cm	0.21 mg/L	0.90 NTU	32.7 mV	16.34 ft	200.00 ml/min
8/10/2023 10:59 AM	01:20:00	7.09 pH	19.65 °C	865.70 µS/cm	0.39 mg/L	0.54 NTU	32.6 mV	16.34 ft	200.00 ml/min
8/10/2023 11:04 AM	01:25:00	7.08 pH	19.71 °C	865.06 µS/cm	0.35 mg/L	0.63 NTU	32.8 mV	16.34 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-12	Grab.

Low-Flow Test Report:

Test Date / Time: 8/12/2023 11:30:53 AM
Project: GP-Plant Hammond
Operator Name: Connor Cain

Location Name: HGWC-13 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 35.15 ft** **Total Depth: 46.79 ft** **Initial Depth to Water: 27.41 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 41.79 ft** **Estimated Total Volume Pumped: 7 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.01 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883553**

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	
8/12/2023 11:30 AM	00:00	6.89 pH	22.62 °C	967.80 µS/cm	0.90 mg/L	9.63 NTU	-50.7 mV	27.42 ft	200.00 ml/min
8/12/2023 11:35 AM	05:00	6.89 pH	21.93 °C	973.21 µS/cm	0.53 mg/L	6.50 NTU	-49.1 mV	27.42 ft	200.00 ml/min
8/12/2023 11:40 AM	10:00	6.90 pH	21.64 °C	970.99 µS/cm	0.42 mg/L	3.56 NTU	-69.0 mV	27.42 ft	200.00 ml/min
8/12/2023 11:45 AM	15:00	6.90 pH	21.69 °C	974.52 µS/cm	0.32 mg/L	3.04 NTU	-68.0 mV	27.42 ft	200.00 ml/min
8/12/2023 11:50 AM	20:00	6.90 pH	21.66 °C	974.94 µS/cm	0.29 mg/L	1.98 NTU	-66.0 mV	27.42 ft	200.00 ml/min
8/12/2023 11:55 AM	25:00	6.90 pH	21.60 °C	974.67 µS/cm	0.26 mg/L	1.89 NTU	-65.8 mV	27.42 ft	200.00 ml/min
8/12/2023 12:00 PM	30:00	6.89 pH	21.60 °C	975.26 µS/cm	0.23 mg/L	1.83 NTU	-44.2 mV	27.42 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-13	Grab

Low-Flow Test Report:

Test Date / Time: 8/10/2023 11:07:01 AM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: MW-5 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 20.84 ft** **Total Depth: 31.08 ft** **Initial Depth to Water: 17.18 ft**	**Pump Type: bladder** **Tubing Type: Poly** **Pump Intake From TOC: 25.84 ft** **Estimated Total Volume Pumped: 8 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.17 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850724**

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	
8/10/2023 11:07 AM	00:00	6.32 pH	19.63 °C	610.22 µS/cm	1.29 mg/L	2.67 NTU	107.4 mV	17.35 ft	200.00 ml/min
8/10/2023 11:12 AM	05:00	6.28 pH	19.32 °C	612.74 µS/cm	0.94 mg/L	2.11 NTU	98.3 mV	17.35 ft	200.00 ml/min
8/10/2023 11:17 AM	10:00	6.29 pH	19.28 °C	625.05 µS/cm	0.84 mg/L	2.01 NTU	126.5 mV	17.35 ft	200.00 ml/min
8/10/2023 11:22 AM	15:00	6.29 pH	19.34 °C	627.58 µS/cm	0.75 mg/L	1.95 NTU	125.1 mV	17.35 ft	200.00 ml/min
8/10/2023 11:27 AM	20:00	6.29 pH	19.41 °C	627.90 µS/cm	0.68 mg/L	2.44 NTU	91.2 mV	17.35 ft	200.00 ml/min
8/10/2023 11:32 AM	25:00	6.29 pH	19.35 °C	631.18 µS/cm	0.63 mg/L	1.89 NTU	120.5 mV	17.35 ft	200.00 ml/min
8/10/2023 11:37 AM	30:00	6.29 pH	19.41 °C	631.56 µS/cm	0.61 mg/L	1.51 NTU	89.4 mV	17.35 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-MW-5	Grab

Low-Flow Test Report:

Test Date / Time: 8/10/2023 1:46:45 PM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: MW-6 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 22.96 ft** **Total Depth: 37.92 ft** **Initial Depth to Water: 17.52 ft**	**Pump Type: bladder** **Tubing Type: Poly** **Pump Intake From TOC: 27.96 ft** **Estimated Total Volume Pumped: 8 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.02 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850724**

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	
8/10/2023 1:46 PM	00:00	6.89 pH	22.11 °C	941.26 µS/cm	0.68 mg/L	41.20 NTU	-19.9 mV	17.54 ft	200.00 ml/min
8/10/2023 1:51 PM	05:00	6.86 pH	21.64 °C	932.16 µS/cm	0.33 mg/L	22.80 NTU	18.2 mV	17.54 ft	200.00 ml/min
8/10/2023 1:56 PM	10:00	6.86 pH	21.82 °C	931.03 µS/cm	0.49 mg/L	11.96 NTU	23.3 mV	17.54 ft	200.00 ml/min
8/10/2023 2:01 PM	15:00	6.86 pH	21.56 °C	929.99 µS/cm	0.38 mg/L	8.02 NTU	23.1 mV	17.54 ft	200.00 ml/min
8/10/2023 2:06 PM	20:00	6.85 pH	21.60 °C	931.59 µS/cm	0.25 mg/L	6.53 NTU	25.8 mV	17.54 ft	200.00 ml/min
8/10/2023 2:11 PM	25:00	6.85 pH	21.82 °C	930.54 µS/cm	0.20 mg/L	5.04 NTU	27.9 mV	17.54 ft	200.00 ml/min
8/10/2023 2:16 PM	30:00	6.85 pH	21.76 °C	929.34 µS/cm	0.18 mg/L	3.68 NTU	29.1 mV	17.54 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-MW-6	Grab

Low-Flow Test Report:

Test Date / Time: 8/10/2023 12:21:37 PM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: MW-7 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 16.89 ft** **Total Depth: 26.60 ft** **Initial Depth to Water: 13.5 ft**	**Pump Type: bladder** **Tubing Type: Poly** **Pump Intake From TOC: 21.89 ft** **Estimated Total Volume Pumped: 8 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850724**

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	
8/10/2023 12:21 PM	00:00	6.78 pH	20.75 °C	400.00 µS/cm	2.42 mg/L	2.39 NTU	84.6 mV	13.50 ft	200.00 ml/min
8/10/2023 12:26 PM	05:00	6.83 pH	19.41 °C	439.69 µS/cm	1.09 mg/L	3.12 NTU	63.8 mV	13.50 ft	200.00 ml/min
8/10/2023 12:31 PM	10:00	6.83 pH	19.36 °C	442.85 µS/cm	0.92 mg/L	2.28 NTU	77.7 mV	13.50 ft	200.00 ml/min
8/10/2023 12:36 PM	15:00	6.84 pH	19.37 °C	447.80 µS/cm	0.80 mg/L	1.99 NTU	75.5 mV	13.50 ft	200.00 ml/min
8/10/2023 12:41 PM	20:00	6.85 pH	19.41 °C	450.98 µS/cm	0.77 mg/L	1.72 NTU	58.0 mV	13.50 ft	200.00 ml/min
8/10/2023 12:46 PM	25:00	6.85 pH	19.40 °C	452.20 µS/cm	0.73 mg/L	2.33 NTU	73.5 mV	13.50 ft	200.00 ml/min
8/10/2023 12:51 PM	30:00	6.85 pH	19.44 °C	452.45 µS/cm	0.67 mg/L	1.57 NTU	73.8 mV	13.50 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-MW-7	Grab

Low-Flow Test Report:

Test Date / Time: 8/10/2023 2:21:49 PM
Project: GP-Plant Hammond
Operator Name: Elisabeth McDonnell

Location Name: MW-19 **Well Diameter: 15.1 ft** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 22.95 ft** **Total Depth: 30.45 ft** **Initial Depth to Water: 15.10 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 24.5 ft** **Estimated Total Volume Pumped: 8 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0 m**	**Instrument Used: Aqua TROLL 400** **Serial Number: 989630**

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	
8/10/2023 2:21 PM	00:00	6.42 pH	22.17 °C	709.20 µS/cm	1.53 mg/L	0.90 NTU	79.9 mV	15.13 ft	200.00 ml/min
8/10/2023 2:26 PM	05:00	6.35 pH	22.10 °C	683.39 µS/cm	1.44 mg/L	2.85 NTU	73.3 mV	15.13 ft	200.00 ml/min
8/10/2023 2:31 PM	10:00	6.37 pH	22.13 °C	668.47 µS/cm	1.30 mg/L	2.02 NTU	70.2 mV	15.10 ft	200.00 ml/min
8/10/2023 2:36 PM	15:00	6.37 pH	22.35 °C	699.61 µS/cm	1.28 mg/L	2.22 NTU	69.0 mV	15.10 ft	200.00 ml/min
8/10/2023 2:41 PM	20:00	6.36 pH	22.44 °C	610.07 µS/cm	1.29 mg/L	2.51 NTU	68.2 mV	15.10 ft	200.00 ml/min
8/10/2023 2:46 PM	25:00	6.36 pH	22.44 °C	691.24 µS/cm	1.17 mg/L	3.32 NTU	92.5 mV	15.10 ft	200.00 ml/min
8/10/2023 2:51 PM	30:00	6.36 pH	22.55 °C	690.42 µS/cm	1.19 mg/L	2.93 NTU	68.2 mV	15.10 ft	200.00 ml/min
8/10/2023 2:56 PM	35:00	6.37 pH	22.53 °C	696.32 µS/cm	1.32 mg/L	1.61 NTU	67.0 mV	15.10 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-MW-19	Grab

Low-Flow Test Report:

Test Date / Time: 8/10/2023 9:44:27 AM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: MW-20 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 24.37 ft** **Total Depth: 34.47 ft** **Initial Depth to Water: 15.1 ft**	**Pump Type: Peri** **Tubing Type: Poly** **Pump Intake From TOC: 29.37 ft** **Estimated Total Volume Pumped: 8 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.3 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850724**

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	
8/10/2023 9:44 AM	00:00	6.61 pH	19.23 °C	617.81 µS/cm	1.01 mg/L	24.00 NTU	-13.8 mV	15.40 ft	200.00 ml/min
8/10/2023 9:49 AM	05:00	6.71 pH	19.13 °C	647.97 µS/cm	0.46 mg/L	11.75 NTU	-33.2 mV	15.40 ft	200.00 ml/min
8/10/2023 9:54 AM	10:00	6.77 pH	19.14 °C	664.43 µS/cm	0.22 mg/L	10.00 NTU	-41.9 mV	15.40 ft	200.00 ml/min
8/10/2023 9:59 AM	15:00	6.81 pH	19.11 °C	674.09 µS/cm	0.18 mg/L	4.42 NTU	-57.8 mV	15.40 ft	200.00 ml/min
8/10/2023 10:04 AM	20:00	6.84 pH	19.10 °C	679.70 µS/cm	0.17 mg/L	3.81 NTU	-47.9 mV	15.40 ft	200.00 ml/min
8/10/2023 10:09 AM	25:00	6.85 pH	19.13 °C	682.37 µS/cm	0.16 mg/L	3.37 NTU	-48.4 mV	15.40 ft	200.00 ml/min
8/10/2023 10:14 AM	30:00	6.86 pH	19.14 °C	685.88 µS/cm	0.15 mg/L	2.77 NTU	-61.6 mV	15.40 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-MW-20	Grab

Low-Flow Test Report:

Test Date / Time: 8/12/2023 9:20:07 AM
Project: GP-Plant Hammond
Operator Name: Connor Cain

Location Name: MW-24D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 62.77 ft** **Total Depth: 73.41 ft** **Initial Depth to Water: 29.87 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 68.41 ft** **Estimated Total Volume Pumped: 11 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883553**

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	
8/12/2023 9:20 AM	00:00	7.58 pH	21.43 °C	604.25 µS/cm	2.52 mg/L	3.21 NTU	80.0 mV	29.87 ft	200.00 ml/min
8/12/2023 9:25 AM	05:00	7.60 pH	21.22 °C	609.01 µS/cm	1.43 mg/L	4.85 NTU	55.5 mV	29.87 ft	200.00 ml/min
8/12/2023 9:30 AM	10:00	7.60 pH	21.07 °C	608.19 µS/cm	1.02 mg/L	4.22 NTU	59.7 mV	29.87 ft	200.00 ml/min
8/12/2023 9:35 AM	15:00	7.60 pH	20.88 °C	609.62 µS/cm	0.72 mg/L	2.77 NTU	56.1 mV	29.87 ft	200.00 ml/min
8/12/2023 9:40 AM	20:00	7.61 pH	20.69 °C	610.02 µS/cm	0.61 mg/L	3.09 NTU	53.9 mV	29.87 ft	200.00 ml/min
8/12/2023 9:45 AM	25:00	7.61 pH	20.66 °C	609.94 µS/cm	0.55 mg/L	5.39 NTU	52.1 mV	29.87 ft	200.00 ml/min
8/12/2023 9:50 AM	30:00	7.61 pH	20.53 °C	610.24 µS/cm	0.45 mg/L	5.23 NTU	51.2 mV	29.87 ft	200.00 ml/min
8/12/2023 9:55 AM	35:00	7.61 pH	20.55 °C	610.14 µS/cm	0.42 mg/L	6.80 NTU	50.3 mV	29.87 ft	200.00 ml/min
8/12/2023 10:00 AM	40:00	7.61 pH	20.60 °C	609.89 µS/cm	0.39 mg/L	5.59 NTU	43.7 mV	29.87 ft	200.00 ml/min
8/12/2023 10:05 AM	45:00	7.61 pH	20.40 °C	609.72 µS/cm	0.34 mg/L	5.82 NTU	48.9 mV	29.87 ft	200.00 ml/min
8/12/2023 10:10 AM	50:00	7.61 pH	20.35 °C	609.29 µS/cm	0.32 mg/L	4.71 NTU	43.1 mV	29.87 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-MW-24D	Grab
HAM-AP-1-FD-01	Grab

Low-Flow Test Report:

Test Date / Time: 8/10/2023 12:01:18 PM
Project: GP-Plant Hammond
Operator Name: Elisabeth McDonnell

Location Name: MW-25D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 53.21 ft** **Total Depth: 63.20 ft** **Initial Depth to Water: 16.10 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 58.21 ft** **Estimated Total Volume Pumped: 10.8 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 160 ml/min** **Final Draw Down: 5.09 m**	**Instrument Used: Aqua TROLL 400** **Serial Number: 989630**

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	
8/10/2023 12:01 PM	00:00	7.55 pH	20.89 °C	521.42 µS/cm	2.95 mg/L	0.90 NTU	-90.4 mV	17.65 ft	200.00 ml/min
8/10/2023 12:06 PM	05:00	7.62 pH	20.39 °C	523.17 µS/cm	1.45 mg/L	0.23 NTU	-98.4 mV	18.49 ft	200.00 ml/min
8/10/2023 12:11 PM	10:00	7.65 pH	20.31 °C	517.96 µS/cm	1.39 mg/L	0.00 NTU	-104.7 mV	19.40 ft	200.00 ml/min
8/10/2023 12:16 PM	15:00	7.67 pH	20.21 °C	524.16 µS/cm	1.07 mg/L	0.00 NTU	-107.4 mV	20.07 ft	200.00 ml/min
8/10/2023 12:21 PM	20:00	7.68 pH	20.14 °C	518.13 µS/cm	1.23 mg/L	0.00 NTU	-107.9 mV	20.45 ft	200.00 ml/min
8/10/2023 12:26 PM	25:00	7.68 pH	20.06 °C	514.33 µS/cm	1.10 mg/L	0.30 NTU	-109.9 mV	20.86 ft	200.00 ml/min
8/10/2023 12:31 PM	30:00	7.69 pH	20.21 °C	511.31 µS/cm	1.38 mg/L	0.00 NTU	-143.9 mV	20.96 ft	160.00 ml/min
8/10/2023 12:36 PM	35:00	7.69 pH	20.30 °C	426.94 µS/cm	1.09 mg/L	0.02 NTU	-113.4 mV	21.05 ft	160.00 ml/min
8/10/2023 12:41 PM	40:00	7.71 pH	20.39 °C	505.22 µS/cm	1.34 mg/L	0.08 NTU	-114.6 mV	21.10 ft	160.00 ml/min
8/10/2023 12:46 PM	45:00	7.71 pH	20.34 °C	502.24 µS/cm	1.22 mg/L	0.00 NTU	-115.7 mV	21.10 ft	160.00 ml/min
8/10/2023 12:51 PM	50:00	7.72 pH	20.39 °C	518.89 µS/cm	1.18 mg/L	0.00 NTU	-117.2 mV	21.18 ft	160.00 ml/min
8/10/2023 12:52 PM	51:12	7.73 pH	20.41 °C	499.21 µS/cm	1.08 mg/L	0.03 NTU	-116.8 mV	21.19 ft	160.00 ml/min

Samples

Sample ID:	Description:

HAM-MW-25D	Grab

Low-Flow Test Report:

Test Date / Time: 8/11/2023 4:19:32 PM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: MW-26D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 68.11 ft** **Total Depth: 77.80 ft** **Initial Depth to Water: 15.7 ft**	**Pump Type: bladder** **Tubing Type: Poly** **Pump Intake From TOC: 73.11 ft** **Estimated Total Volume Pumped: 8 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.19 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850724**

Test Notes:
Seven bottles. Full app. III and IV and Major Ions.

Weather Conditions:
Sunny, 70-80 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	
8/11/2023 4:19 PM	00:00	7.41 pH	21.86 °C	895.80 µS/cm	0.72 mg/L	3.08 NTU	-120.3 mV	15.89 ft	200.00 ml/min
8/11/2023 4:24 PM	05:00	7.32 pH	21.17 °C	861.19 µS/cm	0.28 mg/L	3.85 NTU	-54.3 mV	15.89 ft	200.00 ml/min
8/11/2023 4:29 PM	10:00	7.28 pH	21.12 °C	856.24 µS/cm	0.23 mg/L	4.28 NTU	-33.5 mV	15.89 ft	200.00 ml/min
8/11/2023 4:34 PM	15:00	7.25 pH	21.39 °C	859.30 µS/cm	0.14 mg/L	3.86 NTU	-24.0 mV	15.89 ft	200.00 ml/min
8/11/2023 4:39 PM	20:00	7.23 pH	21.23 °C	869.50 µS/cm	0.25 mg/L	3.34 NTU	-19.2 mV	15.89 ft	200.00 ml/min
8/11/2023 4:44 PM	25:00	7.21 pH	21.01 °C	876.24 µS/cm	0.16 mg/L	15.89 NTU	-36.3 mV	15.89 ft	200.00 ml/min
8/11/2023 4:49 PM	30:00	7.20 pH	21.28 °C	881.85 µS/cm	0.24 mg/L	3.97 NTU	-33.5 mV	15.89 ft	200.00 ml/min

Samples

Sample ID:	Description:
MW-26D	Grab

Low-Flow Test Report:

Test Date / Time: 8/12/2023 10:20:10 AM
Project: GP-Plant Hammond
Operator Name: Anthony Szwast

Location Name: MW-27D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 53.19 ft** **Total Depth: 63.21 ft** **Initial Depth to Water: 13.91 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 58.19 ft** **Estimated Total Volume Pumped: 42.5 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 39.37 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883530**

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	+/- 10	+/- 10	+/- 0.3	
8/12/2023 10:20 AM	00:00	7.67 pH	20.13 °C	404.73 µS/cm	1.31 mg/L	2.91 NTU	-75.7 mV	18.21 ft	250.00 ml/min
8/12/2023 10:25 AM	05:00	7.68 pH	20.09 °C	397.17 µS/cm	1.98 mg/L	2.73 NTU	209.5 mV	19.85 ft	250.00 ml/min
8/12/2023 10:30 AM	10:00	7.69 pH	20.08 °C	392.51 µS/cm	2.26 mg/L	4.88 NTU	329.8 mV	21.40 ft	250.00 ml/min
8/12/2023 10:35 AM	15:00	7.69 pH	20.15 °C	392.93 µS/cm	2.42 mg/L	3.67 NTU	471.5 mV	23.03 ft	250.00 ml/min
8/12/2023 10:40 AM	20:00	7.70 pH	20.12 °C	388.44 µS/cm	2.50 mg/L	4.93 NTU	400.6 mV	24.55 ft	250.00 ml/min
8/12/2023 10:45 AM	25:00	7.70 pH	20.09 °C	389.29 µS/cm	2.52 mg/L	6.19 NTU	493.7 mV	26.08 ft	250.00 ml/min
8/12/2023 10:50 AM	30:00	7.70 pH	20.08 °C	390.13 µS/cm	2.53 mg/L	6.38 NTU	498.3 mV	27.58 ft	250.00 ml/min
8/12/2023 10:55 AM	35:00	7.70 pH	20.04 °C	394.51 µS/cm	2.52 mg/L	3.88 NTU	497.4 mV	29.10 ft	250.00 ml/min
8/12/2023 11:00 AM	40:00	7.71 pH	20.13 °C	395.07 µS/cm	2.50 mg/L	7.51 NTU	430.0 mV	30.47 ft	250.00 ml/min
8/12/2023 11:05 AM	45:00	7.70 pH	20.13 °C	395.21 µS/cm	2.46 mg/L	7.68 NTU	485.3 mV	31.97 ft	250.00 ml/min
8/12/2023 11:10 AM	50:00	7.71 pH	20.14 °C	395.19 µS/cm	2.44 mg/L	7.66 NTU	480.7 mV	33.24 ft	250.00 ml/min
8/12/2023 11:15 AM	55:00	7.71 pH	20.22 °C	395.72 µS/cm	2.41 mg/L	8.38 NTU	475.0 mV	34.64 ft	250.00 ml/min
8/12/2023 11:20 AM	01:00:00	7.71 pH	20.26 °C	395.82 µS/cm	2.37 mg/L	8.38 NTU	455.8 mV	36.04 ft	250.00 ml/min

8/12/2023 11:25 AM	01:05:00	7.71 pH	20.27 °C	397.91 µS/cm	2.33 mg/L	8.90 NTU	443.7 mV	37.42 ft	250.00 ml/min
8/12/2023 11:30 AM	01:10:00	7.71 pH	20.17 °C	395.13 µS/cm	2.30 mg/L	6.16 NTU	437.1 mV	38.68 ft	250.00 ml/min
8/12/2023 11:35 AM	01:15:00	7.71 pH	20.25 °C	397.64 µS/cm	2.29 mg/L	5.88 NTU	440.7 mV	39.88 ft	250.00 ml/min
8/12/2023 11:40 AM	01:20:00	7.71 pH	20.30 °C	398.35 µS/cm	2.26 mg/L	6.16 NTU	428.2 mV	41.13 ft	250.00 ml/min
8/12/2023 11:45 AM	01:25:00	7.69 pH	20.27 °C	398.30 µS/cm	2.27 mg/L	5.30 NTU	422.4 mV	42.35 ft	250.00 ml/min
8/12/2023 11:50 AM	01:30:00	7.70 pH	20.33 °C	398.37 µS/cm	2.31 mg/L	5.56 NTU	413.1 mV	43.58 ft	250.00 ml/min
8/12/2023 11:55 AM	01:35:00	7.71 pH	20.31 °C	399.54 µS/cm	2.36 mg/L	4.93 NTU	397.2 mV	44.76 ft	250.00 ml/min
8/12/2023 12:00 PM	01:40:00	7.71 pH	20.29 °C	400.02 µS/cm	2.40 mg/L	3.67 NTU	383.2 mV	45.84 ft	250.00 ml/min
8/12/2023 12:05 PM	01:45:00	7.72 pH	20.31 °C	400.98 µS/cm	2.43 mg/L	3.56 NTU	379.7 mV	46.98 ft	250.00 ml/min
8/12/2023 12:10 PM	01:50:00	7.73 pH	20.40 °C	400.77 µS/cm	2.47 mg/L	2.11 NTU	373.8 mV	48.17 ft	250.00 ml/min
8/12/2023 12:15 PM	01:55:00	7.73 pH	21.93 °C	405.11 µS/cm	2.43 mg/L	1.87 NTU	357.7 mV	48.49 ft	250.00 ml/min
8/12/2023 12:20 PM	02:00:00	7.72 pH	22.02 °C	405.32 µS/cm	2.26 mg/L	1.61 NTU	336.9 mV	48.75 ft	250.00 ml/min
8/12/2023 12:25 PM	02:05:00	7.72 pH	22.40 °C	410.77 µS/cm	2.08 mg/L	1.04 NTU	312.2 mV	48.96 ft	250.00 ml/min
8/12/2023 12:30 PM	02:10:00	7.73 pH	22.48 °C	409.71 µS/cm	1.90 mg/L	1.61 NTU	286.0 mV	49.19 ft	250.00 ml/min
8/12/2023 12:35 PM	02:15:00	7.70 pH	23.21 °C	421.78 µS/cm	1.87 mg/L	2.91 NTU	302.7 mV	49.23 ft	250.00 ml/min
8/12/2023 12:40 PM	02:20:00	7.73 pH	22.36 °C	406.40 µS/cm	1.62 mg/L	2.08 NTU	228.8 mV	49.52 ft	250.00 ml/min
8/12/2023 12:45 PM	02:25:00	7.74 pH	22.46 °C	408.01 µS/cm	1.62 mg/L	1.13 NTU	194.7 mV	49.76 ft	250.00 ml/min
8/12/2023 12:50 PM	02:30:00	7.74 pH	22.52 °C	408.88 µS/cm	1.57 mg/L	1.67 NTU	164.8 mV	49.99 ft	250.00 ml/min
8/12/2023 12:55 PM	02:35:00	7.74 pH	22.63 °C	407.41 µS/cm	1.56 mg/L	1.30 NTU	148.7 mV	50.21 ft	250.00 ml/min
8/12/2023 1:00 PM	02:40:00	7.75 pH	22.84 °C	403.66 µS/cm	1.53 mg/L	6.64 NTU	124.2 mV	50.41 ft	250.00 ml/min
8/12/2023 1:05 PM	02:45:00	7.75 pH	22.74 °C	402.24 µS/cm	1.50 mg/L	0.52 NTU	114.6 mV	50.62 ft	250.00 ml/min
8/12/2023 1:10 PM	02:50:00	7.75 pH	22.42 °C	400.56 µS/cm	1.49 mg/L	3.80 NTU	106.4 mV	50.85 ft	250.00 ml/min
8/12/2023 1:15 PM	02:55:00	7.73 pH	22.65 °C	399.18 µS/cm	1.50 mg/L	0.63 NTU	94.0 mV	51.06 ft	250.00 ml/min
8/12/2023 1:20 PM	03:00:00	7.74 pH	22.63 °C	401.43 µS/cm	1.50 mg/L	0.56 NTU	96.2 mV	51.29 ft	250.00 ml/min
8/12/2023 1:25 PM	03:05:00	7.74 pH	22.67 °C	397.68 µS/cm	1.50 mg/L	0.41 NTU	103.6 mV	51.47 ft	250.00 ml/min
8/12/2023 1:30 PM	03:10:00	7.75 pH	22.60 °C	400.92 µS/cm	1.49 mg/L	0.80 NTU	84.5 mV	51.68 ft	250.00 ml/min
8/12/2023 1:35 PM	03:15:00	7.76 pH	22.48 °C	401.34 µS/cm	1.48 mg/L	4.45 NTU	59.0 mV	51.86 ft	250.00 ml/min
8/12/2023 1:40 PM	03:20:00	7.77 pH	22.40 °C	400.26 µS/cm	1.49 mg/L	0.74 NTU	61.7 mV	52.08 ft	250.00 ml/min
8/12/2023 1:45 PM	03:25:00	7.76 pH	22.39 °C	406.86 µS/cm	1.50 mg/L	0.56 NTU	46.3 mV	52.28 ft	250.00 ml/min

8/12/2023 1:50 PM	03:30:00	7.76 pH	22.27 °C	406.24 µS/cm	1.50 mg/L	1.09 NTU	52.9 mV	52.47 ft	250.00 ml/min
8/12/2023 1:55 PM	03:35:00	7.78 pH	22.27 °C	405.61 µS/cm	1.50 mg/L	0.82 NTU	48.3 mV	52.68 ft	250.00 ml/min
8/12/2023 2:00 PM	03:40:00	7.78 pH	22.19 °C	405.20 µS/cm	1.49 mg/L	1.35 NTU	36.6 mV	52.88 ft	250.00 ml/min
8/12/2023 2:05 PM	03:45:00	7.79 pH	22.32 °C	405.19 µS/cm	1.49 mg/L	3.86 NTU	24.4 mV	53.08 ft	250.00 ml/min
8/12/2023 2:10 PM	03:50:00	7.79 pH	22.27 °C	404.40 µS/cm	1.50 mg/L	0.67 NTU	34.3 mV	53.25 ft	250.00 ml/min
8/12/2023 2:15 PM	03:55:00	7.80 pH	22.36 °C	403.27 µS/cm	1.49 mg/L	0.80 NTU	30.1 mV	53.28 ft	250.00 ml/min

Samples

Sample ID:	Description:
HAM-MW-27D	Grab

Low-Flow Test Report:

Test Date / Time: 8/11/2023 2:39:02 PM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: MW-28D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 48.21 ft** **Total Depth: 58.18 ft** **Initial Depth to Water: 13.05 ft**	**Pump Type: bladder** **Tubing Type: Poly** **Pump Intake From TOC: 53.12 ft** **Estimated Total Volume Pumped: 8 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.05 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850724**

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	
8/11/2023 2:39 PM	00:00	7.45 pH	22.87 °C	509.88 µS/cm	0.07 mg/L	11.94 NTU	-119.6 mV	13.20 ft	200.00 ml/min
8/11/2023 2:44 PM	05:00	7.48 pH	21.82 °C	508.51 µS/cm	0.04 mg/L	12.92 NTU	-145.5 mV	13.10 ft	200.00 ml/min
8/11/2023 2:49 PM	10:00	7.49 pH	21.54 °C	507.42 µS/cm	0.04 mg/L	11.76 NTU	-189.3 mV	13.10 ft	200.00 ml/min
8/11/2023 2:54 PM	15:00	7.50 pH	21.54 °C	505.88 µS/cm	0.06 mg/L	7.96 NTU	-203.5 mV	13.10 ft	200.00 ml/min
8/11/2023 2:59 PM	20:00	7.50 pH	21.40 °C	504.97 µS/cm	0.08 mg/L	6.81 NTU	-216.6 mV	13.10 ft	200.00 ml/min
8/11/2023 3:04 PM	25:00	7.50 pH	21.60 °C	505.99 µS/cm	0.11 mg/L	5.65 NTU	-229.2 mV	13.10 ft	200.00 ml/min
8/11/2023 3:09 PM	30:00	7.50 pH	21.50 °C	506.91 µS/cm	0.12 mg/L	4.66 NTU	-240.8 mV	13.10 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-MW-28D	Grab

Low-Flow Test Report:

Test Date / Time: 8/10/2023 3:39:40 PM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: MW-29 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 18.25 ft** **Total Depth: 28.25 ft** **Initial Depth to Water: 11.3 ft**	**Pump Type: bladder** **Tubing Type: Poly** **Pump Intake From TOC: 28.25 ft** **Estimated Total Volume Pumped: 6516.667 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.05 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850724**

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	
8/10/2023 3:39 PM	00:00	7.05 pH	21.77 °C	828.28 µS/cm	0.46 mg/L	5.99 NTU	37.3 mV	11.35 ft	200.00 ml/min
8/10/2023 3:44 PM	05:00	7.07 pH	21.21 °C	834.37 µS/cm	0.26 mg/L	4.43 NTU	36.5 mV	11.35 ft	200.00 ml/min
8/10/2023 3:49 PM	10:00	7.06 pH	21.19 °C	829.64 µS/cm	0.24 mg/L	4.31 NTU	41.2 mV	11.35 ft	200.00 ml/min
8/10/2023 3:54 PM	15:00	7.06 pH	21.24 °C	833.30 µS/cm	0.21 mg/L	2.33 NTU	42.2 mV	11.35 ft	200.00 ml/min
8/10/2023 3:59 PM	20:00	7.06 pH	21.15 °C	831.08 µS/cm	0.22 mg/L	1.90 NTU	42.2 mV	11.35 ft	200.00 ml/min
8/10/2023 4:04 PM	25:00	7.06 pH	21.25 °C	831.79 µS/cm	0.16 mg/L	2.48 NTU	42.0 mV	11.35 ft	200.00 ml/min
8/10/2023 4:09 PM	30:00	7.06 pH	21.27 °C	830.16 µS/cm	0.15 mg/L	1.93 NTU	42.5 mV	11.35 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-MW-29	Grab

CALIBRATION REPORTS

January 2023

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Anthony S. | Date: 1/23/2023 | Time (start): 1540 | Time (finish): 1600

smarTroll SN: 833533 | Turbidity Meter Type: LaMote 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 11/2023	13.95	4490	3729.1	4490	+/- 5 %	(Yes) No	
pH (4)		14.13	4.00	3.95	4.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (4) check	—	—	~~4.00~~	—	—	+/- 0.1 SU	Yes No	
pH (7)	2216893 11/2023	14.09	7.00	7.34	7.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (7) check	—	—	~~7.00~~	—	—	+/- 0.1 SU	Yes No	
pH (10)	21320202 12/2023	14.40	10.00	11.09	10.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (10) check	—	—	~~10.00~~	—	—	+/- 0.1 SU	Yes No	
ORP (mV)	2139 0144 11/2023	14.22	228	246.4	228.0	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)			100	105.08	100.0	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0	0.00	—	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1.00	0.44	0.71	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			10.00	11.07	10.06	+/- 0.5 NTU	(Yes) No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: C. CAIN | Date: 1/23/23 | Time (start): 1455 | Time (finish): 1520

smarTroll SN: 966090 | Turbidity Meter Type: LaMote 2020we | SN: 3009

Weather Conditions: Sunny 50F | 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	4284	4490	+/- 5 %	Yes / No	
pH (4)			4.00	4.06	4.0	+/- 0.1 SU	Yes / No	
Mid-Day pH (4) check			4.00			+/- 0.1 SU	Yes / No	
pH (7)	22168893 11/23	16.55	7.00	7.37	7.0	+/- 0.1 SU	Yes / No	
Mid-Day pH (7) check			7.00			+/- 0.1 SU	Yes / No	
pH (10)	21232020Z 12/23	16.96	10.00	10.99	10	+/- 0.1 SU	Yes / No	
Mid-Day pH (10) check			10.00			+/- 0.1 SU	Yes / No	
ORP (mV)	21390149 11/23	16.72	228	243	228	+/- 20mV	Yes / No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	101.05	100	+/- 6 % saturation	Yes / No	
Turbidity 0 NTU			0	0.31	0.25	+/- 0.5 NTU	Yes / No	
Turbidity 1 NTU			1.00	0.85	1.00	+/- 0.5 NTU	Yes / No	
Turbidity 10 NTU			10.00	9.56	10.00	+/- 0.5 NTU	Yes / No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Thomas Kessler | Date: 1/23/23 | Time (start): 1545 | Time (finish): 1555

smarTroll SN: 8507241 | Turbidity Meter Type: LaMote 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 11/23	17.0°C	4490	4307.1	4490	+/- 5 %	Yes / No	
pH (4)			4.00	4.07	4.0	+/- 0.1 SU	Yes / No	
Mid-Day pH (4) check	22165493 11/23	16.55	4.00	6.97	7.0	+/- 0.1 SU	Yes / No	
pH (7)			7.00			+/- 0.1 SU	Yes / No	
Mid-Day pH (7) check			7.00			+/- 0.1 SU	Yes / No	
pH (10)	21320202 12/23	16.20	10.00	9.65	10.0	+/- 0.1 SU	Yes / No	
Mid-Day pH (10) check			10.00			+/- 0.1 SU	Yes / No	
ORP (mV)	21390144 11/23	15.43	228	241.1	225	+/- 20mV	Yes / No	
DO (%) (1pt, 100% water saturated air cal)			100	99.8	100	+/- 6 % saturation	Yes / No	
Turbidity 0 NTU			0	0	0	+/- 0.5 NTU	Yes / No	
Turbidity 1 NTU			1.00	0.82	1.0	+/- 0.5 NTU	Yes / No	
Turbidity 10 NTU			10.00	9.44	10.1	+/- 0.5 NTU	Yes / No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Anthony S. | Date: 1/24/2023 | Time (start): 755 | Time (finish): 815

smarTroll SN: 883533 | Turbidity Meter Type: LaMote 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 11/2023	-0.14	4490	4315.5	4490	+/- 5 %	Yes / No	
pH (4)		-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)	[redacted]		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	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: C. CAIN

Date: 1/24/23

Time (start): 0716

Time (finish): 0735

smarTroll SN: 966040

Turbidity Meter Type: LaMote 2020we

SN: 709

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)	222501153 11/23	6.33	4490	~~3900~~	4490	+/- 5 %	Yes No	
pH (4)	↓		4.00	3.92 ~~3.96~~	4.0	+/- 0.1 SU	Yes No	
Mid-Day pH (4) check		/	4.00	~~3.90~~ 3.96	~~4.06~~ 4.0	+/- 0.1 SU	Yes No	
pH (7)	2216893 11/23	7.42	7.00	7.05	7.0	+/- 0.1 SU	Yes No	
Mid-Day pH (7) check	↓	/	7.00	7.06	7.0	+/- 0.1 SU	Yes No	
pH (10)	2123202.02 12/23	7.69	10.00	10.19	10.0	+/- 0.1 SU	Yes No	
Mid-Day pH (10) check	↓	/	10.00	9.97	10.0	+/- 0.1 SU	Yes No	
ORP (mV)	213901.44 11/23	7.59	228	242.8	228	+/- 20mV	Yes No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]	[redacted]	100	100.02	100	+/- 6 % saturation	Yes No	
Turbidity 0 NTU	[redacted]	[redacted]	0	0.35	0.0	+/- 0.5 NTU	Yes No	
Turbidity 1 NTU	[redacted]	[redacted]	1.00	0.72	1.00	+/- 0.5 NTU	Yes No	
Turbidity 10 NTU	[redacted]	[redacted]	10.00	10.83	10.00	+/- 0.5 NTU	Yes No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Thomas Kessler

Date: 11/24/2023

Time (start): 0700

Time (finish): 0750

smarTroll SN: 850724

Turbidity Meter Type: LaMote 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 %	Yes / No	
pH (4)	11/23		4.00	3.91	4.00	+/- 0.1 SU	Yes / No	
Mid-Day pH (4) check	2216893	9.22	4.00	4.01	—	+/- 0.1 SU	Yes / No	
pH (7)	2216893 11/23	9.76	7.00	7.00	7.00	+/- 0.1 SU	Yes / No	
Mid-Day pH (7) check			7.00	6.98	—	+/- 0.1 SU	Yes / No	
pH (10)	21270602 12/23	9.94	10.00	10.13	10.00	+/- 0.1 SU	Yes / No	
Mid-Day pH (10) check			10.00	10.00	—	+/- 0.1 SU	Yes / No	
ORP (mV)	213901441 11/23	10.09	228	240.4	228	+/- 20mV	Yes / No	
DO (%) (1pt, 100% water saturated air cal)			100	100.4	100	+/- 6 % saturation	Yes / No	
Turbidity 0 NTU			0	0.11	0.00	+/- 0.5 NTU	Yes / No	
Turbidity 1 NTU			1.00	1.07	1.00	+/- 0.5 NTU	Yes / No	
Turbidity 10 NTU			10.00	10.34	9.98	+/- 0.5 NTU	Yes / No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: A. Szwast | Date: 1/26/2023 | Time (start): 825 | Time (finish): 842

smarTroll SN: 883533 | Turbidity Meter Type: LaMote 2020we | SN: 7007-1416

Weather Conditions: cloudy, 40°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	5.40	4490	4588.8	4490	+/- 5 %	(Yes) No	
pH (4)		5.90	4.00	3.84	4.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (4) check	—	—	~~4.00~~	—	—	+/- 0.1 SU	Yes ~~No~~	
pH (7)	2216893 11/2023	6.34	7.00	6.95	7.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (7) check	—	—	~~7.00~~	—	—	~~+/- 0.1 SU~~	Yes ~~No~~	
pH (10)	21320202 12-2023	6.64	10.00	10.16	10.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (10) check	—	—	~~10.00~~	—	—	+/- 0.1 SU	~~Yes~~ ~~No~~	
ORP (mV)	21901144 11/2023	6.75	228	234.5	228.0	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	97.85	100.0	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0	0.00	—	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1.00	0.61	0.80	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			10.00	12.36	10.03	+/- 0.5 NTU	(Yes) No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: C. CAIN | Date: 1/26/23 | Time (start): 0830 | Time (finish): 0900

smarTroll SN: 966040 | Turbidity Meter Type: LaMote 2020we | SN: 7009

Weather Conditions: Cloudy 41 | 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	9.93	4490	4489	4490	+/- 5 %	Yes / No	
pH (4)	↓	↓	4.00	4.03	4.0	+/- 0.1 SU	Yes / No	
Mid-Day pH (4) check	↓	/	4.00	4.01	4.0	+/- 0.1 SU	Yes / No	
pH (7)	2216893 11/23	10.55	7.00	7.04	7.0	+/- 0.1 SU	Yes / No	
Mid-Day pH (7) check	↓	/	7.00	7.07	7.0	+/- 0.1 SU	Yes / No	
pH (10)	212320202 12/23	10.64	10.00	10.10	10.0	+/- 0.1 SU	Yes / No	
Mid-Day pH (10) check	↓	/	10.00	9.94	10.0	+/- 0.1 SU	Yes / No	
ORP (mV)	21390149 11/23	10.54	228	232.7	228	+/- 20mV	Yes / No	
DO (%) (1pt, 100% water saturated air cal)			100	99.37	100	+/- 6 % saturation	Yes / No	
Turbidity 0 NTU			0	0.01	0.0	+/- 0.5 NTU	Yes / No	
Turbidity 1 NTU			1.00	1.18	1.00	+/- 0.5 NTU	Yes / No	
Turbidity 10 NTU			10.00	10.12	10.00	+/- 0.5 NTU	Yes / No	

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EQUIPMENT CALIBRATION LOG

0900

Field Technician: Thomas Kessler | Date: 11/26/2023 | Time (start): 0830 | Time (finish): 1000

smarTroll SN: 85774 | Turbidity Meter Type: LaMote 2020we | SN: S896-37[illegible]

Weather Conditions: Cloudy 40° | 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	10.72	4490	4416	4490	+/- 5 %	Yes / No	
pH (4)	↓		4.00	4.0	4.03	+/- 0.1 SU	Yes / No	
Mid-Day pH (4) check		15.39	4.00	3.85	4.00	+/- 0.1 SU	Yes / ~~No~~	Recal
pH (7)	22168493 11/23	10.45	7.00	7.02	7.00	+/- 0.1 SU	Yes / No	
Mid-Day pH (7) check			7.00	6.90	—	+/- 0.1 SU	Yes / No	
pH (10)	21370202 1/1/23	10.68	10.00	9.95	10.00	+/- 0.1 SU	Yes / No	
Mid-Day pH (10) check			10.00	9.90	—	+/- 0.1 SU	Yes / No	
ORP (mV)	21390144 11/23	10.79	228	2336	228	+/- 20mV	Yes / No	
DO (%) (1pt, 100% water saturated air cal)			100	99.99	100.00	+/- 6 % saturation	Yes / No	
Turbidity 0 NTU			0	0.21	0.00	+/- 0.5 NTU	Yes / No	
Turbidity 1 NTU			1.00	0.99	1.01	+/- 0.5 NTU	Yes / No	
Turbidity 10 NTU			10.00	10.45	10.0	+/- 0.5 NTU	Yes / No	

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EQUIPMENT CALIBRATION LOG

Field Technician: A. Sewust | Date: 1/27/2023 | Time (start): 755 | Time (finish): 830

smarTroll SN: 883533 | Turbidity Meter Type: LaMote 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 1/2023	1.91	4490	4484.4	4490.0	+/- 5 %	(Yes) No	
pH (4)		3.33	4.00	4.04	4.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (4) check	—		~~4.00~~			~~+/- 0.1 SU~~	~~Yes No~~	unable to perform Mid-day pH check while purging well
pH (7)	2216893 1/2023	3.19	7.00	7.08	7.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (7) check	—		~~7.00~~			~~+/- 0.1 SU~~	~~Yes No~~	
pH (10)	21320202 12/2023	3.58	10.00	~~4.04~~	10.00	+/- 0.1 SU	(Yes) No	10.15 = initial reading
Mid-Day pH (10) check	—		~~10.00~~			~~+/- 0.1 SU~~	~~Yes No~~	
ORP (mV)	21396144 1/2023	3.75	228	233.2	228.0	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	93.64	100.0	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0	0.03	—	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1.00	~~0.40~~ 1.00	~~0.42~~	+/- 0.5 NTU	(Yes) 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	(Yes) No	

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EQUIPMENT CALIBRATION LOG

Field Technician: C. CAIN | Date: 1/27/23 | Time (start): 0745 | Time (finish): 0815

smarTroll SN: 966 040 | Turbidity Meter Type: LaMote 2020we | SN: 7009

Weather Conditions: Sunny 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	4496	+/- 5 %	Yes / No	
pH (4)	↓	↓	4.00	3.98	4.0	+/- 0.1 SU	Yes / No	
Mid-Day pH (4) check	↓	/	4.00	4.01	4.0	+/- 0.1 SU	Yes / No	
pH (7)	22168493 11/23	7.56	7.00	7.05	7.0	+/- 0.1 SU	Yes / No	
Mid-Day pH (7) check	↓	/	7.00	7.06	7.0	+/- 0.1 SU	Yes / No	
pH (10)	21232020Z 12/23	7.81	10.00	10.04	10.0	+/- 0.1 SU	Yes / No	
Mid-Day pH (10) check	↓	/	10.00	10.04	10.0	+/- 0.1 SU	Yes / No	
ORP (mV)	21390144	7.65	228	232.7	228	+/- 20mV	Yes / No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]	[redacted]	100	99.42	100	+/- 6 % saturation	Yes / No	
Turbidity 0 NTU	[redacted]	[redacted]	0	0.00	0.00	+/- 0.5 NTU	Yes / No	
Turbidity 1 NTU	[redacted]	[redacted]	1.00	1.08	1.00	+/- 0.5 NTU	Yes / No	
Turbidity 10 NTU	[redacted]	[redacted]	10.00	9.81	10.0	+/- 0.5 NTU	Yes / No	

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EQUIPMENT CALIBRATION LOG

Field Technician: Thomas Keeslin

Date: 1/29/2023

Time (start): 1300

Time (finish): 1330

smarTroll SN: 856774

Turbidity Meter Type: LaMote 2020we

SN: ~~856774~~ 5896-3715

Weather Conditions: Sunny, 45°

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)	2792453 11/23	15.39	4490	4773.5	4490	+/- 5 %	Yes No	
pH (4)			4.00	4.36	4.0	+/- 0.1 SU	Yes No	
Mid-Day pH (4) check	—	—	4.00	—	—	+/- 0.1 SU	Yes No	
pH (7)	27168413 11/23	17.87	7.00	6.57	7.00	+/- 0.1 SU	Yes No	
Mid-Day pH (7) check	—	—	7.00	—	—	+/- 0.1 SU	Yes No	
pH (10)	21370806 11/23	12.32	10.00	9.53	10.00	+/- 0.1 SU	Yes No	
Mid-Day pH (10) check	—	—	10.00	—	—	+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/23	12.09	228	229.6	228	+/- 20mV	Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	101.9	100	+/- 6 % saturation	Yes No	
Turbidity 0 NTU			0	0.38	0.00	+/- 0.5 NTU	Yes No	
Turbidity 1 NTU			1.00	0.98	1.00	+/- 0.5 NTU	Yes No	
Turbidity 10 NTU			10.00	9.88	10.01	+/- 0.5 NTU	Yes No	

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EQUIPMENT CALIBRATION LOG

Field Technician: A. Szwast | 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 %	(Yes) No	
pH (4)		9.73	4.00	3.95	4.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (4) check	~~—~~		~~4.00~~			~~+/- 0.1 SU~~	~~Yes No~~	
pH (7)	2216893 11/2023	9.98	7.00	7.03	7.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (7) check	~~—~~		~~7.00~~			~~+/- 0.1 SU~~	~~Yes No~~	
pH (10)	21320202 12/2023	10.17	10.00	10.15	10.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (10) check	~~—~~		~~10.00~~			~~+/- 0.1 SU~~	~~Yes No~~	
ORP (mV)	21390144 11/2023	10.20	228	233.6	228.0	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	99.54	100.0	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0	0.15	0.00	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1.00	1.08	—	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			10.00	8.68	9.72	+/- 0.5 NTU	(Yes) No	

August 2023

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: C.CAIN | Date: 8/8/23 | Time (start): 0844 | Time (finish): 0904

smarTroll SN: 883553 | Turbidity Meter Type: LaMotte 2020t | SN: 4121-2623

Weather Conditions: Sunny 72 | Facility and Unit: Plant Hammond | Project No.: 60676571

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	24.60	~~4.0~~ 4490 cc	4445.9 ~~4.26~~ cc	~~4.0~~ 4490 cc	+/- 5 %	Yes No	
pH (4)			4.0	~~4.25~~ 4.25	4.0	+/- 0.1 SU	Yes No	
Mid-Day pH (4) check			4.0	3.99		+/- 0.1 SU	Yes No	
pH (7)	22216893 11/23	25.16	7.0	7.18	7.0	+/- 0.1 SU	Yes No	
Mid-Day pH (7) check			7.0	7.02		+/- 0.1 SU	Yes No	
pH (10)	22110130 8/23	25.28	10.0	10.48	10.0	+/- 0.1 SU	Yes No	
Mid-Day pH (10) check			10.	10.0		+/- 0.1 SU	Yes No	
ORP (mV)	21890144 11/23	25.33	228	219.9	228	+/- 20mV	Yes No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	97.99	100	+/- 6 % saturation	Yes No	
Turbidity 0 NTU			0	0.05	0.04	+/- 0.5 NTU	Yes No	
Turbidity 1 NTU			1	0.99	0.99	+/- 0.5 NTU	Yes No	
Turbidity 10 NTU			10	10.54	10.0	+/- 0.5 NTU	Yes No	

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EQUIPMENT CALIBRATION LOG

Field Technician: Thomas Wiegert

Date: 8/8/23

Time (start): 0843 Time (finish): 0857

smarTroll SN: 85072241

Turbidity Meter Type: Lamotte 2020

SN: 1175-4011

Weather Conditions: Clear, 75°C

Facility and Unit: Hammond,

Project No.: GWC5881

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 11/23	24.22	4490	4351.6	4440	+/- 5 %	Yes No	
pH (4)	↓		4	4.07	4.0	+/- 0.1 SU	Yes No	
Mid-Day pH (4) check			4.03	—	—	+/- 0.1 SU	Yes No	
pH (7)	22166CB 11/23	24.74	7.0	7.02	7.0	+/- 0.1 SU	Yes No	
Mid-Day pH (7) check	↓		6.99	—	—	+/- 0.1 SU	Yes No	
pH (10)	21370202 12/23	24.82	10	10.23	10.0	+/- 0.1 SU	Yes No	
Mid-Day pH (10) check	↓		10.07	—	—	+/- 0.1 SU	Yes No	
ORP (mV)	22700865 8/23	24.85	228	225.4	228	+/- 20mV	Yes No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	100.40	100	+/- 6 % saturation	Yes No	
Turbidity 0 NTU	[redacted]		0	1.25	0	+/- 0.5 NTU	Yes No	
Turbidity 1 NTU	[redacted]		1	3.23	0.97	+/- 0.5 NTU	Yes No	
Turbidity 10 NTU	[redacted]		10	9.73	9.97	+/- 0.5 NTU	Yes No	

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EQUIPMENT CALIBRATION LOG

Field Technician: Elisabeth McDonnell | Date: 08/08/23 | Time (start): 840 | Time (finish): 910

smarTroll SN: 989630 | Turbidity Meter Type: LaMotte 2020t | SN: 4109-2623

Weather Conditions: Sunny 85 | Facility and Unit: plant hammond | 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)	2225153 11/23	25.5°	4,490	4,550	4510	+/- 5 %	Yes No	
pH (4)	↓		4.00	4.13	4.00	+/- 0.1 SU	Yes No	
Mid-Day pH (4) check	↓					~~+/- 0.1 SU~~	~~Yes~~ No	
pH (7)	2216893 4/23	26.65	7.0	7.81	7.0	+/- 0.1 SU	Yes No	
Mid-Day pH (7) check	↓					~~+/- 0.1 SU~~	Yes No	
pH (10)	21320202 12/23		10.0	9.82	10.0	+/- 0.1 SU	Yes No	
Mid-Day pH (10) check	↓					~~+/- 0.1 SU~~	Yes No	
ORP (mV)	21390144 11/23	25.56	228	228.2	228.1	+/- 20mV	Yes No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100%	102.95%	100%	+/- 6 % saturation	Yes No	
Turbidity 0 NTU	[redacted]		0.0	0.51	0.00	+/- 0.5 NTU	Yes No	
Turbidity 1 NTU	[redacted]		1.0	1.45	1.05	+/- 0.5 NTU	Yes No	
Turbidity 10 NTU	[redacted]		10.0	13.3	10.4	+/- 0.5 NTU	Yes No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: A. Szwast | Date: 8-10-2023 | Time (start): 805 | Time (finish): 835

smarTroll SN: 883530 | Turbidity Meter Type: LaMotte 2020t | SN: 7139-2623

Weather Conditions: Rainy, 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)	22250153 11/2023	22.60	4490.0	4672.9	4490.0	+/- 5 %	(Yes) No	
pH (4)		23.62	4.00	3.92	4.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (4) check						+/- 0.1 SU	Yes No	
pH (7)	2216893 11/2023	24.55	7.00	7.10	7.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (7) check						+/- 0.1 SU	Yes No	
pH (10)	21320202 12/2023	24.37	10.00	10.26	10.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (10) check						+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/2023	@ 8-10-23 ~~229~~ 24.61	228.0	225.3	228.0	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)			100.0	97.84	100.0	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0.00	0.05	—	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1.00	1.23	1.18	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			10.0	9.33	10.23	+/- 0.5 NTU	(Yes) No	

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EQUIPMENT CALIBRATION LOG

Field Technician: Thomas Kressler | Date: 8/10/23 | Time (start): 0815 | Time (finish): 0830

smarTroll SN: 850724 | Turbidity Meter Type: Lamotte 2020we | SN: 7475 - 4011

Weather Conditions: Rainy, 69° | Facility and Unit: Hammond | Project No: GWC581

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)	2225015 3 11/23	22.58	4490	21482	41,010	+/- 5 %	(Yes) No	
pH (4)	↓		4	4.03	4.0	+/- 0.1 SU	(Yes) No	
Mid-Day pH (4) check	↓	—	—	4.01	—	+/- 0.1 SU	(Yes) No	
pH (7)	226893 11/23	22.84	7	6.99	7.0	+/- 0.1 SU	(Yes) No	
Mid-Day pH (7) check	↓	—	—	7.06	—	+/- 0.1 SU	(Yes) No	
pH (10)	213022 12/23	22.89	10	9.92	10.0	+/- 0.1 SU	(Yes) No	
Mid-Day pH (10) check	↓	—	—	10.03	—	+/- 0.1 SU	(Yes) No	
ORP (mV)	227000285 8/23	22.90	228	225.9	228	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	97.59	100	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU	[redacted]		0	0.82	0	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU	[redacted]		1	0.72	0.89	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU	[redacted]		10	10.39	10.1	+/- 0.5 NTU	(Yes) No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Elisabeth McDonnell | Date: 8/10/23 | Time (start): 808 | Time (finish): 838

smarTroll SN: 989630 | Turbidity Meter Type: La Motte 2020 we | SN: 4109-2623

Weather Conditions: Rainy 75 | Facility and Unit: Plant Hammond | Project No.: GW 6581

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)	2226053 11/23	23	4490	4548	4490	+/- 5 %	(Yes) No	
pH (4)	↓		4.0	4.06	4.0	+/- 0.1 SU	(Yes) No	
Mid-Day pH (4) check		24.68	4.0	4.04	4.0	+/- 0.1 SU	(Yes) No	
pH (7)	2216893 11/23	24.33	7.0	7.02	7.0	+/- 0.1 SU	(Yes) No	
Mid-Day pH (7) check	↓	24.53	7.0	6.97	7.0	+/- 0.1 SU	(Yes) No	
pH (10)	21320202 12/23	24.37	10.0	9.99	10.0	+/- 0.1 SU	(Yes) No	
Mid-Day pH (10) check	↓	24.50	10.0	9.96	10.0	+/- 0.1 SU	(Yes) No	
ORP (mV)	21390144 11/23	24.58	228	227.2	228	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100%	96.97	100%	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU	[redacted]		0.0	0.0	0.0	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU	[redacted]		1.0	.75	.89	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU	[redacted]		10.0	11.1	10.4	+/- 0.5 NTU	(Yes) No	

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EQUIPMENT CALIBRATION LOG

Field Technician: C.CAIN | Date: 8/10/23 | Time (start): 0830 | Time (finish): 0845

smarTroll SN: 883553 | Turbidity Meter Type: 2020 T | SN: 4121-2623

Weather Conditions: Rain 68 | Facility and Unit: Plant Hammond | Project No.: GW6587

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	23.43	4490	4564.8	4490	+/- 5 %	Yes / No	
pH (4)			4.0	4.01	4.0	+/- 0.1 SU	Yes / No	
Mid-Day pH (4) check			4.0	3.99		+/- 0.1 SU	Yes / No	
pH (7)	22168493 11/23	24.36	7.0	6.96	7.0	+/- 0.1 SU	Yes / No	
Mid-Day pH (7) check			7.0	7.0		+/- 0.1 SU	Yes / No	
pH (10)	22110136	24.26	10.0	10.0	10.0	+/- 0.1 SU	Yes / No	
Mid-Day pH (10) check			10.0	10.0		+/- 0.1 SU	Yes / No	
ORP (mV)	21390144 11/23	24.15	228	225.5	228	+/- 20mV	Yes / No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	103.24	100	+/- 6 % saturation	Yes / No	
Turbidity 0 NTU			0	0	0	+/- 0.5 NTU	Yes / No	
Turbidity 1 NTU			1	0.91	1	+/- 0.5 NTU	Yes / No	
Turbidity 10 NTU			10	9.66	10	+/- 0.5 NTU	Yes / No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: A. Szwast | Date: 8-11-2023 | Time (start): 815 | Time (finish): 830

smarTroll SN: 889590 | Turbidity Meter Type: LaMotte 2020t | SN: 4139-2623

Weather Conditions: Cloudy, 75° F | Facility and Unit: Plant Harmony | 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	23.24	4490.0	4495.8	4490.0	+/- 5 %	(Yes) No	
pH (4)		25.61	4.00	4.12	4.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (4) check	22250153 11/2023	29.65	4.00	4.20	4.00	+/- 0.1 SU	(Yes) No	
pH (7)	2216893 11/2023	25.92	7.00	6.96	7.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (7) check	2216893 11/2023	28.09	7.00 8-11-23	6.50	7.00	+/- 0.1 SU	(Yes) No	
pH (10)	21320202 12/2023	26.03	10.00	9.86	10.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (10) check	21320202 12/2023	27.53	10.00	9.49	10.00	+/- 0.1 SU	(Yes) No	
ORP (mV)	21396144 11/2023	26.01	228.0	226.3	228.0	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]	[redacted]	100.0	99.15	100.0	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU	[redacted]	[redacted]	0.00	0.00	—	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU	[redacted]	[redacted]	1.00	1.53	1.08	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU	[redacted]	[redacted]	10.0	9.41	10.32	+/- 0.5 NTU	(Yes) No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Elisabeth McDonnell | Date: 8/11/23 | Time (start): 756 | Time (finish): 816

smarTroll SN: 989630 | Turbidity Meter Type: La Motte 2020t | SN: 4109-2623

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)	22250153 11/23	25.94	4490	4481.9	4490	+/- 5 %	Yes / No	
pH (4)	↓		4.0	4.0	4.0	+/- 0.1 SU	Yes / No	
Mid-Day pH (4) check		30.88	4.0	4.04	4.0	+/- 0.1 SU	Yes / No	
pH (7)	22168993 11/23	26.90	7.0	6.98	7.0	+/- 0.1 SU	Yes / No	
Mid-Day pH (7) check	↓	31.63	7.0	6.97	7.0	+/- 0.1 SU	Yes / No	
pH (10)	21320202 12/23	27.13	10.0	9.98	10.0	+/- 0.1 SU	Yes / No	
Mid-Day pH (10) check	↓	32.09	10.0	10.10	10.0	+/- 0.1 SU	Yes / No	
ORP (mV)	21390149 11/23	26.7	228	225	228	+/- 20mV	Yes / No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100%	99.39	100	+/- 6 % saturation	Yes / No	
Turbidity 0 NTU			0.0	0.0	0.0	+/- 0.5 NTU	Yes / No	
Turbidity 1 NTU			1.0	.89	.48	+/- 0.5 NTU	Yes / No	
Turbidity 10 NTU			10.0	10.6	10.4	+/- 0.5 NTU	Yes / No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Thomas Hessler | Date: 8/11/2012 | Time (start): 0800 | Time (finish): 0833

smarTroll SN: 550174 | Turbidity Meter Type: Lamotte 2020 we | SN: 12175 4011

Weather Conditions: Rainy, 75° | Facility and Unit: Plant Hammond | Project No.: 60XC551

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	24.37	4490	4611.2	4490	+/- 5 %	(Yes) No	
pH (4)			4.00	4.04	4.0	+/- 0.1 SU	(Yes) No	
Mid-Day pH (4) check	—	—	—	4.01	—	+/- 0.1 SU	(Yes) No	
pH (7)	22168G3 11/13	24.69	7.00	7.02	7.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (7) check	—	—	—	6.97	—	+/- 0.1 SU	(Yes) No	
pH (10)	21302012 12/13	24.38	10.00	9.93	10.0	+/- 0.1 SU	(Yes) No	
Mid-Day pH (10) check	—	—	—	10.08	—	+/- 0.1 SU	(Yes) No	
ORP (mV)	22700085 8/13	2460	228	223.5	225	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)			100	98.2	100	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0	1.07	0.0	+/- 0.5 NTU	Yes No	
Turbidity 1 NTU			1	1.10	1.05	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			10	9.76	9.85	+/- 0.5 NTU	(Yes) No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: J. Kessler | Date: 8/12/23 | Time (start): 0720 | Time (finish): 0750

smarTroll SN: 850724 | Turbidity Meter Type: Lamotte 2020 we | SN: 1975.4011

Weather Conditions: Sunny, 75° | Facility and Unit: Hammond | Project No.: GW65381

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)	L2250153 11/23	27.39	4490	1507.3	4490	+/- 5 %	(Yes) No	
pH (4)			4.00	4.01	4.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (4) check	—	—	—	4.09	—	+/- 0.1 SU	(Yes) No	
pH (7)	L2168013 11/23	26.27	7.00	6.95	7.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (7) check	—	—	7.00	—	—	+/- 0.1 SU	(Yes) No	
pH (10)	L2320202 12/23	28.66	10.00	9.91	10.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (10) check	—	—	—	9.92	—	+/- 0.1 SU	(Yes) No	
ORP (mV)	22200085 8/23	28.31	228	222.2	228	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)			100	98.9	100	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0	0.93	0	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1	1.32	0.97	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			10	9.30	9.97	+/- 0.5 NTU	(Yes) No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: C. CAIN | Date: 8/12/23 | Time (start): 0740 | Time (finish): 0815

smarTroll SN: 863553 | Turbidity Meter Type: 2020T | SN: 4121-2623

Weather Conditions: Sunny 75 | Facility and Unit: Plant Harmon | Project No.: GIW6581

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	4496	+/- 5 %	Yes / No	
pH (4)			4.0	3.96	4.0	+/- 0.1 SU	Yes / No	
Mid-Day pH (4) check			4.0	4.0		+/- 0.1 SU	Yes / No	
pH (7)	22164993 11/23	25.75	7.0	6.96	7.0	+/- 0.1 SU	Yes / No	
Mid-Day pH (7) check			7.0	7.0		+/- 0.1 SU	Yes / No	
pH (10)	22110130 8/23	25.92	10.0	9.91	10.0	+/- 0.1 SU	Yes / No	
Mid-Day pH (10) check			10.0	10.02		+/- 0.1 SU	Yes / No	
ORP (mV)	23901444 11/23	25.97	228	225.4	228	+/- 20mV	Yes / No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	96.25	100	+/- 6 % saturation	Yes / No	
Turbidity 0 NTU	[redacted]		0	0	0	+/- 0.5 NTU	Yes / No	
Turbidity 1 NTU	[redacted]		1	0.79	0.96	+/- 0.5 NTU	Yes / No	
Turbidity 10 NTU	[redacted]		10			+/- 0.5 NTU	Yes / No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: A. Szwast | Date: 8-12-2023 | Time (start): 730 | Time (finish): 750

smarTroll SN: 883530 | Turbidity Meter Type: LaMotte 2020t | SN: 4129-2623

Weather Conditions: Sunny, 75° F | Facility and Unit: Plant Hammond | Project No.: C-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 %	(Yes) No	
pH (4)		25.90	4.00	4.71	4.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (4) check						+/- 0.1 SU	Yes No	
pH (7)	22168973 11/2023	26.15	7.00	7.43	7.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (7) check						+/- 0.1 SU	Yes No	
pH (10)	21320202 12/2023	26.29	10.00	10.17	10.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (10) check						+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/2023	26.31	228.0	226.2	228.0	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)			100.0	100.04	100.0	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0.0	0.00	—	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1.0	1.28	1.10	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			10.0	8.95	10.2	+/- 0.5 NTU	(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 1 (AP-1)
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-1. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015), the Georgia Environmental Protection Division (EPD) Rules for Solid Waste Management Chapter 391-3-4-.10 and follows the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling began for the Coal Combustion Residuals (CCR) program in 2016, and at least 8 background samples have been collected at each of the upgradient and downgradient groundwater monitoring wells. The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** HGWA-1, HGWA-2, HGWA-3, HGWA-43D, and HGWA-44D
- **Downgradient wells:** HGWC-7, HGWC-8, HGWC-9, HGWC-10, HGWC-11, HGWC-12, and HGWC-13
- **Assessment wells:** MW-5, MW-6, MW-7, MW-19, MW-20, MW-24D, MW-25D, MW-26D, MW-27D, MW-28D, and MW-29

Sampling at upgradient wells HGWA-43D and HGWA-44D began in September 2020 and all data from these wells are included in construction of interwell statistical limits.

Data from assessment wells, which were first sampled in March 2019, are included on time series and box plots for all parameters. When a minimum of 4 samples is available, data at these wells are evaluated using confidence intervals for the Appendix IV constituents. Wells MW-30D and MW-40D were included as assessment wells during previous reporting periods, but each was reclassified as a "piezometer" based on the findings presented in the alternate source demonstration included as an appendix of the 2020 Annual Groundwater Monitoring & Corrective Action Report, submitted to Georgia EPD in January 2021. Because of this reclassification, data for wells MW-30D and MW-40D are not presented in this report.

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Kristina Rayner, Founder and Senior Statistician to Groundwater Stats Consulting. The statistical analysis was performed according to the groundwater 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 (2009).

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) **–** antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A summary of Appendix IV downgradient and assessment well/constituent pairs with 100% non-detects follows this letter.

For all constituents, a substitution of the most recent reporting limit is used for non-detect data. In the cases of lithium and thallium, historical reporting limits vary among the wells. Therefore, the reporting limits of 0.03 mg/L and 0.001 mg/L, respectively, were substituted across all wells, which is the most recent reporting limit provided by the laboratory. Additionally, during the January/February sample event, elevated reporting limits of 0.025 mg/L were observed for both chromium and cobalt at well HGWC-8 as a result of dilution factors. The most recent reporting limit of 0.005 mg/L found at all other wells for both constituents was substituted in lieu of the elevated reporting limit.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. 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 with the previous screening to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance. The EPA suggests the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations.

Statistical Methods – Appendix III Parameters

The following Appendix III parameters are evaluated using interwell prediction limits combined with a 1-of-2 resample plan: 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.

Note that values shown on data pages reflect raw data and any non-detects that have been substituted with one-half of the reporting limit will be shown as the original reporting limit.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data during each event after careful screening for any new outliers. In some cases, an earlier portion of data may require deselection prior to construction of limits to provide sensitive limits that will rapidly detect changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs. When this step is required a summary of any adjusted records will be provided. No records were adjusted at this time.

Statistical Analysis 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. No new values were flagged as shown in the outlier summary following this report (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). Interwell prediction limits pool 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 initial exceedances are present.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When a resample confirms the initial exceedance, a statistically significant increase (SSI) is identified and further research would be required to identify the cause of the exceedance (i.e., impact from the site, natural variation, or an off-site source). If the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result and, therefore, no exceedance is noted and no further action is necessary. If no resample is collected, the original result is considered a confirmed exceedance.

When the January/February 2023 compliance data from downgradient wells were compared to interwell prediction limits, exceedances were identified for the following well/constituent pairs:

- Boron: HGWC-11, HGWC-12, HGWC-13, HGWC-7, HGWC-8, and HGWC-9
- Calcium: HGWC-12, HGWC-13, and HGWC-9
- Chloride: HGWC-8 and HGWC-9
- Sulfate: HGWC-11, HGWC-12, HGWC-13, HGWC-7, HGWC-8, and HGWC-9
- TDS: HGWC-13 and HGWC-9

A summary table of these findings is provided along with the prediction limits.

Trend Test Evaluation – Appendix III

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable at the 99% confidence level (Figure E). Upgradient well data are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. 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-7
- Calcium: HGWA-3 (upgradient)
- Chloride: HGWA-44D (upgradient)
- Sulfate: HGWA-2 (upgradient)

Decreasing trends:

- Boron: HGWC-12 and HGWC-13
- Chloride: HGWA-3 (upgradient), HGWC-8, and HGWC-9
- Sulfate: HGWA-43D (upgradient)

Statistical Methods – Appendix IV Parameters

Appendix IV parameters are evaluated by statistically comparing the mean or median of each downgradient well/constituent pair against corresponding Groundwater Protection Standards (GWPS). The GWPS may be either regulatory (Maximum Contaminant Limits (MCL) or CCR rule-specified limits) or site-specific limits that are based on upgradient background groundwater quality. Site-specific background limits are determined using tolerance limits, and the comparison of downgradient means or medians to GWPS is performed using confidence intervals. The methods are described below.

Statistical Evaluation of Appendix IV Parameters – 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 containing 100% non-detects do not require analyses. Data from all wells for Appendix IV parameters are reassessed for outliers during each analysis. No new values were flagged and a summary of previously flagged outliers follows this report (Figure C).

Interwell Upper Tolerance Limits

First, interwell upper tolerance limits were used to calculate site-specific background limits from all available pooled upgradient well data through February 2023 for Appendix IV constituents (Figure F). As mentioned above, a reporting limit of 0.03 mg/L was substituted across all wells for lithium. Parametric tolerance limits are used when data follow a normal or transformed-normal distribution. When data contained greater than 50% non-detects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used.

Groundwater Protection Standards

The background limits were then used when determining the groundwater protection standard (GWPS) under 40 CFR §257.95(h) and Georgia EPD Rule 391-3-4-.10(6)(a). On July 30, 2018, US EPA revised the Federal CCR rule updating GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR §257.95(h)(2). Effective on February 22,

2022, Georgia EPD incorporated the updated GWPS into the current Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a). In accordance with the updated Rules, the GWPS is:

- The maximum contaminant level (MCL) established under §141.62 and §141.66 of this title
- Where an MCL has not been established for a constituent, Federal and State CCR Rules specify levels for cobalt (0.006 mg/L), lead (0.015 mg/L), lithium (0.040 mg/L), and molybdenum (0.100 mg/L)
- The respective background level for a constituent when the background level is higher than the MCL or Federal CCR Rule identified GWPS

Following Georgia EPD Rule requirements and the Federal CCR requirements, GWPS were established for statistical comparison of Appendix IV constituents for this sample event (Figure G).

Confidence Intervals

To complete the statistical comparison to GWPS, confidence intervals using data through February 2023 were constructed for each of the Appendix IV constituents in each downgradient well and assessment wells with 4 or more samples.

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.

Confidence intervals were compared to the GWPS prepared as described above (Figure H). As mentioned above, a reporting limit of 0.005 mg/L was substituted for both chromium and cobalt. 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:

- Arsenic: HGWC-13
- Molybdenum: HGWC-8

Trend Test Evaluation – Appendix IV

Data at wells with confidence interval exceedances are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (Figure 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. No statistically significant increasing or decreasing trends were identified.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Hammond AP-1. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

Andrew Collins
Project Manager

Kristina Rayner
Senior Statistician

100% Non-Detects: Appendix IV Downgradient & Assessment

Analysis Run 4/14/2023 1:04 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Antimony (mg/L)
HGWC-12, MW-19, MW-20, MW-25D, MW-5

Arsenic (mg/L)
HGWC-10, MW-24D, MW-7

Beryllium (mg/L)
HGWC-10, HGWC-12, HGWC-9, MW-20, MW-24D, MW-25D, MW-26D, MW-27D, MW-29, MW-5, MW-6

Cadmium (mg/L)
HGWC-13, MW-20, MW-24D, MW-25D, MW-26D, MW-27D, MW-28D, MW-29, MW-5, MW-6, MW-7

Cobalt (mg/L)
MW-25D, MW-5, MW-7

Lead (mg/L)
MW-25D

Lithium (mg/L)
HGWC-10, HGWC-11, MW-5, MW-6, MW-7

Mercury (mg/L)
HGWC-12, HGWC-7, HGWC-8, MW-19, MW-20, MW-24D, MW-25D, MW-26D, MW-27D, MW-28D, MW-29, MW-5, MW-6, MW-7

Molybdenum (mg/L)
MW-20, MW-5

Selenium (mg/L)
HGWC-7, MW-20, MW-24D, MW-25D, MW-26D, MW-28D, MW-29, MW-6

Thallium (mg/L)
HGWC-10, HGWC-7, HGWC-9, MW-20, MW-24D, MW-25D, MW-26D, MW-27D, MW-5, MW-7

Appendix III Interwell Prediction Limits - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 4/14/2023, 12:39 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-11	0.44	n/a	1/26/2023	0.5	Yes	80	n/a	n/a	5	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-12	0.44	n/a	1/26/2023	1.5	Yes	80	n/a	n/a	5	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-13	0.44	n/a	1/26/2023	0.83	Yes	80	n/a	n/a	5	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-7	0.44	n/a	1/27/2023	0.93	Yes	80	n/a	n/a	5	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-8	0.44	n/a	2/1/2023	1.9	Yes	80	n/a	n/a	5	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-9	0.44	n/a	1/26/2023	1.9	Yes	80	n/a	n/a	5	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-12	138	n/a	1/26/2023	154	Yes	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-13	138	n/a	1/26/2023	234	Yes	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-9	138	n/a	1/26/2023	173	Yes	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-8	44.8	n/a	2/1/2023	52.4	Yes	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-9	44.8	n/a	1/26/2023	86.9	Yes	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-11	88.2	n/a	1/26/2023	209	Yes	80	n/a	n/a	1.25	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-12	88.2	n/a	1/26/2023	228	Yes	80	n/a	n/a	1.25	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-13	88.2	n/a	1/26/2023	495	Yes	80	n/a	n/a	1.25	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-7	88.2	n/a	1/27/2023	119	Yes	80	n/a	n/a	1.25	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-8	88.2	n/a	2/1/2023	179	Yes	80	n/a	n/a	1.25	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-9	88.2	n/a	1/26/2023	217	Yes	80	n/a	n/a	1.25	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-13	632	n/a	1/26/2023	962	Yes	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-9	632	n/a	1/26/2023	745	Yes	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2

Appendix III Interwell Prediction Limits - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 4/14/2023, 12:39 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-10	0.44	n/a	1/27/2023	0.065	No	80	n/a	n/a	5	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Boron (mg/L)	**HGWC-11**	**0.44**	**n/a**	**1/26/2023**	**0.5**	**Yes**	**80**	**n/a**	**n/a**	**5**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-12**	**0.44**	**n/a**	**1/26/2023**	**1.5**	**Yes**	**80**	**n/a**	**n/a**	**5**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-13**	**0.44**	**n/a**	**1/26/2023**	**0.83**	**Yes**	**80**	**n/a**	**n/a**	**5**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-7**	**0.44**	**n/a**	**1/27/2023**	**0.93**	**Yes**	**80**	**n/a**	**n/a**	**5**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-8**	**0.44**	**n/a**	**2/1/2023**	**1.9**	**Yes**	**80**	**n/a**	**n/a**	**5**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-9**	**0.44**	**n/a**	**1/26/2023**	**1.9**	**Yes**	**80**	**n/a**	**n/a**	**5**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	HGWC-10	138	n/a	1/27/2023	60.4	No	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-11	138	n/a	1/26/2023	113	No	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Calcium (mg/L)	**HGWC-12**	**138**	**n/a**	**1/26/2023**	**154**	**Yes**	**80**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-13**	**138**	**n/a**	**1/26/2023**	**234**	**Yes**	**80**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	HGWC-7	138	n/a	1/27/2023	124	No	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-8	138	n/a	2/1/2023	110	No	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Calcium (mg/L)	**HGWC-9**	**138**	**n/a**	**1/26/2023**	**173**	**Yes**	**80**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	HGWC-10	44.8	n/a	1/27/2023	1.6	No	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-11	44.8	n/a	1/26/2023	8.8	No	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-12	44.8	n/a	1/26/2023	34.6	No	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-13	44.8	n/a	1/26/2023	12.5	No	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-7	44.8	n/a	1/27/2023	40	No	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Chloride (mg/L)	**HGWC-8**	**44.8**	**n/a**	**2/1/2023**	**52.4**	**Yes**	**80**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**HGWC-9**	**44.8**	**n/a**	**1/26/2023**	**86.9**	**Yes**	**80**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Fluoride (mg/L)	HGWC-10	1.3	n/a	1/27/2023	0.16	No	94	n/a	n/a	28.72	n/a	n/a	0.0002194	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-11	1.3	n/a	1/26/2023	0.2	No	94	n/a	n/a	28.72	n/a	n/a	0.0002194	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-12	1.3	n/a	1/26/2023	0.21	No	94	n/a	n/a	28.72	n/a	n/a	0.0002194	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-13	1.3	n/a	1/26/2023	0.4	No	94	n/a	n/a	28.72	n/a	n/a	0.0002194	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-7	1.3	n/a	1/27/2023	0.1	No	94	n/a	n/a	28.72	n/a	n/a	0.0002194	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-8	1.3	n/a	2/1/2023	0.4	No	94	n/a	n/a	28.72	n/a	n/a	0.0002194	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-9	1.3	n/a	1/26/2023	0.11	No	94	n/a	n/a	28.72	n/a	n/a	0.0002194	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-10	8.25	4.9	1/27/2023	6.89	No	89	n/a	n/a	0	n/a	n/a	0.0004864	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-11	8.25	4.9	1/26/2023	6.23	No	89	n/a	n/a	0	n/a	n/a	0.0004864	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-12	8.25	4.9	1/26/2023	7.1	No	89	n/a	n/a	0	n/a	n/a	0.0004864	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-13	8.25	4.9	1/26/2023	6.9	No	89	n/a	n/a	0	n/a	n/a	0.0004864	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-7	8.25	4.9	1/27/2023	7.25	No	89	n/a	n/a	0	n/a	n/a	0.0004864	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-8	8.25	4.9	2/1/2023	6.6	No	89	n/a	n/a	0	n/a	n/a	0.0004864	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-9	8.25	4.9	1/26/2023	7.07	No	89	n/a	n/a	0	n/a	n/a	0.0004864	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-10	88.2	n/a	1/27/2023	37.3	No	80	n/a	n/a	1.25	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**HGWC-11**	**88.2**	**n/a**	**1/26/2023**	**209**	**Yes**	**80**	**n/a**	**n/a**	**1.25**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-12**	**88.2**	**n/a**	**1/26/2023**	**228**	**Yes**	**80**	**n/a**	**n/a**	**1.25**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-13**	**88.2**	**n/a**	**1/26/2023**	**495**	**Yes**	**80**	**n/a**	**n/a**	**1.25**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-7**	**88.2**	**n/a**	**1/27/2023**	**119**	**Yes**	**80**	**n/a**	**n/a**	**1.25**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-8**	**88.2**	**n/a**	**2/1/2023**	**179**	**Yes**	**80**	**n/a**	**n/a**	**1.25**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-9**	**88.2**	**n/a**	**1/26/2023**	**217**	**Yes**	**80**	**n/a**	**n/a**	**1.25**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	HGWC-10	632	n/a	1/27/2023	188	No	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-11	632	n/a	1/26/2023	429	No	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-12	632	n/a	1/26/2023	624	No	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**HGWC-13**	**632**	**n/a**	**1/26/2023**	**962**	**Yes**	**80**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	HGWC-7	632	n/a	1/27/2023	473	No	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-8	632	n/a	2/1/2023	528	No	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**HGWC-9**	**632**	**n/a**	**1/26/2023**	**745**	**Yes**	**80**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**

Appendix III Trend Tests - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 4/14/2023, 12:44 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-12**	**-0.1782**	**-97**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-13**	**-0.246**	**-121**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-7**	**0.04008**	**125**	**92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**HGWA-3 (bg)**	**2.343**	**113**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**HGWA-3 (bg)**	**-0.1308**	**-102**	**-87**	**Yes**	**21**	**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-8**	**-9.384**	**-113**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**HGWC-9**	**-12.17**	**-134**	**-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**

Appendix III Trend Tests - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 4/14/2023, 12:44 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	HGWA-1 (bg)	-0.0005071	-38	-87	No	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	**HGWA-2 (bg)**	**0.002417**	**122**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	HGWA-3 (bg)	0.0004174	28	87	No	21	19.05	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)	HGWC-11	-0.1651	-74	-81	No	20	0	n/a	n/a	0.01	NP
Boron (mg/L)	**HGWC-12**	**-0.1782**	**-97**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-13**	**-0.246**	**-121**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-7**	**0.04008**	**125**	**92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	HGWC-8	-0.0007786	-3	-87	No	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-9	0.05878	64	81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-1 (bg)	2.482	68	87	No	21	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
Calcium (mg/L)	**HGWA-3 (bg)**	**2.343**	**113**	**87**	**Yes**	**21**	**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	-20	-25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-12	-4.398	-55	-81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-13	18.24	66	81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-9	0.9669	42	81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-1 (bg)	0.6249	63	87	No	21	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
Chloride (mg/L)	**HGWA-3 (bg)**	**-0.1308**	**-102**	**-87**	**Yes**	**21**	**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
Chloride (mg/L)	**HGWA-44D (bg)**	**8.893**	**28**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**HGWC-8**	**-9.384**	**-113**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**HGWC-9**	**-12.17**	**-134**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	HGWA-1 (bg)	1.051	29	87	No	21	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-3 (bg)	0.5404	34	87	No	21	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**
Sulfate (mg/L)	HGWA-44D (bg)	3.569	14	25	No	9	11.11	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-11	-8.003	-34	-81	No	20	5	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-12	-9.947	-60	-81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-13	45.96	62	81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-7	0	12	92	No	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-8	-3.675	-27	-87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-9	-2.98	-41	-81	No	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-1 (bg)	3.042	16	87	No	21	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)	1.746	27	87	No	21	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)	HGWC-13	52.01	56	81	No	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-9	-33.15	-52	-81	No	20	0	n/a	n/a	0.01	NP

Upper Tolerance Limits Summary Table

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 4/14/2023, 12:49 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.003	n/a	n/a	n/a	n/a 83	n/a	n/a	80.72	n/a	n/a	0.01416	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	n/a 89	n/a	n/a	66.29	n/a	n/a	0.01041	NP Inter(NDs)
Barium (mg/L)	n/a	0.46	n/a	n/a	n/a	n/a 89	n/a	n/a	0	n/a	n/a	0.01041	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0005	n/a	n/a	n/a	n/a 83	n/a	n/a	78.31	n/a	n/a	0.01416	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0005	n/a	n/a	n/a	n/a 83	n/a	n/a	85.54	n/a	n/a	0.01416	NP Inter(NDs)
Chromium (mg/L)	n/a	0.0079	n/a	n/a	n/a	n/a 83	n/a	n/a	83.13	n/a	n/a	0.01416	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.038	n/a	n/a	n/a	n/a 83	n/a	n/a	72.29	n/a	n/a	0.01416	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	4.36	n/a	n/a	n/a	n/a 89	n/a	n/a	0	n/a	n/a	0.01041	NP Inter(normality)
Fluoride (mg/L)	n/a	1.3	n/a	n/a	n/a	n/a 94	n/a	n/a	28.72	n/a	n/a	0.008054	NP Inter(normality)
Lead (mg/L)	n/a	0.001	n/a	n/a	n/a	n/a 80	n/a	n/a	68.75	n/a	n/a	0.01652	NP Inter(NDs)
Lithium (mg/L)	n/a	0.064	n/a	n/a	n/a	n/a 89	n/a	n/a	19.1	n/a	n/a	0.01041	NP Inter(normality)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	n/a 61	n/a	n/a	96.72	n/a	n/a	0.04377	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.01	n/a	n/a	n/a	n/a 91	n/a	n/a	78.02	n/a	n/a	0.009394	NP Inter(NDs)
Selenium (mg/L)	n/a	0.005	n/a	n/a	n/a	n/a 89	n/a	n/a	97.75	n/a	n/a	0.01041	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	n/a 89	n/a	n/a	98.88	n/a	n/a	0.01041	NP Inter(NDs)

PLANT HAMMOND AP-1 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		0.0079	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.038	0.038
Combined Radium, Total (pCi/L)	5		4.36	5
Fluoride, Total (mg/L)	4		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 indidcates background is higher than MCL or CCR-Rule*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residuals*

**GWPS = Groundwater Protection Statard*

Confidence Intervals - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 4/14/2023, 1:13 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**HGWC-13**	**0.4311**	**0.3628**	**0.01**	**Yes**	**23**	**0.397**	**0.06529**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**HGWC-8**	**0.4856**	**0.4241**	**0.1**	**Yes**	**24**	**0.4513**	**0.06596**	**0**	**None**	**x^2**	**0.01**	**Param.**

Confidence Intervals - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 4/14/2023, 1:13 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	HGWC-10	0.003	0.0018	0.006	No	21	0.002831	0.000564	90.48	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-11	0.003	0.00038	0.006	No	21	0.002875	0.0005717	95.24	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-13	0.003	0.00047	0.006	No	21	0.00213	0.001263	66.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-7	0.003	0.0017	0.006	No	22	0.00282	0.0006192	90.91	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-8	0.003	0.00064	0.006	No	21	0.002888	0.000515	95.24	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-9	0.003	0.00092	0.006	No	21	0.002528	0.001002	80.95	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-24D	0.003	0.0017	0.006	No	12	0.002892	0.0003753	91.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-26D	0.003	0.002	0.006	No	12	0.002775	0.0005463	83.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-27D	0.003	0.0003	0.006	No	12	0.001652	0.001409	50	None	No	0.01	NP (normality)
Antimony (mg/L)	MW-28D	0.003	0.0019	0.006	No	12	0.002908	0.0003175	91.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-29	0.003	0.00094	0.006	No	12	0.002828	0.0005947	91.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-6	0.003	0.0014	0.006	No	12	0.002867	0.0004619	91.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-7	0.003	0.00086	0.006	No	12	0.002398	0.0009593	66.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-11	0.005	0.0018	0.01	No	23	0.003554	0.001724	47.83	None	No	0.01	NP (normality)
Arsenic (mg/L)	HGWC-12	0.004183	0.002886	0.01	No	23	0.003535	0.00124	8.696	None	No	0.01	Param.
Arsenic (mg/L)	**HGWC-13**	**0.4311**	**0.3628**	**0.01**	**Yes**	**23**	**0.397**	**0.06529**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	HGWC-7	0.005	0.0019	0.01	No	24	0.004871	0.0006328	95.83	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-8	0.005	0.002	0.01	No	23	0.00487	0.0006255	95.65	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-9	0.005	0.0021	0.01	No	23	0.004305	0.001573	82.61	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-19	0.005	0.00045	0.01	No	12	0.004621	0.001313	91.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-20	0.005	0.00094	0.01	No	12	0.004052	0.001767	75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-25D	0.005	0.001	0.01	No	12	0.003729	0.001895	66.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-26D	0.005	0.0008	0.01	No	12	0.004008	0.001811	75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-27D	0.005	0.00069	0.01	No	12	0.003907	0.001984	75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-28D	0.005	0.0011	0.01	No	12	0.004675	0.001126	91.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-29	0.005	0.00037	0.01	No	12	0.004614	0.001337	91.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-5	0.005	0.0013	0.01	No	12	0.004692	0.001068	91.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-6	0.005	0.0034	0.01	No	12	0.004867	0.0004619	91.67	None	No	0.01	NP (NDs)
Barium (mg/L)	HGWC-10	0.08399	0.06212	2	No	23	0.07306	0.02091	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-11	0.05051	0.03278	2	No	23	0.04283	0.01895	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	HGWC-12	0.123	0.083	2	No	23	0.09896	0.02104	0	None	No	0.01	NP (normality)
Barium (mg/L)	HGWC-13	0.08825	0.06754	2	No	23	0.0779	0.0198	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-7	0.07378	0.06797	2	No	24	0.07088	0.005696	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-8	0.07372	0.06219	2	No	23	0.06796	0.01102	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-9	0.1187	0.1011	2	No	23	0.1099	0.01686	0	None	No	0.01	Param.
Barium (mg/L)	MW-19	0.06184	0.04583	2	No	12	0.05383	0.01021	0	None	No	0.01	Param.
Barium (mg/L)	MW-20	0.09568	0.08599	2	No	12	0.09083	0.006177	0	None	No	0.01	Param.
Barium (mg/L)	MW-24D	0.081	0.048	2	No	12	0.0605	0.02098	0	None	No	0.01	NP (normality)
Barium (mg/L)	MW-25D	0.596	0.4157	2	No	12	0.5058	0.1149	0	None	No	0.01	Param.
Barium (mg/L)	MW-26D	0.1217	0.07335	2	No	12	0.0975	0.03078	0	None	No	0.01	Param.
Barium (mg/L)	MW-27D	1.2	0.94	2	No	12	1.056	0.1609	0	None	No	0.01	NP (normality)
Barium (mg/L)	MW-28D	0.7309	0.3408	2	No	12	0.5358	0.2486	0	None	No	0.01	Param.
Barium (mg/L)	MW-29	0.08349	0.07551	2	No	12	0.0795	0.00509	0	None	No	0.01	Param.
Barium (mg/L)	MW-5	0.05211	0.04456	2	No	12	0.04833	0.004812	0	None	No	0.01	Param.
Barium (mg/L)	MW-6	0.09038	0.07995	2	No	12	0.08517	0.006645	0	None	No	0.01	Param.
Barium (mg/L)	MW-7	0.0617	0.04896	2	No	12	0.05533	0.008117	0	None	No	0.01	Param.
Beryllium (mg/L)	HGWC-11	0.0005	0.00012	0.004	No	21	0.0003713	0.0001875	66.67	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-13	0.0005	0.000097	0.004	No	21	0.0003254	0.0002069	57.14	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-7	0.0005	0.00019	0.004	No	22	0.0004476	0.0001363	86.36	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-8	0.003	0.000074	0.004	No	21	0.001885	0.001456	61.9	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-19	0.0005	0.000058	0.004	No	12	0.0004632	0.0001276	91.67	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-28D	0.0005	0.000054	0.004	No	12	0.0003952	0.0001909	75	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-7	0.0005	0.000051	0.004	No	12	0.0004626	0.0001296	91.67	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-10	0.0005	0.000115	0.005	No	21	0.0003721	0.0001864	66.67	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-11	0.0005	0.0001	0.005	No	21	0.0004427	0.0001439	85.71	None	No	0.01	NP (NDs)

Confidence Intervals - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 4/14/2023, 1:13 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cadmium (mg/L)	HGWC-12	0.0005	0.0003	0.005	No	21	0.00044	0.0001313	80.95	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-7	0.0005	0.0002	0.005	No	22	0.0004268	0.0001394	77.27	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-8	0.0003	0.00017	0.005	No	21	0.0002924	0.0003358	4.762	None	No	0.01	NP (normality)
Cadmium (mg/L)	HGWC-9	0.0005	0.0002	0.005	No	21	0.0004462	0.0001368	85.71	None	No	0.01	NP (NDs)
Cadmium (mg/L)	MW-19	0.0003417	0.0001502	0.005	No	12	0.0003508	0.0002735	25	Kaplan-Meier	ln(x)	0.01	Param.
Chromium (mg/L)	HGWC-10	0.02	0.0012	0.1	No	21	0.005348	0.00355	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-11	0.005	0.0012	0.1	No	21	0.004386	0.001547	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-12	0.005	0.0025	0.1	No	21	0.004467	0.001382	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-13	0.005	0.00059	0.1	No	21	0.00436	0.001608	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-7	0.005	0.0021	0.1	No	22	0.006984	0.0144	68.18	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-8	0.005	0.0015	0.1	No	21	0.004215	0.001666	80.95	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-9	0.005	0.0013	0.1	No	21	0.004219	0.001657	80.95	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-19	0.005	0.00059	0.1	No	12	0.003035	0.002099	50	None	No	0.01	NP (normality)
Chromium (mg/L)	MW-20	0.005	0.00068	0.1	No	12	0.003908	0.001975	75	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-24D	0.005	0.0017	0.1	No	12	0.004343	0.001558	83.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-25D	0.005	0.0012	0.1	No	12	0.004317	0.001599	83.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-26D	0.005	0.001	0.1	No	12	0.003505	0.001913	58.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-27D	0.005	0.00082	0.1	No	12	0.004293	0.001651	83.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-28D	0.005	0.00081	0.1	No	12	0.003137	0.002009	50	None	No	0.01	NP (normality)
Chromium (mg/L)	MW-29	0.005	0.001	0.1	No	12	0.004667	0.001155	91.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-5	0.003948	0.002236	0.1	No	12	0.003092	0.001091	0	None	No	0.01	Param.
Chromium (mg/L)	MW-6	0.005	0.00059	0.1	No	12	0.003952	0.001908	75	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-7	0.005	0.0015	0.1	No	12	0.002292	0.001295	16.67	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-10	0.005	0.0009	0.038	No	21	0.00379	0.001963	71.43	None	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-11	0.005	0.0014	0.038	No	21	0.003103	0.001799	42.86	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-12	0.0018	0.0012	0.038	No	21	0.00151	0.0004265	9.524	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-13	0.004201	0.002611	0.038	No	21	0.003686	0.002213	4.762	None	ln(x)	0.01	Param.
Cobalt (mg/L)	HGWC-7	0.00147	0.0007471	0.038	No	22	0.001179	0.0007416	13.64	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	HGWC-8	0.002242	0.001945	0.038	No	21	0.002094	0.0002693	9.524	None	No	0.01	Param.
Cobalt (mg/L)	HGWC-9	0.0007	0.00051	0.038	No	21	0.0008643	0.0006357	9.524	None	No	0.01	NP (normality)
Cobalt (mg/L)	MW-19	0.04167	0.0295	0.038	No	12	0.03558	0.007751	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-20	0.005	0.0011	0.038	No	12	0.004675	0.001126	91.67	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-24D	0.005	0.00056	0.038	No	12	0.003909	0.001982	75	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-26D	0.005	0.00044	0.038	No	12	0.001979	0.002232	33.33	None	No	0.01	NP (normality)
Cobalt (mg/L)	MW-27D	0.005	0.0004	0.038	No	12	0.003828	0.002121	75	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-28D	0.005	0.00093	0.038	No	12	0.004661	0.001175	91.67	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-29	0.001228	0.0007098	0.038	No	12	0.0009692	0.0003305	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-6	0.005	0.00041	0.038	No	12	0.001263	0.001752	16.67	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	HGWC-10	1.067	0.604	5	No	23	0.8353	0.4423	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-11	1.134	0.6526	5	No	23	0.8934	0.4603	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-12	1.031	0.5721	5	No	23	0.8014	0.4385	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-13	0.9792	0.5965	5	No	23	0.7879	0.3658	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-7	0.8409	0.4167	5	No	24	0.6782	0.4762	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-8	0.9538	0.656	5	No	23	0.8049	0.2847	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-9	0.8913	0.5289	5	No	23	0.7101	0.3464	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-19	0.9587	0.412	5	No	12	0.6853	0.3484	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-20	1.002	0.3888	5	No	12	0.6953	0.3906	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-24D	0.5788	0.1374	5	No	12	0.3767	0.3495	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-25D	1.279	0.8145	5	No	12	1.047	0.296	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-26D	0.9284	0.1186	5	No	12	0.5235	0.516	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-27D	1.544	0.8213	5	No	12	1.196	0.5082	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-28D	1.385	0.6077	5	No	12	0.9962	0.4951	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-29	0.9393	0.3837	5	No	12	0.6615	0.354	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-5	0.9737	0.5478	5	No	12	0.7608	0.2714	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-6	1.015	0.4421	5	No	12	0.7613	0.4499	0	None	ln(x)	0.01	Param.

Confidence Intervals - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 4/14/2023, 1:13 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Combined Radium 226 + 228 (pCi/L)	MW-7	1.18	0.5086	5	No	12	0.8444	0.428	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-10	0.1861	0.08031	4	No	24	0.174	0.1317	16.67	Kaplan-Meier	x^(1/3)	0.01	Param.
Fluoride (mg/L)	HGWC-11	0.3995	0.2471	4	No	24	0.3355	0.1595	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	HGWC-12	0.34	0.17	4	No	24	0.3084	0.2332	4.167	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-13	0.687	0.5004	4	No	24	0.5937	0.1829	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-7	0.15	0.084	4	No	26	0.145	0.1052	7.692	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-8	0.63	0.45	4	No	25	0.556	0.1706	0	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-9	0.2386	0.1022	4	No	24	0.1895	0.1498	8.333	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	MW-19	0.2612	0.1025	4	No	12	0.1892	0.1289	0	None	x^(1/3)	0.01	Param.
Fluoride (mg/L)	MW-20	0.1	0.074	4	No	12	0.09392	0.01119	75	None	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-24D	0.09451	0.04923	4	No	12	0.0855	0.03602	33.33	Kaplan-Meier	sqrt(x)	0.01	Param.
Fluoride (mg/L)	MW-25D	1.7	1.4	4	No	12	1.625	0.2006	0	None	No	0.01	NP (normality)
Fluoride (mg/L)	MW-26D	0.1259	0.05694	4	No	12	0.09142	0.04394	8.333	None	No	0.01	Param.
Fluoride (mg/L)	MW-27D	0.3	0.22	4	No	12	0.2683	0.05219	0	None	No	0.01	NP (normality)
Fluoride (mg/L)	MW-28D	0.2415	0.1635	4	No	12	0.2025	0.04975	0	None	No	0.01	Param.
Fluoride (mg/L)	MW-29	0.18	0.068	4	No	12	0.09433	0.03293	58.33	None	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-5	0.0865	0.05882	4	No	12	0.0795	0.01968	16.67	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	MW-6	0.1052	0.05616	4	No	12	0.09983	0.05	16.67	Kaplan-Meier	ln(x)	0.01	Param.
Fluoride (mg/L)	MW-7	0.17	0.069	4	No	12	0.09808	0.0268	66.67	Kaplan-Meier	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-10	0.001	0.00005	0.015	No	19	0.00095	0.0002179	94.74	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-11	0.001	0.00021	0.015	No	19	0.0007399	0.0003974	68.42	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-12	0.001	0.000096	0.015	No	19	0.0007757	0.0003928	73.68	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-13	0.001	0.00015	0.015	No	19	0.0007258	0.0004152	68.42	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-7	0.001	0.0001	0.015	No	20	0.0006997	0.0004322	55	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-8	0.001	0.0002	0.015	No	19	0.0008172	0.0003643	78.95	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-9	0.001	0.00014	0.015	No	19	0.0006481	0.000426	57.89	None	No	0.01	NP (NDs)
Lead (mg/L)	MW-19	0.001	0.000071	0.015	No	10	0.0006304	0.0004775	60	None	No	0.011	NP (NDs)
Lead (mg/L)	MW-20	0.001	0.0001	0.015	No	10	0.0006439	0.0004608	60	None	No	0.011	NP (NDs)
Lead (mg/L)	MW-24D	0.001	0.000042	0.015	No	10	0.0005456	0.0004809	50	None	No	0.011	NP (normality)
Lead (mg/L)	MW-26D	0.001	0.0001	0.015	No	10	0.000818	0.0003837	80	None	No	0.011	NP (NDs)
Lead (mg/L)	MW-27D	0.001	0.00043	0.015	No	10	0.000856	0.0003117	80	None	No	0.011	NP (NDs)
Lead (mg/L)	MW-28D	0.001	0.00018	0.015	No	10	0.0007022	0.0003965	50	None	No	0.011	NP (normality)
Lead (mg/L)	MW-29	0.001	0.00009	0.015	No	10	0.0007252	0.0004427	70	None	No	0.011	NP (NDs)
Lead (mg/L)	MW-5	0.001	0.001	0.015	No	10	0.0009047	0.0003014	90	None	No	0.011	NP (NDs)
Lead (mg/L)	MW-6	0.001	0.000084	0.015	No	10	0.000651	0.000454	60	None	No	0.011	NP (NDs)
Lead (mg/L)	MW-7	0.001	0.001	0.015	No	10	0.0009062	0.0002966	90	None	No	0.011	NP (NDs)
Lithium (mg/L)	HGWC-12	0.01048	0.008019	0.064	No	23	0.009248	0.00235	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-13	0.03735	0.03093	0.064	No	23	0.03414	0.006137	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-7	0.0026	0.002	0.064	No	24	0.002958	0.002614	4.167	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-8	0.0029	0.0025	0.064	No	23	0.003196	0.002599	4.348	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-9	0.0044	0.004	0.064	No	23	0.004596	0.002319	4.348	None	No	0.01	NP (normality)
Lithium (mg/L)	MW-19	0.01297	0.008428	0.064	No	12	0.01046	0.003347	0	None	x^2	0.01	Param.
Lithium (mg/L)	MW-20	0.03	0.00082	0.064	No	12	0.008322	0.01307	25	None	No	0.01	NP (normality)
Lithium (mg/L)	MW-24D	0.002843	0.00254	0.064	No	12	0.002692	0.0001929	0	None	No	0.01	Param.
Lithium (mg/L)	MW-25D	0.0502	0.0428	0.064	No	12	0.0465	0.004719	0	None	No	0.01	Param.
Lithium (mg/L)	MW-26D	0.0041	0.0032	0.064	No	12	0.005775	0.007636	0	None	No	0.01	NP (normality)
Lithium (mg/L)	MW-27D	0.008546	0.006254	0.064	No	12	0.0074	0.00146	0	None	No	0.01	Param.
Lithium (mg/L)	MW-28D	0.01282	0.007277	0.064	No	12	0.01005	0.003534	0	None	No	0.01	Param.
Lithium (mg/L)	MW-29	0.002354	0.00203	0.064	No	12	0.002192	0.0002065	0	None	No	0.01	Param.
Mercury (mg/L)	HGWC-10	0.0002	0.00005	0.002	No	15	0.00019	0.00003873	93.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-11	0.0002	0.00005	0.002	No	15	0.00019	0.00003873	93.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-13	0.0002	0.00005	0.002	No	15	0.0001793	0.00005457	86.67	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-9	0.0002	0.00004	0.002	No	15	0.0001893	0.00004131	93.33	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	HGWC-10	0.01	0.0014	0.1	No	23	0.006591	0.004354	60.87	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	HGWC-11	0.02635	0.01705	0.1	No	23	0.0217	0.008891	0	None	No	0.01	Param.

Confidence Intervals - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 4/14/2023, 1:13 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Molybdenum (mg/L)	HGWC-12	0.04914	0.04557	0.1	No	23	0.04735	0.003411	0	None	No	0.01	Param.
Molybdenum (mg/L)	HGWC-13	0.03523	0.03001	0.1	No	23	0.03262	0.004987	0	None	No	0.01	Param.
Molybdenum (mg/L)	HGWC-7	0.04271	0.03586	0.1	No	25	0.03928	0.006866	0	None	No	0.01	Param.
Molybdenum (mg/L)	**HGWC-8**	**0.4856**	**0.4241**	**0.1**	**Yes**	**24**	**0.4513**	**0.06596**	**0**	**None**	**x^2**	**0.01**	**Param.**
Molybdenum (mg/L)	HGWC-9	0.033	0.0236	0.1	No	23	0.04746	0.09377	0	None	No	0.01	NP (normality)
Molybdenum (mg/L)	MW-19	0.05279	0.02587	0.1	No	12	0.03933	0.01715	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-24D	0.01	0.0008	0.1	No	12	0.00392	0.004496	33.33	None	No	0.01	NP (normality)
Molybdenum (mg/L)	MW-25D	0.01	0.0022	0.1	No	12	0.008595	0.003292	83.33	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-26D	0.02425	0.01175	0.1	No	13	0.018	0.008412	7.692	None	No	0.01	Param.
Molybdenum (mg/L)	MW-27D	0.003636	0.001403	0.1	No	12	0.002583	0.001576	8.333	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	MW-28D	0.01969	0.007547	0.1	No	12	0.01362	0.007735	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-29	0.003287	0.002479	0.1	No	12	0.002883	0.0005149	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-6	0.002699	0.002284	0.1	No	12	0.002492	0.0002644	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-7	0.01	0.0014	0.1	No	12	0.005283	0.004211	41.67	None	No	0.01	NP (normality)
Selenium (mg/L)	HGWC-10	0.005	0.0031	0.05	No	23	0.004174	0.001266	65.22	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-11	0.01395	0.006463	0.05	No	23	0.0102	0.007153	0	None	No	0.01	Param.
Selenium (mg/L)	HGWC-12	0.005	0.0011	0.05	No	23	0.00483	0.0008132	95.65	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-13	0.005	0.0016	0.05	No	23	0.004643	0.001203	91.3	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-8	0.005	0.0024	0.05	No	23	0.004887	0.0005421	95.65	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-9	0.005	0.0037	0.05	No	23	0.004943	0.0002711	95.65	None	No	0.01	NP (NDs)
Selenium (mg/L)	MW-19	0.00488	0.002282	0.05	No	12	0.00395	0.001709	16.67	Kaplan-Meier	No	0.01	Param.
Selenium (mg/L)	MW-27D	0.005	0.00012	0.05	No	12	0.004593	0.001409	91.67	Kaplan-Meier	No	0.01	NP (NDs)
Selenium (mg/L)	MW-5	0.003736	0.002447	0.05	No	12	0.003092	0.0008218	0	None	No	0.01	Param.
Selenium (mg/L)	MW-7	0.005	0.0014	0.05	No	12	0.003383	0.00172	50	None	No	0.01	NP (normality)
Thallium (mg/L)	HGWC-11	0.001	0.00008	0.002	No	23	0.00092	0.0002651	91.3	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-12	0.001	0.0002	0.002	No	23	0.0007663	0.0004029	73.91	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-13	0.0004273	0.0003377	0.002	No	23	0.0003825	0.00008561	8.696	None	No	0.01	Param.
Thallium (mg/L)	HGWC-8	0.001	0.00011	0.002	No	23	0.0007247	0.0004261	69.57	None	No	0.01	NP (NDs)
Thallium (mg/L)	MW-19	0.001	0.00023	0.002	No	12	0.0005025	0.0003683	33.33	None	No	0.01	NP (normality)
Thallium (mg/L)	MW-28D	0.001	0.000092	0.002	No	12	0.0009243	0.0002621	91.67	None	No	0.01	NP (NDs)
Thallium (mg/L)	MW-29	0.001	0.000064	0.002	No	12	0.000922	0.0002702	91.67	None	No	0.01	NP (NDs)
Thallium (mg/L)	MW-6	0.001	0.000082	0.002	No	12	0.0009235	0.000265	91.67	None	No	0.01	NP (NDs)

Appendix IV Trend Tests - All Results (No Significant)

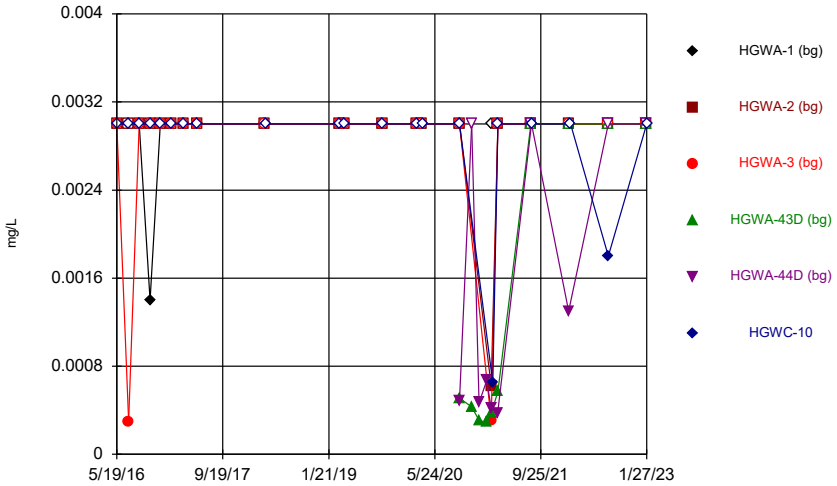
Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 4/14/2023, 1:16 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Arsenic (mg/L)	HGWA-1 (bg)	0	-11	-98	No	23	86.96	n/a	n/a	0.01	NP
Arsenic (mg/L)	HGWA-2 (bg)	0	34	98	No	23	60.87	n/a	n/a	0.01	NP
Arsenic (mg/L)	HGWA-3 (bg)	0	22	98	No	23	60.87	n/a	n/a	0.01	NP
Arsenic (mg/L)	HGWA-43D (bg)	0	5	30	No	10	40	n/a	n/a	0.01	NP
Arsenic (mg/L)	HGWA-44D (bg)	0	-10	-30	No	10	70	n/a	n/a	0.01	NP
Arsenic (mg/L)	HGWC-13	0.01498	85	98	No	23	0	n/a	n/a	0.01	NP
Molybdenum (mg/L)	HGWA-1 (bg)	0	0	105	No	24	100	n/a	n/a	0.01	NP
Molybdenum (mg/L)	HGWA-2 (bg)	0	0	98	No	23	100	n/a	n/a	0.01	NP
Molybdenum (mg/L)	HGWA-3 (bg)	0	0	105	No	24	100	n/a	n/a	0.01	NP
Molybdenum (mg/L)	HGWA-43D (bg)	-0.0007215	-20	-30	No	10	0	n/a	n/a	0.01	NP
Molybdenum (mg/L)	HGWA-44D (bg)	0.000373	20	30	No	10	0	n/a	n/a	0.01	NP
Molybdenum (mg/L)	HGWC-8	-0.01469	-99	-105	No	24	0	n/a	n/a	0.01	NP

FIGURE A.

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Antimony Analysis Run 4/14/2023 12:17 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
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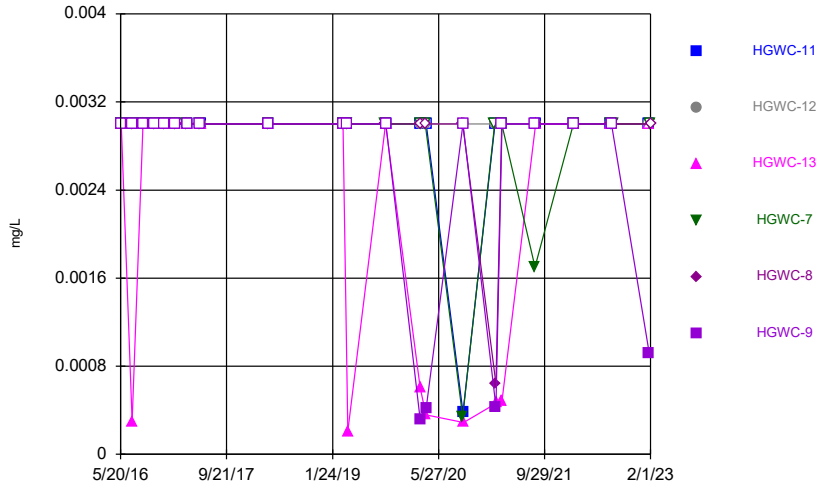

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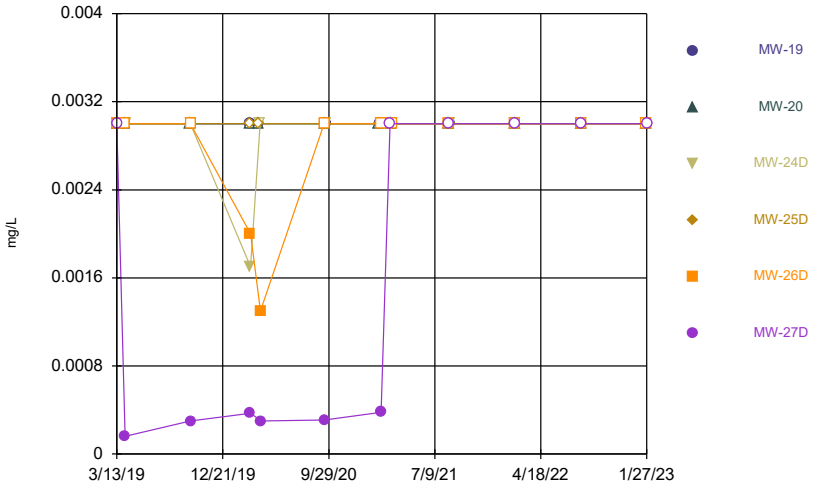

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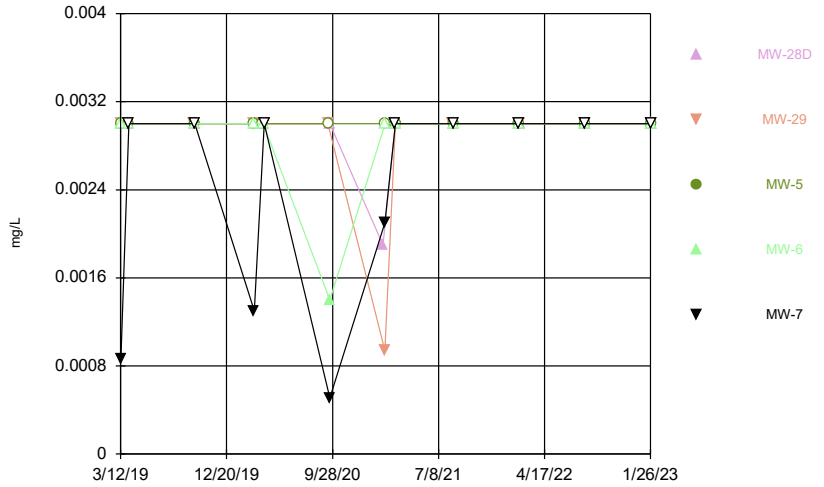

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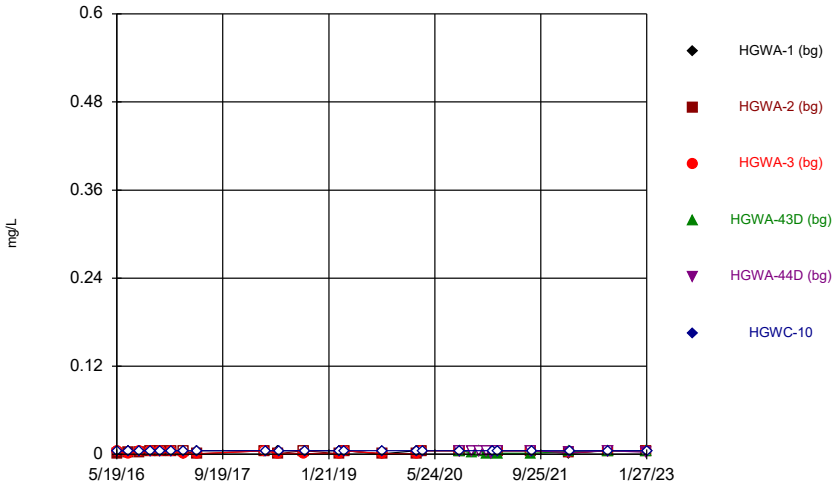

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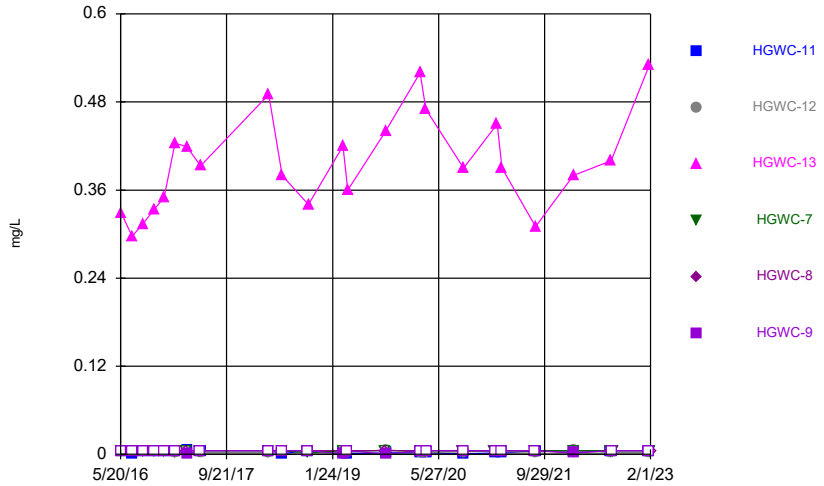
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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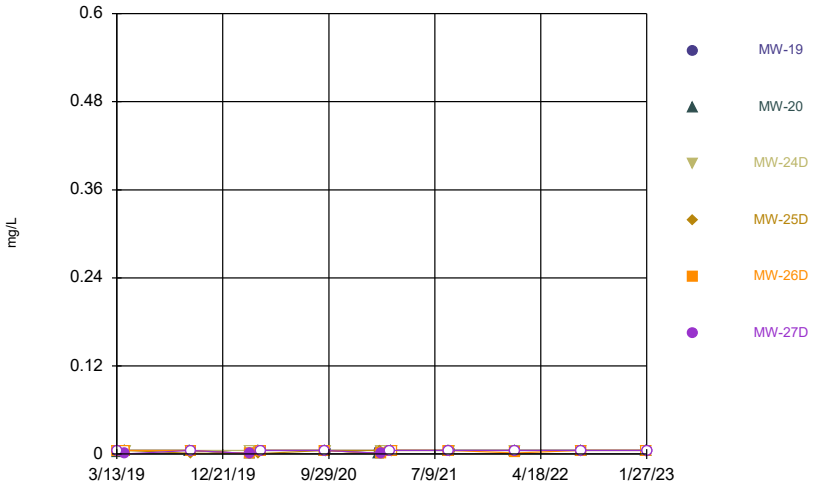
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

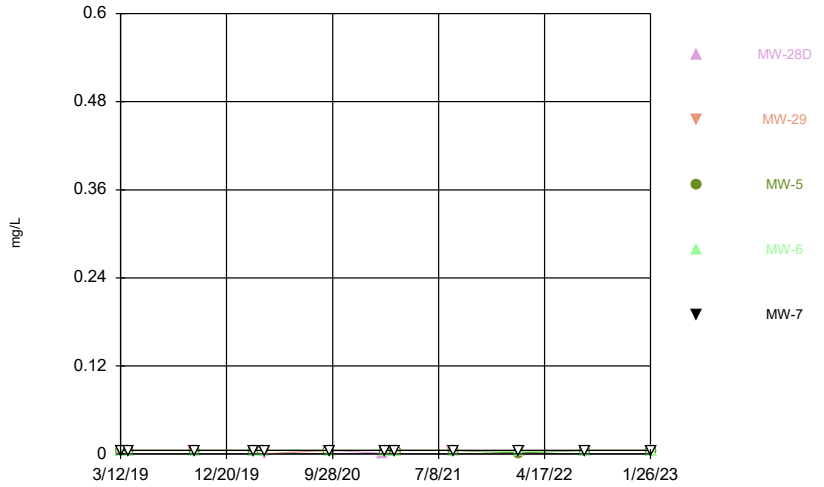
Time Series



Constituent: Arsenic Analysis Run 4/14/2023 12:17 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

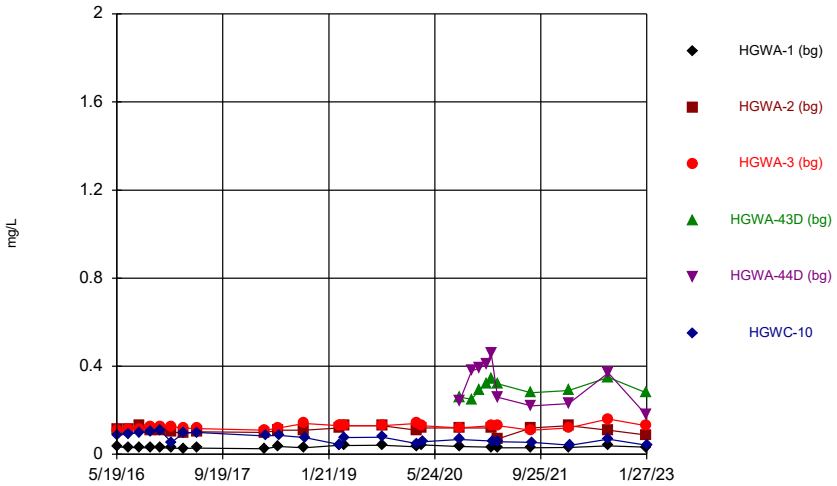
Time Series



Constituent: Arsenic Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

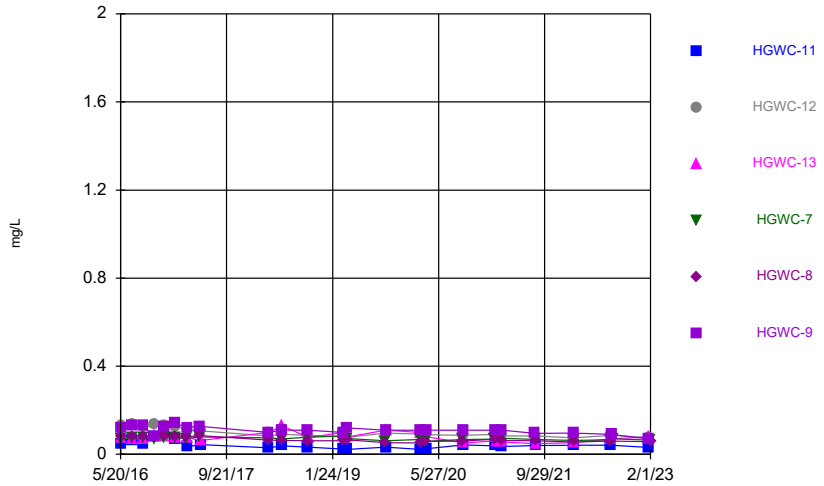


Constituent: Barium Analysis Run 4/14/2023 12:18 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series



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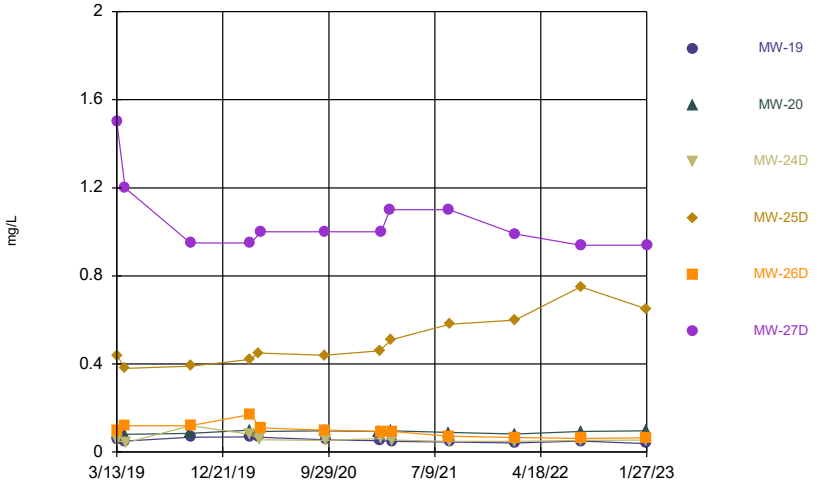
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

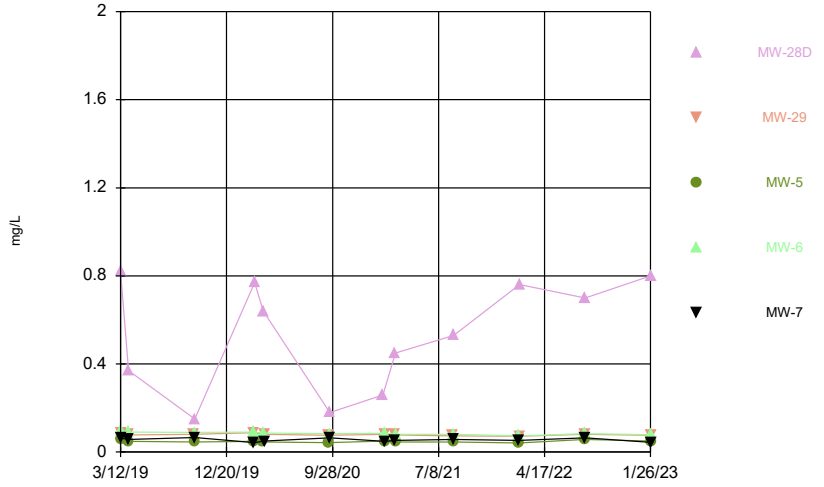


Constituent: Barium Analysis Run 4/14/2023 12:18 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

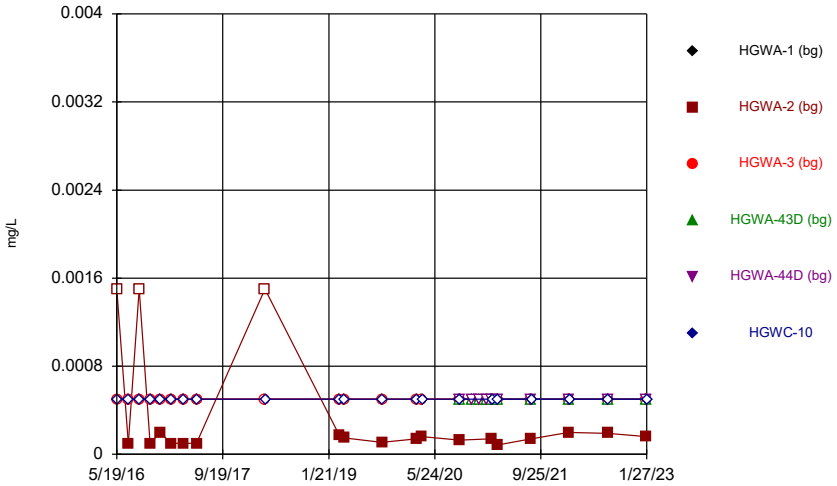


Constituent: Barium Analysis Run 4/14/2023 12:18 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

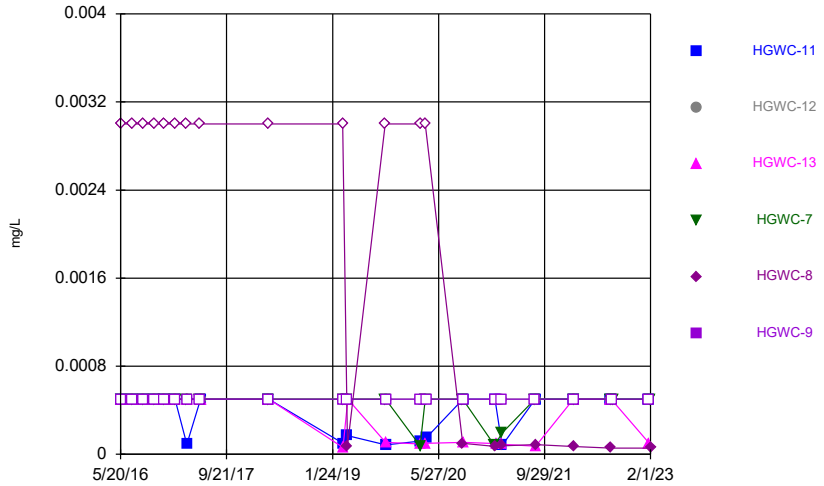
Time Series



Constituent: Beryllium Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

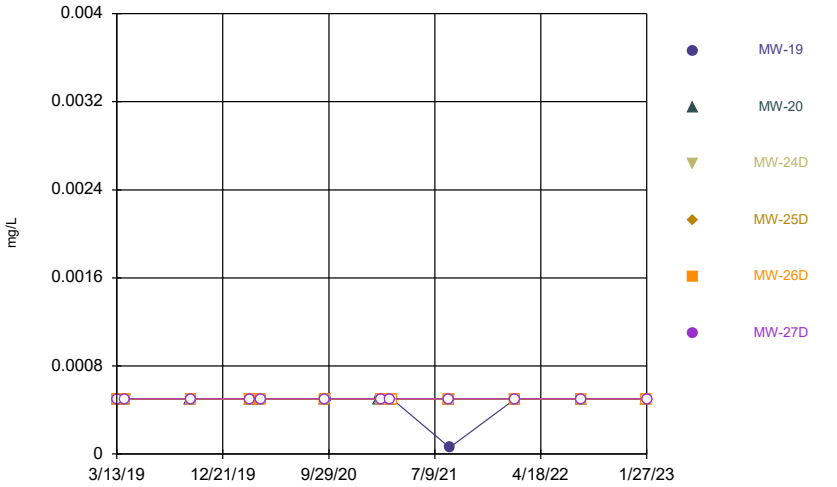
Time Series



Constituent: Beryllium Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

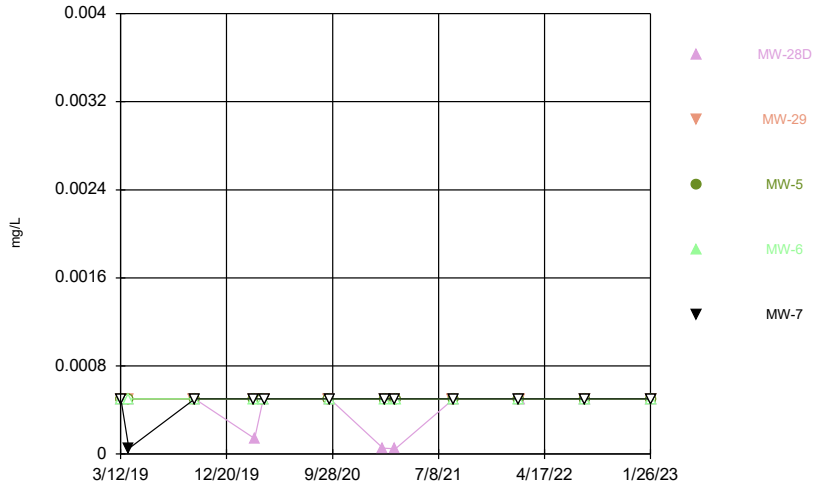
Time Series



Constituent: Beryllium Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

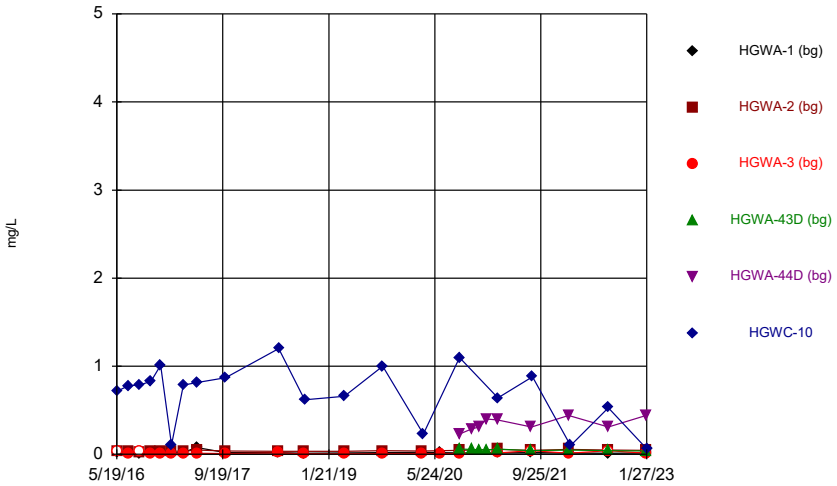
Time Series



Constituent: Beryllium Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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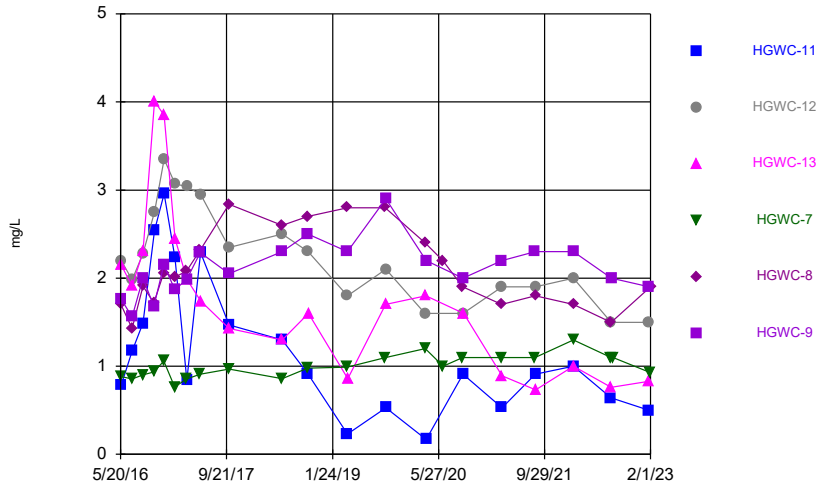
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series



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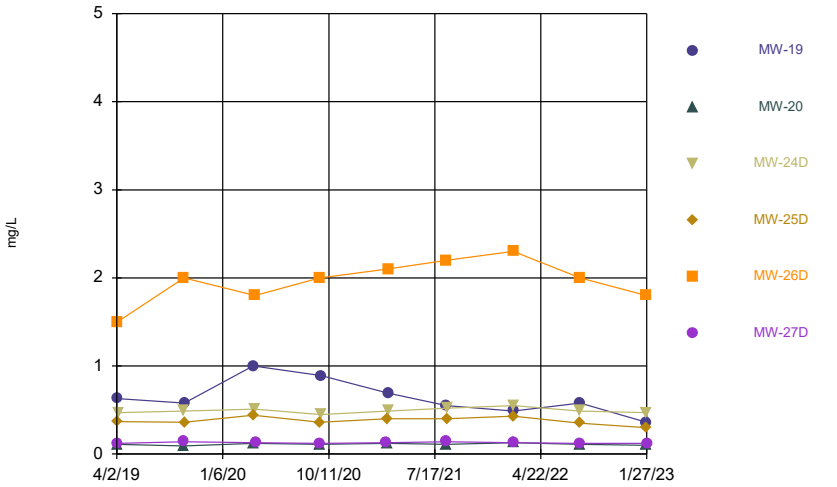
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

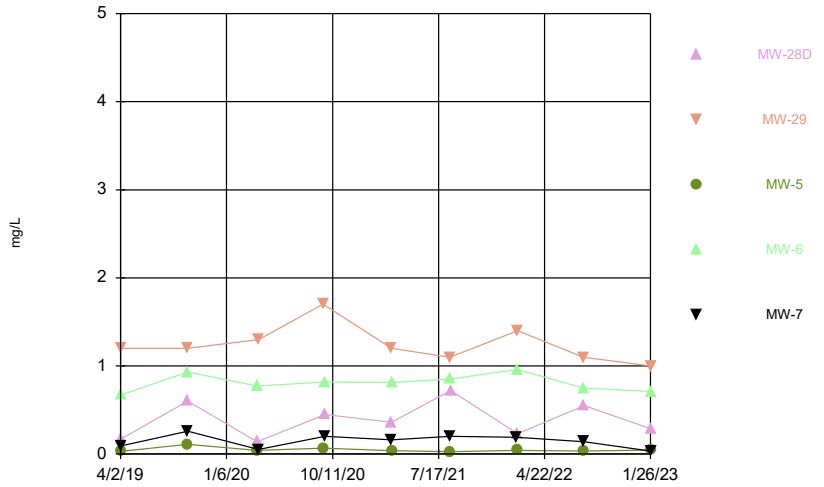
Time Series



Constituent: Boron Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

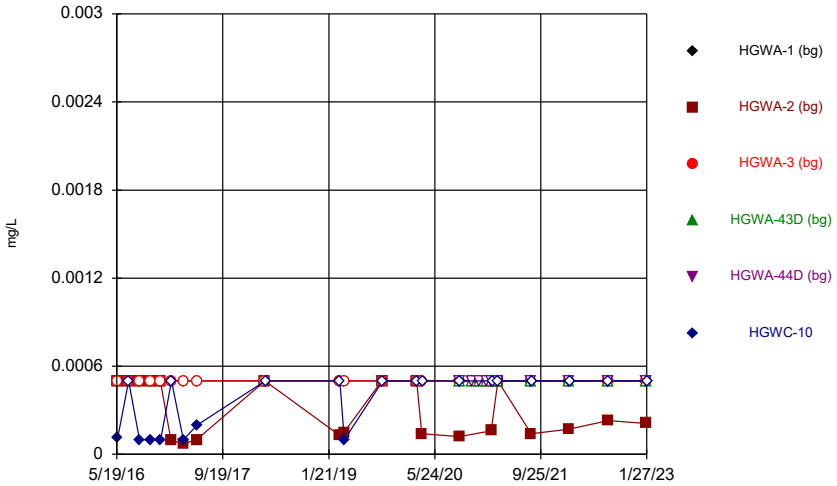
Time Series



Constituent: Boron Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

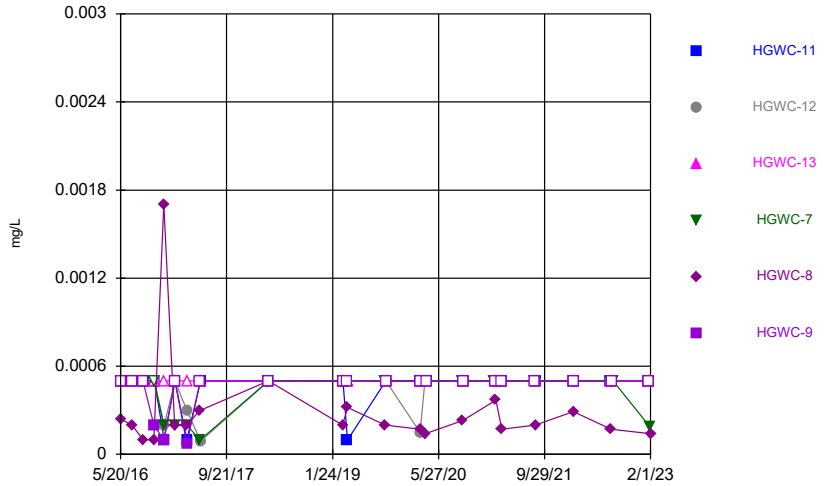
Time Series



Constituent: Cadmium Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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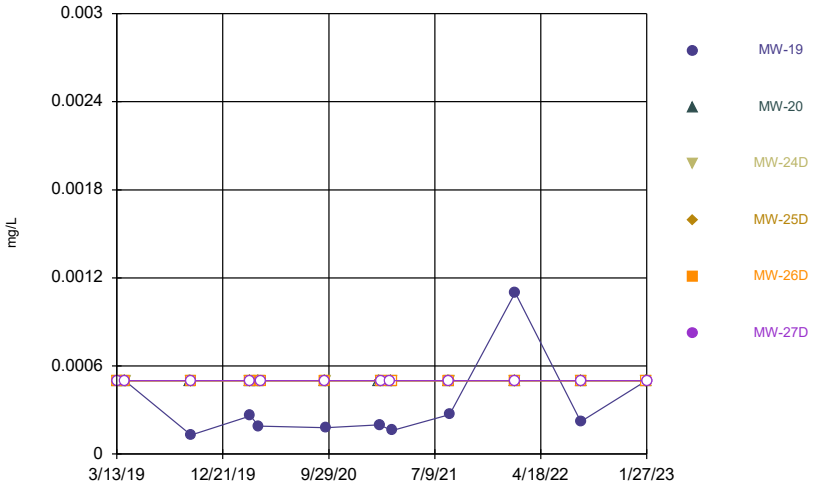
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

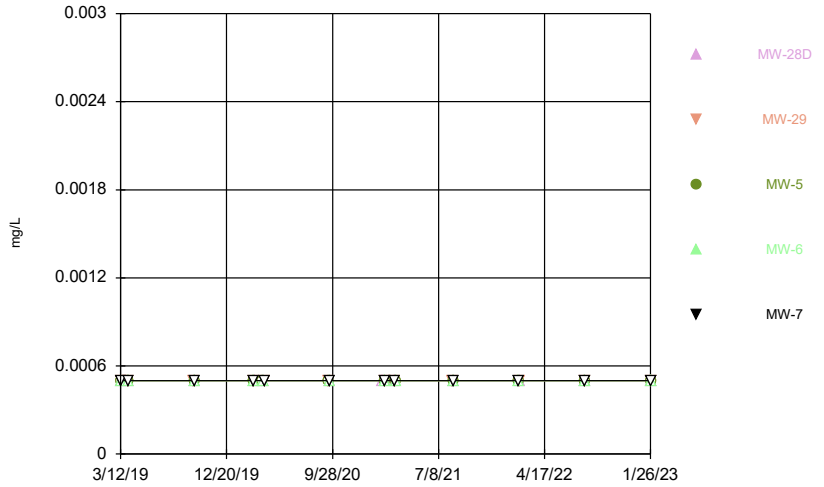
Time Series



Constituent: Cadmium Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

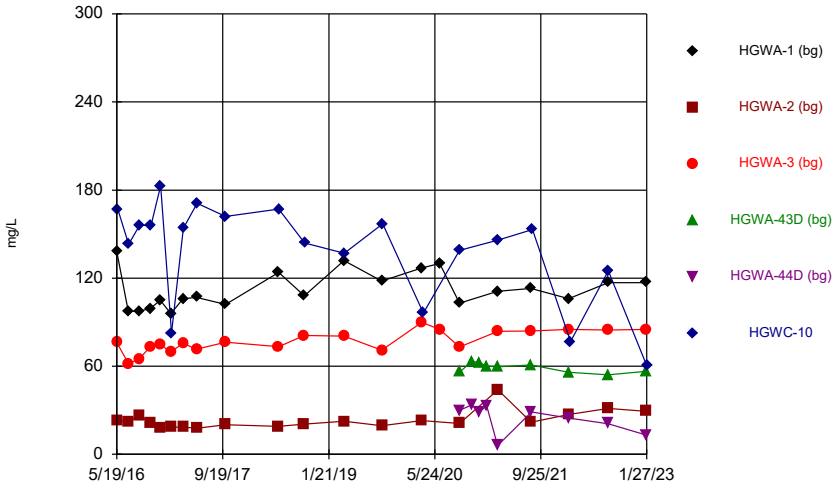
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Cadmium Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Time Series

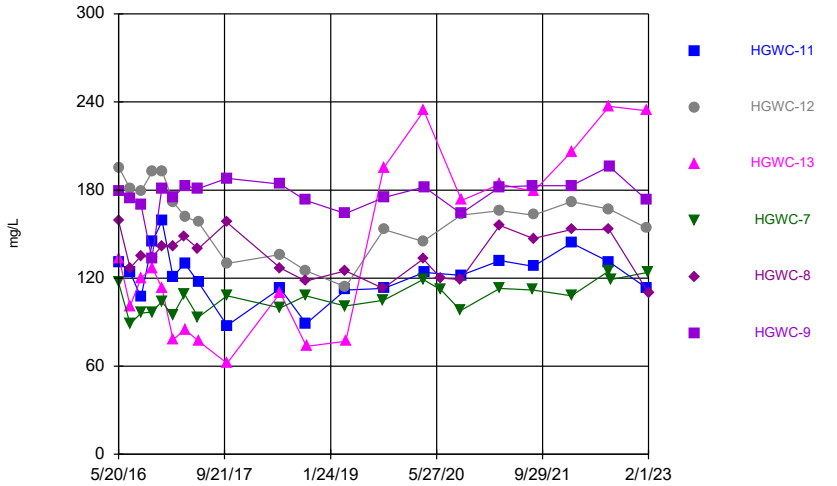


Constituent: Calcium Analysis Run 4/14/2023 12:18 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

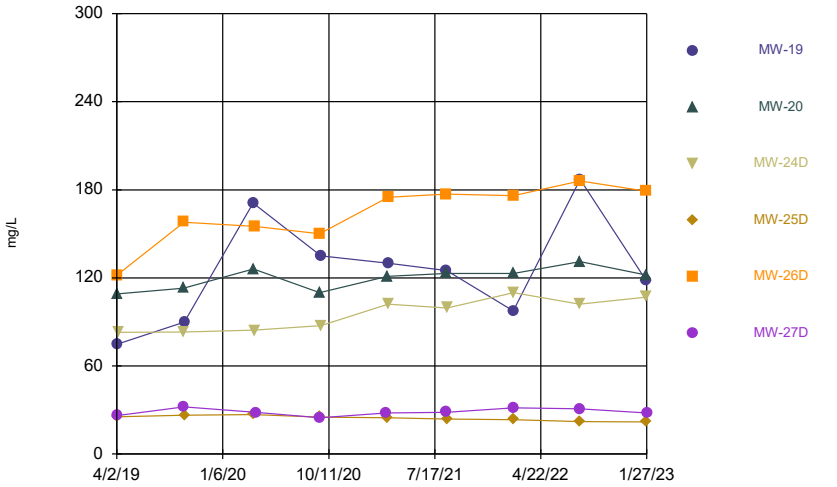


Constituent: Calcium Analysis Run 4/14/2023 12:18 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

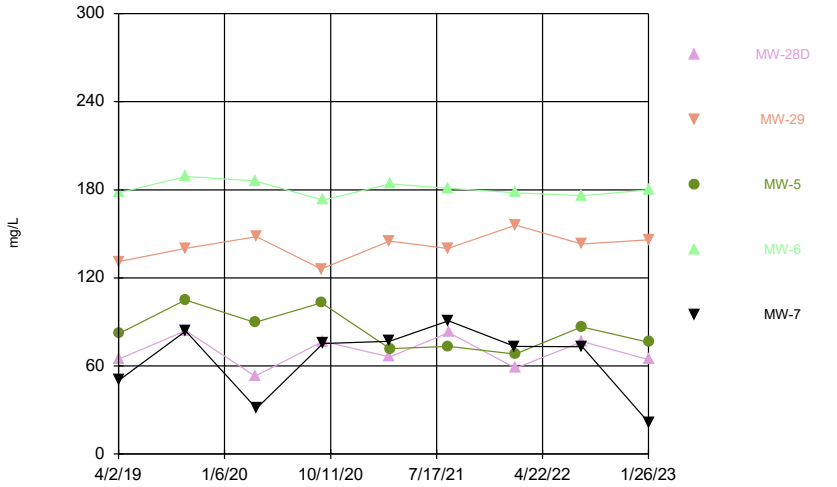


Constituent: Calcium Analysis Run 4/14/2023 12:18 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

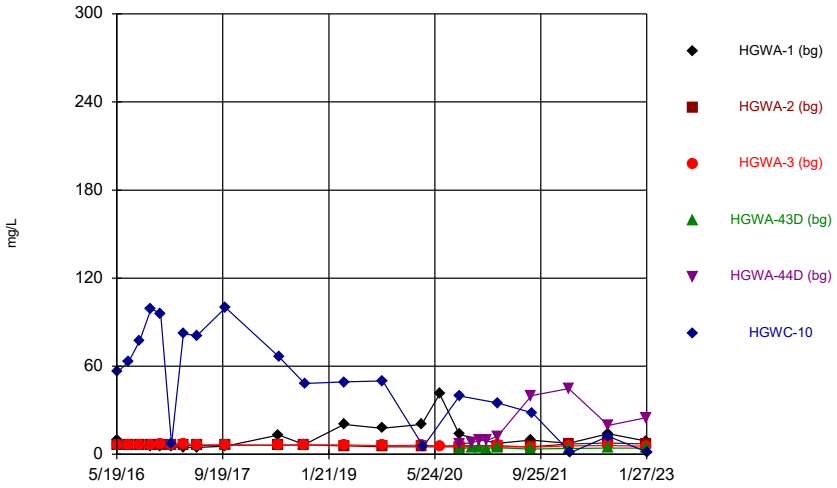
Time Series



Constituent: Calcium Analysis Run 4/14/2023 12:18 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Time Series

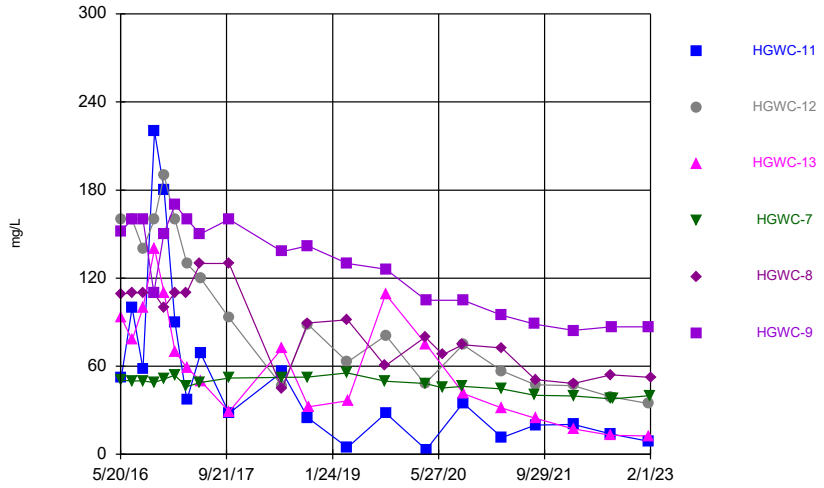


Constituent: Chloride Analysis Run 4/14/2023 12:18 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

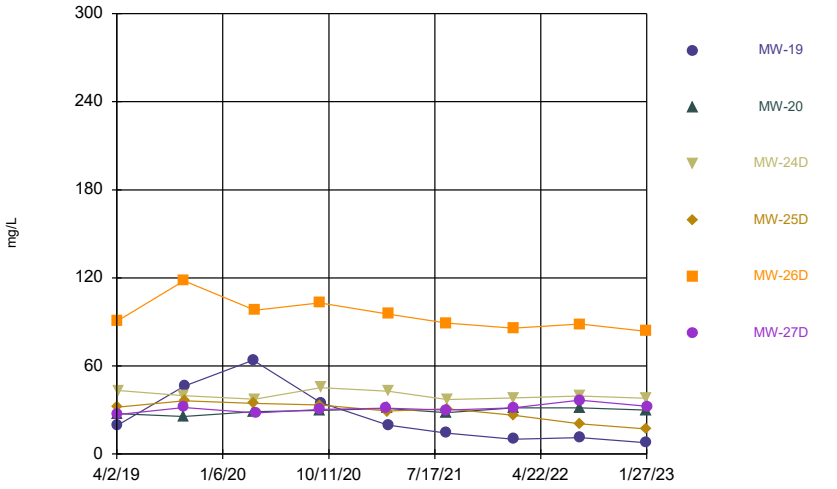


Constituent: Chloride Analysis Run 4/14/2023 12:18 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

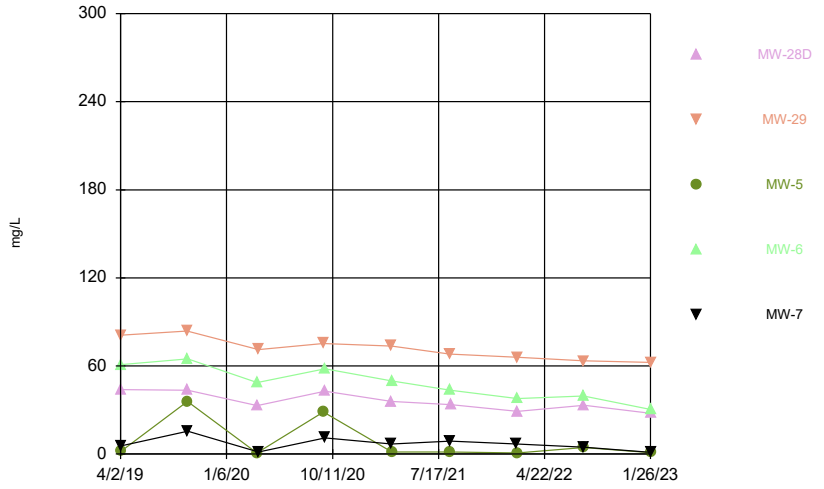


Constituent: Chloride Analysis Run 4/14/2023 12:18 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

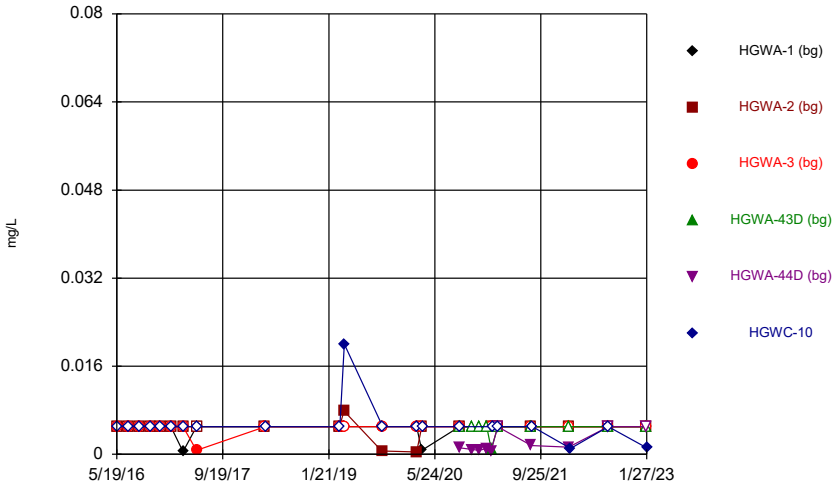


Constituent: Chloride Analysis Run 4/14/2023 12:18 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

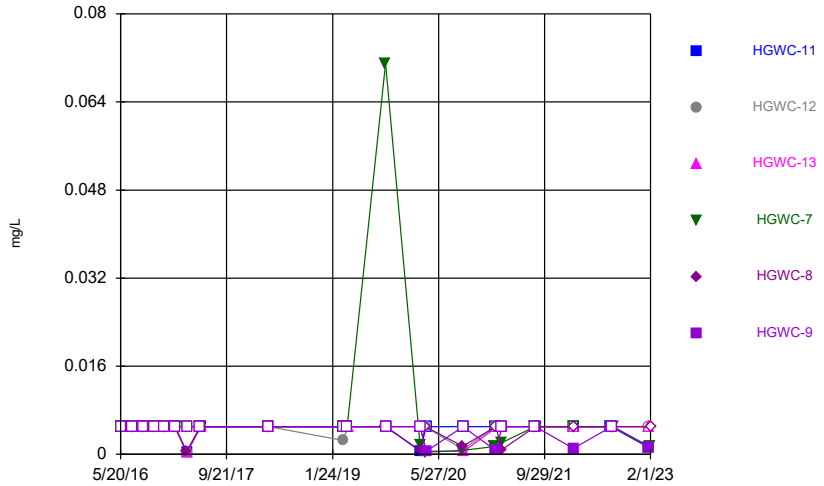
Time Series



Constituent: Chromium Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

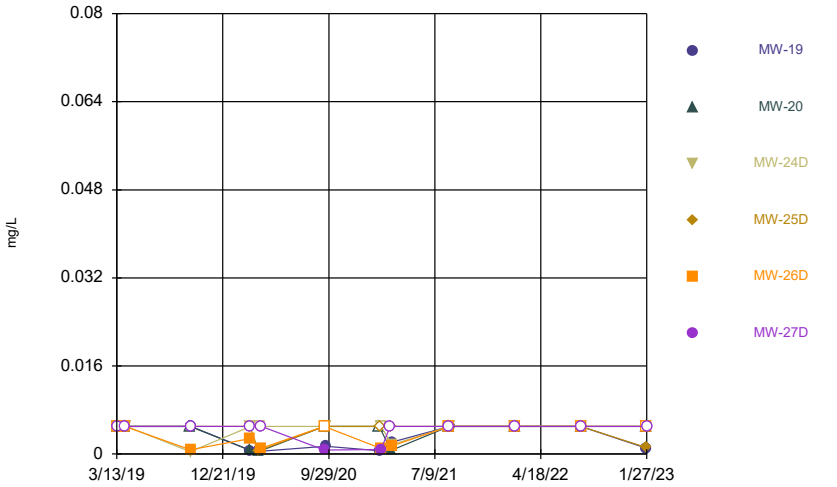
Time Series



Constituent: Chromium Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

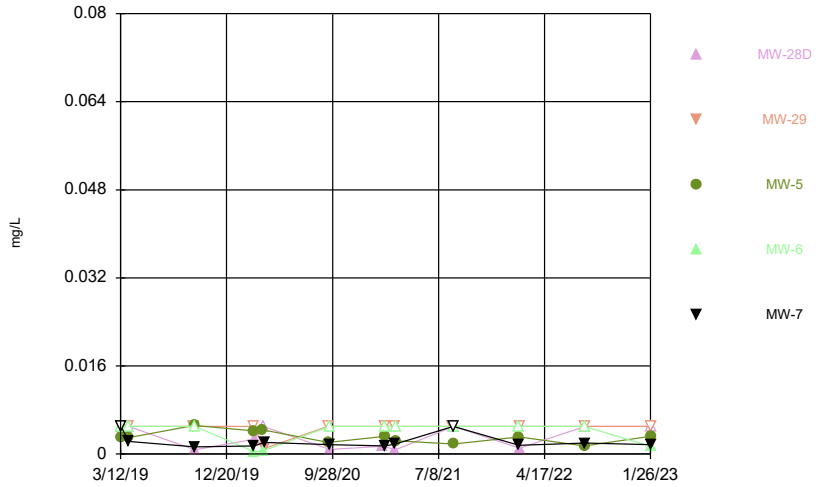
Time Series



Constituent: Chromium Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

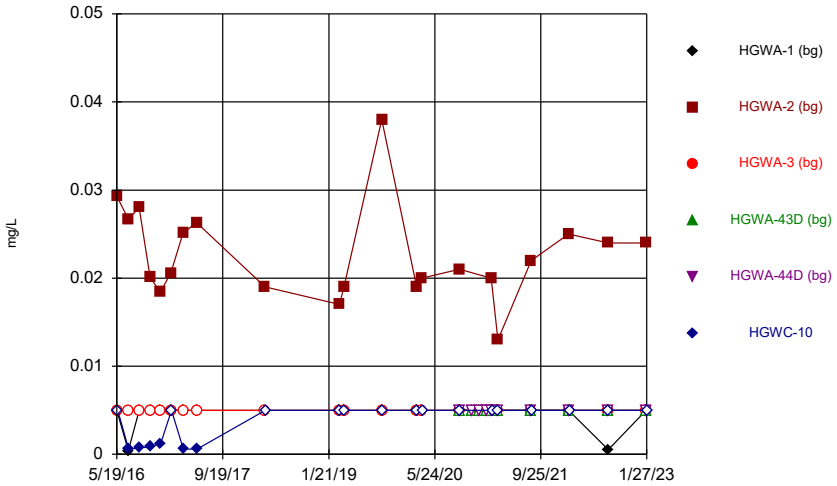
Time Series



Constituent: Chromium Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

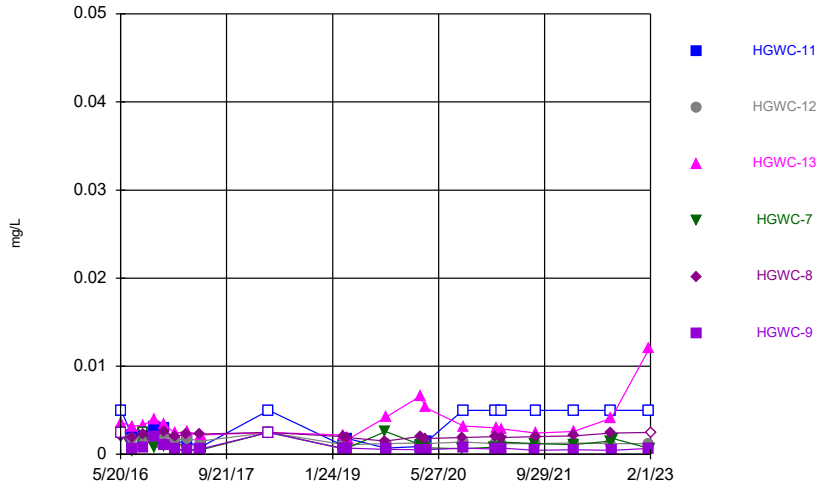
Time Series



Constituent: Cobalt Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

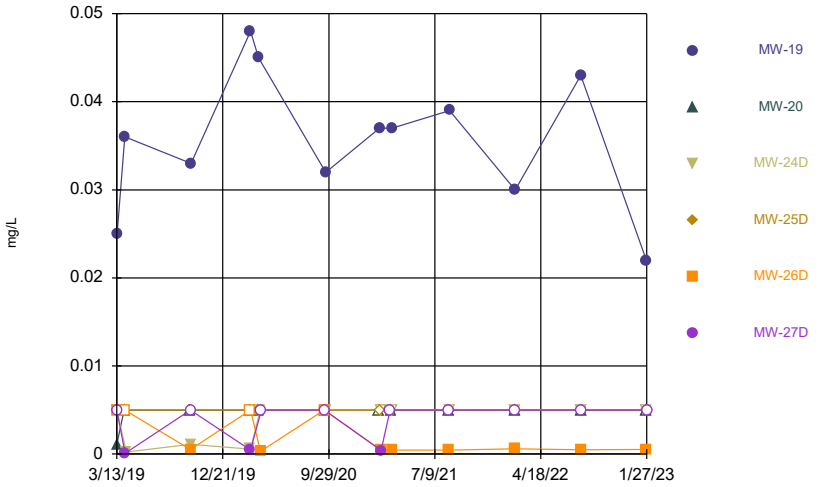
Time Series



Constituent: Cobalt Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

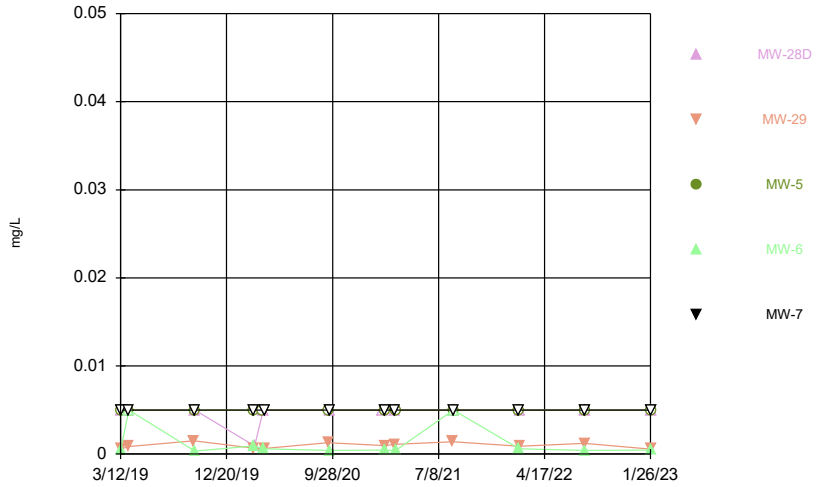
Time Series



Constituent: Cobalt Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

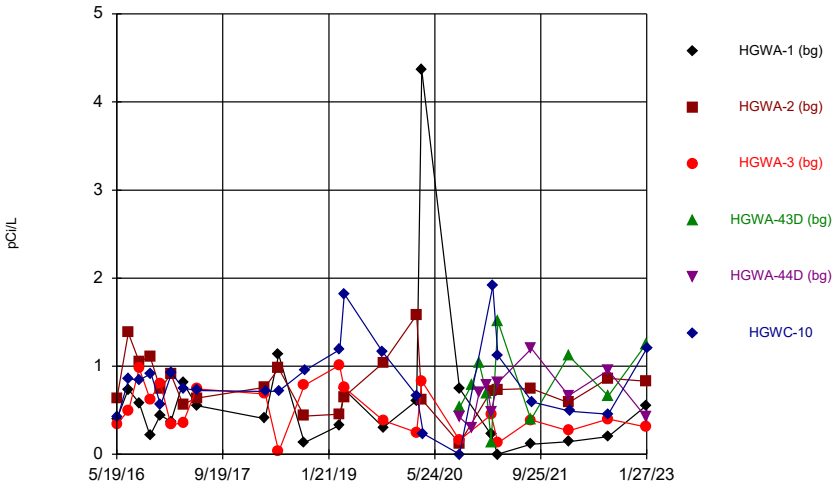
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Cobalt Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

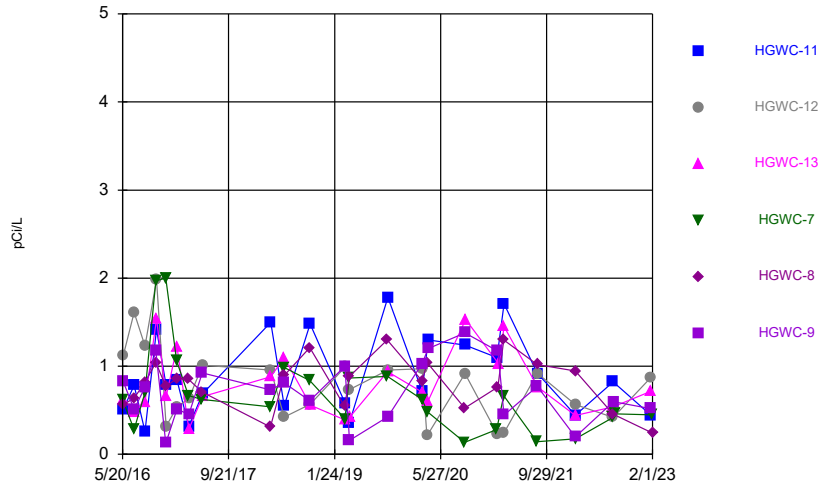
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

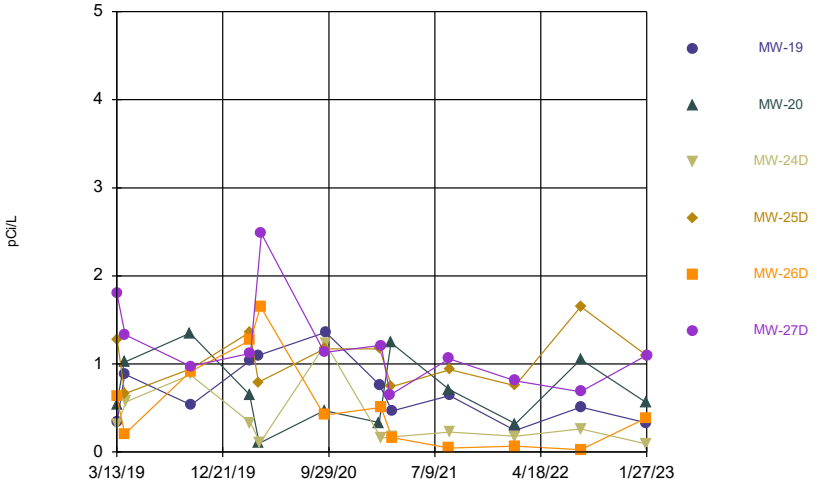
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

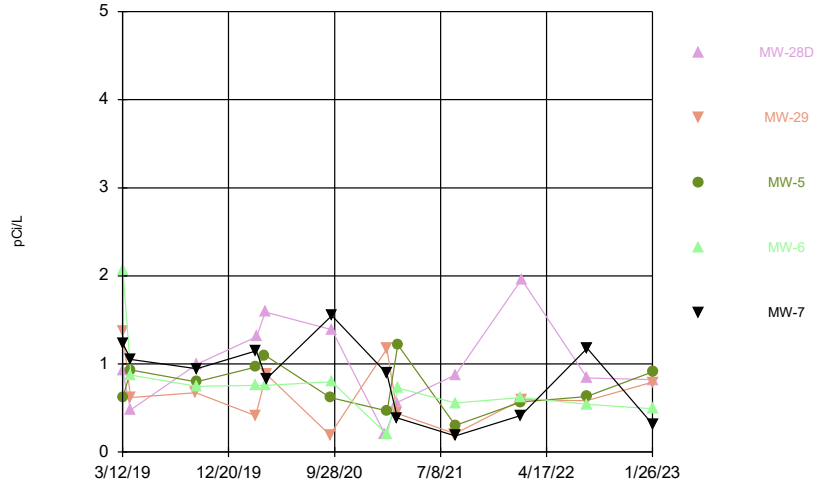
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

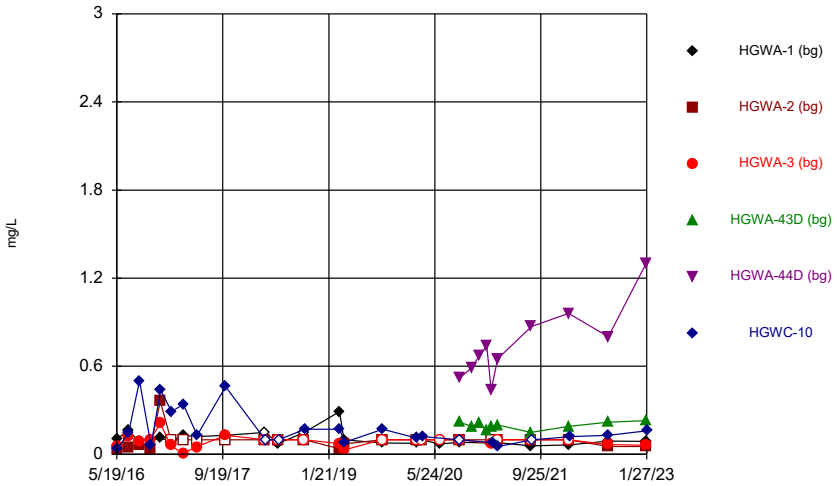
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

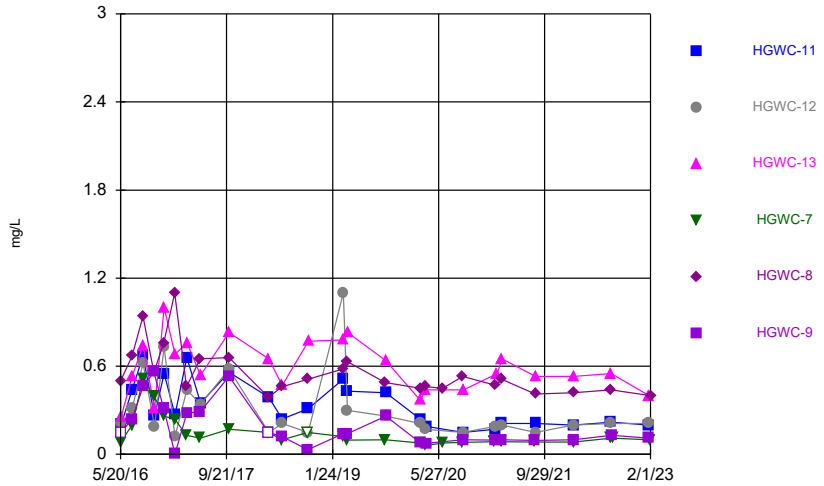
Time Series



Constituent: Fluoride Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

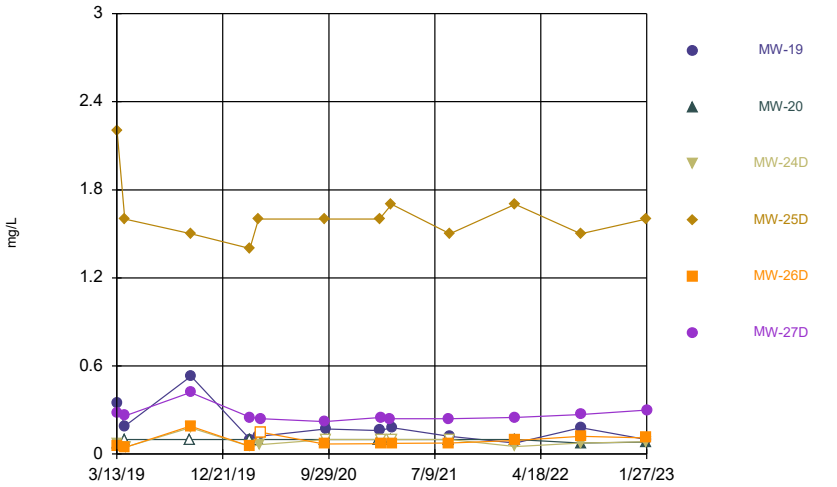
Time Series



Constituent: Fluoride Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

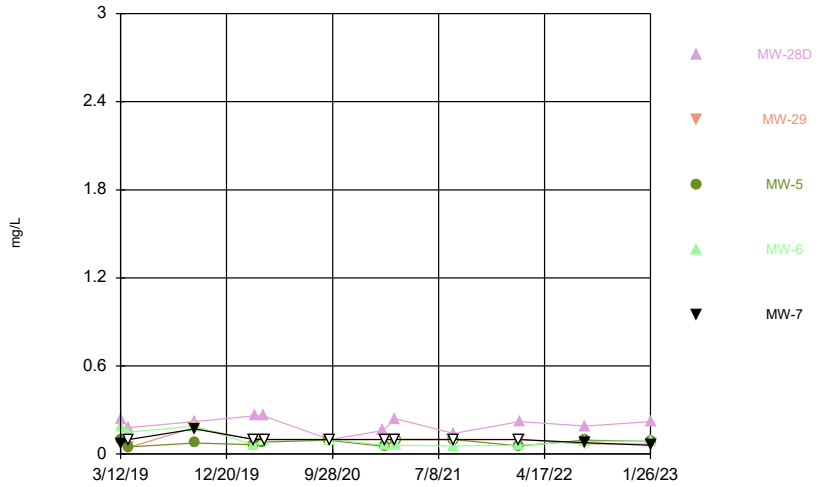
Time Series



Constituent: Fluoride Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

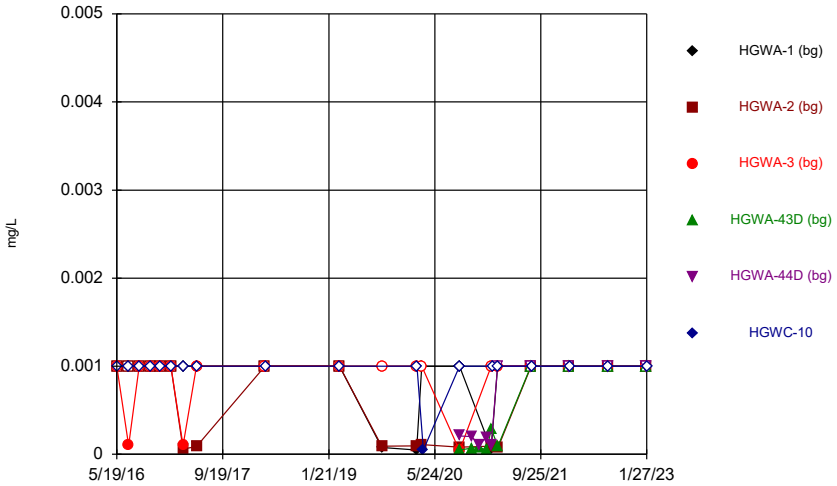
Time Series



Constituent: Fluoride Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

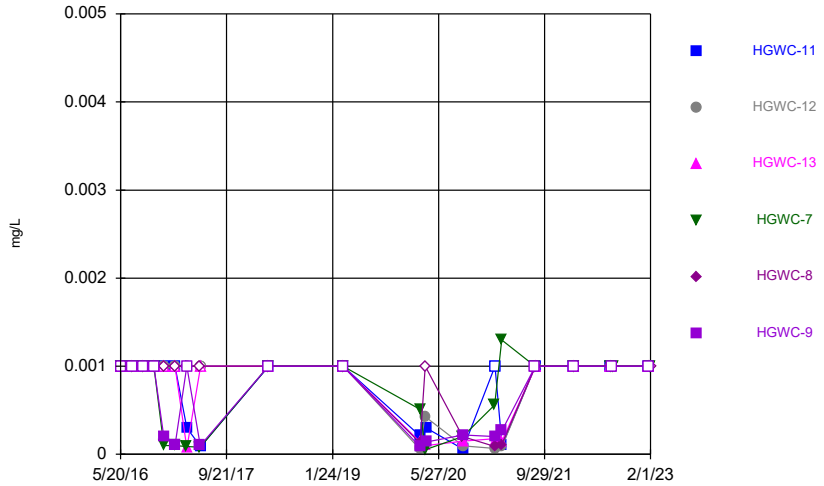
Time Series



Constituent: Lead Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

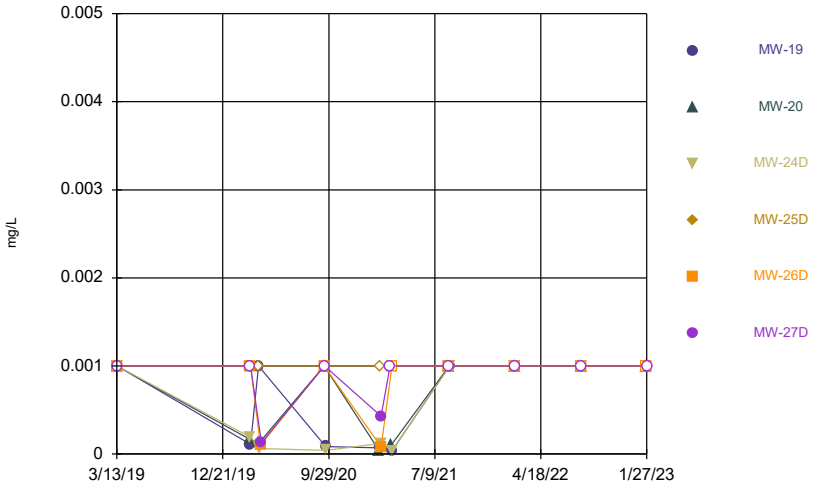
Time Series



Constituent: Lead Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

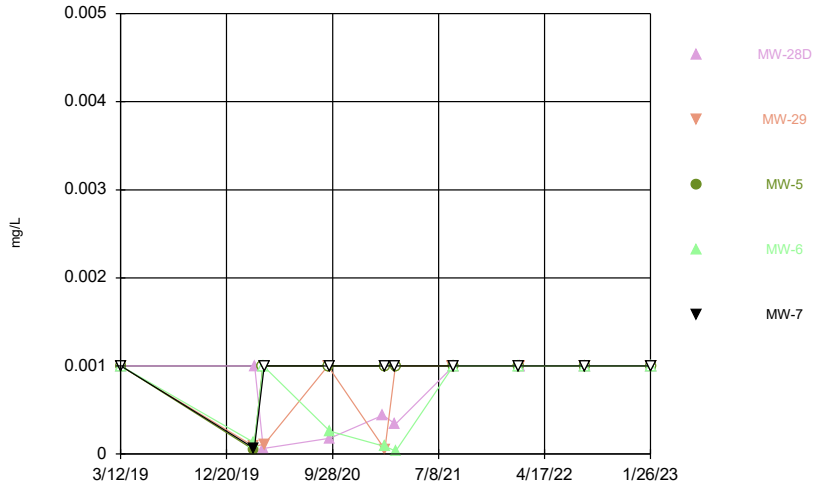
Time Series



Constituent: Lead Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

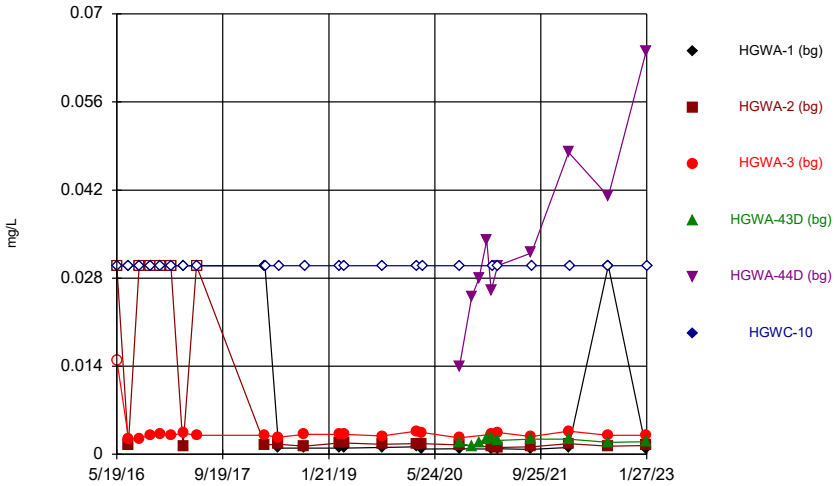
Time Series



Constituent: Lead Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

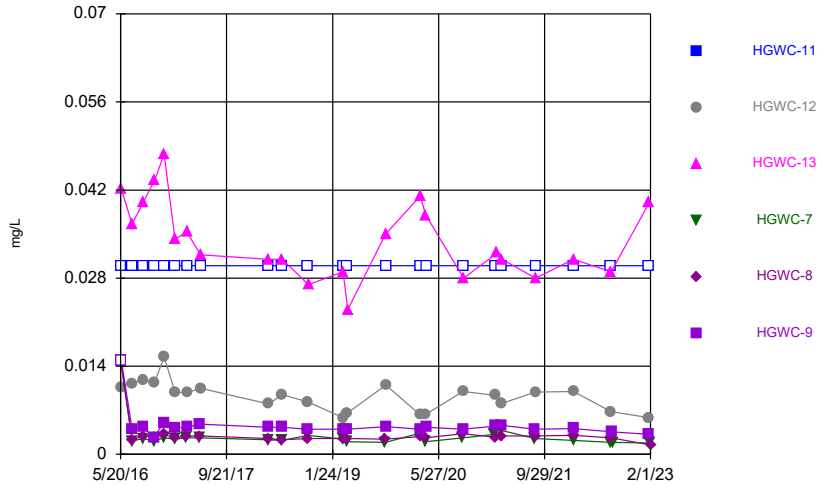
Time Series



Constituent: Lithium Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

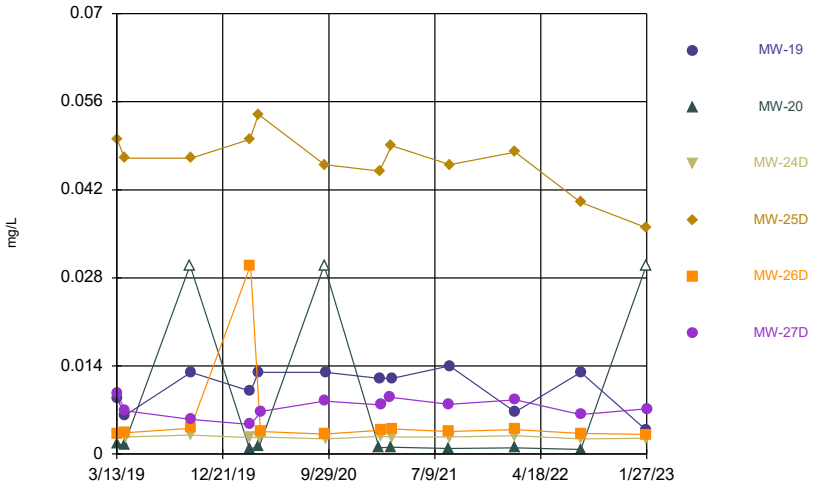
Time Series



Constituent: Lithium Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

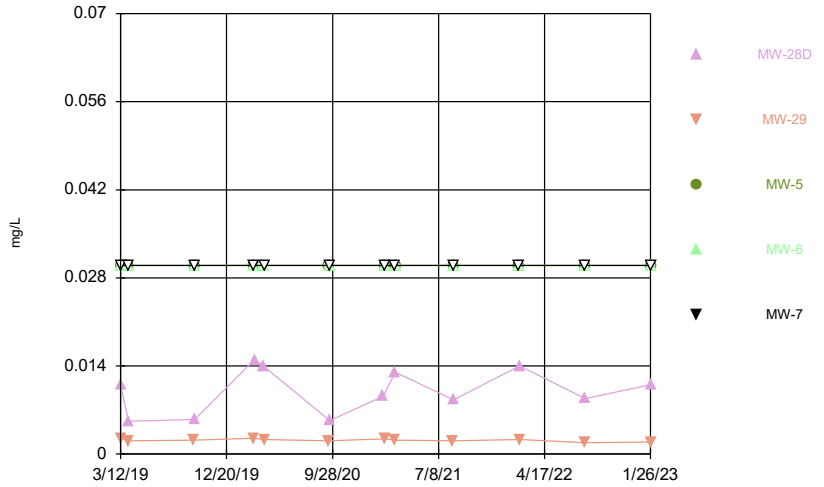
Time Series



Constituent: Lithium Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

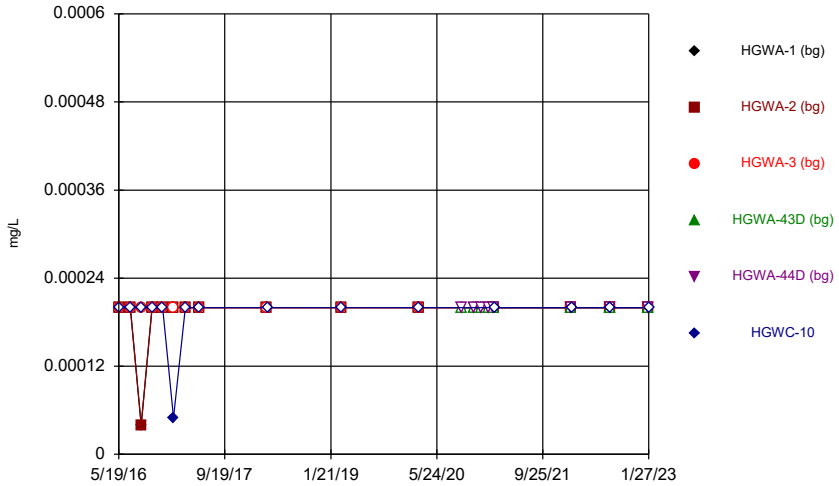
Time Series



Constituent: Lithium Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

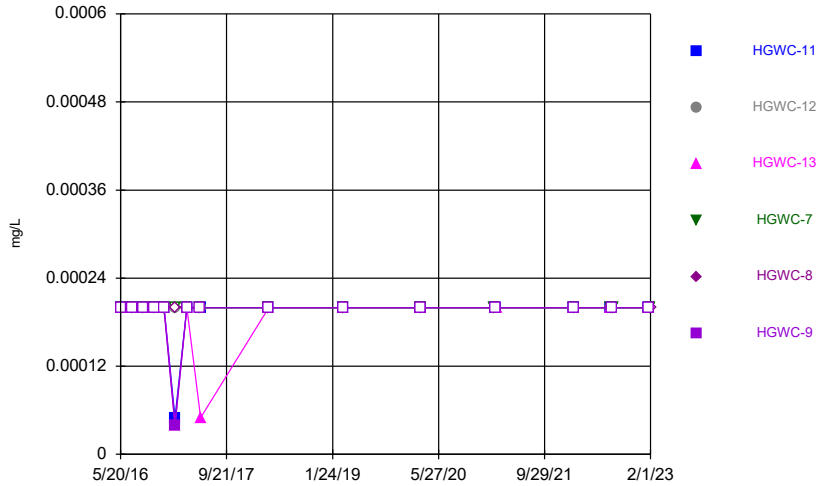
Time Series



Constituent: Mercury Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

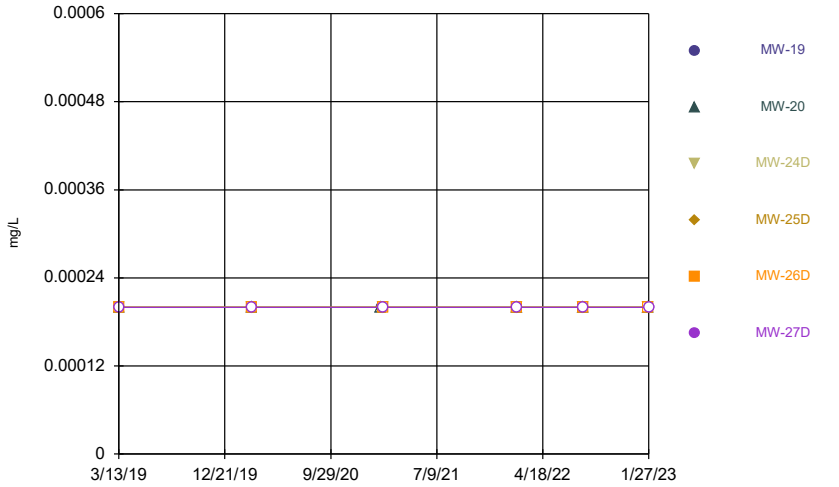
Time Series



Constituent: Mercury Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

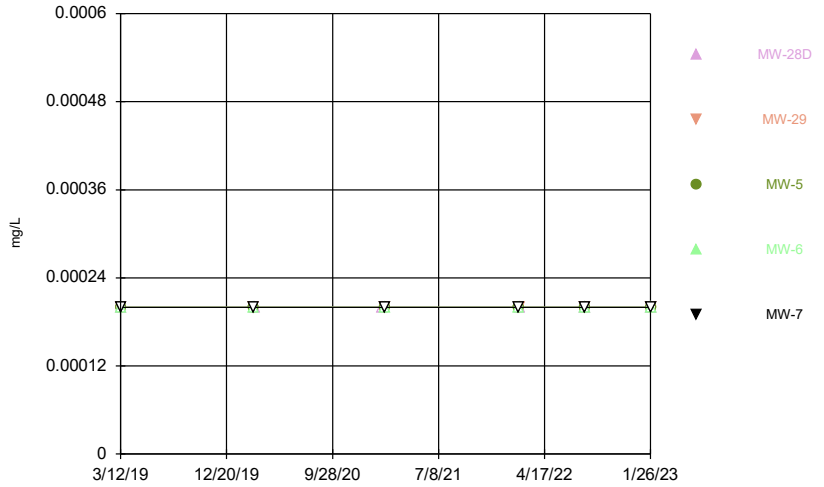
Time Series



Constituent: Mercury Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

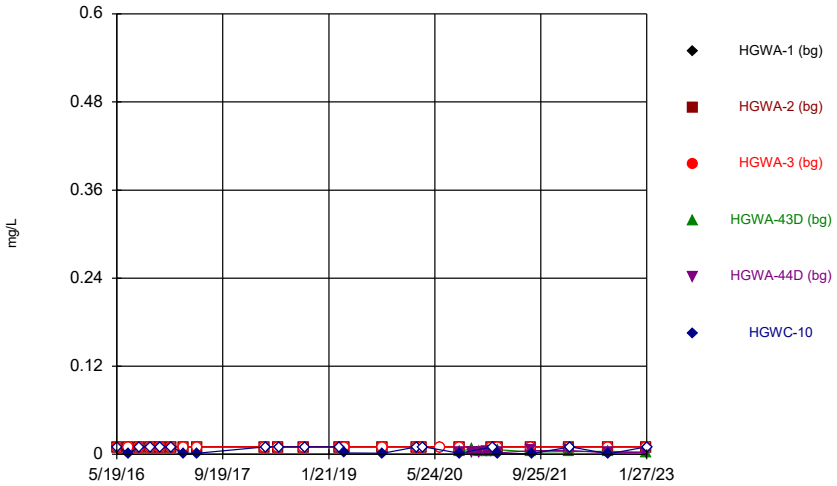
Time Series



Constituent: Mercury Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

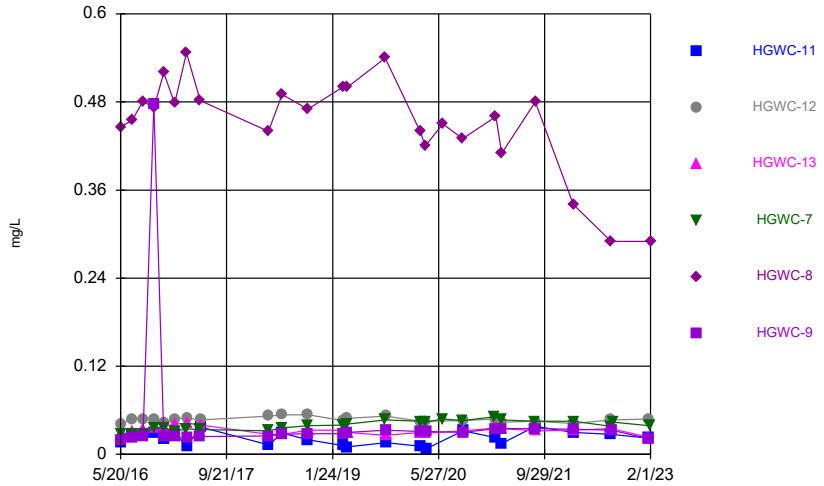
Time Series



Constituent: Molybdenum Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

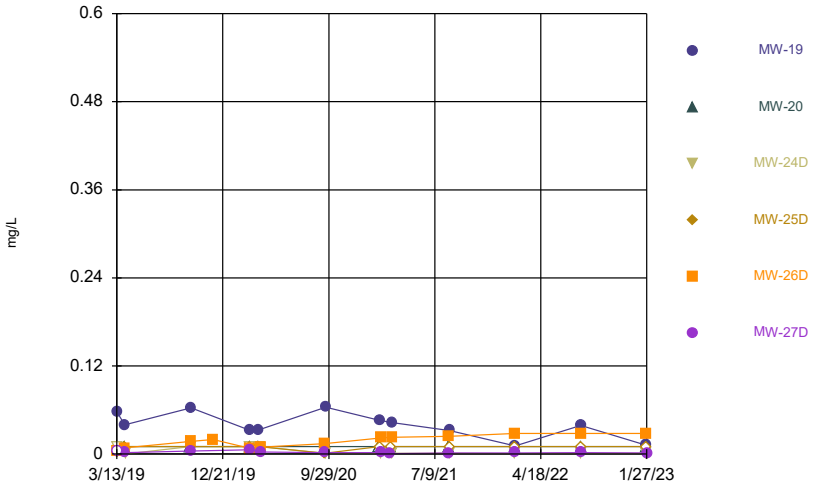
Time Series



Constituent: Molybdenum Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

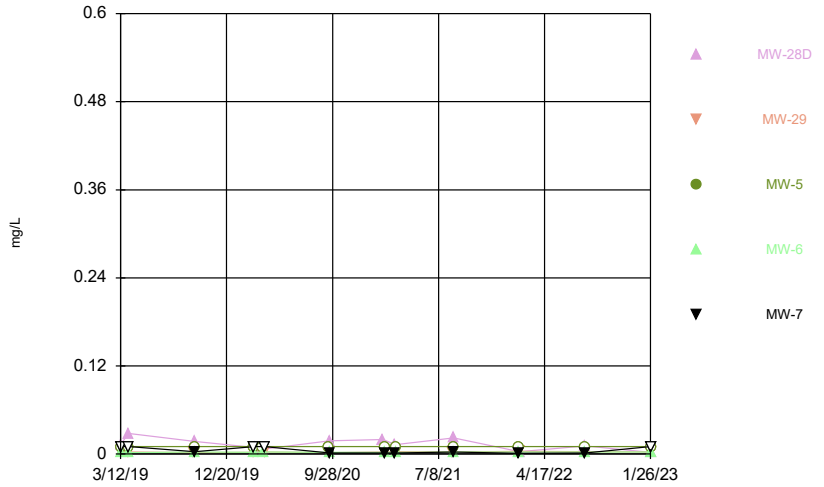
Time Series



Constituent: Molybdenum Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

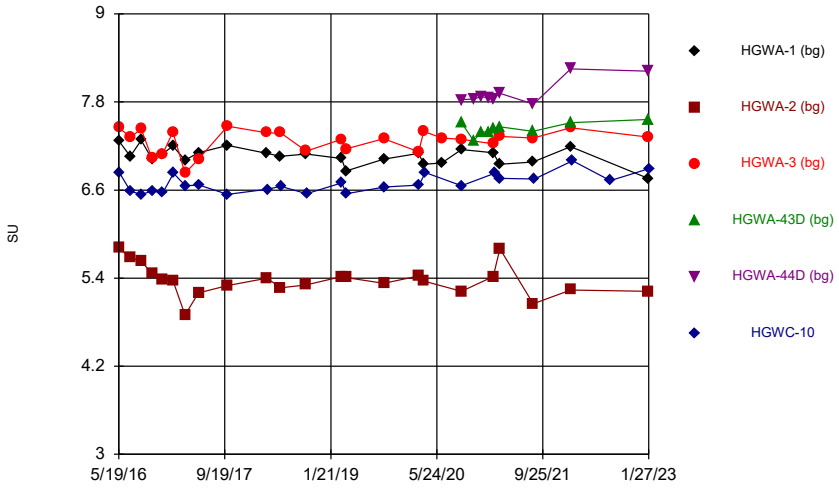
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Molybdenum Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Time Series

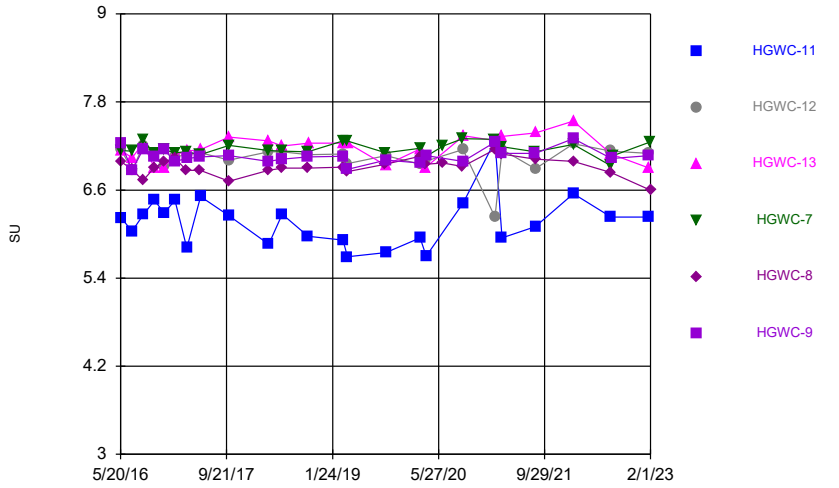


Constituent: pH, Field Analysis Run 4/14/2023 12:18 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

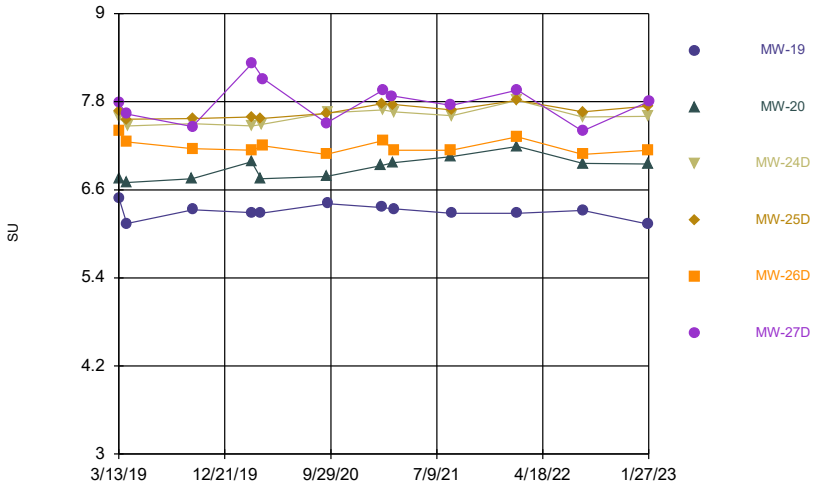


Constituent: pH, Field Analysis Run 4/14/2023 12:18 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

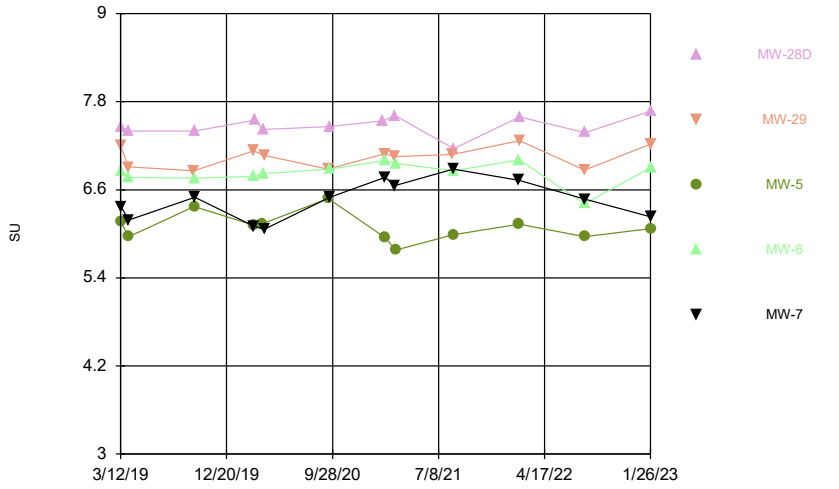


Constituent: pH, Field Analysis Run 4/14/2023 12:19 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

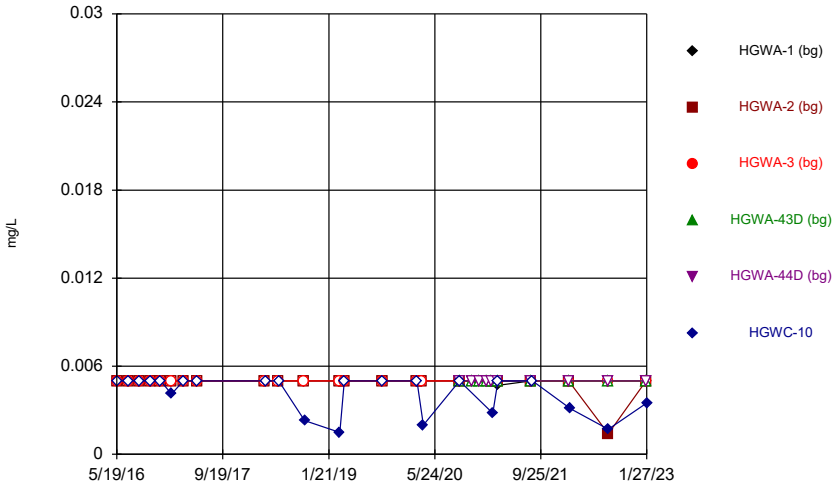


Constituent: pH, Field Analysis Run 4/14/2023 12:19 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

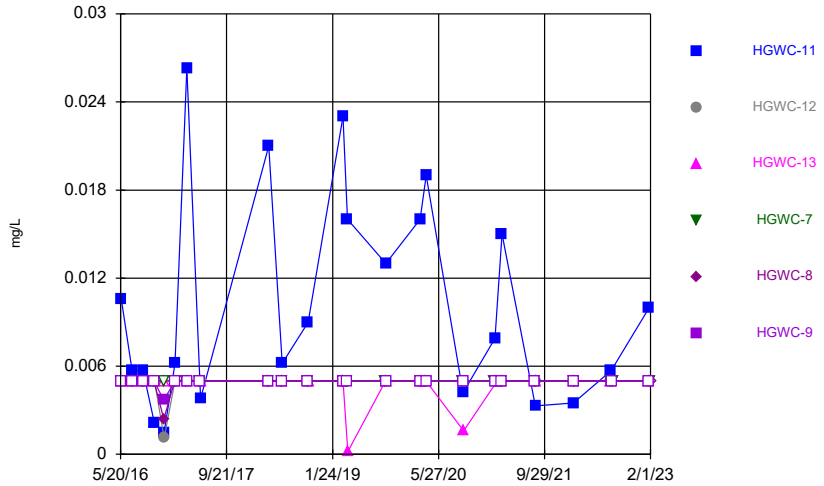
Time Series



Constituent: Selenium Analysis Run 4/14/2023 12:19 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

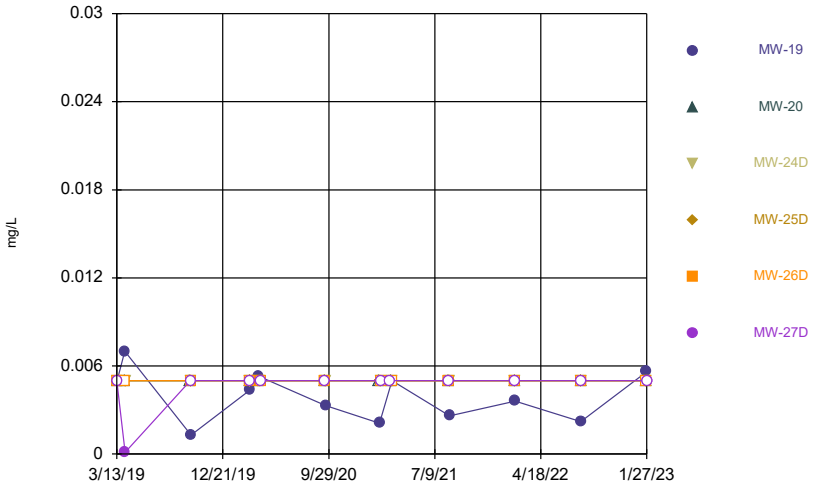
Time Series



Constituent: Selenium Analysis Run 4/14/2023 12:19 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

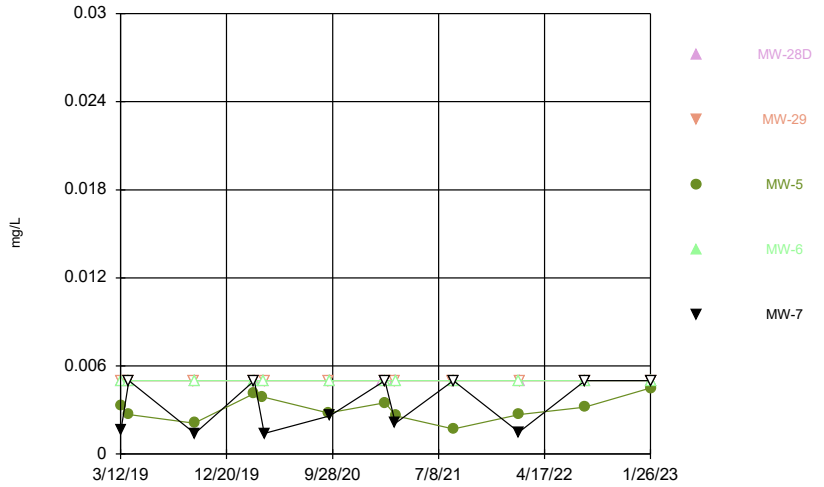
Time Series



Constituent: Selenium Analysis Run 4/14/2023 12:19 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

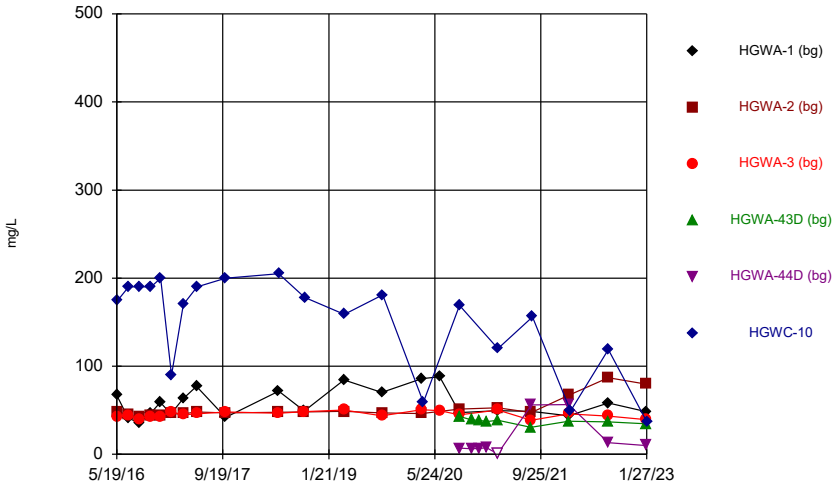
Time Series



Constituent: Selenium Analysis Run 4/14/2023 12:19 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

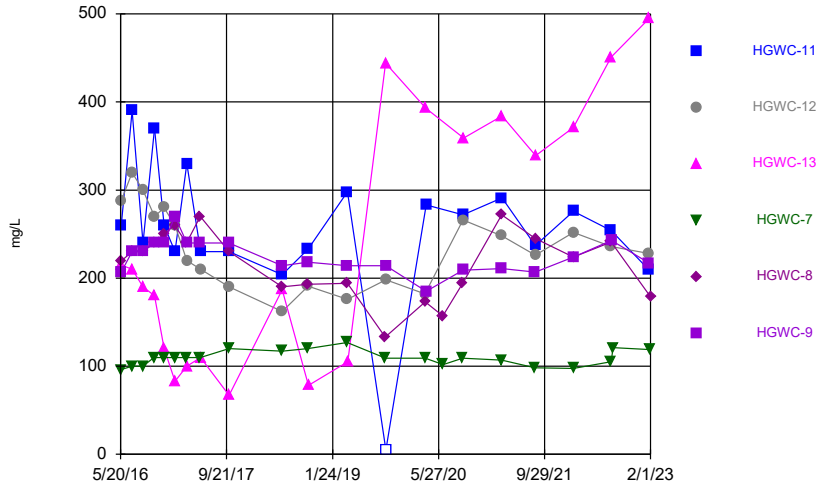
Time Series



Constituent: Sulfate Analysis Run 4/14/2023 12:19 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

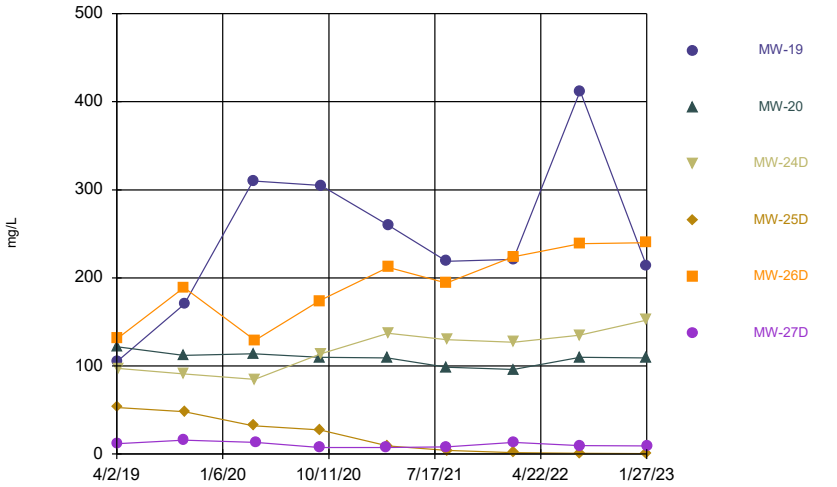
Time Series



Constituent: Sulfate Analysis Run 4/14/2023 12:19 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

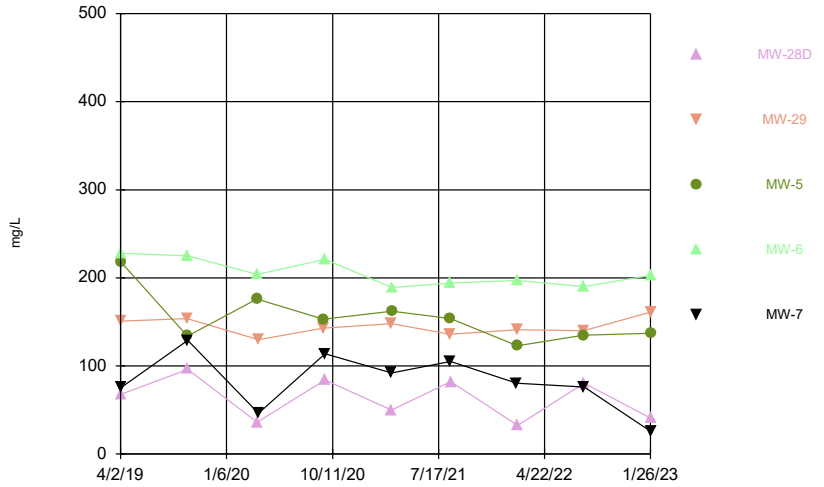
Time Series



Constituent: Sulfate Analysis Run 4/14/2023 12:19 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

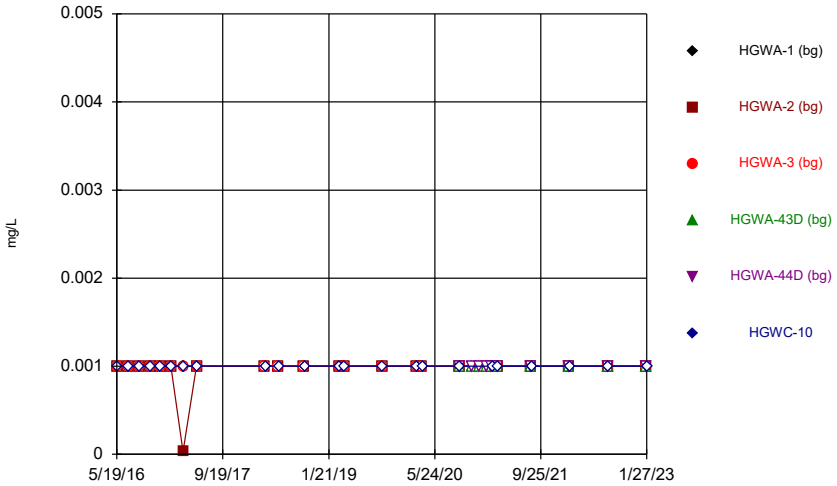
Time Series



Constituent: Sulfate Analysis Run 4/14/2023 12:19 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

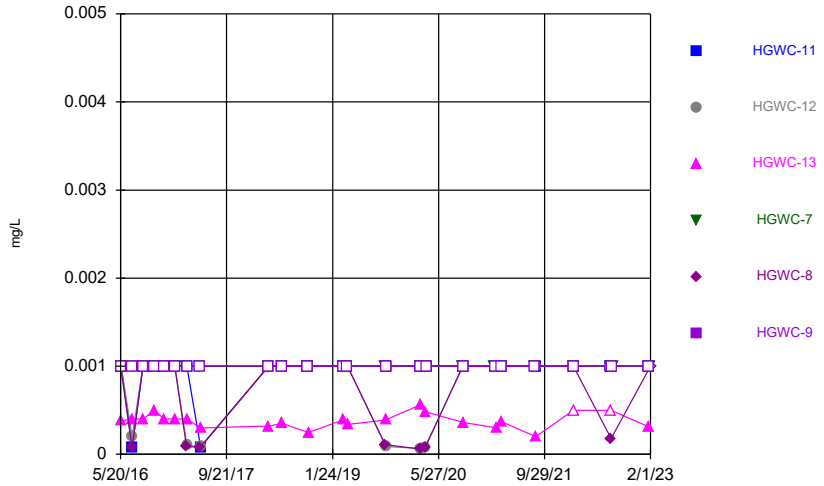
Time Series



Constituent: Thallium Analysis Run 4/14/2023 12:19 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

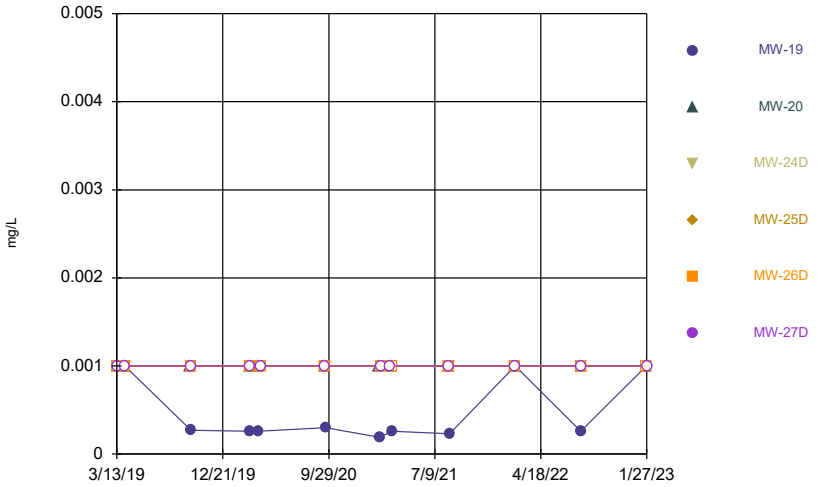
Time Series



Constituent: Thallium Analysis Run 4/14/2023 12:19 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

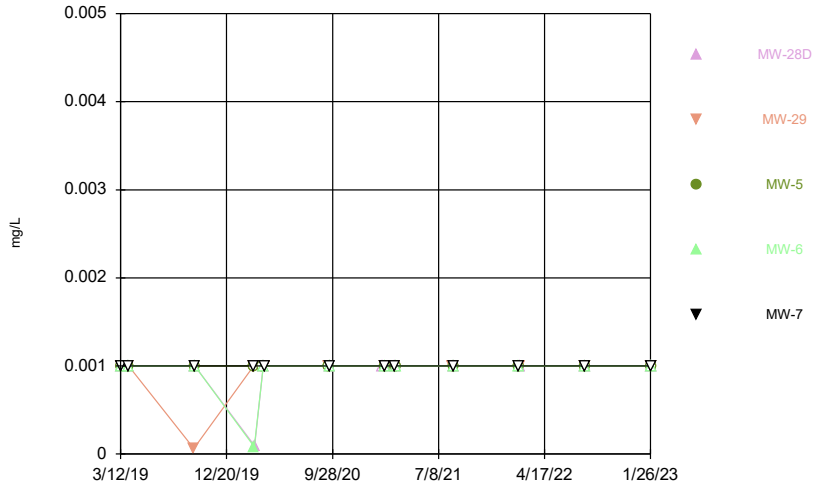
Time Series



Constituent: Thallium Analysis Run 4/14/2023 12:19 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

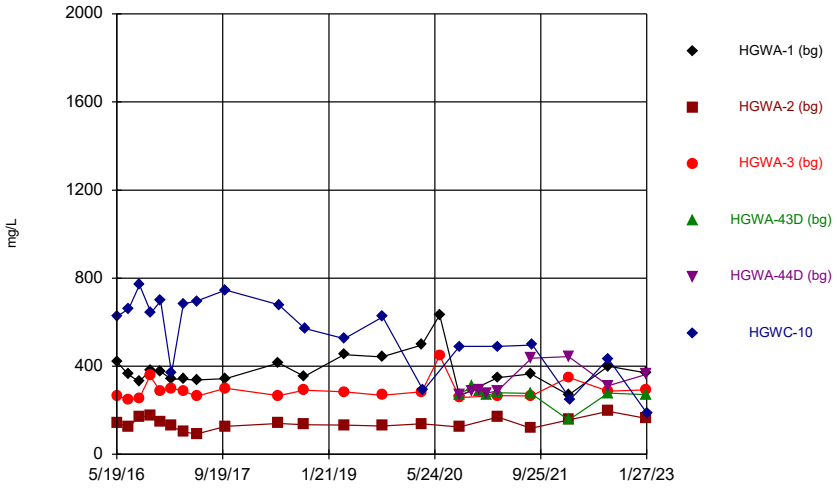
Time Series



Constituent: Thallium Analysis Run 4/14/2023 12:19 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

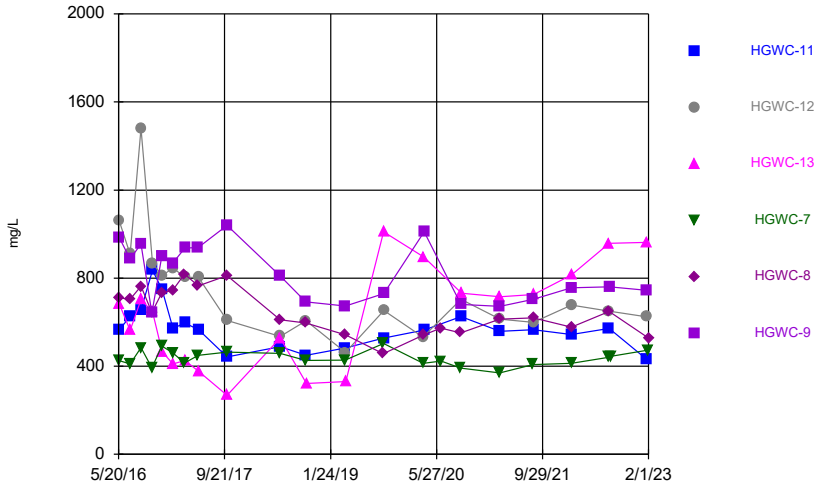


Constituent: Total Dissolved Solids Analysis Run 4/14/2023 12:19 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

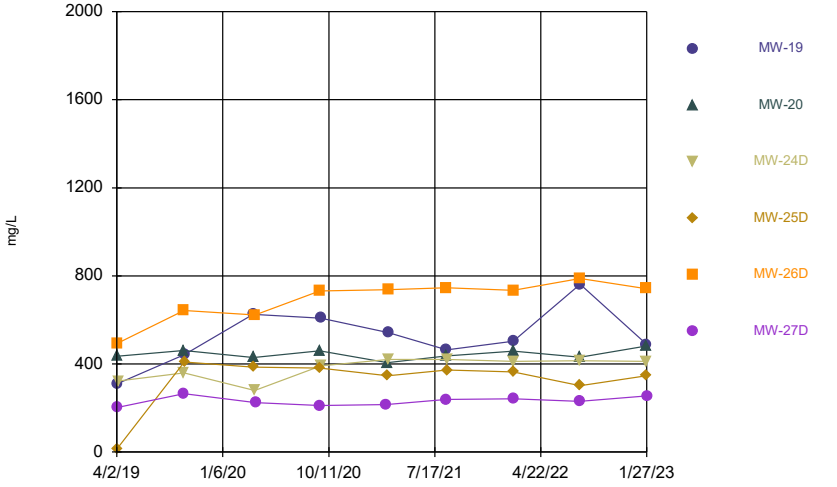


Constituent: Total Dissolved Solids Analysis Run 4/14/2023 12:19 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

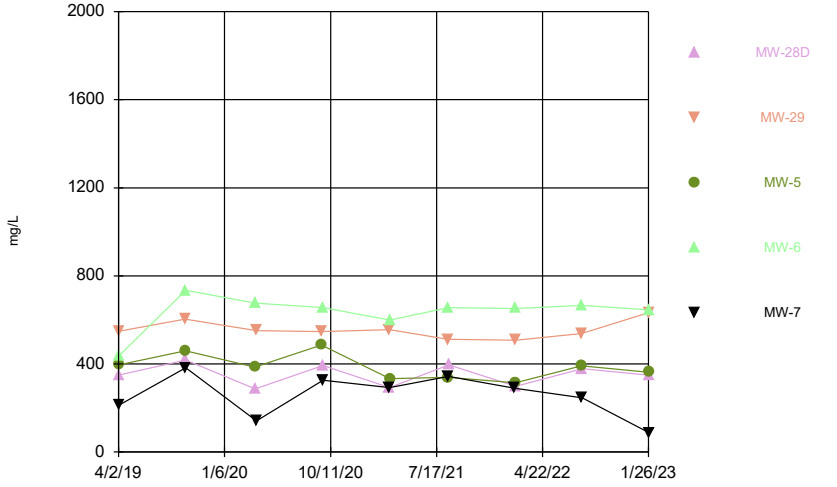


Constituent: Total Dissolved Solids Analysis Run 4/14/2023 12:19 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series



Constituent: Total Dissolved Solids Analysis Run 4/14/2023 12:19 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Time Series

Constituent: Antimony (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	<0.003	<0.003	<0.003			
5/23/2016						<0.003
7/11/2016	<0.003	<0.003				
7/12/2016			0.0003 (J)			<0.003
8/30/2016	<0.003	<0.003	<0.003			
9/1/2016						<0.003
10/19/2016	0.0014 (J)	<0.003	<0.003			
10/24/2016						<0.003
12/6/2016	<0.003	<0.003	<0.003			
12/7/2016						<0.003
1/24/2017	<0.003	<0.003	<0.003			
1/26/2017						<0.003
3/21/2017	<0.003	<0.003	<0.003			
3/22/2017						<0.003
5/22/2017	<0.003	<0.003	<0.003			
5/24/2017						<0.003
4/2/2018	<0.003	<0.003				
4/3/2018			<0.003			
4/4/2018						<0.003
3/12/2019	<0.003	<0.003	<0.003			
3/13/2019						<0.003
4/1/2019			<0.003			
4/2/2019	<0.003	<0.003				
4/3/2019						<0.003
9/23/2019	<0.003	<0.003	<0.003			
9/27/2019						<0.003
3/2/2020	<0.003	<0.003	<0.003			
3/3/2020						<0.003
3/25/2020	<0.003	<0.003	<0.003			
4/1/2020						<0.003
9/15/2020	<0.003	<0.003	<0.003			
9/16/2020				0.00051 (J)	0.00049 (J)	<0.003
11/10/2020				0.00043 (J)	<0.003	
12/15/2020				0.00031 (J)	0.00047 (J)	
1/19/2021				0.00029 (J)	0.00067 (JB)	
2/8/2021	<0.003					
2/9/2021		0.00062 (JB)	0.00031 (JB)	0.00037 (JB)	0.00042 (J)	
2/15/2021						0.00065 (J)
3/10/2021	<0.003				0.00037 (J)	
3/11/2021		<0.003	<0.003	0.00057 (J)		
3/12/2021						<0.003
8/11/2021	<0.003			<0.003		
8/12/2021		<0.003	<0.003			
8/13/2021					<0.003	
8/17/2021						<0.003
2/1/2022	<0.003	<0.003	<0.003	<0.003	0.0013 (J)	
2/9/2022						<0.003
8/2/2022	<0.003	<0.003	<0.003	<0.003	<0.003	
8/3/2022						0.0018 (J)
1/23/2023			<0.003			
1/24/2023	<0.003	<0.003		<0.003	<0.003	
1/27/2023						<0.003

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				<0.003	<0.003	
5/23/2016	<0.003	<0.003	<0.003			<0.003
7/12/2016	<0.003	<0.003	0.0003 (J)	<0.003	<0.003	<0.003
9/1/2016	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
10/20/2016				<0.003	<0.003	<0.003
10/24/2016	<0.003	<0.003	<0.003			
12/6/2016				<0.003	<0.003	<0.003
12/7/2016	<0.003	<0.003	<0.003			
1/25/2017				<0.003	<0.003	
1/26/2017	<0.003	<0.003	<0.003			<0.003
3/21/2017				<0.003	<0.003	
3/22/2017	<0.003	<0.003	<0.003			<0.003
5/23/2017				<0.003	<0.003	<0.003
5/24/2017	<0.003	<0.003	<0.003			
4/3/2018				<0.003	<0.003	<0.003
4/4/2018	<0.003	<0.003	<0.003			
3/12/2019					<0.003	
3/13/2019	<0.003		<0.003	<0.003		<0.003
3/14/2019		<0.003				
4/2/2019				<0.003		
4/3/2019	<0.003	<0.003			<0.003	<0.003
4/5/2019			0.00021 (J)			
9/24/2019					<0.003	
9/25/2019				<0.003		
9/26/2019			<0.003			
9/27/2019	<0.003	<0.003				<0.003
3/3/2020	<0.003	<0.003			<0.003	
3/4/2020			0.00061 (J)	<0.003		0.00032 (J)
3/26/2020		<0.003				
3/27/2020				<0.003	<0.003	
3/30/2020			0.00036 (J)			
3/31/2020	<0.003					0.00042 (J)
9/16/2020				0.00034 (J)	<0.003	
9/17/2020						<0.003
9/18/2020	0.00038 (J)	<0.003				
9/21/2020			0.00029 (J)			
2/10/2021				<0.003		
2/12/2021	<0.003	<0.003				
2/16/2021					0.00064 (J)	0.00043 (J)
2/22/2021			0.00047 (J)			
3/15/2021				<0.003	<0.003	
3/16/2021	<0.003	<0.003				<0.003
3/17/2021			0.00049 (J)			
8/16/2021				0.0017 (J)		
8/17/2021						<0.003
8/18/2021	<0.003	<0.003			<0.003	
8/19/2021			<0.003			
2/9/2022	<0.003	<0.003				<0.003
2/10/2022			<0.003	<0.003	<0.003	
8/3/2022	<0.003	<0.003	<0.003	<0.003	<0.003	
8/4/2022						<0.003
8/11/2022				<0.003		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
1/26/2023	<0.003	<0.003	<0.003			0.00092 (J)
1/27/2023				<0.003		
2/1/2023					<0.003	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		<0.003	<0.003		<0.003	<0.003
3/14/2019	<0.003			<0.003		
4/2/2019		<0.003				
4/3/2019	<0.003			<0.003	<0.003	
4/4/2019						0.00016 (J)
4/8/2019			<0.003			
9/25/2019		<0.003				
9/26/2019			<0.003		<0.003	0.0003 (J)
9/27/2019	<0.003			<0.003		
3/2/2020		<0.003				
3/3/2020				<0.003		
3/4/2020	<0.003		0.0017 (J)		0.002 (J)	0.00037 (J)
3/26/2020	<0.003			<0.003		
3/27/2020		<0.003				
3/30/2020			<0.003			
3/31/2020					0.0013 (J)	
4/2/2020						0.0003 (J)
9/17/2020		<0.003			<0.003	
9/18/2020				<0.003		0.00031 (J)
9/21/2020	<0.003		<0.003			
2/11/2021		<0.003				
2/12/2021	<0.003			<0.003		
2/16/2021			<0.003		<0.003	0.00038 (J)
3/12/2021						<0.003
3/15/2021		<0.003				
3/16/2021				<0.003		
3/17/2021	<0.003		<0.003		<0.003	
8/17/2021		<0.003			<0.003	<0.003
8/18/2021	<0.003					
8/19/2021			<0.003	<0.003		
2/9/2022	<0.003			<0.003	<0.003	
2/10/2022		<0.003	<0.003			<0.003
8/3/2022			<0.003			<0.003
8/4/2022	<0.003	<0.003		<0.003	<0.003	
1/26/2023	<0.003	<0.003	<0.003	<0.003	<0.003	
1/27/2023						<0.003

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	<0.003	<0.003			
3/13/2019			<0.003	<0.003	0.00086 (J)
4/2/2019	<0.003	<0.003			
4/3/2019			<0.003	<0.003	<0.003
9/24/2019		<0.003			
9/25/2019			<0.003		
9/26/2019	<0.003			<0.003	<0.003
3/2/2020		<0.003	<0.003		
3/3/2020				<0.003	0.0013 (J)
3/4/2020	<0.003				
3/26/2020			<0.003		
3/27/2020	<0.003			<0.003	
3/30/2020		<0.003			<0.003
9/16/2020		<0.003			
9/17/2020			<0.003		
9/21/2020	<0.003			0.0014 (J)	0.00051 (J)
2/10/2021	0.0019 (J)				
2/15/2021		0.00094 (J)			0.0021 (J)
2/16/2021			<0.003	<0.003	
3/15/2021	<0.003	<0.003			<0.003
3/16/2021			<0.003	<0.003	
8/16/2021		<0.003			
8/17/2021			<0.003	<0.003	<0.003
8/18/2021	<0.003				
2/8/2022					<0.003
2/9/2022			<0.003	<0.003	
2/10/2022	<0.003	<0.003			
8/3/2022		<0.003	<0.003	<0.003	
8/4/2022	<0.003				<0.003
1/26/2023	<0.003	<0.003	<0.003	<0.003	<0.003

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	<0.005	0.00127 (J)	<0.005			
5/23/2016						<0.005
7/11/2016	<0.005	0.002 (J)				
7/12/2016			0.0008 (J)			<0.005
8/30/2016	<0.005	0.0017 (J)	<0.005			
9/1/2016						<0.005
10/19/2016	<0.005	<0.005	<0.005			
10/24/2016						<0.005
12/6/2016	<0.005	<0.005	<0.005			
12/7/2016						<0.005
1/24/2017	<0.005	<0.005	<0.005			
1/26/2017						<0.005
3/21/2017	0.0005 (J)	<0.005	0.0007 (J)			
3/22/2017						<0.005
5/22/2017	<0.005	0.0006 (J)	0.0006 (J)			
5/24/2017						<0.005
4/2/2018	<0.005	<0.005				
4/3/2018			<0.005			
4/4/2018						<0.005
6/4/2018	<0.005	0.00088 (J)	0.0008 (J)			
6/5/2018						<0.005
10/1/2018	<0.005	<0.005	0.0011 (J)			
10/2/2018						<0.005
3/12/2019	<0.005	0.00069 (J)	0.00063 (J)			
3/13/2019						<0.005
4/1/2019			<0.005			
4/2/2019	<0.005	<0.005				
4/3/2019						<0.005
9/23/2019	0.00046 (J)	0.00067 (J)	0.0011 (J)			
9/27/2019						<0.005
3/2/2020	<0.005	0.00043 (J)	0.0004 (J)			
3/3/2020						<0.005
3/25/2020	<0.005	<0.005	<0.005			
4/1/2020						<0.005
9/15/2020	<0.005	<0.005	<0.005			
9/16/2020				<0.005	<0.005	<0.005
11/10/2020				0.0021 (J)	<0.005	
12/15/2020				<0.005	<0.005	
1/19/2021				0.0011 (J)	<0.005	
2/8/2021	<0.005					
2/9/2021		<0.005	<0.005	0.0017 (JB)	0.00083 (J)	
2/15/2021						<0.005
3/10/2021	<0.005				<0.005	
3/11/2021		<0.005	<0.005	0.0013 (J)		
3/12/2021						<0.005
8/11/2021	<0.005			0.0015 (J)		
8/12/2021		<0.005	<0.005			
8/13/2021					<0.005	
8/17/2021						<0.005
2/1/2022	0.0016 (J)	0.0023 (J)	0.0024 (J)	0.0036 (J)	0.0025 (J)	
2/9/2022						<0.005
8/2/2022	<0.005	<0.005	<0.005	<0.005	<0.005	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
8/3/2022						<0.005
1/23/2023			<0.005			
1/24/2023	<0.005	<0.005		<0.005	0.0027 (J)	
1/27/2023						<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				<0.005	<0.005	
5/23/2016	<0.005	0.0046 (J)	0.329			<0.005
7/12/2016	0.0015 (J)	0.005	0.297	<0.005	<0.005	<0.005
9/1/2016	<0.005	0.0043 (J)	0.314	<0.005	<0.005	<0.005
10/20/2016				<0.005	<0.005	<0.005
10/24/2016	<0.005	0.0049 (J)	0.334			
12/6/2016				<0.005	<0.005	<0.005
12/7/2016	<0.005	0.0046 (J)	0.35			
1/25/2017				<0.005	<0.005	
1/26/2017	<0.005	<0.005	0.424			<0.005
3/21/2017				<0.005	<0.005	
3/22/2017	0.0053	0.0019 (J)	0.419			0.0008 (J)
5/23/2017				<0.005	<0.005	<0.005
5/24/2017	<0.005	0.0022 (J)	0.393			
4/3/2018				<0.005	<0.005	<0.005
4/4/2018	<0.005	<0.005	0.49			
6/5/2018	0.0012 (J)		0.38	<0.005		
6/6/2018		0.0048 (J)			<0.005	<0.005
10/2/2018				0.0019 (J)	<0.005	<0.005
10/3/2018	<0.005	0.0037 (J)				
10/5/2018			0.34			
3/12/2019					<0.005	
3/13/2019	0.0024 (J)		0.42	<0.005		0.00075 (J)
3/14/2019		0.0026 (J)				
4/2/2019				<0.005		
4/3/2019	0.00094 (J)	0.0022 (J)			<0.005	<0.005
4/5/2019			0.36			
9/24/2019					<0.005	
9/25/2019				<0.005		
9/26/2019			0.44			
9/27/2019	0.0018 (J)	0.0061				0.00037 (J)
3/3/2020	0.0022 (J)	0.0023 (J)			<0.005	
3/4/2020			0.52	<0.005		<0.005
3/26/2020		0.0028 (J)				
3/27/2020				<0.005	<0.005	
3/30/2020			0.47			
3/31/2020	0.0022 (J)					<0.005
9/16/2020				<0.005	<0.005	
9/17/2020						<0.005
9/18/2020	0.00081 (J)	0.0031 (J)				
9/21/2020			0.39			
2/10/2021				<0.005		
2/12/2021	0.002 (J)	0.0045 (J)				
2/16/2021					<0.005	<0.005
2/22/2021			0.45			
3/15/2021				<0.005	<0.005	
3/16/2021	0.0017 (J)	0.0038 (J)				<0.005
3/17/2021			0.39			
8/16/2021				<0.005		
8/17/2021						<0.005
8/18/2021	<0.005	0.0028 (J)			<0.005	
8/19/2021			0.31			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
2/9/2022	0.0047 (J)	0.0053				0.0021 (J)
2/10/2022			0.38	<0.005	0.002 (J)	
8/3/2022	<0.005	0.0023 (J)	0.4	<0.005	<0.005	
8/4/2022						<0.005
8/11/2022				<0.005		
1/26/2023	<0.005	0.0025 (J)	0.53			<0.005
1/27/2023				<0.005		
2/1/2023					<0.005	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		0.0023 (J)	<0.005		<0.005	<0.005
3/14/2019	<0.005			0.0019 (J)		
4/2/2019		<0.005				
4/3/2019	<0.005			<0.005	<0.005	
4/4/2019						0.0002 (J)
4/8/2019			<0.005			
9/25/2019		<0.005				
9/26/2019			<0.005		<0.005	<0.005
9/27/2019	<0.005			0.0011 (J)		
3/2/2020		0.00038 (J)				
3/3/2020				0.001 (J)		
3/4/2020	0.00045 (J)		<0.005		0.0006 (J)	0.00069 (J)
3/26/2020	<0.005			0.00075 (J)		
3/27/2020		<0.005				
3/30/2020			<0.005			
3/31/2020					<0.005	
4/2/2020						<0.005
9/17/2020		<0.005			<0.005	
9/18/2020				<0.005		<0.005
9/21/2020	<0.005		<0.005			
2/11/2021		0.00094 (J)				
2/12/2021	<0.005			<0.005		
2/16/2021			<0.005		0.0008 (J)	0.001 (J)
3/12/2021						<0.005
3/15/2021		<0.005				
3/16/2021				<0.005		
3/17/2021	<0.005		<0.005		<0.005	
8/17/2021		<0.005			<0.005	<0.005
8/18/2021	<0.005					
8/19/2021			<0.005	<0.005		
2/9/2022	<0.005			<0.005	0.0017 (J)	
2/10/2022		<0.005	<0.005			<0.005
8/3/2022			<0.005			<0.005
8/4/2022	<0.005	<0.005		<0.005	<0.005	
1/26/2023	<0.005	<0.005	<0.005	<0.005	<0.005	
1/27/2023						<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	<0.005	<0.005			
3/13/2019			<0.005	<0.005	<0.005
4/2/2019	<0.005	<0.005			
4/3/2019			<0.005	<0.005	<0.005
9/24/2019		<0.005			
9/25/2019			<0.005		
9/26/2019	<0.005			<0.005	<0.005
3/2/2020		<0.005	<0.005		
3/3/2020				<0.005	<0.005
3/4/2020	<0.005				
3/26/2020			<0.005		
3/27/2020	<0.005			<0.005	
3/30/2020		0.00037 (J)			<0.005
9/16/2020		<0.005			
9/17/2020			<0.005		
9/21/2020	<0.005			<0.005	<0.005
2/10/2021	0.0011 (J)				
2/15/2021		<0.005			<0.005
2/16/2021			<0.005	<0.005	
3/15/2021	<0.005	<0.005			<0.005
3/16/2021			<0.005	<0.005	
8/16/2021		<0.005			
8/17/2021			<0.005	<0.005	<0.005
8/18/2021	<0.005				
2/8/2022					<0.005
2/9/2022			0.0013 (J)	0.0034 (J)	
2/10/2022	<0.005	<0.005			
8/3/2022		<0.005	<0.005	<0.005	
8/4/2022	<0.005				<0.005
1/26/2023	<0.005	<0.005	<0.005	<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Barium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	0.0346	0.114	0.111			
5/23/2016						0.0877
7/11/2016	0.0311	0.112				
7/12/2016			0.115			0.0926
8/30/2016	0.0293	0.131	0.113			
9/1/2016						0.0994
10/19/2016	0.0293	0.111	0.123			
10/24/2016						0.101
12/6/2016	0.0304	0.108	0.127			
12/7/2016						0.107
1/24/2017	0.028	0.102	0.126			
1/26/2017						0.0538
3/21/2017	0.0275	0.095	0.12			
3/22/2017						0.0962
5/22/2017	0.0281	0.103	0.117			
5/24/2017						0.0996
4/2/2018	0.026	0.099				
4/3/2018			0.11			
4/4/2018						0.084
6/4/2018	0.035	0.11	0.12			
6/5/2018						0.086
10/1/2018	0.029	0.11	0.14			
10/2/2018						0.076
3/12/2019	0.042	0.12	0.13			
3/13/2019						0.044
4/1/2019			0.13			
4/2/2019	0.04	0.13				
4/3/2019						0.076
9/23/2019	0.042	0.13	0.13			
9/27/2019						0.078
3/2/2020	0.034	0.11	0.14			
3/3/2020						0.048
3/25/2020	0.043	0.12	0.13			
4/1/2020						0.058
9/15/2020	0.035	0.12	0.12			
9/16/2020				0.26	0.24	0.068
11/10/2020				0.25	0.38	
12/15/2020				0.29	0.39	
1/19/2021				0.32	0.41	
2/8/2021	0.032					
2/9/2021		0.12	0.13	0.34	0.46	
2/15/2021						0.06
3/10/2021	0.03				0.26	
3/11/2021		0.07	0.13	0.32		
3/12/2021						0.058
8/11/2021	0.03			0.28		
8/12/2021		0.12	0.11			
8/13/2021					0.22	
8/17/2021						0.055
2/1/2022	0.031	0.13	0.12	0.29	0.23	
2/9/2022						0.042
8/2/2022	0.039	0.11	0.16	0.35	0.37	

Time Series

Constituent: Barium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
8/3/2022						0.069
1/23/2023			0.13			
1/24/2023	0.033	0.088		0.28	0.18	
1/27/2023						0.041

Time Series

Constituent: Barium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				0.0687	0.0808	
5/23/2016	0.0466	0.133	0.0779			0.117
7/12/2016	0.0616	0.135	0.0697	0.0731	0.083	0.13
9/1/2016	0.0497	0.123	0.07	0.0747	0.0829	0.13
10/20/2016				0.072	0.0811	0.0806
10/24/2016	0.0794	0.135	0.0882			
12/6/2016				0.0752	0.0845	0.128
12/7/2016	0.1	0.13	0.0798			
1/25/2017				0.0747	0.078	
1/26/2017	0.0696	0.127	0.0738			0.142
3/21/2017				0.0722	0.0791	
3/22/2017	0.0346	0.112	0.0755			0.122
5/23/2017				0.0794	0.0846	0.127
5/24/2017	0.0437	0.106	0.0627			
4/3/2018				0.075	0.065	0.1
4/4/2018	0.029	0.083	0.099			
6/5/2018	0.039		0.13	0.071		
6/6/2018		0.09			0.063	0.11
10/2/2018				0.078	0.061	0.11
10/3/2018	0.033	0.087				
10/5/2018			0.076			
3/12/2019					0.062	
3/13/2019	0.024		0.1	0.083		0.1
3/14/2019		0.081				
4/2/2019				0.072		
4/3/2019	0.023	0.077			0.066	0.12
4/5/2019			0.079			
9/24/2019					0.053	
9/25/2019				0.061		
9/26/2019			0.11			
9/27/2019	0.033	0.096				0.11
3/3/2020	0.022	0.092			0.052	
3/4/2020			0.1	0.068		0.11
3/26/2020		0.089				
3/27/2020				0.059	0.059	
3/30/2020			0.08			
3/31/2020	0.026					0.11
9/16/2020				0.068	0.06	
9/17/2020						0.11
9/18/2020	0.043	0.086				
9/21/2020			0.052			
2/10/2021				0.069		
2/12/2021	0.039	0.09				
2/16/2021					0.069	0.11
2/22/2021			0.061			
3/15/2021				0.074	0.063	
3/16/2021	0.035	0.084				0.11
3/17/2021			0.056			
8/16/2021				0.068		
8/17/2021						0.095
8/18/2021	0.04	0.083			0.062	
8/19/2021			0.049			

Time Series

Constituent: Barium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
2/9/2022	0.042	0.075				0.096
2/10/2022			0.053	0.063	0.056	
8/3/2022	0.041	0.086	0.07	0.066	0.06	
8/4/2022						0.091
8/11/2022				0.071		
1/26/2023	0.031	0.076	0.079			0.069
1/27/2023				0.065		
2/1/2023					0.058	

Time Series

Constituent: Barium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		0.087	0.053		0.099	1.5
3/14/2019	0.06			0.44		
4/2/2019		0.08				
4/3/2019	0.05			0.38	0.12	
4/4/2019						1.2
4/8/2019			0.043			
9/25/2019		0.085				
9/26/2019			0.12		0.12	0.95
9/27/2019	0.068			0.39		
3/2/2020		0.099				
3/3/2020				0.42		
3/4/2020	0.069		0.081		0.17	0.95
3/26/2020	0.067			0.45		
3/27/2020		0.093				
3/30/2020			0.056			
3/31/2020					0.11	
4/2/2020						1
9/17/2020		0.096			0.099	
9/18/2020				0.44		1
9/21/2020	0.056		0.053			
2/11/2021		0.093				
2/12/2021	0.051			0.46		
2/16/2021			0.062		0.093	1
3/12/2021						1.1
3/15/2021		0.096				
3/16/2021				0.51		
3/17/2021	0.049		0.055		0.094	
8/17/2021		0.089			0.072	1.1
8/18/2021	0.045					
8/19/2021			0.048	0.58		
2/9/2022	0.042			0.6	0.066	
2/10/2022		0.082	0.048			0.99
8/3/2022			0.053			0.94
8/4/2022	0.05	0.093		0.75	0.062	
1/26/2023	0.039	0.097	0.054	0.65	0.065	
1/27/2023						0.94

Time Series

Constituent: Barium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	0.82	0.089			
3/13/2019			0.056	0.1	0.063
4/2/2019	0.37	0.078			
4/3/2019			0.049	0.09	0.058
9/24/2019		0.081			
9/25/2019			0.046		
9/26/2019	0.15			0.089	0.066
3/2/2020		0.088	0.049		
3/3/2020				0.09	0.043
3/4/2020	0.77				
3/26/2020			0.046		
3/27/2020	0.64			0.086	
3/30/2020		0.08			0.05
9/16/2020		0.076			
9/17/2020			0.043		
9/21/2020	0.18			0.083	0.065
2/10/2021	0.26				
2/15/2021		0.081			0.048
2/16/2021			0.05	0.085	
3/15/2021	0.45	0.078			0.053
3/16/2021			0.046	0.081	
8/16/2021		0.074			
8/17/2021			0.045	0.081	0.057
8/18/2021	0.53				
2/8/2022					0.053
2/9/2022			0.042	0.074	
2/10/2022	0.76	0.072			
8/3/2022		0.081	0.058	0.084	
8/4/2022	0.7				0.064
1/26/2023	0.8	0.076	0.05	0.079	0.044

Time Series

Constituent: Beryllium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	<0.0005	<0.003	<0.0005			
5/23/2016						<0.0005
7/11/2016	<0.0005	0.0001 (J)				
7/12/2016			<0.0005			<0.0005
8/30/2016	<0.0005	<0.003	<0.0005			
9/1/2016						<0.0005
10/19/2016	<0.0005	0.0001 (J)	<0.0005			
10/24/2016						<0.0005
12/6/2016	<0.0005	0.0002 (J)	<0.0005			
12/7/2016						<0.0005
1/24/2017	<0.0005	0.0001 (J)	<0.0005			
1/26/2017						<0.0005
3/21/2017	<0.0005	0.0001 (J)	<0.0005			
3/22/2017						<0.0005
5/22/2017	<0.0005	0.0001 (J)	<0.0005			
5/24/2017						<0.0005
4/2/2018	<0.0005	<0.003				
4/3/2018			<0.0005			
4/4/2018						<0.0005
3/12/2019	<0.0005	0.00017 (J)	<0.0005			
3/13/2019						<0.0005
4/1/2019			<0.0005			
4/2/2019	<0.0005	0.00015 (J)				
4/3/2019						<0.0005
9/23/2019	<0.0005	0.00011 (J)	<0.0005			
9/27/2019						<0.0005
3/2/2020	<0.0005	0.00014 (J)	<0.0005			
3/3/2020						<0.0005
3/25/2020	<0.0005	0.00016 (J)	<0.0005			
4/1/2020						<0.0005
9/15/2020	<0.0005	0.00013 (J)	<0.0005			
9/16/2020				<0.0005	<0.0005	<0.0005
11/10/2020				<0.0005	<0.0005	
12/15/2020				<0.0005	<0.0005	
1/19/2021				<0.0005	<0.0005	
2/8/2021	<0.0005					
2/9/2021		0.00014 (J)	<0.0005	<0.0005	<0.0005	
2/15/2021						<0.0005
3/10/2021	<0.0005				<0.0005	
3/11/2021		8.6E-05 (J)	<0.0005	<0.0005		
3/12/2021						<0.0005
8/11/2021	<0.0005			<0.0005		
8/12/2021		0.00014 (J)	<0.0005			
8/13/2021					<0.0005	
8/17/2021						<0.0005
2/1/2022	<0.0005	0.0002 (J)	<0.0005	<0.0005	<0.0005	
2/9/2022						<0.0005
8/2/2022	<0.0005	0.00019 (J)	<0.0005	<0.0005	<0.0005	
8/3/2022						<0.0005
1/23/2023			<0.0005			
1/24/2023	<0.0005	0.00016 (J)		<0.0005	<0.0005	
1/27/2023						<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				<0.0005	<0.003	
5/23/2016	<0.0005	<0.0005	<0.0005			<0.0005
7/12/2016	<0.0005	<0.0005	<0.0005	<0.0005	<0.003	<0.0005
9/1/2016	<0.0005	<0.0005	<0.0005	<0.0005	<0.003	<0.0005
10/20/2016				<0.0005	<0.003	<0.0005
10/24/2016	<0.0005	<0.0005	<0.0005			
12/6/2016				<0.0005	<0.003	<0.0005
12/7/2016	<0.0005	<0.0005	<0.0005			
1/25/2017				<0.0005	<0.003	
1/26/2017	<0.0005	<0.0005	<0.0005			<0.0005
3/21/2017				<0.0005	<0.003	
3/22/2017	9E-05 (J)	<0.0005	<0.0005			<0.0005
5/23/2017				<0.0005	<0.003	<0.0005
5/24/2017	<0.0005	<0.0005	<0.0005			
4/3/2018				<0.0005	<0.003	<0.0005
4/4/2018	<0.0005	<0.0005	<0.0005			
3/12/2019					<0.003	
3/13/2019	0.0001 (J)		6.2E-05 (J)	<0.0005		<0.0005
3/14/2019		<0.0005				
4/2/2019				<0.0005		
4/3/2019	0.00017 (J)	<0.0005			7.4E-05 (J)	<0.0005
4/5/2019			<0.0005			
9/24/2019					<0.003	
9/25/2019				<0.0005		
9/26/2019			0.00011 (J)			
9/27/2019	8.6E-05 (J)	<0.0005				<0.0005
3/3/2020	0.00012 (J)	<0.0005			<0.003	
3/4/2020			9.3E-05 (J)	7.7E-05 (J)		<0.0005
3/26/2020		<0.0005				
3/27/2020				<0.0005	<0.003	
3/30/2020			9.9E-05 (J)			
3/31/2020	0.00015 (J)					<0.0005
9/16/2020				<0.0005	0.0001 (J)	
9/17/2020						<0.0005
9/18/2020	<0.0005	<0.0005				
9/21/2020			0.00011 (J)			
2/10/2021				8.1E-05 (J)		
2/12/2021	<0.0005	<0.0005				
2/16/2021					7.1E-05 (J)	<0.0005
2/22/2021			9.7E-05 (J)			
3/15/2021				0.00019 (J)	7.8E-05 (J)	
3/16/2021	8.1E-05 (J)	<0.0005				<0.0005
3/17/2021			9E-05 (J)			
8/16/2021				<0.0005		
8/17/2021						<0.0005
8/18/2021	<0.0005	<0.0005			8.7E-05 (J)	
8/19/2021			7.3E-05 (J)			
2/9/2022	<0.0005	<0.0005				<0.0005
2/10/2022			<0.0005	<0.0005	7.1E-05 (J)	
8/3/2022	<0.0005	<0.0005	<0.0005	<0.0005	5.6E-05 (J)	
8/4/2022						<0.0005
8/11/2022				<0.0005		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
1/26/2023	<0.0005	<0.0005	9.9E-05 (J)			<0.0005
1/27/2023				<0.0005		
2/1/2023					5.6E-05 (J)	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		<0.0005	<0.0005		<0.0005	<0.0005
3/14/2019	<0.0005			<0.0005		
4/2/2019		<0.0005				
4/3/2019	<0.0005			<0.0005	<0.0005	
4/4/2019						<0.0005
4/8/2019			<0.0005			
9/25/2019		<0.0005				
9/26/2019			<0.0005		<0.0005	<0.0005
9/27/2019	<0.0005			<0.0005		
3/2/2020		<0.0005				
3/3/2020				<0.0005		
3/4/2020	<0.0005		<0.0005		<0.0005	<0.0005
3/26/2020	<0.0005			<0.0005		
3/27/2020		<0.0005				
3/30/2020			<0.0005			
3/31/2020					<0.0005	
4/2/2020						<0.0005
9/17/2020		<0.0005			<0.0005	
9/18/2020				<0.0005		<0.0005
9/21/2020	<0.0005		<0.0005			
2/11/2021		<0.0005				
2/12/2021	<0.0005			<0.0005		
2/16/2021			<0.0005		<0.0005	<0.0005
3/12/2021						<0.0005
3/15/2021		<0.0005				
3/16/2021				<0.0005		
3/17/2021	<0.0005		<0.0005		<0.0005	
8/17/2021		<0.0005			<0.0005	<0.0005
8/18/2021	5.8E-05 (J)					
8/19/2021			<0.0005	<0.0005		
2/9/2022	<0.0005			<0.0005	<0.0005	
2/10/2022		<0.0005	<0.0005			<0.0005
8/3/2022			<0.0005			<0.0005
8/4/2022	<0.0005	<0.0005		<0.0005	<0.0005	
1/26/2023	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
1/27/2023						<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	<0.0005	<0.0005			
3/13/2019			<0.0005	<0.0005	<0.0005
4/2/2019	<0.0005	<0.0005			
4/3/2019			<0.0005	<0.0005	5.1E-05 (J)
9/24/2019		<0.0005			
9/25/2019			<0.0005		
9/26/2019	<0.0005			<0.0005	<0.0005
3/2/2020		<0.0005	<0.0005		
3/3/2020				<0.0005	<0.0005
3/4/2020	0.00014 (J)				
3/26/2020			<0.0005		
3/27/2020	<0.0005			<0.0005	
3/30/2020		<0.0005			<0.0005
9/16/2020		<0.0005			
9/17/2020			<0.0005		
9/21/2020	<0.0005			<0.0005	<0.0005
2/10/2021	5.4E-05 (J)				
2/15/2021		<0.0005			<0.0005
2/16/2021			<0.0005	<0.0005	
3/15/2021	4.8E-05 (J)	<0.0005			<0.0005
3/16/2021			<0.0005	<0.0005	
8/16/2021		<0.0005			
8/17/2021			<0.0005	<0.0005	<0.0005
8/18/2021	<0.0005				
2/8/2022					<0.0005
2/9/2022			<0.0005	<0.0005	
2/10/2022	<0.0005	<0.0005			
8/3/2022		<0.0005	<0.0005	<0.0005	
8/4/2022	<0.0005				<0.0005
1/26/2023	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	0.0214 (J)	0.0321 (J)	<0.04			
5/23/2016						0.72
7/11/2016	0.0142 (J)	0.0337 (J)				
7/12/2016			0.0074 (J)			0.778
8/30/2016	0.0074 (J)	0.0173 (J)	<0.04			
9/1/2016						0.786
10/19/2016	0.0224 (J)	0.0341 (J)	0.0085 (J)			
10/24/2016						0.831
12/6/2016	0.0211 (J)	0.0326 (J)	0.0085 (J)			
12/7/2016						1.01
1/24/2017	0.0165 (J)	0.0365 (J)	0.01 (J)			
1/26/2017						0.108
3/21/2017	0.0187 (J)	0.0349 (J)	0.0079 (J)			
3/22/2017						0.788
5/22/2017	0.0782	0.0475	0.0131 (J)			
5/24/2017						0.814
10/3/2017	0.0198 (J)	0.0386 (J)	0.0097 (J)			0.871
6/4/2018	0.02 (J)	0.036 (J)	0.017 (J)			
6/5/2018						1.2
10/1/2018	0.013 (J)	0.035 (J)	0.0061 (J)			
10/2/2018						0.62
4/1/2019			0.0066 (J)			
4/2/2019	0.016 (J)	0.034 (J)				
4/3/2019						0.66
9/23/2019	0.021 (J)	0.04 (J)	0.0081 (J)			
9/27/2019						1
3/25/2020	0.025 (J)	0.039 (J)	0.0096 (J)			
4/1/2020						0.23
6/16/2020	0.021 (J)		0.01 (J)			
9/15/2020	0.017 (J)	0.044 (J)	0.0071 (J)			
9/16/2020				0.061 (J)	0.23	1.1
11/10/2020				0.057 (J)	0.29	
12/15/2020				0.052 (J)	0.31	
1/19/2021				0.049 (J)	0.4	
3/10/2021	0.015 (J)				0.39	
3/11/2021		0.056	0.015 (J)	0.06		
3/12/2021						0.64
8/11/2021	0.02 (J)			0.042		
8/12/2021		0.044	<0.04			
8/13/2021					0.31	
8/17/2021						0.88
2/1/2022	0.016 (J)	0.056	0.011 (J)	0.05	0.44	
2/9/2022						0.1
8/2/2022	0.012 (J)	0.047	<0.04	0.043	0.31	
8/3/2022						0.53
1/23/2023			0.012 (J)			
1/24/2023	0.015 (J)	0.046		0.037 (J)	0.44	
1/27/2023						0.065

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				0.885	1.71	
5/23/2016	0.787	2.2	2.15			1.76
7/12/2016	1.17	1.98	1.91	0.857	1.43	1.56
9/1/2016	1.49	2.28	2.3	0.904	1.91	2
10/20/2016				0.936	1.72	1.68
10/24/2016	2.54	2.75	4.01			
12/6/2016				1.06	2.06	2.15
12/7/2016	2.96	3.35	3.85			
1/25/2017				0.764	2.01	
1/26/2017	2.23	3.07	2.45			1.87
3/21/2017				0.857	2.08	
3/22/2017	0.84	3.04	1.99			1.99
5/23/2017				0.91	2.32	2.29
5/24/2017	2.29	2.95	1.74			
10/3/2017	1.47	2.35	1.43	0.967	2.84	2.05
6/5/2018	1.3		1.3	0.86		
6/6/2018		2.5			2.6	2.3
10/2/2018				0.98	2.7	2.5
10/3/2018	0.91	2.3				
10/5/2018			1.6			
4/2/2019				0.99		
4/3/2019	0.23	1.8			2.8	2.3
4/5/2019			0.86 (J)			
9/24/2019					2.8	
9/25/2019				1.1		
9/26/2019			1.7			
9/27/2019	0.53	2.1				2.9
3/26/2020		1.6				
3/27/2020				1.2	2.4	
3/30/2020			1.8			
3/31/2020	0.17					2.2
6/16/2020					2.2	
6/17/2020				1		
9/16/2020				1.1	1.9	
9/17/2020						2
9/18/2020	0.91	1.6				
9/21/2020			1.6			
3/15/2021				1.1	1.7	
3/16/2021	0.53	1.9				2.2
3/17/2021			0.89			
8/16/2021				1.1		
8/17/2021						2.3
8/18/2021	0.91	1.9			1.8	
8/19/2021			0.73			
2/9/2022	1	2				2.3
2/10/2022			1	1.3	1.7	
8/3/2022	0.64	1.5	0.76	1.1	1.5	
8/4/2022						2
8/11/2022				1.1		
1/26/2023	0.5	1.5	0.83			1.9
1/27/2023				0.93		
2/1/2023					1.9	

Time Series

Constituent: Boron (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
4/2/2019		0.11				
4/3/2019	0.63			0.37	1.5	
4/4/2019						0.12 (J)
4/8/2019			0.47 (J)			
9/25/2019		0.091				
9/26/2019			0.49		2	0.14
9/27/2019	0.58			0.36		
3/26/2020	1			0.44		
3/27/2020		0.12				
3/30/2020			0.51			
3/31/2020					1.8	
4/2/2020						0.13
9/17/2020		0.11			2	
9/18/2020				0.36		0.12
9/21/2020	0.89		0.45			
3/12/2021						0.13
3/15/2021		0.12				
3/16/2021				0.4		
3/17/2021	0.69		0.49		2.1	
8/17/2021		0.11			2.2	0.14
8/18/2021	0.55					
8/19/2021			0.52	0.4		
2/9/2022	0.49			0.43	2.3	
2/10/2022		0.13	0.55			0.13
8/3/2022			0.49			0.12
8/4/2022	0.58	0.11		0.35	2	
1/26/2023	0.36	0.099	0.47	0.3	1.8	
1/27/2023						0.12

Time Series

Constituent: Boron (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
4/2/2019	0.17	1.2			
4/3/2019			0.03 (J)	0.67	0.094
9/24/2019		1.2			
9/25/2019			0.11		
9/26/2019	0.6			0.93	0.26
3/26/2020			0.041 (J)		
3/27/2020	0.14			0.77	
3/30/2020		1.3			0.051 (J)
9/16/2020		1.7			
9/17/2020			0.067 (J)		
9/21/2020	0.45			0.82	0.2
3/15/2021	0.36	1.2			0.16
3/16/2021			0.037 (J)	0.81	
8/16/2021		1.1			
8/17/2021			0.026 (J)	0.85	0.2
8/18/2021	0.72				
2/8/2022					0.19
2/9/2022			0.042	0.96	
2/10/2022	0.23	1.4			
8/3/2022		1.1	0.034 (J)	0.75	
8/4/2022	0.55				0.14
1/26/2023	0.29	1	0.044	0.71	0.033 (J)

Time Series

Constituent: Cadmium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	<0.0005	<0.0005	<0.0005			
5/23/2016						0.000115 (J)
7/11/2016	<0.0005	<0.0005				
7/12/2016			<0.0005			<0.0005
8/30/2016	<0.0005	<0.0005	<0.0005			
9/1/2016						0.0001 (J)
10/19/2016	<0.0005	<0.0005	<0.0005			
10/24/2016						0.0001 (J)
12/6/2016	<0.0005	<0.0005	<0.0005			
12/7/2016						0.0001 (J)
1/24/2017	<0.0005	0.0001 (J)	<0.0005			
1/26/2017						<0.0005
3/21/2017	<0.0005	7E-05 (J)	<0.0005			
3/22/2017						0.0001 (J)
5/22/2017	<0.0005	0.0001 (J)	<0.0005			
5/24/2017						0.0002 (J)
4/2/2018	<0.0005	<0.0005				
4/3/2018			<0.0005			
4/4/2018						<0.0005
3/12/2019	<0.0005	0.00013 (J)	<0.0005			
3/13/2019						<0.0005
4/1/2019			<0.0005			
4/2/2019	<0.0005	0.00015 (J)				
4/3/2019						0.0001 (J)
9/23/2019	<0.0005	<0.0005	<0.0005			
9/27/2019						<0.0005
3/2/2020	<0.0005	<0.0005	<0.0005			
3/3/2020						<0.0005
3/25/2020	<0.0005	0.00014 (J)	<0.0005			
4/1/2020						<0.0005
9/15/2020	<0.0005	0.00012 (J)	<0.0005			
9/16/2020				<0.0005	<0.0005	<0.0005
11/10/2020				<0.0005	<0.0005	
12/15/2020				<0.0005	<0.0005	
1/19/2021				<0.0005	<0.0005	
2/8/2021	<0.0005					
2/9/2021		0.00016 (J)	<0.0005	<0.0005	<0.0005	
2/15/2021						<0.0005
3/10/2021	<0.0005				<0.0005	
3/11/2021		<0.0005	<0.0005	<0.0005		
3/12/2021						<0.0005
8/11/2021	<0.0005			<0.0005		
8/12/2021		0.00014 (J)	<0.0005			
8/13/2021					<0.0005	
8/17/2021						<0.0005
2/1/2022	<0.0005	0.00017 (J)	<0.0005	<0.0005	<0.0005	
2/9/2022						<0.0005
8/2/2022	<0.0005	0.00023 (J)	<0.0005	<0.0005	<0.0005	
8/3/2022						<0.0005
1/23/2023			<0.0005			
1/24/2023	<0.0005	0.00021 (J)		<0.0005	<0.0005	
1/27/2023						<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				<0.0005	0.00024 (J)	
5/23/2016	<0.0005	<0.0005	<0.0005			<0.0005
7/12/2016	<0.0005	<0.0005	<0.0005	<0.0005	0.0002 (J)	<0.0005
9/1/2016	<0.0005	<0.0005	<0.0005	<0.0005	0.0001 (J)	<0.0005
10/20/2016				<0.0005	0.0001 (J)	0.0002 (J)
10/24/2016	<0.0005	<0.0005	<0.0005			
12/6/2016				0.0002 (J)	0.0017	0.0001 (J)
12/7/2016	0.0001 (J)	0.0002 (J)	<0.0005			
1/25/2017				0.0002 (J)	0.0002 (J)	
1/26/2017	<0.0005	<0.0005	<0.0005			<0.0005
3/21/2017				0.0002 (J)	0.0002 (J)	
3/22/2017	0.0001 (J)	0.0003 (J)	<0.0005			7E-05 (J)
5/23/2017				0.0001 (J)	0.0003 (J)	<0.0005
5/24/2017	<0.0005	9E-05 (J)	<0.0005			
4/3/2018				<0.0005	<0.001	<0.0005
4/4/2018	<0.0005	<0.0005	<0.0005			
3/12/2019					0.0002 (J)	
3/13/2019	<0.0005		<0.0005	<0.0005		<0.0005
3/14/2019		<0.0005				
4/2/2019				<0.0005		
4/3/2019	9.6E-05 (J)	<0.0005			0.00032 (J)	<0.0005
4/5/2019			<0.0005			
9/24/2019					0.0002 (J)	
9/25/2019				<0.0005		
9/26/2019			<0.0005			
9/27/2019	<0.0005	<0.0005				<0.0005
3/3/2020	<0.0005	0.00015 (J)			0.00017 (J)	
3/4/2020			<0.0005	<0.0005		<0.0005
3/26/2020		<0.0005				
3/27/2020				<0.0005	0.00014 (J)	
3/30/2020			<0.0005			
3/31/2020	<0.0005					<0.0005
9/16/2020				<0.0005	0.00023 (J)	
9/17/2020						<0.0005
9/18/2020	<0.0005	<0.0005				
9/21/2020			<0.0005			
2/10/2021				<0.0005		
2/12/2021	<0.0005	<0.0005				
2/16/2021					0.00037 (J)	<0.0005
2/22/2021			<0.0005			
3/15/2021				<0.0005	0.00017 (J)	
3/16/2021	<0.0005	<0.0005				<0.0005
3/17/2021			<0.0005			
8/16/2021				<0.0005		
8/17/2021						<0.0005
8/18/2021	<0.0005	<0.0005			0.0002 (J)	
8/19/2021			<0.0005			
2/9/2022	<0.0005	<0.0005				<0.0005
2/10/2022			<0.0005	<0.0005	0.00029 (J)	
8/3/2022	<0.0005	<0.0005	<0.0005	<0.0005	0.00017 (J)	
8/4/2022						<0.0005
8/11/2022				<0.0005		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
1/26/2023	<0.0005	<0.0005	<0.0005			<0.0005
1/27/2023				0.00019 (J)		
2/1/2023					0.00014 (J)	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		<0.0005	<0.0005		<0.0005	<0.0005
3/14/2019	<0.0005			<0.0005		
4/2/2019		<0.0005				
4/3/2019	<0.0005			<0.0005	<0.0005	
4/4/2019						<0.0005
4/8/2019			<0.0005			
9/25/2019		<0.0005				
9/26/2019			<0.0005		<0.0005	<0.0005
9/27/2019	0.00013 (J)			<0.0005		
3/2/2020		<0.0005				
3/3/2020				<0.0005		
3/4/2020	0.00026 (J)		<0.0005		<0.0005	<0.0005
3/26/2020	0.00019 (J)			<0.0005		
3/27/2020		<0.0005				
3/30/2020			<0.0005			
3/31/2020					<0.0005	
4/2/2020						<0.0005
9/17/2020		<0.0005			<0.0005	
9/18/2020				<0.0005		<0.0005
9/21/2020	0.00018 (J)		<0.0005			
2/11/2021		<0.0005				
2/12/2021	0.0002 (J)			<0.0005		
2/16/2021			<0.0005		<0.0005	<0.0005
3/12/2021						<0.0005
3/15/2021		<0.0005				
3/16/2021				<0.0005		
3/17/2021	0.00016 (J)		<0.0005		<0.0005	
8/17/2021		<0.0005			<0.0005	<0.0005
8/18/2021	0.00027 (J)					
8/19/2021			<0.0005	<0.0005		
2/9/2022	0.0011			<0.0005	<0.0005	
2/10/2022		<0.0005	<0.0005			<0.0005
8/3/2022			<0.0005			<0.0005
8/4/2022	0.00022 (J)	<0.0005		<0.0005	<0.0005	
1/26/2023	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
1/27/2023						<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	<0.0005	<0.0005			
3/13/2019			<0.0005	<0.0005	<0.0005
4/2/2019	<0.0005	<0.0005			
4/3/2019			<0.0005	<0.0005	<0.0005
9/24/2019		<0.0005			
9/25/2019			<0.0005		
9/26/2019	<0.0005			<0.0005	<0.0005
3/2/2020		<0.0005	<0.0005		
3/3/2020				<0.0005	<0.0005
3/4/2020	<0.0005				
3/26/2020			<0.0005		
3/27/2020	<0.0005			<0.0005	
3/30/2020		<0.0005			<0.0005
9/16/2020		<0.0005			
9/17/2020			<0.0005		
9/21/2020	<0.0005			<0.0005	<0.0005
2/10/2021	<0.0005				
2/15/2021		<0.0005			<0.0005
2/16/2021			<0.0005	<0.0005	
3/15/2021	<0.0005	<0.0005			<0.0005
3/16/2021			<0.0005	<0.0005	
8/16/2021		<0.0005			
8/17/2021			<0.0005	<0.0005	<0.0005
8/18/2021	<0.0005				
2/8/2022					<0.0005
2/9/2022			<0.0005	<0.0005	
2/10/2022	<0.0005	<0.0005			
8/3/2022		<0.0005	<0.0005	<0.0005	
8/4/2022	<0.0005				<0.0005
1/26/2023	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Calcium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	138	22.9	76.2			
5/23/2016						167
7/11/2016	97.2	22.3				
7/12/2016			61.5			143
8/30/2016	97.5	26.4	65.1			
9/1/2016						156
10/19/2016	99.2	21.7	73.2			
10/24/2016						156
12/6/2016	105	18.2	74.9			
12/7/2016						183
1/24/2017	95.7	18.5	69.6			
1/26/2017						82.6
3/21/2017	106	18.6	75.7			
3/22/2017						154
5/22/2017	107	17.8	71.5			
5/24/2017						171
10/3/2017	102	20.2	76.3			162
6/4/2018	124	19.1	73.4			
6/5/2018						167
10/1/2018	108	20.5 (J)	80.9			
10/2/2018						144
4/1/2019			80.5			
4/2/2019	132	22.5 (J)				
4/3/2019						137
9/23/2019	118	19.5	71			
9/27/2019						157
3/25/2020	127	23	89.8			
4/1/2020						96.2
6/16/2020	130		85.1			
9/15/2020	103	21.1	73.1			
9/16/2020				56	30	139
11/10/2020				63.3	33.6	
12/15/2020				62.6	28.7	
1/19/2021				60.1	33	
3/10/2021	111				5.9	
3/11/2021		43.8	83.8	59.6		
3/12/2021						146 (M1)
8/11/2021	113			61		
8/12/2021		21.9	84			
8/13/2021					28.9	
8/17/2021						153
2/1/2022	106	27.2	85.1	55.9	24.8	
2/9/2022						76.8
8/2/2022	117	31.2	84.6	54.1	20.9	
8/3/2022						125
1/23/2023			85			
1/24/2023	117	29.4		56.6	13.2	
1/27/2023						60.4

Time Series

Constituent: Calcium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				117	159	
5/23/2016	131	195	133			179
7/12/2016	124	181	101	88.8	127	174
9/1/2016	107	179	120	96.3	135	170
10/20/2016				96.9	134	133
10/24/2016	145	193	127			
12/6/2016				104	142	181
12/7/2016	159	193	113			
1/25/2017				94.5	142	
1/26/2017	121	172	77.9			175
3/21/2017				109	148	
3/22/2017	130	162	85.1			183
5/23/2017				93.3	140	181
5/24/2017	117	158	77.1			
10/3/2017	87.7	130	62	108	158	188
6/5/2018	113		110	99.8		
6/6/2018		136			127	184
10/2/2018				108	118	173
10/3/2018	89	125				
10/5/2018			73.6			
4/2/2019				101		
4/3/2019	112	114			125	164
4/5/2019			77.1			
9/24/2019					113	
9/25/2019				105		
9/26/2019			195			
9/27/2019	113	153				175
3/26/2020		145				
3/27/2020				119	133	
3/30/2020			234			
3/31/2020	124					182
6/16/2020					120	
6/17/2020				112		
9/16/2020				98	119	
9/17/2020						164
9/18/2020	122	163				
9/21/2020			173			
3/15/2021				113	156	
3/16/2021	132	166				182
3/17/2021			184			
8/16/2021				112		
8/17/2021						183
8/18/2021	128	163			147	
8/19/2021			179			
2/9/2022	144	172				183
2/10/2022			206	108	153	
8/3/2022	131	167	237	125	153	
8/4/2022						196
8/11/2022				119		
1/26/2023	113	154	234			173
1/27/2023				124		
2/1/2023					110	

Time Series

Constituent: Calcium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
4/2/2019		109				
4/3/2019	74.9			25.4	122	
4/4/2019						26.3
4/8/2019			83			
9/25/2019		113				
9/26/2019			83.1		158	32.1
9/27/2019	90			26.4		
3/26/2020	171			27		
3/27/2020		126				
3/30/2020			84.4			
3/31/2020					155	
4/2/2020						28.4
9/17/2020		110			150	
9/18/2020				25.1		24.8
9/21/2020	135		87.6			
3/12/2021						28
3/15/2021		121				
3/16/2021				24.8		
3/17/2021	130		102		175	
8/17/2021		123			177	28.5
8/18/2021	125					
8/19/2021			99.5	23.8		
2/9/2022	97.6			23.5	176	
2/10/2022		123	110			31.4
8/3/2022			102			30.8
8/4/2022	187	131		22	186	
1/26/2023	118	122	107	21.8	179	
1/27/2023						28.1

Time Series

Constituent: Calcium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
4/2/2019	64.6	131			
4/3/2019			82	178	50.2
9/24/2019		140			
9/25/2019			105		
9/26/2019	84			189	83.9
3/26/2020			89.6		
3/27/2020	53			186	
3/30/2020		148			31.1
9/16/2020		126			
9/17/2020			103		
9/21/2020	76.8			173	75.3
3/15/2021	66.1	145			76.9
3/16/2021			71.8	184	
8/16/2021		140			
8/17/2021			73.3	181	90.7
8/18/2021	82.8				
2/8/2022					73.3
2/9/2022			68.1	178	
2/10/2022	58.5	156			
8/3/2022		143	86.6	176	
8/4/2022	76.7				73.1
1/26/2023	64.4	146	76.1	180	21.6

Time Series

Constituent: Chloride (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	9.94	6.14	5.93			
5/23/2016						56.1
7/11/2016	6.3	5.9				
7/12/2016			6.2			63
8/30/2016	6	6.2	6.4			
9/1/2016						77
10/19/2016	5.8	6.1	6.5			
10/24/2016						99
12/6/2016	5.4	6	7.2			
12/7/2016						96
1/24/2017	5.2	6.1	6.4			
1/26/2017						7
3/21/2017	4.6	5.9	7.5			
3/22/2017						82
5/22/2017	4.6	5.9	6.5			
5/24/2017						81
10/3/2017	5.6	6.3	6.5			100
6/4/2018	13.1	6.1	6.3			
6/5/2018						66.6
10/1/2018	6.6	6.4	6.4			
10/2/2018						48.3
4/1/2019			6.5			
4/2/2019	20.3	5.8				
4/3/2019						49.3
9/23/2019	17.7	5.1	5.9			
9/27/2019						49.9
3/25/2020	20.4	5.2	6.1			
4/1/2020						5.4
6/16/2020	41.1		5.8			
9/15/2020	13.4	5	6			
9/16/2020				4.1	7.2	39.7
11/10/2020				4.4	7.8	
12/15/2020				4.7	9.4	
1/19/2021				4.1	9.5	
3/10/2021	7.4				12.3	
3/11/2021		5.1	5.9	4.5		
3/12/2021						35
8/11/2021	9.6			3.5		
8/12/2021		5.2	4.8			
8/13/2021					39.9	
8/17/2021						28.3
2/1/2022	7.5	7	5.7	4.1	44.8	
2/9/2022						1.2
8/2/2022	14.1	7.8	5.9	4.3	19.8	
8/3/2022						12.3
1/23/2023			5.6			
1/24/2023	9	7.1		4.3	24.9	
1/27/2023						1.6

Time Series

Constituent: Chloride (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				50.4	109	
5/23/2016	51.9	160	93.2			152
7/12/2016	100	160	78	50	110	160
9/1/2016	58	140	100	50	110	160
10/20/2016				49	110	110
10/24/2016	220	160	140			
12/6/2016				51	100	150
12/7/2016	180	190	110			
1/25/2017				54	110	
1/26/2017	90	160	70			170
3/21/2017				46	110	
3/22/2017	37	130	59			160
5/23/2017				49	130	150
5/24/2017	69	120	50			
10/3/2017	28	93	29	52	130	160
6/5/2018	56.1		72.3	52.3		
6/6/2018		46.4			44.8	138
10/2/2018				52.6	89.4	142
10/3/2018	24.8	88.4				
10/5/2018			32.3			
4/2/2019				55.5		
4/3/2019	4.6	62.8			91.6	130
4/5/2019			36.4			
9/24/2019					60.2	
9/25/2019				49.8		
9/26/2019			109			
9/27/2019	27.9	81				126
3/26/2020		48				
3/27/2020				48.3	79.8	
3/30/2020			75.1			
3/31/2020	3.2					105
6/16/2020					67.9	
6/17/2020				45.2		
9/16/2020				46.4	74.6	
9/17/2020						105
9/18/2020	34.9	74.6				
9/21/2020			41.2			
3/15/2021				44.5	72.4	
3/16/2021	11.5	56.8				94.7
3/17/2021			31.4			
8/16/2021				40.3		
8/17/2021						88.6
8/18/2021	19.9	47.3			50.9	
8/19/2021			24.4			
2/9/2022	20.4	46.8				84.4
2/10/2022			17.4	39.8	48.2	
8/3/2022	13.8	39.2	13	37.9	54.1	
8/4/2022						86.8
8/11/2022				37.7		
1/26/2023	8.8	34.6	12.5			86.9
1/27/2023				40		
2/1/2023					52.4	

Time Series

Constituent: Chloride (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
4/2/2019		27.5				
4/3/2019	19.5			32	90.6	
4/4/2019						26.9
4/8/2019			43.3			
9/25/2019		25.7				
9/26/2019			39.7		118	31.8
9/27/2019	46.2			36.2		
3/26/2020	64			34.6		
3/27/2020		28.8				
3/30/2020			37.4			
3/31/2020					98	
4/2/2020						27.9
9/17/2020		29.7			103	
9/18/2020				33.4		30.4
9/21/2020	35		45.2			
3/12/2021						31.3
3/15/2021		31.1				
3/16/2021				29.2		
3/17/2021	19.8		42.9		95.3	
8/17/2021		28.3			89.2	30
8/18/2021	14.3					
8/19/2021			37.2	30.8		
2/9/2022	10.2			26.5	85.7	
2/10/2022		31.4	38.2			31.4
8/3/2022			39.6			36.7
8/4/2022	11.3	31.4		20.5	88.5	
1/26/2023	7.7	30	38	17.2	83.6	
1/27/2023						32.5

Time Series

Constituent: Chloride (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
4/2/2019	44	80.9			
4/3/2019			1.8	60.9	5.6
9/24/2019		83.8			
9/25/2019			35.9		
9/26/2019	43.5			64.9	15.6
3/26/2020			0.73 (J)		
3/27/2020	33			48.6	
3/30/2020		71.2			1.5
9/16/2020		75.3			
9/17/2020			28.7		
9/21/2020	42.9			58.1	11.1
3/15/2021	35.8	73.6			6.8
3/16/2021			1.4	49.8	
8/16/2021		68			
8/17/2021			1.4	43.5	8.9
8/18/2021	33.7				
2/8/2022					6.9
2/9/2022			0.74 (J)	37.9	
2/10/2022	29	66			
8/3/2022		63.5	4.4	39.6	
8/4/2022	33.3				4.7
1/26/2023	27.7	62.4	0.86 (J)	30.5	1.2

Time Series

Constituent: Chromium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	<0.005	<0.005	<0.005			
5/23/2016						<0.005
7/11/2016	<0.005	<0.005				
7/12/2016			<0.005			<0.005
8/30/2016	<0.005	<0.005	<0.005			
9/1/2016						<0.005
10/19/2016	<0.005	<0.005	<0.005			
10/24/2016						<0.005
12/6/2016	<0.005	<0.005	<0.005			
12/7/2016						<0.005
1/24/2017	<0.005	<0.005	<0.005			
1/26/2017						<0.005
3/21/2017	0.0005 (J)	<0.005	<0.005			
3/22/2017						<0.005
5/22/2017	<0.005	<0.005	0.0007 (J)			
5/24/2017						<0.005
4/2/2018	<0.005	<0.005				
4/3/2018			<0.005			
4/4/2018						<0.005
3/12/2019	<0.005	<0.005	<0.005			
3/13/2019						<0.005
4/1/2019			<0.005			
4/2/2019	<0.005	0.0079 (J)				
4/3/2019						0.02
9/23/2019	<0.005	0.00058 (J)	<0.005			
9/27/2019						<0.005
3/2/2020	<0.005	0.00041 (J)	<0.005			
3/3/2020						<0.005
3/25/2020	0.00072 (J)	<0.005	<0.005			
4/1/2020						<0.005
9/15/2020	<0.005	<0.005	<0.005			
9/16/2020				<0.005	0.0012 (J)	<0.005
11/10/2020				<0.005	0.00089 (J)	
12/15/2020				<0.005	0.00072 (J)	
1/19/2021				<0.005	0.0011 (J)	
2/8/2021	<0.005					
2/9/2021		<0.005	<0.005	0.00095 (J)	0.00066 (J)	
2/15/2021						<0.005
3/10/2021	<0.005				<0.005	
3/11/2021		<0.005	<0.005	<0.005		
3/12/2021						<0.005
8/11/2021	<0.005			<0.005		
8/12/2021		<0.005	<0.005			
8/13/2021					0.0016 (J)	
8/17/2021						<0.005
2/1/2022	<0.005	<0.005	<0.005	<0.005	0.0013 (J)	
2/9/2022						0.0011 (J)
8/2/2022	<0.005	<0.005	<0.005	<0.005	<0.005	
8/3/2022						<0.005
1/23/2023			<0.005			
1/24/2023	<0.005	<0.005		<0.005	<0.005	
1/27/2023						0.0012 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				<0.005	<0.005	
5/23/2016	<0.005	<0.005	<0.005			<0.005
7/12/2016	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
9/1/2016	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
10/20/2016				<0.005	<0.005	<0.005
10/24/2016	<0.005	<0.005	<0.005			
12/6/2016				<0.005	<0.005	<0.005
12/7/2016	<0.005	<0.005	<0.005			
1/25/2017				<0.005	<0.005	
1/26/2017	<0.005	<0.005	<0.005			<0.005
3/21/2017				<0.005	0.0005 (J)	
3/22/2017	0.0003 (J)	0.0004 (J)	0.0004 (J)			<0.005
5/23/2017				<0.005	<0.005	<0.005
5/24/2017	<0.005	<0.005	<0.005			
4/3/2018				<0.005	<0.005	<0.005
4/4/2018	<0.005	<0.005	<0.005			
3/12/2019					<0.005	
3/13/2019	<0.005		<0.005	<0.005		<0.005
3/14/2019		0.0025 (J)				
4/2/2019				<0.005		
4/3/2019	<0.005	<0.005			<0.005	<0.005
4/5/2019			<0.005			
9/24/2019					<0.005	
9/25/2019				0.071		
9/26/2019			<0.005			
9/27/2019	<0.005	<0.005				<0.005
3/3/2020	0.00061 (J)	<0.005			0.0007 (J)	
3/4/2020			<0.005	0.0016 (J)		<0.005
3/26/2020		<0.005				
3/27/2020				0.0004 (J)	<0.005	
3/30/2020			0.00059 (J)			
3/31/2020	<0.005					0.00052 (J)
9/16/2020				0.00074 (J)	0.0015 (J)	
9/17/2020						<0.005
9/18/2020	<0.005	0.00091 (J)				
9/21/2020			0.00056 (J)			
2/10/2021				0.0014 (J)		
2/12/2021	<0.005	<0.005				
2/16/2021					<0.005	0.00067 (J)
2/22/2021			<0.005			
3/15/2021				0.0021 (J)	0.00082 (J)	
3/16/2021	<0.005	<0.005				<0.005
3/17/2021			<0.005			
8/16/2021				<0.005		
8/17/2021						<0.005
8/18/2021	<0.005	<0.005			<0.005	
8/19/2021			<0.005			
2/9/2022	<0.005	<0.005				0.0011 (J)
2/10/2022			<0.005	<0.005	<0.005	
8/3/2022	<0.005	<0.005	<0.005	<0.005	<0.005	
8/4/2022						<0.005
8/11/2022				<0.005		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
1/26/2023	0.0012 (J)	<0.005	<0.005			0.0013 (J)
1/27/2023				0.0014 (J)		
2/1/2023					<0.005	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		<0.005	<0.005		<0.005	<0.005
3/14/2019	<0.005			<0.005		
4/2/2019		<0.005				
4/3/2019	<0.005			<0.005	<0.005	
4/4/2019						<0.005
4/8/2019			<0.005			
9/25/2019		<0.005				
9/26/2019			0.00042 (J)		0.00076 (J)	<0.005
9/27/2019	<0.005			<0.005		
3/2/2020		0.00071 (J)				
3/3/2020				<0.005		
3/4/2020	0.00066 (J)		<0.005		0.0028 (J)	<0.005
3/26/2020	0.00047 (J)			0.00061 (J)		
3/27/2020		0.00051 (J)				
3/30/2020			<0.005			
3/31/2020					0.001 (J)	
4/2/2020						<0.005
9/17/2020		<0.005			<0.005	
9/18/2020				<0.005		0.0007 (J)
9/21/2020	0.0014 (J)		<0.005			
2/11/2021		<0.005				
2/12/2021	0.00059 (J)			<0.005		
2/16/2021			<0.005		0.001 (J)	0.00082 (J)
3/12/2021						<0.005
3/15/2021		0.00068 (J)				
3/16/2021				<0.005		
3/17/2021	0.0022 (J)		0.0017 (J)		0.0015 (J)	
8/17/2021		<0.005			<0.005	<0.005
8/18/2021	<0.005					
8/19/2021			<0.005	<0.005		
2/9/2022	<0.005			<0.005	<0.005	
2/10/2022		<0.005	<0.005			<0.005
8/3/2022			<0.005			<0.005
8/4/2022	<0.005	<0.005		<0.005	<0.005	
1/26/2023	0.0011 (J)	<0.005	<0.005	0.0012 (J)	<0.005	
1/27/2023						<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	<0.005	<0.005			
3/13/2019			0.003 (J)	<0.005	<0.005
4/2/2019	<0.005	<0.005			
4/3/2019			0.003 (J)	<0.005	0.0023 (J)
9/24/2019		<0.005			
9/25/2019			0.0052 (J)		
9/26/2019	0.00081 (J)			<0.005	0.0013 (J)
3/2/2020		<0.005	0.0042 (J)		
3/3/2020				0.00044 (J)	0.0015 (J)
3/4/2020	0.0027 (J)				
3/26/2020			0.0044 (J)		
3/27/2020	<0.005			0.00059 (J)	
3/30/2020		0.001 (J)			0.0021 (J)
9/16/2020		<0.005			
9/17/2020			0.0021 (J)		
9/21/2020	0.00085 (J)			<0.005	0.0017 (J)
2/10/2021	0.0014 (J)				
2/15/2021		<0.005			0.0015 (J)
2/16/2021			0.0032 (J)	<0.005	
3/15/2021	0.00078 (J)	<0.005			0.0018 (J)
3/16/2021			0.0024 (J)	<0.005	
8/16/2021		<0.005			
8/17/2021			0.0018 (J)	<0.005	<0.005
8/18/2021	<0.005				
2/8/2022					0.0016 (J)
2/9/2022			0.0031 (J)	<0.005	
2/10/2022	0.0011 (J)	<0.005			
8/3/2022		<0.005	0.0015 (J)	<0.005	
8/4/2022	<0.005				0.002 (J)
1/26/2023	<0.005	<0.005	0.0032 (J)	0.0014 (J)	0.0017 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	<0.005	0.0293	<0.005			
5/23/2016						<0.005
7/11/2016	0.0004 (J)	0.0267				
7/12/2016			<0.005			0.0006 (J)
8/30/2016	<0.005	0.028	<0.005			
9/1/2016						0.0007 (J)
10/19/2016	<0.005	0.0201	<0.005			
10/24/2016						0.0009 (J)
12/6/2016	<0.005	0.0184	<0.005			
12/7/2016						0.0012 (J)
1/24/2017	<0.005	0.0206	<0.005			
1/26/2017						<0.005
3/21/2017	<0.005	0.0251	<0.005			
3/22/2017						0.0006 (J)
5/22/2017	<0.005	0.0263	<0.005			
5/24/2017						0.0006 (J)
4/2/2018	<0.005	0.019				
4/3/2018			<0.005			
4/4/2018						<0.005
3/12/2019	<0.005	0.017	<0.005			
3/13/2019						<0.005
4/1/2019			<0.005			
4/2/2019	<0.005	0.019				
4/3/2019						<0.005
9/23/2019	<0.005	0.038	<0.005			
9/27/2019						<0.005
3/2/2020	<0.005	0.019	<0.005			
3/3/2020						<0.005
3/25/2020	<0.005	0.02	<0.005			
4/1/2020						<0.005
9/15/2020	<0.005	0.021	<0.005			
9/16/2020				<0.005	<0.005	<0.005
11/10/2020				<0.005	<0.005	
12/15/2020				<0.005	<0.005	
1/19/2021				<0.005	<0.005	
2/8/2021	<0.005					
2/9/2021		0.02	<0.005	<0.005	<0.005	
2/15/2021						<0.005
3/10/2021	<0.005				<0.005	
3/11/2021		0.013	<0.005	<0.005		
3/12/2021						<0.005
8/11/2021	<0.005			<0.005		
8/12/2021		0.022	<0.005			
8/13/2021					<0.005	
8/17/2021						<0.005
2/1/2022	<0.005	0.025	<0.005	<0.005	<0.005	
2/9/2022						<0.005
8/2/2022	0.00054 (J)	0.024	<0.005	<0.005	<0.005	
8/3/2022						<0.005
1/23/2023			<0.005			
1/24/2023	<0.005	0.024		<0.005	<0.005	
1/27/2023						<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				<0.005	0.00207 (J)	
5/23/2016	<0.005	<0.005	0.00361 (J)			<0.005
7/12/2016	0.0021 (J)	0.0018 (J)	0.0032 (J)	0.0003 (J)	0.0019 (J)	0.0006 (J)
9/1/2016	0.0025 (J)	0.0016 (J)	0.0033 (J)	<0.005	0.0023 (J)	0.0007 (J)
10/20/2016				0.0008 (J)	0.002 (J)	0.002 (J)
10/24/2016	0.0032 (J)	0.0017 (J)	0.004 (J)			
12/6/2016				0.0009 (J)	0.0026 (J)	0.0011 (J)
12/7/2016	0.003 (J)	0.0021 (J)	0.0034 (J)			
1/25/2017				0.0005 (J)	0.002 (J)	
1/26/2017	0.0014 (J)	0.0016 (J)	0.0024 (J)			0.0006 (J)
3/21/2017				0.0005 (J)	0.0023 (J)	
3/22/2017	0.0014 (J)	0.0018 (J)	0.0026 (J)			0.0005 (J)
5/23/2017				0.0005 (J)	0.0023 (J)	0.0006 (J)
5/24/2017	0.0008 (J)	0.0015 (J)	0.0022 (J)			
4/3/2018				<0.005	<0.005	<0.005
4/4/2018	<0.005	<0.005	<0.005			
3/12/2019					0.002 (J)	
3/13/2019	0.00098 (J)		0.0022 (J)	0.00067 (J)		0.00065 (J)
3/14/2019		0.0011 (J)				
4/2/2019				0.00069 (J)		
4/3/2019	0.0018 (J)	0.0011 (J)			0.0019 (J)	0.00069 (J)
4/5/2019			0.0017 (J)			
9/24/2019					0.0015 (J)	
9/25/2019				0.0026 (J)		
9/26/2019			0.0042 (J)			
9/27/2019	0.00071 (J)	0.0012 (J)				0.00057 (J)
3/3/2020	0.00087 (J)	0.0013 (J)			0.002 (J)	
3/4/2020			0.0066	0.0011 (J)		0.00053 (J)
3/26/2020		0.0012 (J)				
3/27/2020				0.00074 (J)	0.0018 (J)	
3/30/2020			0.0053			
3/31/2020	0.0014 (J)					0.00051 (J)
9/16/2020				0.00065 (J)	0.0019 (J)	
9/17/2020						0.0007 (J)
9/18/2020	<0.005	0.0014 (J)				
9/21/2020			0.0032 (J)			
2/10/2021				0.00081 (J)		
2/12/2021	<0.005	0.0012 (J)				
2/16/2021					0.002 (J)	0.00061 (J)
2/22/2021			0.003 (J)			
3/15/2021				0.0014 (J)	0.0019 (J)	
3/16/2021	<0.005	0.0012 (J)				0.00069 (J)
3/17/2021			0.0029 (J)			
8/16/2021				0.0012 (J)		
8/17/2021						0.00045 (J)
8/18/2021	<0.005	0.0012 (J)			0.002 (J)	
8/19/2021			0.0024 (J)			
2/9/2022	<0.005	0.0013 (J)				0.00051 (J)
2/10/2022			0.0026 (J)	0.0011 (J)	0.0021 (J)	
8/3/2022	<0.005	0.0012 (J)	0.0041 (J)	0.0015 (J)	0.0024 (J)	
8/4/2022						0.00046 (J)
8/11/2022				0.0018 (J)		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
1/26/2023	<0.005	0.0012 (J)	0.012			0.00068 (J)
1/27/2023				0.00067 (J)		
2/1/2023					<0.005	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		0.0011 (J)	<0.005		<0.005	<0.005
3/14/2019	0.025			<0.005		
4/2/2019		<0.005				
4/3/2019	0.036			<0.005	<0.005	
4/4/2019						9.1E-05 (J)
4/8/2019			0.00025 (J)			
9/25/2019		<0.005				
9/26/2019			0.0011 (J)		0.00053 (J)	<0.005
9/27/2019	0.033			<0.005		
3/2/2020		<0.005				
3/3/2020				<0.005		
3/4/2020	0.048		0.00056 (J)		<0.005	0.00045 (J)
3/26/2020	0.045			<0.005		
3/27/2020		<0.005				
3/30/2020			<0.005			
3/31/2020					0.0003 (J)	
4/2/2020						<0.005
9/17/2020		<0.005			<0.005	
9/18/2020				<0.005		<0.005
9/21/2020	0.032		<0.005			
2/11/2021		<0.005				
2/12/2021	0.037			<0.005		
2/16/2021			<0.005		0.00045 (J)	0.0004 (J)
3/12/2021						<0.005
3/15/2021		<0.005				
3/16/2021				<0.005		
3/17/2021	0.037		<0.005		0.00044 (J)	
8/17/2021		<0.005			0.00045 (J)	<0.005
8/18/2021	0.039					
8/19/2021			<0.005	<0.005		
2/9/2022	0.03			<0.005	0.00059 (J)	
2/10/2022		<0.005	<0.005			<0.005
8/3/2022			<0.005			<0.005
8/4/2022	0.043	<0.005		<0.005	0.00048 (J)	
1/26/2023	0.022	<0.005	<0.005	<0.005	0.00051 (J)	
1/27/2023						<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	<0.005	0.00057 (J)			
3/13/2019			<0.005	0.00055 (J)	<0.005
4/2/2019	<0.005	0.00084 (J)			
4/3/2019			<0.005	<0.005	<0.005
9/24/2019		0.0015 (J)			
9/25/2019			<0.005		
9/26/2019	<0.005			0.00036 (J)	<0.005
3/2/2020		0.00067 (J)	<0.005		
3/3/2020				0.00094 (J)	<0.005
3/4/2020	0.00093 (J)				
3/26/2020			<0.005		
3/27/2020	<0.005			0.00059 (J)	
3/30/2020		0.00063 (J)			<0.005
9/16/2020		0.0013 (J)			
9/17/2020			<0.005		
9/21/2020	<0.005			0.00041 (J)	<0.005
2/10/2021	<0.005				
2/15/2021		0.00097 (J)			<0.005
2/16/2021			<0.005	0.00045 (J)	
3/15/2021	<0.005	0.0011 (J)			<0.005
3/16/2021			<0.005	0.00042 (J)	
8/16/2021		0.0014 (J)			
8/17/2021			<0.005	<0.005	<0.005
8/18/2021	<0.005				
2/8/2022					<0.005
2/9/2022			<0.005	0.00059 (J)	
2/10/2022	<0.005	0.00089 (J)			
8/3/2022		0.0012 (J)	<0.005	0.00041 (J)	
8/4/2022	<0.005				<0.005
1/26/2023	<0.005	0.00056 (J)	<0.005	0.00044 (J)	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	0.397 (U)	0.627 (U)	0.342 (U)			
5/23/2016						0.419 (U)
7/11/2016	0.738 (U)	1.38				
7/12/2016			0.499 (U)			0.855
8/30/2016	0.581 (U)	1.05 (U)	0.976 (U)			
9/1/2016						0.844 (U)
10/19/2016	0.213 (U)	1.11 (U)	0.626 (U)			
10/24/2016						0.917 (U)
12/6/2016	0.444 (U)	0.741 (U)	0.805 (U)			
12/7/2016						0.558 (U)
1/24/2017	0.373 (U)	0.908 (U)	0.336 (U)			
1/26/2017						0.922 (U)
3/21/2017	0.816 (U)	0.567 (U)	0.358 (U)			
3/22/2017						0.751 (U)
5/22/2017	0.554 (U)	0.638 (U)	0.744 (U)			
5/24/2017						0.725 (U)
4/2/2018	0.405 (U)	0.761 (U)				
4/3/2018			0.684 (U)			
4/4/2018						0.715 (U)
6/4/2018	1.13 (U)	0.975 (U)	0.0291 (U)			
6/5/2018						0.718 (U)
10/1/2018	0.132 (U)	0.434 (U)	0.781 (U)			
10/2/2018						0.948
3/12/2019	0.327 (U)	0.454 (U)	1.01 (U)			
3/13/2019						1.19 (U)
4/1/2019			0.76 (U)			
4/2/2019	0.739 (U)	0.651 (U)				
4/3/2019						1.82 (U)
9/27/2019						1.16 (U)
9/30/2019	0.306 (U)	1.04 (U)	0.384 (U)			
3/2/2020	0.61 (U)	1.58	0.249 (U)			
3/3/2020						0.667 (U)
3/25/2020	4.36	0.621 (U)	0.833 (U)			
4/1/2020						0.235 (U)
9/15/2020	0.748 (U)	0.124 (U)	0.161 (U)			
9/16/2020				0.531 (U)	0.422 (U)	0 (U)
11/10/2020				0.788 (U)	0.293 (U)	
12/15/2020				1.04 (U)	0.7 (U)	
1/19/2021				0.685 (U)	0.79 (U)	
2/8/2021	0.223 (U)					
2/9/2021		0.721 (U)	0.447 (U)	0.138 (U)	0.486 (U)	
2/15/2021						1.91
3/10/2021	0 (U)				0.811 (U)	
3/11/2021		0.737 (U)	0.128 (U)	1.51 (U)		
3/12/2021						1.12 (U)
8/11/2021	0.115 (U)			0.394 (U)		
8/12/2021		0.746 (U)	0.389 (U)			
8/13/2021					1.2	
8/17/2021						0.595 (U)
2/1/2022	0.143 (U)	0.588 (U)	0.266 (U)	1.12	0.665 (U)	
2/9/2022						0.49 (U)
8/2/2022	0.203 (U)	0.861 (U)	0.4 (U)	0.662 (U)	0.952 (U)	

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
8/3/2022						0.454 (U)
1/23/2023			0.311 (U)			
1/24/2023	0.549 (U)	0.829 (U)		1.25	0.421 (U)	
1/27/2023						1.2

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				0.62 (U)	0.56 (U)	
5/23/2016	0.509 (U)	1.12	0.625 (U)			0.826 (U)
7/12/2016	0.784 (U)	1.61	0.478 (U)	0.283 (U)	0.636 (U)	0.511 (U)
9/1/2016	0.261 (U)	1.23	0.595 (U)	0.703 (U)	0.818 (U)	0.762 (U)
10/20/2016				1.97	1.04 (U)	1.17
10/24/2016	1.42	1.98	1.54			
12/6/2016				2	0.771 (U)	0.126 (U)
12/7/2016	0.781 (U)	0.319 (U)	0.657 (U)			
1/25/2017				1.06 (U)	0.859 (U)	
1/26/2017	0.842 (U)	0.54 (U)	1.22			0.515 (U)
3/21/2017				0.668 (U)	0.851 (U)	
3/22/2017	0.318 (U)	0.635 (U)	0.285 (U)			0.451 (U)
5/23/2017				0.621 (U)	0.705 (U)	0.924 (U)
5/24/2017	0.687 (U)	1.01	0.655 (U)			
4/3/2018				0.538 (U)	0.311 (U)	0.732 (U)
4/4/2018	1.5	0.956	0.882 (U)			
6/5/2018	0.549 (U)		1.1 (U)	0.985 (U)		
6/6/2018		0.424 (U)			0.896 (U)	0.813 (U)
10/2/2018				0.837 (U)	1.21	0.61 (U)
10/3/2018	1.48	0.57 (U)				
10/5/2018			0.558 (U)			
3/12/2019					0.544 (U)	
3/13/2019	0.584 (U)		0.39 (U)	0.403 (U)		1 (U)
3/14/2019		0.992 (U)				
4/2/2019				0.865 (U)		
4/3/2019	0.36 (U)	0.734 (U)			0.885 (U)	0.156 (U)
4/5/2019			0.422 (U)			
9/24/2019					1.3	
9/25/2019				0.884 (U)		
9/26/2019			0.939 (U)			
9/27/2019	1.78	0.958 (U)				0.428 (U)
3/3/2020	0.716 (U)	0.971 (U)			0.835 (U)	
3/4/2020			0.708 (U)	0.624 (U)		1.03
3/26/2020		0.209 (U)				
3/27/2020				0.485 (U)	1.04 (U)	
3/30/2020			0.602 (U)			
3/31/2020	1.3 (U)					1.2 (U)
9/16/2020				0.135 (U)	0.526 (U)	
9/17/2020						1.38 (U)
9/18/2020	1.24 (U)	0.916 (U)				
9/21/2020			1.53			
2/10/2021				0.281 (U)		
2/12/2021	1.1	0.236 (U)				
2/16/2021					0.764 (U)	1.17 (U)
2/22/2021			1.02			
3/15/2021				0.666 (U)	1.3 (U)	
3/16/2021	1.71	0.245 (U)				0.446 (U)
3/17/2021			1.45 (U)			
8/16/2021				0.143 (U)		
8/17/2021						0.771 (U)
8/18/2021	0.919 (U)	0.919 (U)			1.02 (U)	
8/19/2021			0.764 (U)			

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
2/9/2022	0.444 (U)	0.564 (U)				0.198 (U)
2/10/2022			0.442 (U)	0.175 (U)	0.945 (U)	
8/3/2022	0.823 (U)	0.418 (U)	0.54 (U)	0.42 (U)	0.455 (U)	
8/4/2022						0.597 (U)
8/11/2022				0.461 (U)		
1/26/2023	0.441 (U)	0.877	0.719			0.516 (U)
1/27/2023				0.45 (U)		
2/1/2023					0.241 (U)	

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		0.538 (U)	0.311 (U)		0.627 (U)	1.81
3/14/2019	0.347 (U)			1.28 (U)		
4/2/2019		1.02 (U)				
4/3/2019	0.884 (U)			0.662 (U)	0.205 (U)	
4/4/2019						1.33
4/8/2019			0.573 (U)			
9/25/2019		1.35 (U)				
9/26/2019			0.878 (U)		0.912 (U)	0.974 (U)
9/27/2019	0.534 (U)			0.945 (U)		
3/2/2020		0.653 (U)				
3/3/2020				1.36		
3/4/2020	1.04		0.333 (U)		1.27 (U)	1.12
3/26/2020	1.1 (U)			0.793 (U)		
3/27/2020		0.1 (U)				
3/30/2020			0.107 (U)			
3/31/2020					1.65	
4/2/2020						2.48
9/17/2020		0.469 (U)			0.42 (U)	
9/18/2020				1.17 (U)		1.13 (U)
9/21/2020	1.36 (U)		1.23 (U)			
2/11/2021		0.334 (U)				
2/12/2021	0.764 (U)			1.17		
2/16/2021			0.156 (U)		0.505 (U)	1.21
3/12/2021						0.649 (U)
3/15/2021		1.24 (U)				
3/16/2021				0.742 (U)		
3/17/2021	0.466 (U)		0.174 (U)		0.165 (U)	
8/17/2021		0.709 (U)			0.0468 (U)	1.06 (U)
8/18/2021	0.642 (U)					
8/19/2021			0.227 (U)	0.935 (U)		
2/9/2022	0.245 (U)			0.754 (U)	0.0677 (U)	
2/10/2022		0.32 (U)	0.178 (U)			0.809 (U)
8/3/2022			0.263 (U)			0.685 (U)
8/4/2022	0.509 (U)	1.05 (U)		1.65	0.0273 (U)	
1/26/2023	0.333 (U)	0.561 (U)	0.0906 (U)	1.1	0.386 (U)	
1/27/2023						1.1

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	0.926 (U)	1.37			
3/13/2019			0.621 (U)	2.07	1.23
4/2/2019	0.479 (U)	0.62 (U)			
4/3/2019			0.932 (U)	0.872 (U)	1.05 (U)
9/24/2019		0.675 (U)			
9/25/2019			0.798 (U)		
9/26/2019	0.997 (U)			0.745 (U)	0.947 (U)
3/2/2020		0.413 (U)	0.964 (U)		
3/3/2020				0.757 (U)	1.15
3/4/2020	1.31				
3/26/2020			1.1		
3/27/2020	1.59			0.758 (U)	
3/30/2020		0.885 (U)			0.83 (U)
9/16/2020		0.193 (U)			
9/17/2020			0.618 (U)		
9/21/2020	1.39 (U)			0.796 (U)	1.55 (U)
2/10/2021	0.201 (U)				
2/15/2021		1.17 (U)			0.892 (U)
2/16/2021			0.466 (U)	0.198 (U)	
3/15/2021	0.564 (U)	0.436 (U)			0.386 (U)
3/16/2021			1.22	0.727 (U)	
8/16/2021		0.208 (U)			
8/17/2021			0.304 (U)	0.557 (U)	0.183 (U)
8/18/2021	0.876 (U)				
2/8/2022					0.417 (U)
2/9/2022			0.567 (U)	0.619 (U)	
2/10/2022	1.96 (U)	0.594 (U)			
8/3/2022		0.581 (U)	0.63 (U)	0.543 (U)	
8/4/2022	0.84 (U)				1.18 (U)
1/26/2023	0.821	0.793 (U)	0.909	0.493 (U)	0.318 (U)

Time Series

Constituent: Fluoride (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	0.105 (J)	0.0303 (J)	0.0513 (J)			
5/23/2016						0.0394 (J)
7/11/2016	0.16 (J)	0.05 (J)				
7/12/2016			0.12 (J)			0.15 (J)
8/30/2016	0.09 (J)	0.06 (J)	0.09 (J)			
9/1/2016						0.5
10/19/2016	0.1 (J)	0.04 (J)	0.1 (J)			
10/24/2016						0.06 (J)
12/6/2016	0.11 (J)	0.36	0.21 (J)			
12/7/2016						0.44
1/24/2017	0.09 (J)	<0.1	0.06 (J)			
1/26/2017						0.29 (J)
3/21/2017	0.13 (J)	<0.1	0.005 (J)			
3/22/2017						0.34
5/22/2017	0.12 (J)	<0.1	0.05 (J)			
5/24/2017						0.13 (J)
10/3/2017	0.13 (J)	<0.1	0.13 (J)			0.46
4/2/2018	<0.3	<0.1				
4/3/2018			<0.1			
4/4/2018						<0.1
6/4/2018	0.074 (J)	<0.1	<0.1			
6/5/2018						<0.1
10/1/2018	<0.3	<0.1	<0.1			
10/2/2018						0.17 (J)
3/12/2019	0.29 (J)	0.038 (J)	0.072 (J)			
3/13/2019						0.17 (J)
4/1/2019			0.029 (J)			
4/2/2019	0.1 (J)	0.071 (J)				
4/3/2019						0.082 (J)
9/23/2019	0.078 (J)	<0.1	<0.1			
9/27/2019						0.17 (J)
3/2/2020	0.076 (J)	<0.1	<0.1			
3/3/2020						0.11 (J)
3/25/2020	0.098 (J)	<0.1	<0.1			
4/1/2020						0.12 (J)
6/16/2020	0.071 (J)		<0.1			
9/15/2020	0.082 (J)	<0.1	<0.1			
9/16/2020				0.22	0.52	<0.1
11/10/2020				0.19	0.59	
12/15/2020				0.21	0.67	
1/19/2021				0.16	0.74	
2/8/2021	0.078 (J)					
2/9/2021		<0.1	0.074 (J)	0.19	0.44	
2/15/2021						0.08 (J)
3/10/2021	0.079 (J)				0.65	
3/11/2021		0.1	<0.1	0.2		
3/12/2021						0.054 (J)
8/11/2021	0.058 (J)			0.15		
8/12/2021		<0.1	<0.1			
8/13/2021					0.87	
8/17/2021						<0.1
2/1/2022	0.064 (J)	<0.1	<0.1	0.19	0.96	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
2/9/2022						0.12
8/2/2022	0.09 (J)	0.053 (J)	0.067 (J)	0.22	0.8	
8/3/2022						0.13
1/23/2023			0.061 (J)			
1/24/2023	0.089 (J)	0.053 (J)		0.23	1.3	
1/27/2023						0.16

Time Series

Constituent: Fluoride (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				0.0828 (J)	0.499	
5/23/2016	0.203 (J)	0.212 (J)	0.2587 (J)			<0.3
7/12/2016	0.44	0.31	0.53	0.2 (J)	0.67	0.24 (J)
9/1/2016	0.67	0.62	0.74	0.51	0.94	0.46
10/20/2016				0.4	0.56	0.56
10/24/2016	0.26 (J)	0.19 (J)	0.31			
12/6/2016				0.26 (J)	0.76	0.31
12/7/2016	0.55	0.73	1			
1/25/2017				0.24 (J)	1.1	
1/26/2017	0.27 (J)	0.12 (J)	0.68			0.004 (J)
3/21/2017				0.13 (J)	0.46	
3/22/2017	0.66	0.44	0.76			0.28 (J)
5/23/2017				0.11 (J)	0.65	0.29 (J)
5/24/2017	0.35	0.34	0.54			
10/3/2017	0.56	0.58	0.83	0.17 (J)	0.66	0.53
4/3/2018				<0.3	0.39	<0.3
4/4/2018	0.39	<0.3	0.65			
6/5/2018	0.24 (J)		0.47	0.099 (J)		
6/6/2018		0.21 (J)			0.46	0.12 (J)
10/2/2018				<0.3	0.51	0.031 (J)
10/3/2018	0.31	0.15 (J)				
10/5/2018			0.77			
3/12/2019					0.58	
3/13/2019	0.51		0.78	0.12 (J)		0.14 (J)
3/14/2019		1.1				
4/2/2019				0.097 (J)		
4/3/2019	0.43	0.3 (J)			0.63	0.14 (J)
4/5/2019			0.83			
9/24/2019					0.49	
9/25/2019				0.1 (J)		
9/26/2019			0.64			
9/27/2019	0.42	0.26 (J)				0.26 (J)
3/3/2020	0.24 (J)	0.21 (J)			0.45	
3/4/2020			0.37	0.077 (J)		0.08 (J)
3/26/2020		0.17 (J)				
3/27/2020				0.059 (J)	0.46	
3/30/2020			0.44			
3/31/2020	0.19 (J)					0.074 (J)
6/16/2020					0.45	
6/17/2020				0.077 (J)		
9/16/2020				0.081 (J)	0.53	
9/17/2020						0.1
9/18/2020	0.15	0.15				
9/21/2020			0.44			
2/10/2021				0.085 (J)		
2/12/2021	0.17	0.19				
2/16/2021					0.47	0.096 (J)
2/22/2021			0.55			
3/15/2021				0.086 (J)	0.51	
3/16/2021	0.21	0.2				0.098 (J)
3/17/2021			0.65			
8/16/2021				0.084 (J)		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
8/17/2021						0.095 (J)
8/18/2021	0.21	0.15			0.41	
8/19/2021			0.53			
2/9/2022	0.2	0.2				0.1
2/10/2022			0.53	0.083 (J)	0.42	
8/3/2022	0.22	0.21	0.55	0.11	0.44	
8/4/2022						0.13
8/11/2022				0.11		
1/26/2023	0.2	0.21	0.4			0.11
1/27/2023				0.1		
2/1/2023					0.4	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		0.072 (J)	0.074 (J)		0.052 (J)	0.28 (J)
3/14/2019	0.35			2.2		
4/2/2019		<0.1				
4/3/2019	0.19 (J)			1.6	0.044 (J)	
4/4/2019						0.26 (J)
4/8/2019			0.048 (J)			
9/25/2019		<0.1				
9/26/2019			0.18 (J)		0.19 (J)	0.42
9/27/2019	0.53			1.5		
3/2/2020		<0.1				
3/3/2020				1.4		
3/4/2020	0.096 (J)		0.051 (J)		0.052 (J)	0.25 (J)
3/26/2020	0.12 (J)			1.6		
3/27/2020		<0.1				
3/30/2020			0.064 (J)			
3/31/2020					<0.3	
4/2/2020						0.24 (J)
9/17/2020		<0.1			0.069 (J)	
9/18/2020				1.6		0.22
9/21/2020	0.17		<0.1			
2/11/2021		<0.1				
2/12/2021	0.16			1.6		
2/16/2021			<0.1		0.071 (J)	0.25
3/12/2021						0.24
3/15/2021		<0.1				
3/16/2021				1.7		
3/17/2021	0.18		<0.1		0.072 (J)	
8/17/2021		<0.1			0.075 (J)	0.24
8/18/2021	0.12					
8/19/2021			<0.1	1.5		
2/9/2022	0.076 (J)			1.7	0.092 (J)	
2/10/2022		<0.1	0.051 (J)			0.25
8/3/2022			0.075 (J)			0.27
8/4/2022	0.18	0.074 (J)		1.5	0.12	
1/26/2023	0.098 (J)	0.081 (J)	0.083 (J)	1.6	0.11	
1/27/2023						0.3

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	0.24 (J)	0.07 (J)			
3/13/2019			0.1 (J)	0.19 (J)	0.069 (J)
4/2/2019	0.18 (J)	0.045 (J)			
4/3/2019			0.049 (J)	0.15 (J)	<0.1
9/24/2019		0.18 (J)			
9/25/2019			0.076 (J)		
9/26/2019	0.22 (J)			0.19 (J)	0.17 (J)
3/2/2020		<0.1	0.065 (J)		
3/3/2020				0.062 (J)	<0.1
3/4/2020	0.26 (J)				
3/26/2020			0.082 (J)		
3/27/2020	0.26 (J)			<0.1	
3/30/2020		<0.1			<0.1
9/16/2020		<0.1			
9/17/2020			0.094 (J)		
9/21/2020	0.1			<0.1	<0.1
2/10/2021	0.16				
2/15/2021		<0.1			<0.1
2/16/2021			0.051 (J)	0.059 (J)	
3/15/2021	0.24	<0.1			<0.1
3/16/2021			<0.1	0.06 (J)	
8/16/2021		<0.1			
8/17/2021			<0.1	0.055 (J)	<0.1
8/18/2021	0.14				
2/8/2022					<0.1
2/9/2022			0.056 (J)	0.059 (J)	
2/10/2022	0.22	<0.1			
8/3/2022		0.069 (J)	0.094 (J)	0.085 (J)	
8/4/2022	0.19				0.078 (J)
1/26/2023	0.22	0.068 (J)	0.087 (J)	0.088 (J)	0.06 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	<0.001	<0.001	<0.001			
5/23/2016						<0.001
7/11/2016	<0.001	<0.001				
7/12/2016			0.0001 (J)			<0.001
8/30/2016	<0.001	<0.001	<0.001			
9/1/2016						<0.001
10/19/2016	<0.001	<0.001	<0.001			
10/24/2016						<0.001
12/6/2016	<0.001	<0.001	<0.001			
12/7/2016						<0.001
1/24/2017	<0.001	<0.001	<0.001			
1/26/2017						<0.001
3/21/2017	<0.001	6E-05 (J)	0.0001 (J)			
3/22/2017						<0.001
5/22/2017	<0.001	9E-05 (J)	<0.001			
5/24/2017						<0.001
4/2/2018	<0.001	<0.001				
4/3/2018			<0.001			
4/4/2018						<0.001
3/12/2019	<0.001	<0.001	<0.001			
3/13/2019						<0.001
9/23/2019	7.8E-05 (J)	9.2E-05 (J)	<0.001			
3/2/2020	4.8E-05 (J)	9.5E-05 (J)	<0.001			
3/3/2020						<0.001
3/25/2020	<0.001	0.00011 (J)	<0.001			
4/1/2020						5E-05 (J)
9/15/2020	<0.001	8E-05 (J)	4.2E-05 (J)			
9/16/2020				5E-05 (J)	0.00021 (J)	<0.001
11/10/2020				6.9E-05 (J)	0.0002 (J)	
12/15/2020				8.2E-05 (J)	0.00011 (J)	
1/19/2021				4.4E-05 (J)	0.00019 (J)	
2/8/2021	5.8E-05 (J)					
2/9/2021		9.4E-05 (J)	<0.001	0.00029 (J)	0.0001 (J)	
2/15/2021						<0.001
3/10/2021	<0.001				<0.001	
3/11/2021		7.6E-05 (J)	<0.001	9.4E-05 (J)		
3/12/2021						<0.001
8/11/2021	<0.001			<0.001		
8/12/2021		<0.001	<0.001			
8/13/2021					<0.001	
8/17/2021						<0.001
2/1/2022	<0.001	<0.001	<0.001	<0.001	<0.001	
2/9/2022						<0.001
8/2/2022	<0.001	<0.001	<0.001	<0.001	<0.001	
8/3/2022						<0.001
1/23/2023			<0.001			
1/24/2023	<0.001	<0.001		<0.001	<0.001	
1/27/2023						<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				<0.001	<0.001	
5/23/2016	<0.001	<0.001	<0.001			<0.001
7/12/2016	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
9/1/2016	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
10/20/2016				<0.001	<0.001	<0.001
10/24/2016	<0.001	<0.001	<0.001			
12/6/2016				0.0001 (J)	<0.001	0.0002 (J)
12/7/2016	<0.001	<0.001	<0.001			
1/25/2017				0.0001 (J)	<0.001	
1/26/2017	<0.001	<0.001	<0.001			0.0001 (J)
3/21/2017				9E-05 (J)	<0.001	
3/22/2017	0.0003 (J)	<0.001	7E-05 (J)			<0.001
5/23/2017				8E-05 (J)	<0.001	0.0001 (J)
5/24/2017	9E-05 (J)	<0.001	<0.001			
4/3/2018				<0.001	<0.001	<0.001
4/4/2018	<0.001	<0.001	<0.001			
3/12/2019					<0.001	
3/13/2019	<0.001		<0.001	<0.001		<0.001
3/14/2019		<0.001				
3/3/2020	0.00021 (J)	5.6E-05 (J)			0.00013 (J)	
3/4/2020			0.00014 (J)	0.00051 (J)		8.4E-05 (J)
3/26/2020		0.00043 (J)				
3/27/2020				5.4E-05 (J)	<0.001	
3/30/2020			0.0001 (J)			
3/31/2020	0.0003 (J)					0.00014 (J)
9/16/2020				0.0002 (J)	0.0002 (J)	
9/17/2020						0.00022 (J)
9/18/2020	6E-05 (J)	9.6E-05 (J)				
9/21/2020			0.00015 (J)			
2/10/2021				0.00056 (J)		
2/12/2021	<0.001	6.7E-05 (J)				
2/16/2021					8.6E-05 (J)	0.0002 (J)
2/22/2021			0.00018 (J)			
3/15/2021				0.0013	0.00011 (J)	
3/16/2021	9.9E-05 (J)	8.9E-05 (J)				0.00027 (J)
3/17/2021			0.00015 (J)			
8/16/2021				<0.001		
8/17/2021						<0.001
8/18/2021	<0.001	<0.001			<0.001	
8/19/2021			<0.001			
2/9/2022	<0.001	<0.001				<0.001
2/10/2022			<0.001	<0.001	<0.001	
8/3/2022	<0.001	<0.001	<0.001	<0.001	<0.001	
8/4/2022						<0.001
8/11/2022				<0.001		
1/26/2023	<0.001	<0.001	<0.001			<0.001
1/27/2023				<0.001		
2/1/2023					<0.001	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		<0.001	<0.001		<0.001	<0.001
3/14/2019	<0.001			<0.001		
3/2/2020		0.00017 (J)				
3/3/2020				<0.001		
3/4/2020	0.00011 (J)		0.00019 (J)		<0.001	<0.001
3/26/2020	<0.001			<0.001		
3/27/2020		0.00013 (J)				
3/30/2020			6.4E-05 (J)			
3/31/2020					0.0001 (J)	
4/2/2020						0.00013 (J)
9/17/2020		<0.001			<0.001	
9/18/2020				<0.001		<0.001
9/21/2020	8.5E-05 (J)		4.2E-05 (J)			
2/11/2021		3.9E-05 (J)				
2/12/2021	7.1E-05 (J)			<0.001		
2/16/2021			0.00012 (J)		8E-05 (J)	0.00043 (J)
3/12/2021						<0.001
3/15/2021		0.0001 (J)				
3/16/2021				<0.001		
3/17/2021	3.8E-05 (J)		4E-05 (J)		<0.001	
8/17/2021		<0.001			<0.001	<0.001
8/18/2021	<0.001					
8/19/2021			<0.001	<0.001		
2/9/2022	<0.001			<0.001	<0.001	
2/10/2022		<0.001	<0.001			<0.001
8/3/2022			<0.001			<0.001
8/4/2022	<0.001	<0.001		<0.001	<0.001	
1/26/2023	<0.001	<0.001	<0.001	<0.001	<0.001	
1/27/2023						<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	<0.001	<0.001			
3/13/2019			<0.001	<0.001	<0.001
3/2/2020		9E-05 (J)	4.7E-05 (J)		
3/3/2020				0.00013 (J)	6.2E-05 (J)
3/4/2020	0.001 (J)				
3/26/2020			<0.001		
3/27/2020	6.2E-05 (J)			<0.001	
3/30/2020		0.00011 (J)			<0.001
9/16/2020		<0.001			
9/17/2020			<0.001		
9/21/2020	0.00018 (J)			0.00026 (J)	<0.001
2/10/2021	0.00044 (J)				
2/15/2021		5.2E-05 (J)			<0.001
2/16/2021			<0.001	8.4E-05 (J)	
3/15/2021	0.00034 (J)	<0.001			<0.001
3/16/2021			<0.001	3.6E-05 (J)	
8/16/2021		<0.001			
8/17/2021			<0.001	<0.001	<0.001
8/18/2021	<0.001				
2/8/2022					<0.001
2/9/2022			<0.001	<0.001	
2/10/2022	<0.001	<0.001			
8/3/2022		<0.001	<0.001	<0.001	
8/4/2022	<0.001				<0.001
1/26/2023	<0.001	<0.001	<0.001	<0.001	<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	<0.03	<0.03	<0.03			
5/23/2016						<0.03
7/11/2016	<0.03	0.0014 (J)				
7/12/2016			0.0024 (J)			<0.03
8/30/2016	<0.03	<0.03	0.0025 (J)			
9/1/2016						<0.03
10/19/2016	<0.03	<0.03	0.003 (J)			
10/24/2016						<0.03
12/6/2016	<0.03	<0.03	0.0033 (J)			
12/7/2016						<0.03
1/24/2017	<0.03	<0.03	0.003 (J)			
1/26/2017						<0.03
3/21/2017	<0.03	0.0012 (J)	0.0034 (J)			
3/22/2017						<0.03
5/22/2017	<0.03	<0.03	0.003 (J)			
5/24/2017						<0.03
4/2/2018	<0.03	0.0015 (J)				
4/3/2018			0.003 (J)			
4/4/2018						<0.03
6/4/2018	0.001 (J)	0.0016 (J)	0.0027 (J)			
6/5/2018						<0.03
10/1/2018	0.00099 (J)	0.0013 (J)	0.0032 (J)			
10/2/2018						<0.03
3/12/2019	0.001 (J)	0.0018 (J)	0.0032 (J)			
3/13/2019						<0.03
4/1/2019			0.0032 (J)			
4/2/2019	0.001 (J)	0.0018 (J)				
4/3/2019						<0.03
9/23/2019	0.0011 (J)	0.0016 (J)	0.0029 (J)			
9/27/2019						<0.03
3/2/2020	0.0012 (J)	0.0017 (J)	0.0037 (J)			
3/3/2020						<0.03
3/25/2020	0.00083 (J)	0.0017 (J)	0.0035 (J)			
4/1/2020						<0.03
9/15/2020	0.00087 (J)	0.0015 (J)	0.0026 (J)			
9/16/2020				0.0018 (J)	0.014 (J)	<0.03
11/10/2020				0.0013 (J)	0.025 (J)	
12/15/2020				0.0019 (J)	0.028 (J)	
1/19/2021				0.0025 (J)	0.034	
2/8/2021	0.00086 (J)					
2/9/2021		0.0012 (J)	0.0032 (J)	0.0026 (J)	0.026 (J)	
2/15/2021						<0.03
3/10/2021	0.0009 (J)				0.03	
3/11/2021		0.0011 (J)	0.0035 (J)	0.0022 (J)		
3/12/2021						<0.03
8/11/2021	0.00078 (J)			0.0024 (J)		
8/12/2021		0.0012 (J)	0.0028 (J)			
8/13/2021					0.032	
8/17/2021						<0.03
2/1/2022	0.0011 (J)	0.0017 (J)	0.0037 (J)	0.0024 (J)	0.048	
2/9/2022						<0.03
8/2/2022	<0.03	0.0013 (J)	0.003 (J)	0.0019 (J)	0.041	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
8/3/2022						<0.03
1/23/2023			0.003 (J)			
1/24/2023	0.00092 (J)	0.0014 (J)		0.002 (J)	0.064	
1/27/2023						<0.03

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				<0.03	<0.03	
5/23/2016	<0.03	0.0107 (J)	0.0422 (J)			<0.03
7/12/2016	<0.03	0.0113 (J)	0.0366 (J)	0.0021 (J)	0.0023 (J)	0.004 (J)
9/1/2016	<0.03	0.0118 (J)	0.04 (J)	0.0025 (J)	0.0029 (J)	0.0044 (J)
10/20/2016				0.0021 (J)	0.0027 (J)	0.0027 (J)
10/24/2016	<0.03	0.0114 (J)	0.0435 (J)			
12/6/2016				0.0026 (J)	0.0032 (J)	0.005 (J)
12/7/2016	<0.03	0.0155 (J)	0.0477 (J)			
1/25/2017				0.0024 (J)	0.0026 (J)	
1/26/2017	<0.03	0.0099 (J)	0.0342 (J)			0.0042 (J)
3/21/2017				0.0026 (J)	0.0029 (J)	
3/22/2017	<0.03	0.0098 (J)	0.0353 (J)			0.0043 (J)
5/23/2017				0.0026 (J)	0.0029 (J)	0.0048 (J)
5/24/2017	<0.03	0.0105 (J)	0.0317 (J)			
4/3/2018				0.0023 (J)	0.0025 (J)	0.0043 (J)
4/4/2018	<0.03	0.008 (J)	0.031 (J)			
6/5/2018	<0.03		0.031 (J)	0.0022 (J)		
6/6/2018		0.0095 (J)			0.0023 (J)	0.0043 (J)
10/2/2018				0.003 (J)	0.0025 (J)	0.004 (J)
10/3/2018	<0.03	0.0083 (J)				
10/5/2018			0.027 (J)			
3/12/2019					0.0025 (J)	
3/13/2019	<0.03		0.029 (J)	0.0024 (J)		0.004 (J)
3/14/2019		0.0058 (J)				
4/2/2019				0.002 (J)		
4/3/2019	<0.03	0.0066 (J)			0.0025 (J)	0.004 (J)
4/5/2019			0.023 (J)			
9/24/2019					0.0024 (J)	
9/25/2019				0.0019 (J)		
9/26/2019			0.035			
9/27/2019	<0.03	0.011 (J)				0.0044 (J)
3/3/2020	<0.03	0.0063 (J)			0.0028 (J)	
3/4/2020			0.041	0.0034 (J)		0.004 (J)
3/26/2020		0.0063 (J)				
3/27/2020				0.002 (J)	0.0026 (J)	
3/30/2020			0.038			
3/31/2020	<0.03					0.0043 (J)
9/16/2020				0.0026 (J)	0.0033 (J)	
9/17/2020						0.004 (J)
9/18/2020	<0.03	0.01 (J)				
9/21/2020			0.028 (J)			
2/10/2021				0.0032 (J)		
2/12/2021	<0.03	0.0094 (J)				
2/16/2021					0.0027 (J)	0.0045 (J)
2/22/2021			0.032			
3/15/2021				0.0038 (J)	0.0029 (J)	
3/16/2021	<0.03	0.0081 (J)				0.0046 (J)
3/17/2021			0.031			
8/16/2021				0.0025 (J)		
8/17/2021						0.004 (J)
8/18/2021	<0.03	0.0099 (J)			0.0029 (J)	
8/19/2021			0.028 (J)			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
2/9/2022	<0.03	0.01 (J)				0.0041 (J)
2/10/2022			0.031	0.0022 (J)	0.003 (J)	
8/3/2022	<0.03	0.0068 (J)	0.029 (J)	0.0019 (J)	0.0026 (J)	
8/4/2022						0.0036 (J)
8/11/2022				0.0019 (J)		
1/26/2023	<0.03	0.0058 (J)	0.04			0.0032 (J)
1/27/2023				0.0018 (J)		
2/1/2023					0.0015 (J)	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		0.0016 (J)	0.0029 (J)		0.0033 (J)	0.0097 (J)
3/14/2019	0.0089 (J)			0.05		
4/2/2019		0.0015 (J)				
4/3/2019	0.0061 (J)			0.047 (J)	0.0034 (J)	
4/4/2019						0.0069 (J)
4/8/2019			0.0027 (J)			
9/25/2019		<0.03				
9/26/2019			0.003 (J)		0.0041 (J)	0.0055 (J)
9/27/2019	0.013 (J)			0.047		
3/2/2020		0.00082 (J)				
3/3/2020				0.05		
3/4/2020	0.01 (J)		0.0026 (J)		0.03 (J)	0.0047 (J)
3/26/2020	0.013 (J)			0.054		
3/27/2020		0.0012 (J)				
3/30/2020			0.0027 (J)			
3/31/2020					0.0036 (J)	
4/2/2020						0.0068 (J)
9/17/2020		<0.03			0.0032 (J)	
9/18/2020				0.046		0.0084 (J)
9/21/2020	0.013 (J)		0.0024 (J)			
2/11/2021		0.001 (J)				
2/12/2021	0.012 (J)			0.045		
2/16/2021			0.0028 (J)		0.0038 (J)	0.0078 (J)
3/12/2021						0.009 (J)
3/15/2021		0.0011 (J)				
3/16/2021				0.049		
3/17/2021	0.012 (J)		0.0027 (J)		0.004 (J)	
8/17/2021		0.00091 (J)			0.0036 (J)	0.0079 (J)
8/18/2021	0.014 (J)					
8/19/2021			0.0027 (J)	0.046		
2/9/2022	0.0067 (J)			0.048	0.0039 (J)	
2/10/2022		0.00099 (J)	0.0029 (J)			0.0086 (J)
8/3/2022			0.0024 (J)			0.0063 (J)
8/4/2022	0.013 (J)	0.00075 (J)		0.04	0.0033 (J)	
1/26/2023	0.0038 (J)	<0.03	0.0025 (J)	0.036	0.0031 (J)	
1/27/2023						0.0072 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	0.011 (J)	0.0024 (J)			
3/13/2019			<0.03	<0.03	<0.03
4/2/2019	0.0052 (J)	0.0021 (J)			
4/3/2019			<0.03	<0.03	<0.03
9/24/2019		0.0022 (J)			
9/25/2019			<0.03		
9/26/2019	0.0055 (J)			<0.03	<0.03
3/2/2020		0.0025 (J)	<0.03		
3/3/2020				<0.03	<0.03
3/4/2020	0.015 (J)				
3/26/2020			<0.03		
3/27/2020	0.014 (J)			<0.03	
3/30/2020		0.0023 (J)			<0.03
9/16/2020		0.0021 (J)			
9/17/2020			<0.03		
9/21/2020	0.0053 (J)			<0.03	<0.03
2/10/2021	0.0092 (J)				
2/15/2021		0.0024 (J)			<0.03
2/16/2021			<0.03	<0.03	
3/15/2021	0.013 (J)	0.0022 (J)			<0.03
3/16/2021			<0.03	<0.03	
8/16/2021		0.0021 (J)			
8/17/2021			<0.03	<0.03	<0.03
8/18/2021	0.0086 (J)				
2/8/2022					<0.03
2/9/2022			<0.03	<0.03	
2/10/2022	0.014 (J)	0.0023 (J)			
8/3/2022		0.0018 (J)	<0.03	<0.03	
8/4/2022	0.0088 (J)				<0.03
1/26/2023	0.011 (J)	0.0019 (J)	<0.03	<0.03	<0.03

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	<0.0002	<0.0002	<0.0002			
5/23/2016						<0.0002
7/11/2016	<0.0002	<0.0002				
7/12/2016			<0.0002			<0.0002
8/30/2016	4E-05 (J)	4E-05 (J)	<0.0002			
9/1/2016						<0.0002
10/19/2016	<0.0002	<0.0002	<0.0002			
10/24/2016						<0.0002
12/6/2016	<0.0002	<0.0002	<0.0002			
12/7/2016						<0.0002
1/24/2017	<0.0002	<0.0002	<0.0002			
1/26/2017						5E-05 (J)
3/21/2017	<0.0002	<0.0002	<0.0002			
3/22/2017						<0.0002
5/22/2017	<0.0002	<0.0002	<0.0002			
5/24/2017						<0.0002
4/2/2018	<0.0002	<0.0002				
4/3/2018			<0.0002			
4/4/2018						<0.0002
3/12/2019	<0.0002	<0.0002	<0.0002			
3/13/2019						<0.0002
3/2/2020	<0.0002	<0.0002	<0.0002			
3/3/2020						<0.0002
9/16/2020				<0.0002	<0.0002	
11/10/2020				<0.0002	<0.0002	
12/15/2020				<0.0002	<0.0002	
1/19/2021				<0.0002	<0.0002	
2/8/2021	<0.0002					
2/9/2021		<0.0002	<0.0002	<0.0002	<0.0002	
2/15/2021						<0.0002
2/1/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
2/9/2022						<0.0002
8/2/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
8/3/2022						<0.0002
1/23/2023			<0.0002			
1/24/2023	<0.0002	<0.0002		<0.0002	<0.0002	
1/27/2023						<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				<0.0002	<0.0002	
5/23/2016	<0.0002	<0.0002	<0.0002			<0.0002
7/12/2016	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
9/1/2016	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
10/20/2016				<0.0002	<0.0002	<0.0002
10/24/2016	<0.0002	<0.0002	<0.0002			
12/6/2016				<0.0002	<0.0002	<0.0002
12/7/2016	<0.0002	<0.0002	<0.0002			
1/25/2017				<0.0002	<0.0002	
1/26/2017	5E-05 (J)	<0.0002	4E-05 (J)			4E-05 (J)
3/21/2017				<0.0002	<0.0002	
3/22/2017	<0.0002	<0.0002	<0.0002			<0.0002
5/23/2017				<0.0002	<0.0002	<0.0002
5/24/2017	<0.0002	<0.0002	5E-05 (J)			
4/3/2018				<0.0002	<0.0002	<0.0002
4/4/2018	<0.0002	<0.0002	<0.0002			
3/12/2019					<0.0002	
3/13/2019	<0.0002		<0.0002	<0.0002		<0.0002
3/14/2019		<0.0002				
3/3/2020	<0.0002	<0.0002			<0.0002	
3/4/2020			<0.0002	<0.0002		<0.0002
2/10/2021				<0.0002		
2/12/2021	<0.0002	<0.0002				
2/16/2021					<0.0002	<0.0002
2/22/2021			<0.0002			
2/9/2022	<0.0002	<0.0002				<0.0002
2/10/2022			<0.0002	<0.0002	<0.0002	
8/3/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
8/4/2022						<0.0002
8/11/2022				<0.0002		
1/26/2023	<0.0002	<0.0002	<0.0002			<0.0002
1/27/2023				<0.0002		
2/1/2023					<0.0002	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		<0.0002	<0.0002		<0.0002	<0.0002
3/14/2019	<0.0002			<0.0002		
3/2/2020		<0.0002				
3/3/2020				<0.0002		
3/4/2020	<0.0002		<0.0002		<0.0002	<0.0002
2/11/2021		<0.0002				
2/12/2021	<0.0002			<0.0002		
2/16/2021			<0.0002		<0.0002	<0.0002
2/9/2022	<0.0002			<0.0002	<0.0002	
2/10/2022		<0.0002	<0.0002			<0.0002
8/3/2022			<0.0002			<0.0002
8/4/2022	<0.0002	<0.0002		<0.0002	<0.0002	
1/26/2023	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
1/27/2023						<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	<0.0002	<0.0002			
3/13/2019			<0.0002	<0.0002	<0.0002
3/2/2020		<0.0002	<0.0002		
3/3/2020				<0.0002	<0.0002
3/4/2020	<0.0002				
2/10/2021	<0.0002				
2/15/2021		<0.0002			<0.0002
2/16/2021			<0.0002	<0.0002	
2/8/2022					<0.0002
2/9/2022			<0.0002	<0.0002	
2/10/2022	<0.0002	<0.0002			
8/3/2022		<0.0002	<0.0002	<0.0002	
8/4/2022	<0.0002				<0.0002
1/26/2023	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	<0.01	<0.01	<0.01			
5/23/2016						<0.01
7/11/2016	<0.01	<0.01				
7/12/2016			<0.01			0.0013 (J)
8/30/2016	<0.01	<0.01	<0.01			
9/1/2016						<0.01
10/19/2016	<0.01	<0.01	<0.01			
10/24/2016						<0.01
12/6/2016	<0.01	<0.01	<0.01			
12/7/2016						<0.01
1/24/2017	<0.01	<0.01	<0.01			
1/26/2017						<0.01
3/21/2017	<0.01	<0.01	<0.01			
3/22/2017						0.0013 (J)
5/22/2017	<0.01	<0.01	<0.01			
5/24/2017						0.0014 (J)
4/2/2018	<0.01	<0.01				
4/3/2018			<0.01			
4/4/2018						<0.01
6/4/2018	<0.01	<0.01	<0.01			
6/5/2018						<0.01
10/1/2018	<0.01	<0.01	<0.01			
10/2/2018						<0.01
3/12/2019	<0.01	<0.01	<0.01			
3/13/2019						<0.01
4/1/2019			<0.01			
4/2/2019	<0.01	<0.01				
4/3/2019						0.0021 (J)
9/23/2019	<0.01	<0.01	<0.01			
9/27/2019						0.0014 (J)
3/2/2020	<0.01	<0.01	<0.01			
3/3/2020						<0.01
3/25/2020	<0.01	<0.01	<0.01			
4/1/2020						<0.01
6/16/2020	<0.01		<0.01			
9/15/2020	<0.01	<0.01	<0.01			
9/16/2020				0.0044 (J)	0.0019 (J)	0.0014 (J)
11/10/2020				0.0072 (J)	0.0018 (J)	
12/15/2020				0.0044 (J)	0.0019 (J)	
1/19/2021				0.0038 (J)	0.0035 (J)	
2/8/2021	<0.01					
2/9/2021		<0.01	<0.01	0.0045 (J)	0.0038 (J)	
2/15/2021						<0.01
3/10/2021	<0.01				0.0019 (J)	
3/11/2021		<0.01	<0.01	0.0064 (J)		
3/12/2021						0.0007 (J)
8/11/2021	<0.01			0.0034 (J)		
8/12/2021		<0.01	<0.01			
8/13/2021					0.0051 (J)	
8/17/2021						0.0012 (J)
2/1/2022	<0.01	<0.01	<0.01	0.0036 (J)	0.0055 (J)	
2/9/2022						<0.01

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
8/2/2022	<0.01	<0.01	<0.01	0.0042 (J)	0.002 (J)	
8/3/2022						0.00079 (J)
1/23/2023			<0.01			
1/24/2023	<0.01	<0.01		0.0027 (J)	0.0026 (J)	
1/27/2023						<0.01

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				0.028	0.446	
5/23/2016	0.0164	0.0413 (J)	0.027			0.0187
7/12/2016	0.0251	0.0484	0.0316	0.0273	0.455	0.0229
9/1/2016	0.0259	0.0474	0.0336	0.0274	0.481	0.0239
10/20/2016				0.036	0.472	0.477
10/24/2016	0.0293	0.047	0.0352			
12/6/2016				0.0365	0.52	0.0236
12/7/2016	0.0209	0.0432	0.0383			
1/25/2017				0.0317	0.478	
1/26/2017	0.0277	0.0484	0.041			0.0234
3/21/2017				0.0346	0.547	
3/22/2017	0.011	0.0494	0.0426			0.0219
5/23/2017				0.0336	0.482	0.0242
5/24/2017	0.0373	0.047	0.04			
4/3/2018				0.032	0.44	0.025
4/4/2018	0.013	0.052	0.027			
6/5/2018	0.029		0.027	0.036		
6/6/2018		0.054			0.49	0.027
10/2/2018				0.039	0.47	0.028
10/3/2018	0.02	0.054				
10/5/2018			0.033			
3/12/2019					0.5	
3/13/2019	0.012		0.033	0.04		0.028
3/14/2019		0.046				
4/2/2019				0.041		
4/3/2019	0.01	0.049			0.5	0.03
4/5/2019			0.03			
9/24/2019					0.54	
9/25/2019				0.047		
9/26/2019			0.026			
9/27/2019	0.016	0.052				0.033
3/3/2020	0.011	0.045			0.44	
3/4/2020			0.03	0.045		0.031
3/26/2020		0.045				
3/27/2020				0.044	0.42	
3/30/2020			0.029			
3/31/2020	0.0074 (J)					0.031
6/16/2020					0.45	
6/17/2020				0.048		
9/16/2020				0.046	0.43	
9/17/2020						0.03
9/18/2020	0.032	0.046				
9/21/2020			0.032			
2/10/2021				0.051		
2/12/2021	0.023	0.048				
2/16/2021					0.46	0.035
2/22/2021			0.036			
3/15/2021				0.047	0.41	
3/16/2021	0.015	0.044				0.035
3/17/2021			0.035			
8/16/2021				0.045		
8/17/2021						0.035

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
8/18/2021	0.038	0.045			0.48	
8/19/2021			0.032			
2/9/2022	0.03	0.042				0.034
2/10/2022			0.033	0.045	0.34	
8/3/2022	0.027	0.047	0.035	0.038	0.29	
8/4/2022						0.033
8/11/2022				0.044		
1/26/2023	0.022	0.048	0.023			0.021
1/27/2023				0.039		
2/1/2023					0.29	

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		<0.01	<0.01		<0.01	<0.01
3/14/2019	0.057			0.0022 (J)		
4/2/2019		<0.01				
4/3/2019	0.04			<0.01	0.0083 (J)	
4/4/2019						0.0018 (J)
4/8/2019			0.00027 (J)			
9/25/2019		<0.01				
9/26/2019			<0.01		0.017	0.0042 (J)
9/27/2019	0.063			<0.01		
11/25/2019					0.02	
3/2/2020		<0.01				
3/3/2020				<0.01		
3/4/2020	0.032		<0.01		0.0074 (J)	0.0058 (J)
3/26/2020	0.033			<0.01		
3/27/2020		<0.01				
3/30/2020			<0.01			
3/31/2020					0.0093 (J)	
4/2/2020						0.003 (J)
9/17/2020		<0.01			0.014	
9/18/2020				0.00094 (J)		0.0018 (J)
9/21/2020	0.064		0.00099 (J)			
2/11/2021		<0.01				
2/12/2021	0.046			<0.01		
2/16/2021			0.00096 (J)		0.022	0.0019 (J)
3/12/2021						0.0008 (J)
3/15/2021		<0.01				
3/16/2021				<0.01		
3/17/2021	0.043		0.001 (J)		0.023	
8/17/2021		<0.01			0.024	0.0016 (J)
8/18/2021	0.032					
8/19/2021			0.00087 (J)	<0.01		
2/9/2022	0.011			<0.01	0.028	
2/10/2022		<0.01	0.0008 (J)			0.0017 (J)
8/3/2022			0.00095 (J)			0.002 (J)
8/4/2022	0.039	<0.01		<0.01	0.028	
1/26/2023	0.012	<0.01	0.0012 (J)	<0.01	0.028	
1/27/2023						0.0014 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	0.013	0.0038 (J)			
3/13/2019			<0.01	0.0021 (J)	<0.01
4/2/2019	0.028	0.0028 (J)			
4/3/2019			<0.01	0.0021 (J)	<0.01
9/24/2019		0.0021 (J)			
9/25/2019			<0.01		
9/26/2019	0.017			0.0026 (J)	0.0033 (J)
3/2/2020		0.0025 (J)	<0.01		
3/3/2020				0.0022 (J)	<0.01
3/4/2020	0.009 (J)				
3/26/2020			<0.01		
3/27/2020	0.0068 (J)			0.0026 (J)	
3/30/2020		0.0029 (J)			<0.01
9/16/2020		0.0021 (J)			
9/17/2020			<0.01		
9/21/2020	0.018			0.0025 (J)	0.0015 (J)
2/10/2021	0.02				
2/15/2021		0.0029 (J)			0.0015 (J)
2/16/2021			<0.01	0.0025 (J)	
3/15/2021	0.013	0.0031 (J)			0.0015 (J)
3/16/2021			<0.01	0.0023 (J)	
8/16/2021		0.0027 (J)			
8/17/2021			<0.01	0.0027 (J)	0.003 (J)
8/18/2021	0.022				
2/8/2022					0.0012 (J)
2/9/2022			<0.01	0.0026 (J)	
2/10/2022	0.0031 (J)	0.0036 (J)			
8/3/2022		0.0032 (J)	<0.01	0.0028 (J)	
8/4/2022	0.011				0.0014 (J)
1/26/2023	0.0025 (J)	0.0029 (J)	<0.01	0.0029 (J)	<0.01

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: pH, Field (SU) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	7.27	5.81	7.45			
5/23/2016						6.83
7/11/2016	7.06	5.68				
7/12/2016			7.32			6.58
8/30/2016	7.28	5.63	7.43			
9/1/2016						6.54
10/19/2016	7.02	5.46	7.03			
10/24/2016						6.59
12/6/2016	7.09	5.38	7.08			
12/7/2016						6.56
1/24/2017	7.2	5.37	7.39			
1/26/2017						6.83
3/21/2017	7.01	4.9	6.83			
3/22/2017						6.66
5/22/2017	7.11	5.2	7.02			
5/24/2017						6.67
10/3/2017	7.21	5.3	7.47			6.54
4/2/2018	7.1	5.4				
4/3/2018			7.38			
4/4/2018						6.61
6/4/2018	7.06	5.27	7.38			
6/5/2018						6.65
10/1/2018	7.09	5.31	7.13			
10/2/2018						6.55
3/12/2019	7.03	5.42	7.29			
3/13/2019						6.7
4/1/2019			7.16			
4/2/2019	6.86	5.41				
4/3/2019						6.55
9/23/2019	7.02	5.33	7.3			
9/27/2019						6.64
3/2/2020	7.1	5.43	7.12			
3/3/2020						6.67
3/25/2020	6.95	5.36	7.4			
4/1/2020						6.84
6/16/2020	6.97 (D)		7.31 (D)			
9/15/2020	7.15	5.22	7.29			
9/16/2020				7.52	7.83	6.66
11/10/2020				7.27	7.84	
12/15/2020				7.39	7.87	
1/19/2021				7.39	7.86	
2/8/2021	7.11					
2/9/2021		5.42	7.23	7.44	7.84	
2/15/2021						6.83
3/10/2021	6.95				7.92	
3/11/2021		5.8	7.33	7.46		
3/12/2021						6.76
8/11/2021	6.98			7.4		
8/12/2021		5.05	7.31			
8/13/2021					7.77	
8/17/2021						6.75
2/1/2022	7.19	5.24	7.45	7.52	8.25	

Time Series

Constituent: pH, Field (SU) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
2/9/2022						7
8/3/2022						6.73
1/23/2023			7.32			
1/24/2023	6.76	5.22		7.56	8.22	
1/27/2023						6.89

Time Series

Constituent: pH, Field (SU) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				7.14	6.99	
5/23/2016	6.22	7.15	7.14			7.23
7/12/2016	6.04	6.87	7.04	7.13	6.88	6.87
9/1/2016	6.26	7.2	7.24	7.29	6.73	7.15
10/20/2016				7.1	6.9	7.05
10/24/2016	6.46	7.1	6.9			
12/6/2016				7.15	6.98	7.15
12/7/2016	6.29	6.92	6.91			
1/25/2017				7.11	7.04	
1/26/2017	6.46	7.05	7.08			6.99
3/21/2017				7.12	6.87	
3/22/2017	5.81	7.08	7.13			7.03
5/23/2017				7.08	6.87	7.05
5/24/2017	6.51	7.11	7.15			
10/3/2017	6.25	7.01	7.32	7.21	6.72	7.07
4/3/2018				7.14	6.87	6.99
4/4/2018	5.86	7.12	7.27			
6/5/2018	6.27		7.2	7.13		
6/6/2018		7.12			6.9	7.02
10/2/2018				7.12	6.9	7.05
10/3/2018	5.97	7.08				
10/5/2018			7.24			
3/12/2019					6.91	
3/13/2019	5.92		7.24	7.27		7.06
3/14/2019		7.09				
4/2/2019				7.27		
4/3/2019	5.69	6.96			6.85	6.88
4/5/2019			7.24			
9/24/2019					6.95	
9/25/2019				7.11		
9/26/2019			6.94			
9/27/2019	5.75	7.07				7.01
3/3/2020	5.95	6.95			7.06	
3/4/2020			7.16	7.17		6.97
3/26/2020		6.99				
3/27/2020				7.05	6.95	
3/30/2020			6.91			
3/31/2020	5.7					7.07
6/16/2020					6.97 (D)	
6/17/2020				7.2 (D)		
9/16/2020				7.3	6.92	
9/17/2020						6.99
9/18/2020	6.42	7.15				
9/21/2020			7.34			
2/10/2021				7.29		
2/12/2021	7.27	6.23				
2/16/2021					7.16	7.26
2/22/2021			7.27			
3/15/2021				7.19	7.09	
3/16/2021	5.95	7.15				7.1
3/17/2021			7.33			
8/16/2021				7.12		

Time Series

Constituent: pH, Field (SU) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
8/17/2021						7.1
8/18/2021	6.1	6.89			7.02	
8/19/2021			7.38			
2/9/2022	6.55	7.23				7.3
2/10/2022			7.54	7.22	6.99	
8/3/2022	6.23	7.13	7.09	6.93	6.84	
8/4/2022						7.03
8/11/2022				7.07		
1/26/2023	6.23	7.1	6.9			7.07
1/27/2023				7.25		
2/1/2023					6.6	

Time Series

Constituent: pH, Field (SU) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		6.75	7.58		7.4	7.78
3/14/2019	6.48			7.67		
4/2/2019		6.7				
4/3/2019	6.14			7.56	7.25	
4/4/2019						7.63
4/8/2019			7.47			
9/25/2019		6.75				
9/26/2019			7.5		7.16	7.46
9/27/2019	6.33			7.57		
3/2/2020		6.98				
3/3/2020				7.59		
3/4/2020	6.29		7.47		7.14	8.33
3/26/2020	6.28			7.57		
3/27/2020		6.75				
3/30/2020			7.49			
3/31/2020					7.2	
4/2/2020						8.11
9/17/2020		6.78			7.08	
9/18/2020				7.64		7.51
9/21/2020	6.41		7.65			
2/11/2021		6.93				
2/12/2021	6.36			7.77		
2/16/2021			7.69		7.27	7.96
3/12/2021						7.88
3/15/2021		6.97				
3/16/2021				7.76		
3/17/2021	6.34		7.66		7.14	
8/17/2021		7.05			7.14	7.75
8/18/2021	6.28					
8/19/2021			7.61	7.69		
2/9/2022	6.28			7.82	7.32	
2/10/2022		7.19	7.82			7.96
8/3/2022			7.59			7.4
8/4/2022	6.32	6.96		7.66	7.08	
1/26/2023	6.13	6.95	7.6	7.74	7.14	
1/27/2023						7.8

Time Series

Constituent: pH, Field (SU) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	7.46	7.2			
3/13/2019			6.16	6.86	6.37
4/2/2019	7.4	6.91			
4/3/2019			5.96	6.77	6.19
9/24/2019		6.86			
9/25/2019			6.37		
9/26/2019	7.4			6.76	6.5
3/2/2020		7.13	6.12		
3/3/2020				6.78	6.1
3/4/2020	7.55				
3/26/2020			6.14		
3/27/2020	7.42			6.82	
3/30/2020		7.07			6.06
9/16/2020		6.88			
9/17/2020			6.48		
9/21/2020	7.46			6.88	6.5
2/10/2021	7.54				
2/15/2021		7.09			6.77
2/16/2021			5.95	7	
3/15/2021	7.61	7.05			6.66
3/16/2021			5.78	6.96	
8/16/2021		7.08			
8/17/2021			5.99	6.86	6.88
8/18/2021	7.16				
2/8/2022					6.73
2/9/2022			6.13	7.01	
2/10/2022	7.59	7.27			
8/3/2022		6.87	5.96	6.41	
8/4/2022	7.38				6.47
1/26/2023	7.67	7.22	6.07	6.9	6.23

Time Series

Constituent: Selenium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	<0.005	<0.005	<0.005			
5/23/2016						<0.005
7/11/2016	<0.005	<0.005				
7/12/2016			<0.005			<0.005
8/30/2016	<0.005	<0.005	<0.005			
9/1/2016						<0.005
10/19/2016	<0.005	<0.005	<0.005			
10/24/2016						<0.005
12/6/2016	<0.005	<0.005	<0.005			
12/7/2016						<0.005
1/24/2017	<0.005	<0.005	<0.005			
1/26/2017						0.0041 (J)
3/21/2017	<0.005	<0.005	<0.005			
3/22/2017						<0.005
5/22/2017	<0.005	<0.005	<0.005			
5/24/2017						<0.005
4/2/2018	<0.005	<0.005				
4/3/2018			<0.005			
4/4/2018						<0.005
6/4/2018	<0.005	<0.005	<0.005			
6/5/2018						<0.005
10/1/2018	<0.005	<0.005	<0.005			
10/2/2018						0.0023 (J)
3/12/2019	<0.005	<0.005	<0.005			
3/13/2019						0.0015 (J)
4/1/2019			<0.005			
4/2/2019	<0.005	<0.005				
4/3/2019						<0.005
9/23/2019	<0.005	<0.005	<0.005			
9/27/2019						<0.005
3/2/2020	<0.005	<0.005	<0.005			
3/3/2020						<0.005
3/25/2020	<0.005	<0.005	<0.005			
4/1/2020						0.002 (J)
9/15/2020	<0.005	<0.005	<0.005			
9/16/2020				<0.005	<0.005	<0.005
11/10/2020				<0.005	<0.005	
12/15/2020				<0.005	<0.005	
1/19/2021				<0.005	<0.005	
2/8/2021	<0.005					
2/9/2021		<0.005	<0.005	<0.005	<0.005	
2/15/2021						0.0028 (J)
3/10/2021	0.0047 (J)				<0.005	
3/11/2021		<0.005	<0.005	<0.005		
3/12/2021						<0.005
8/11/2021	<0.005			<0.005		
8/12/2021		<0.005	<0.005			
8/13/2021					<0.005	
8/17/2021						<0.005
2/1/2022	<0.005	<0.005	<0.005	<0.005	<0.005	
2/9/2022						0.0031 (J)
8/2/2022	<0.005	0.0014 (J)	<0.005	<0.005	<0.005	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
8/3/2022						0.0017 (J)
1/23/2023			<0.005			
1/24/2023	<0.005	<0.005		<0.005	<0.005	
1/27/2023						0.0035 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				<0.005	<0.005	
5/23/2016	0.0106	<0.005	<0.005			<0.005
7/12/2016	0.0057 (J)	<0.005	<0.005	<0.005	<0.005	<0.005
9/1/2016	0.0057 (J)	<0.005	<0.005	<0.005	<0.005	<0.005
10/20/2016				<0.005	<0.005	<0.005
10/24/2016	0.0021 (J)	<0.005	<0.005			
12/6/2016				<0.005	0.0024 (J)	0.0037 (J)
12/7/2016	0.0015 (J)	0.0011 (J)	<0.005			
1/25/2017				<0.005	<0.005	
1/26/2017	0.0062 (J)	<0.005	<0.005			<0.005
3/21/2017				<0.005	<0.005	
3/22/2017	0.0263	<0.005	<0.005			<0.005
5/23/2017				<0.005	<0.005	<0.005
5/24/2017	0.0038 (J)	<0.005	<0.005			
4/3/2018				<0.005	<0.005	<0.005
4/4/2018	0.021	<0.005	<0.005			
6/5/2018	0.0062 (J)		<0.005	<0.005		
6/6/2018		<0.005			<0.005	<0.005
10/2/2018				<0.005	<0.005	<0.005
10/3/2018	0.009 (J)	<0.005				
10/5/2018			<0.005			
3/12/2019					<0.005	
3/13/2019	0.023		<0.005	<0.005		<0.005
3/14/2019		<0.005				
4/2/2019				<0.005		
4/3/2019	0.016	<0.005			<0.005	<0.005
4/5/2019			0.00018 (J)			
9/24/2019					<0.005	
9/25/2019				<0.005		
9/26/2019			<0.005			
9/27/2019	0.013	<0.005				<0.005
3/3/2020	0.016	<0.005			<0.005	
3/4/2020			<0.005	<0.005		<0.005
3/26/2020		<0.005				
3/27/2020				<0.005	<0.005	
3/30/2020			<0.005			
3/31/2020	0.019					<0.005
9/16/2020				<0.005	<0.005	
9/17/2020						<0.005
9/18/2020	0.0042 (J)	<0.005				
9/21/2020			0.0016 (J)			
2/10/2021				<0.005		
2/12/2021	0.0079 (J)	<0.005				
2/16/2021					<0.005	<0.005
2/22/2021			<0.005			
3/15/2021				<0.005	<0.005	
3/16/2021	0.015	<0.005				<0.005
3/17/2021			<0.005			
8/16/2021				<0.005		
8/17/2021						<0.005
8/18/2021	0.0033 (J)	<0.005			<0.005	
8/19/2021			<0.005			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
2/9/2022	0.0035 (J)	<0.005				<0.005
2/10/2022			<0.005	<0.005	<0.005	
8/3/2022	0.0057	<0.005	<0.005	<0.005	<0.005	
8/4/2022						<0.005
8/11/2022				<0.005		
1/26/2023	0.01	<0.005	<0.005			<0.005
1/27/2023				<0.005		
2/1/2023					<0.005	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		<0.005	<0.005		<0.005	<0.005
3/14/2019	<0.005			<0.005		
4/2/2019		<0.005				
4/3/2019	0.007 (J)			<0.005	<0.005	
4/4/2019						0.00012 (J)
4/8/2019			<0.005			
9/25/2019		<0.005				
9/26/2019			<0.005		<0.005	<0.005
9/27/2019	0.0013 (J)			<0.005		
3/2/2020		<0.005				
3/3/2020				<0.005		
3/4/2020	0.0044 (J)		<0.005		<0.005	<0.005
3/26/2020	0.0053 (J)			<0.005		
3/27/2020		<0.005				
3/30/2020			<0.005			
3/31/2020					<0.005	
4/2/2020						<0.005
9/17/2020		<0.005			<0.005	
9/18/2020				<0.005		<0.005
9/21/2020	0.0033 (J)		<0.005			
2/11/2021		<0.005				
2/12/2021	0.0021 (J)			<0.005		
2/16/2021			<0.005		<0.005	<0.005
3/12/2021						<0.005
3/15/2021		<0.005				
3/16/2021				<0.005		
3/17/2021	<0.005		<0.005		<0.005	
8/17/2021		<0.005			<0.005	<0.005
8/18/2021	0.0026 (J)					
8/19/2021			<0.005	<0.005		
2/9/2022	0.0036 (J)			<0.005	<0.005	
2/10/2022		<0.005	<0.005			<0.005
8/3/2022			<0.005			<0.005
8/4/2022	0.0022 (J)	<0.005		<0.005	<0.005	
1/26/2023	0.0056	<0.005	<0.005	<0.005	<0.005	
1/27/2023						<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	<0.005	<0.005			
3/13/2019			0.0033 (J)	<0.005	0.0016 (J)
4/2/2019	<0.005	<0.005			
4/3/2019			0.0027 (J)	<0.005	<0.005
9/24/2019		<0.005			
9/25/2019			0.0021 (J)		
9/26/2019	<0.005			<0.005	0.0014 (J)
3/2/2020		<0.005	0.0041 (J)		
3/3/2020				<0.005	<0.005
3/4/2020	<0.005				
3/26/2020			0.0039 (J)		
3/27/2020	<0.005			<0.005	
3/30/2020		<0.005			0.0014 (J)
9/16/2020		<0.005			
9/17/2020			0.0028 (J)		
9/21/2020	<0.005			<0.005	0.0026 (J)
2/10/2021	<0.005				
2/15/2021		<0.005			<0.005
2/16/2021			0.0035 (J)	<0.005	
3/15/2021	<0.005	<0.005			0.0021 (J)
3/16/2021			0.0026 (J)	<0.005	
8/16/2021		<0.005			
8/17/2021			0.0017 (J)	<0.005	<0.005
8/18/2021	<0.005				
2/8/2022					0.0015 (J)
2/9/2022			0.0027 (J)	<0.005	
2/10/2022	<0.005	<0.005			
8/3/2022		<0.005	0.0032 (J)	<0.005	
8/4/2022	<0.005				<0.005
1/26/2023	<0.005	<0.005	0.0045 (J)	<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	66.9	48.6	42.3			
5/23/2016						175
7/11/2016	41	45				
7/12/2016			44			190
8/30/2016	36	42	40			
9/1/2016						190
10/19/2016	46	44	43			
10/24/2016						190
12/6/2016	59	44	43			
12/7/2016						200
1/24/2017	46	46	48			
1/26/2017						90
3/21/2017	63	46	45			
3/22/2017						170
5/22/2017	77	48	46			
5/24/2017						190
10/3/2017	42	47	48			200
6/4/2018	71.8	47.8	46.6			
6/5/2018						205
10/1/2018	49.1	48.1	48.6			
10/2/2018						178
4/1/2019			50.4			
4/2/2019	84.3	48.7				
4/3/2019						159
9/23/2019	70.2	47.2	43.9			
9/27/2019						181
3/25/2020	85.9	46.3	50.5			
4/1/2020						59
6/16/2020	88.2		49.5			
9/15/2020	47.3	51.5	44.7			
9/16/2020				43	6.9	169
11/10/2020				39	6.3	
12/15/2020				38.8	6.7	
1/19/2021				37.3	7.4	
3/10/2021	49.6				<1	
3/11/2021		52.9	50.4	38.6		
3/12/2021						120
8/11/2021	48.9			30.5		
8/12/2021		47.4	38.6			
8/13/2021					56.1	
8/17/2021						156
2/1/2022	43.7	67.1	46	37.5	56.3	
2/9/2022						49.2
8/2/2022	58.1	86.9	43.5	37	13.2	
8/3/2022						119
1/23/2023			39.5			
1/24/2023	48.3	79.7		34.7	10.1	
1/27/2023						37.3

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				96	219	
5/23/2016	260	288	215			207
7/12/2016	390	320	210	100	230	230
9/1/2016	240	300	190	100	230	230
10/20/2016				110	240	240
10/24/2016	370	270	180			
12/6/2016				110	250	240
12/7/2016	260	280	120			
1/25/2017				110	260	
1/26/2017	230	260	83			270
3/21/2017				110	240	
3/22/2017	330	220	100			240
5/23/2017				110	270	240
5/24/2017	230	210	110			
10/3/2017	230	190	67	120	230	240
6/5/2018	204		187	117		
6/6/2018		162			190	214
10/2/2018				120	193	218
10/3/2018	233	191				
10/5/2018			78.3			
4/2/2019				127		
4/3/2019	298	176			194	214
4/5/2019			105			
9/24/2019					133	
9/25/2019				109		
9/26/2019			444			
9/27/2019	<10	198				214
3/26/2020		182				
3/27/2020				109	173	
3/30/2020			393			
3/31/2020	283					185
6/16/2020					157	
6/17/2020				102		
9/16/2020				109	194	
9/17/2020						209
9/18/2020	272	266				
9/21/2020			359			
3/15/2021				107	272	
3/16/2021	291	248				211
3/17/2021			384			
8/16/2021				98.1		
8/17/2021						207
8/18/2021	237	226			245	
8/19/2021			339			
2/9/2022	276	252				224
2/10/2022			371	97.5	224	
8/3/2022	254	236	451	105	241	
8/4/2022						243
8/11/2022				121		
1/26/2023	209	228	495			217
1/27/2023				119		
2/1/2023					179	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
4/2/2019		122				
4/3/2019	105			53	131	
4/4/2019						11.8
4/8/2019			97.3			
9/25/2019		112				
9/26/2019			91		189	15.6
9/27/2019	170			48		
3/26/2020	310			32.3		
3/27/2020		114				
3/30/2020			84.9			
3/31/2020					129	
4/2/2020						13.3
9/17/2020		110			174	
9/18/2020				27.4		7.5
9/21/2020	305		114			
3/12/2021						7.4
3/15/2021		109				
3/16/2021				9.4		
3/17/2021	260		137		212	
8/17/2021		98.6			194	8.2
8/18/2021	219					
8/19/2021			130	4.1		
2/9/2022	221			1.7	224	
2/10/2022		95.9	127			13.2
8/3/2022			135			9.5
8/4/2022	412	110		0.97 (J)	239	
1/26/2023	214	109	152	0.59 (J)	240	
1/27/2023						9.1

Time Series

Constituent: Sulfate (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
4/2/2019	67.7	151			
4/3/2019			218	228	75.3
9/24/2019		154			
9/25/2019			134		
9/26/2019	96.2			225	129
3/26/2020			176		
3/27/2020	36			204	
3/30/2020		130			46.2
9/16/2020		143			
9/17/2020			153		
9/21/2020	84.2			221	114
3/15/2021	50.1	148			92.1
3/16/2021			162	189	
8/16/2021		136			
8/17/2021			154	194	105
8/18/2021	82.1				
2/8/2022					80.4
2/9/2022			123	197	
2/10/2022	32.5	141			
8/3/2022		140	135	190	
8/4/2022	80.5				76
1/26/2023	40.8	161	137	203	26

Time Series

Constituent: Thallium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	<0.001	<0.001	<0.001			
5/23/2016						<0.001
7/11/2016	<0.001	<0.001				
7/12/2016			<0.001			<0.001
8/30/2016	<0.001	<0.001	<0.001			
9/1/2016						<0.001
10/19/2016	<0.001	<0.001	<0.001			
10/24/2016						<0.001
12/6/2016	<0.001	<0.001	<0.001			
12/7/2016						<0.001
1/24/2017	<0.001	<0.001	<0.001			
1/26/2017						<0.001
3/21/2017	<0.001	3E-05 (J)	<0.001			
3/22/2017						<0.001
5/22/2017	<0.001	<0.001	<0.001			
5/24/2017						<0.001
4/2/2018	<0.001	<0.001				
4/3/2018			<0.001			
4/4/2018						<0.001
6/4/2018	<0.001	<0.001	<0.001			
6/5/2018						<0.001
10/1/2018	<0.001	<0.001	<0.001			
10/2/2018						<0.001
3/12/2019	<0.001	<0.001	<0.001			
3/13/2019						<0.001
4/1/2019			<0.001			
4/2/2019	<0.001	<0.001				
4/3/2019						<0.001
9/23/2019	<0.001	<0.001	<0.001			
9/27/2019						<0.001
3/2/2020	<0.001	<0.001	<0.001			
3/3/2020						<0.001
3/25/2020	<0.001	<0.001	<0.001			
4/1/2020						<0.001
9/15/2020	<0.001	<0.001	<0.001			
9/16/2020				<0.001	<0.001	<0.001
11/10/2020				<0.001	<0.001	
12/15/2020				<0.001	<0.001	
1/19/2021				<0.001	<0.001	
2/8/2021	<0.001					
2/9/2021		<0.001	<0.001	<0.001	<0.001	
2/15/2021						<0.001
3/10/2021	<0.001				<0.001	
3/11/2021		<0.001	<0.001	<0.001		
3/12/2021						<0.001
8/11/2021	<0.001			<0.001		
8/12/2021		<0.001	<0.001			
8/13/2021					<0.001	
8/17/2021						<0.001
2/1/2022	<0.001	<0.001	<0.001	<0.001	<0.001	
2/9/2022						<0.001
8/2/2022	<0.001	<0.001	<0.001	<0.001	<0.001	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
8/3/2022						<0.001
1/23/2023			<0.001			
1/24/2023	<0.001	<0.001		<0.001	<0.001	
1/27/2023						<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				<0.001	<0.001	
5/23/2016	<0.001	<0.001	0.000378 (J)			<0.001
7/12/2016	8E-05 (J)	0.0002 (J)	0.0004 (J)	<0.001	7E-05 (J)	<0.001
9/1/2016	<0.001	<0.001	0.0004 (J)	<0.001	<0.001	<0.001
10/20/2016				<0.001	<0.001	<0.001
10/24/2016	<0.001	<0.001	0.0005 (J)			
12/6/2016				<0.001	<0.001	<0.001
12/7/2016	<0.001	<0.001	0.0004 (J)			
1/25/2017				<0.001	<0.001	
1/26/2017	<0.001	<0.001	0.0004 (J)			<0.001
3/21/2017				<0.001	9E-05 (J)	
3/22/2017	<0.001	0.0001 (J)	0.0004 (J)			<0.001
5/23/2017				<0.001	8E-05 (J)	<0.001
5/24/2017	8E-05 (J)	9E-05 (J)	0.0003 (J)			
4/3/2018				<0.001	<0.001	<0.001
4/4/2018	<0.001	<0.001	0.00032 (J)			
6/5/2018	<0.001		0.00035 (J)	<0.001		
6/6/2018		<0.001			<0.001	<0.001
10/2/2018				<0.001	<0.001	<0.001
10/3/2018	<0.001	<0.001				
10/5/2018			0.00025 (J)			
3/12/2019					<0.001	
3/13/2019	<0.001		0.00039 (J)	<0.001		<0.001
3/14/2019		<0.001				
4/2/2019				<0.001		
4/3/2019	<0.001	<0.001			<0.001	<0.001
4/5/2019			0.00034 (J)			
9/24/2019					0.00011 (J)	
9/25/2019				<0.001		
9/26/2019			0.00039 (J)			
9/27/2019	<0.001	8.8E-05 (J)				<0.001
3/3/2020	<0.001	6.6E-05 (J)			6.1E-05 (J)	
3/4/2020			0.00056 (J)	<0.001		<0.001
3/26/2020		8E-05 (J)				
3/27/2020				<0.001	7.7E-05 (J)	
3/30/2020			0.00048 (J)			
3/31/2020	<0.001					<0.001
9/16/2020				<0.001	<0.001	
9/17/2020						<0.001
9/18/2020	<0.001	<0.001				
9/21/2020			0.00036 (J)			
2/10/2021				<0.001		
2/12/2021	<0.001	<0.001				
2/16/2021					<0.001	<0.001
2/22/2021			0.0003 (J)			
3/15/2021				<0.001	<0.001	
3/16/2021	<0.001	<0.001				<0.001
3/17/2021			0.00037 (J)			
8/16/2021				<0.001		
8/17/2021						<0.001
8/18/2021	<0.001	<0.001			<0.001	
8/19/2021			0.0002 (J)			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
2/9/2022	<0.001	<0.001				<0.001
2/10/2022			<0.001	<0.001	<0.001	
8/3/2022	<0.001	<0.001	<0.001	<0.001	0.00018 (J)	
8/4/2022						<0.001
8/11/2022				<0.001		
1/26/2023	<0.001	<0.001	0.00031 (J)			<0.001
1/27/2023				<0.001		
2/1/2023					<0.001	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		<0.001	<0.001		<0.001	<0.001
3/14/2019	<0.001			<0.001		
4/2/2019		<0.001				
4/3/2019	<0.001			<0.001	<0.001	
4/4/2019						<0.001
4/8/2019			<0.001			
9/25/2019		<0.001				
9/26/2019			<0.001		<0.001	<0.001
9/27/2019	0.00027 (J)			<0.001		
3/2/2020		<0.001				
3/3/2020				<0.001		
3/4/2020	0.00026 (J)		<0.001		<0.001	<0.001
3/26/2020	0.00026 (J)			<0.001		
3/27/2020		<0.001				
3/30/2020			<0.001			
3/31/2020					<0.001	
4/2/2020						<0.001
9/17/2020		<0.001			<0.001	
9/18/2020				<0.001		<0.001
9/21/2020	0.0003 (J)		<0.001			
2/11/2021		<0.001				
2/12/2021	0.00019 (J)			<0.001		
2/16/2021			<0.001		<0.001	<0.001
3/12/2021						<0.001
3/15/2021		<0.001				
3/16/2021				<0.001		
3/17/2021	0.00026 (J)		<0.001		<0.001	
8/17/2021		<0.001			<0.001	<0.001
8/18/2021	0.00023 (J)					
8/19/2021			<0.001	<0.001		
2/9/2022	<0.001			<0.001	<0.001	
2/10/2022		<0.001	<0.001			<0.001
8/3/2022			<0.001			<0.001
8/4/2022	0.00026 (J)	<0.001		<0.001	<0.001	
1/26/2023	<0.001	<0.001	<0.001	<0.001	<0.001	
1/27/2023						<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	<0.001	<0.001			
3/13/2019			<0.001	<0.001	<0.001
4/2/2019	<0.001	<0.001			
4/3/2019			<0.001	<0.001	<0.001
9/24/2019		6.4E-05 (J)			
9/25/2019			<0.001		
9/26/2019	<0.001			<0.001	<0.001
3/2/2020		<0.001	<0.001		
3/3/2020				8.2E-05 (J)	<0.001
3/4/2020	9.2E-05 (J)				
3/26/2020			<0.001		
3/27/2020	<0.001			<0.001	
3/30/2020		<0.001			<0.001
9/16/2020		<0.001			
9/17/2020			<0.001		
9/21/2020	<0.001			<0.001	<0.001
2/10/2021	<0.001				
2/15/2021		<0.001			<0.001
2/16/2021			<0.001	<0.001	
3/15/2021	<0.001	<0.001			<0.001
3/16/2021			<0.001	<0.001	
8/16/2021		<0.001			
8/17/2021			<0.001	<0.001	<0.001
8/18/2021	<0.001				
2/8/2022					<0.001
2/9/2022			<0.001	<0.001	
2/10/2022	<0.001	<0.001			
8/3/2022		<0.001	<0.001	<0.001	
8/4/2022	<0.001				<0.001
1/26/2023	<0.001	<0.001	<0.001	<0.001	<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	421	143	267			
5/23/2016						629
7/11/2016	363	125				
7/12/2016			249			661
8/30/2016	330	168	254			
9/1/2016						769
10/19/2016	380	176	357			
10/24/2016						643
12/6/2016	377	145	285			
12/7/2016						697
1/24/2017	342	129	300			
1/26/2017						368
3/21/2017	340	103	288			
3/22/2017						683
5/22/2017	338	92	263			
5/24/2017						696
10/3/2017	343	127	300			746
6/4/2018	415	140	266			
6/5/2018						679
10/1/2018	354	135	291			
10/2/2018						572
4/1/2019			284			
4/2/2019	452	133				
4/3/2019						525
9/23/2019	442	129	268			
9/27/2019						624
3/25/2020	496	138	284			
4/1/2020						290
6/16/2020	632		448			
9/15/2020	265	124	258			
9/16/2020				272	270	490
11/10/2020				307	287	
12/15/2020				289	295	
1/19/2021				270	278	
3/10/2021	348				289	
3/11/2021		169	267	279		
3/12/2021						490 (H1)
8/11/2021	366			277		
8/12/2021		118	265			
8/13/2021					436	
8/17/2021						496
2/1/2022	270	156	350	156	444	
2/9/2022						250
8/2/2022	400	196	287	278	311	
8/3/2022						433
1/23/2023			293			
1/24/2023	369	164		271	363	
1/27/2023						188

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				427	711	
5/23/2016	564	1060	683			984
7/12/2016	627	909	563	410	704	887
9/1/2016	656	1480	702	484	763	956
10/20/2016				393	644	642
10/24/2016	836	868	647			
12/6/2016				492	733	899
12/7/2016	748	811	465			
1/25/2017				461	744	
1/26/2017	571	846	411			869
3/21/2017				415	818	
3/22/2017	597	804	427			936
5/23/2017				450	765	939
5/24/2017	566	803	377			
10/3/2017	443	608	268	464	812	1040
6/5/2018	489		528	459		
6/6/2018		535			611	810
10/2/2018				426	597	693
10/3/2018	449	607				
10/5/2018			322			
4/2/2019				428		
4/3/2019	483	462			543	673
4/5/2019			331			
9/24/2019					457	
9/25/2019				503		
9/26/2019			1010			
9/27/2019	528	653				730
3/26/2020		533				
3/27/2020				413	541	
3/30/2020			895			
3/31/2020	565					1010
6/16/2020					573	
6/17/2020				423		
9/16/2020				392	552	
9/17/2020						680
9/18/2020	626	704				
9/21/2020			732			
3/15/2021				370	614	
3/16/2021	558	614				672
3/17/2021			716			
8/16/2021				407		
8/17/2021						704
8/18/2021	566	600			620	
8/19/2021			726			
2/9/2022	544	678				756
2/10/2022			814	414	578	
8/3/2022	572	650	958	441	648	
8/4/2022						760
8/11/2022				445		
1/26/2023	429	624	962			745
1/27/2023				473		
2/1/2023					528	

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 4/14/2023 12:20 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
4/2/2019		435				
4/3/2019	310			15 (J)	493	
4/4/2019						203
4/8/2019			323			
9/25/2019		461				
9/26/2019			360		643	265
9/27/2019	442			409		
3/26/2020	626			385		
3/27/2020		429				
3/30/2020			280			
3/31/2020					623	
4/2/2020						224
9/17/2020		460			732	
9/18/2020				382		211
9/21/2020	608		391			
3/12/2021						215
3/15/2021		406				
3/16/2021				347		
3/17/2021	543		420		738	
8/17/2021		437			746	239
8/18/2021	464					
8/19/2021			420	373		
2/9/2022	503			364	734	
2/10/2022		459	412			242
8/3/2022			415			230
8/4/2022	762	431		302	788	
1/26/2023	490	482	412	346	741	
1/27/2023						255

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 4/14/2023 12:20 PM

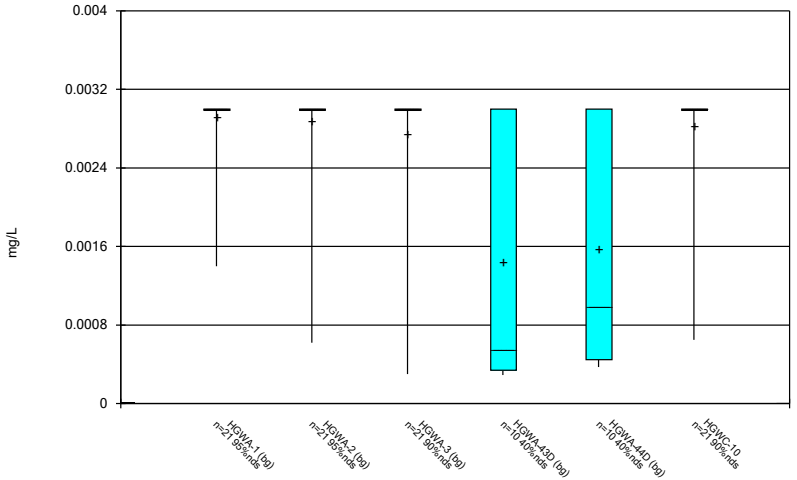
Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
4/2/2019	350	548			
4/3/2019			396	437	213
9/24/2019		603			
9/25/2019			460		
9/26/2019	418			735	383
3/26/2020			385		
3/27/2020	287			676	
3/30/2020		552			142
9/16/2020		547			
9/17/2020			486		
9/21/2020	393			656	326
3/15/2021	293	555			293
3/16/2021			333	600	
8/16/2021		512			
8/17/2021			339	656	344
8/18/2021	396				
2/8/2022					290
2/9/2022			314	652	
2/10/2022	299	508			
8/3/2022		538	391	666	
8/4/2022	378				246
1/26/2023	349	632	363	646	89

FIGURE B.

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

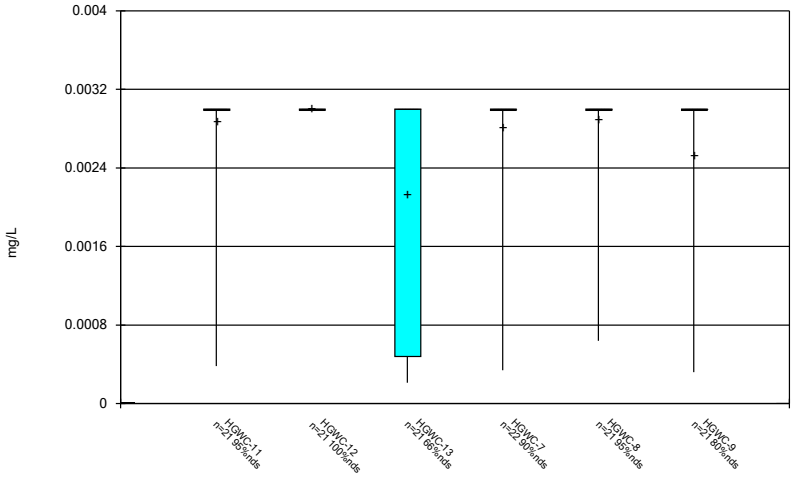


Constituent: Antimony Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

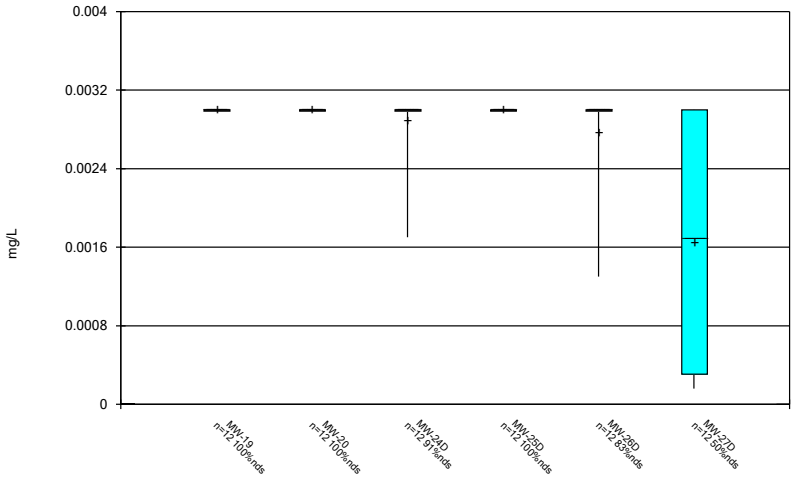


Constituent: Antimony Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

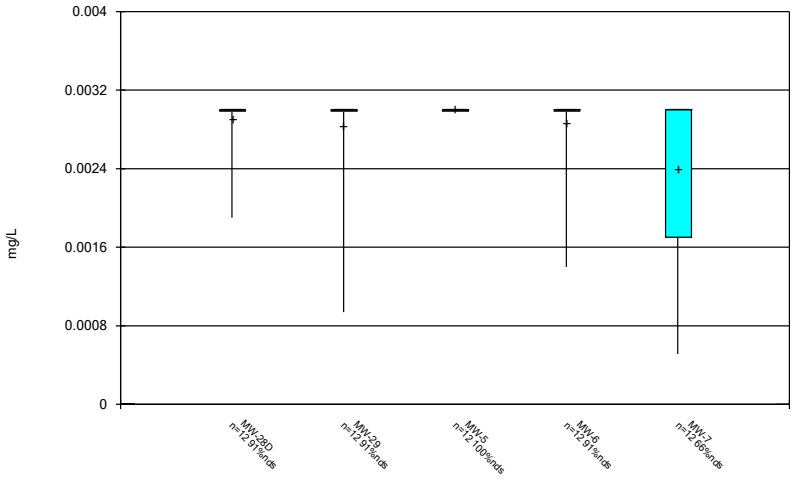


Constituent: Antimony Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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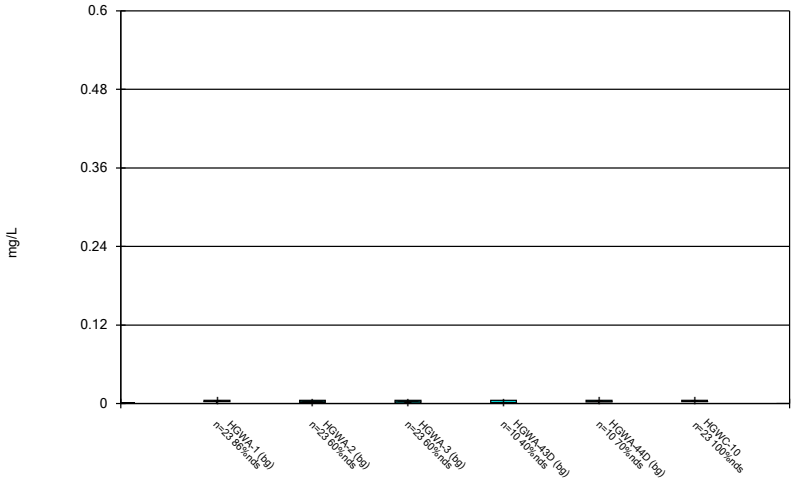
Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

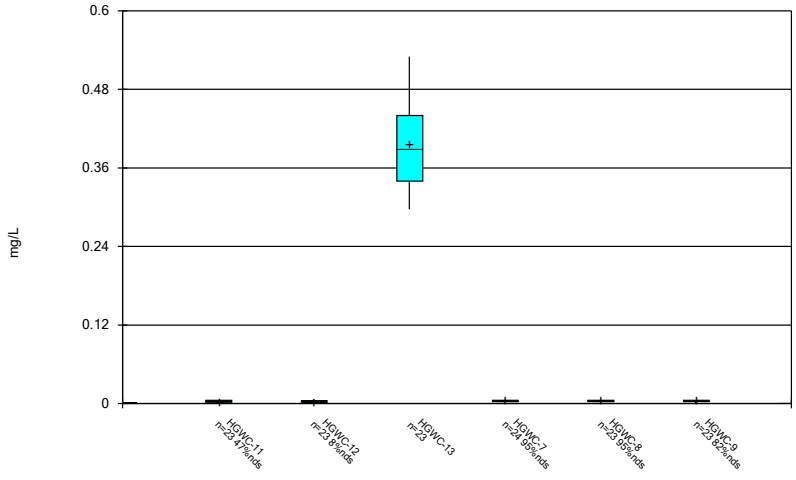


Constituent: Arsenic Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

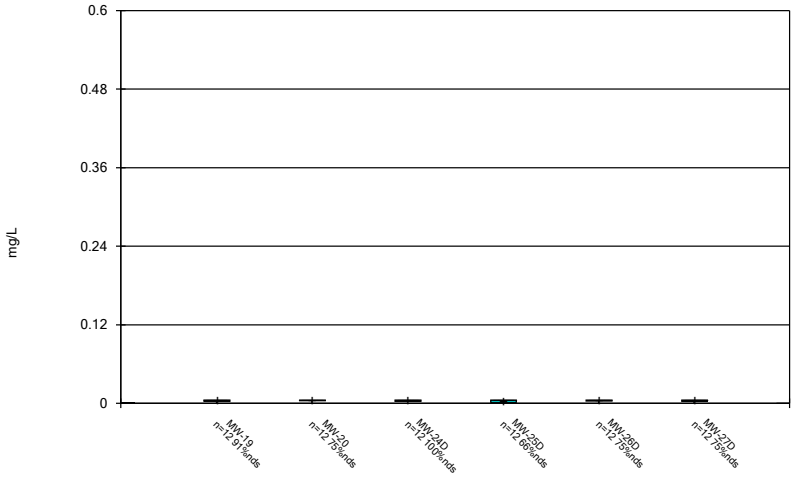


Constituent: Arsenic Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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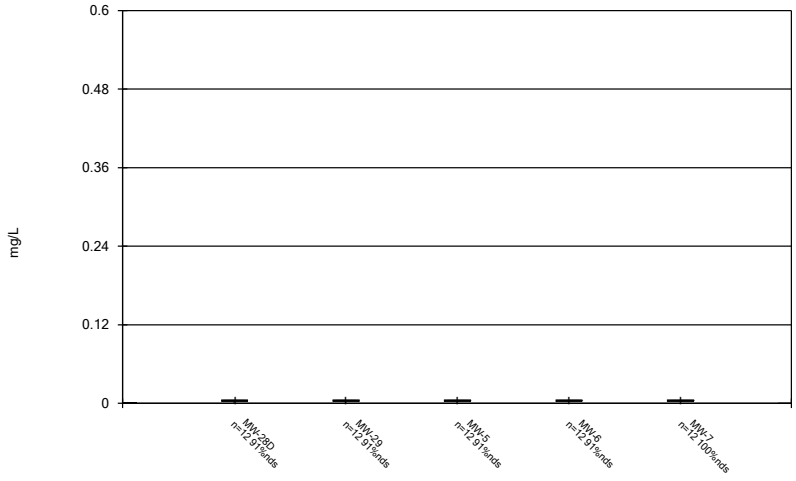
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

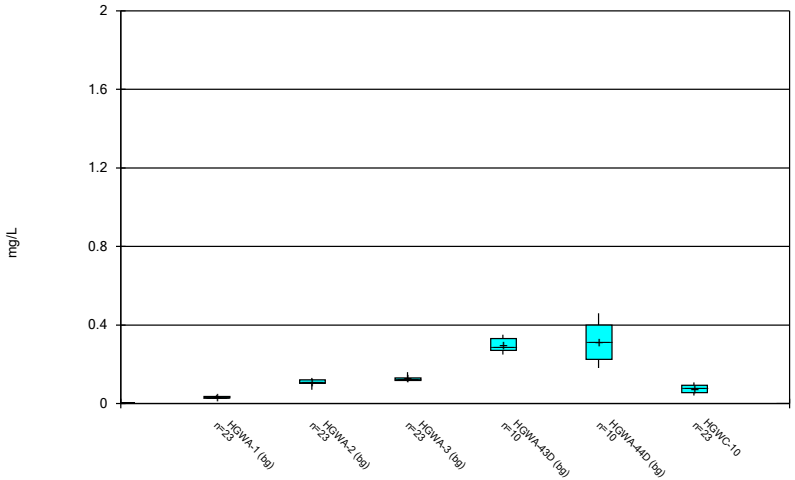
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

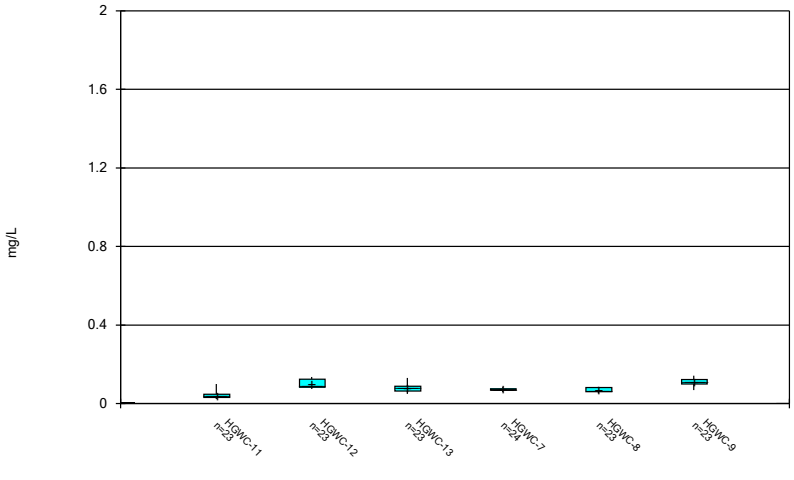


Constituent: Barium Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

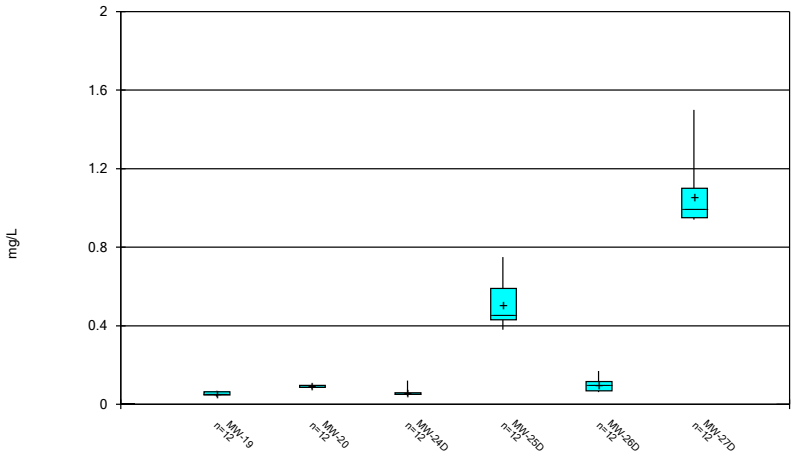


Constituent: Barium Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

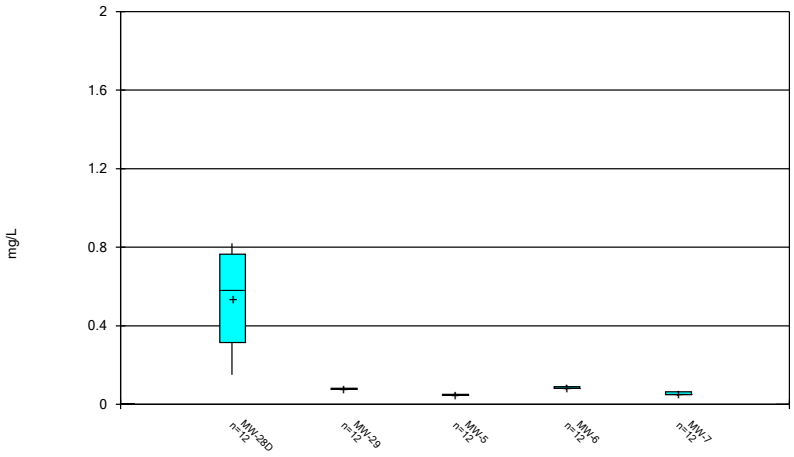


Constituent: Barium Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

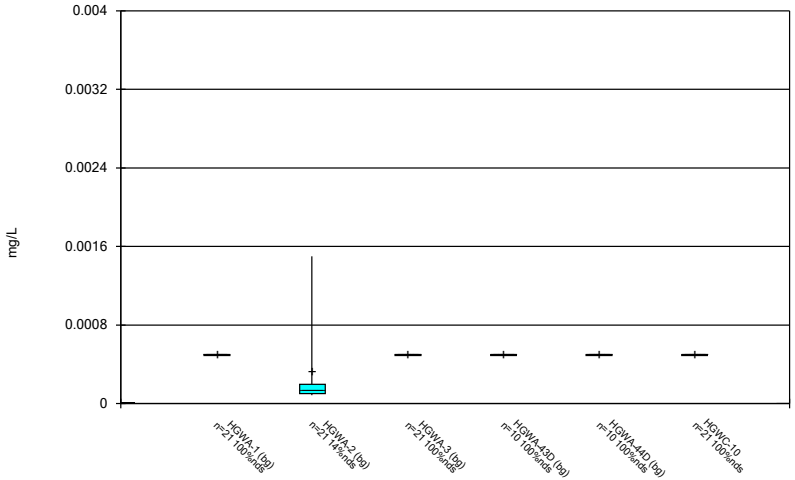
Box & Whiskers Plot



Constituent: Barium Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

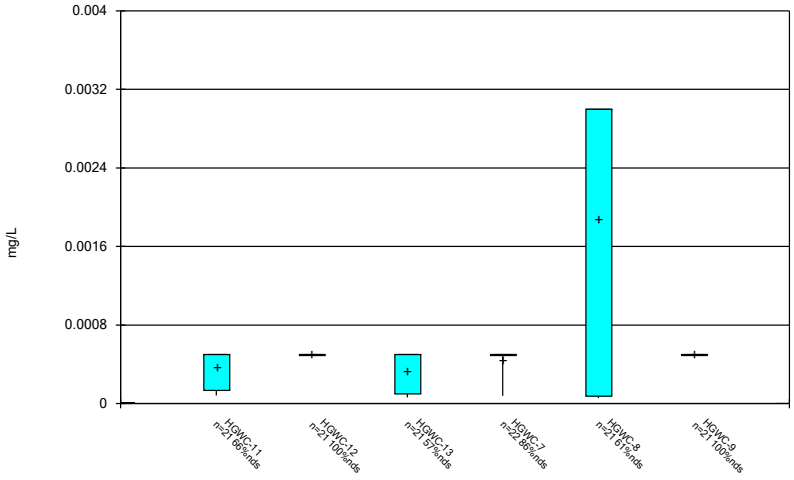


Constituent: Beryllium Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

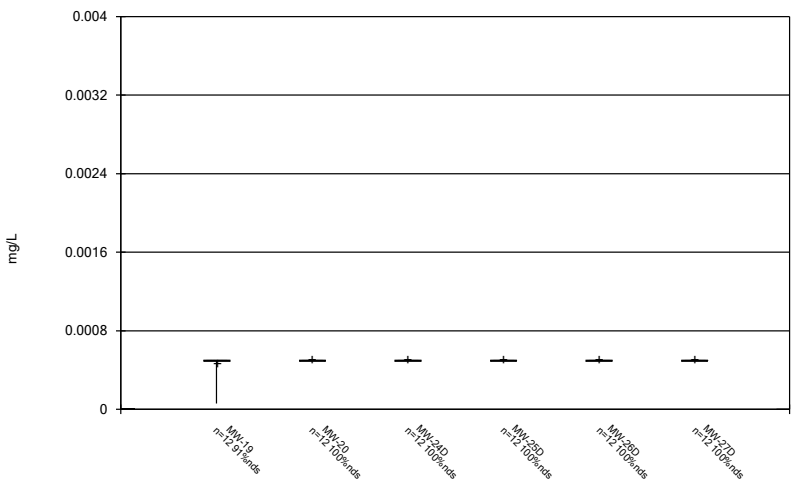


Constituent: Beryllium Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

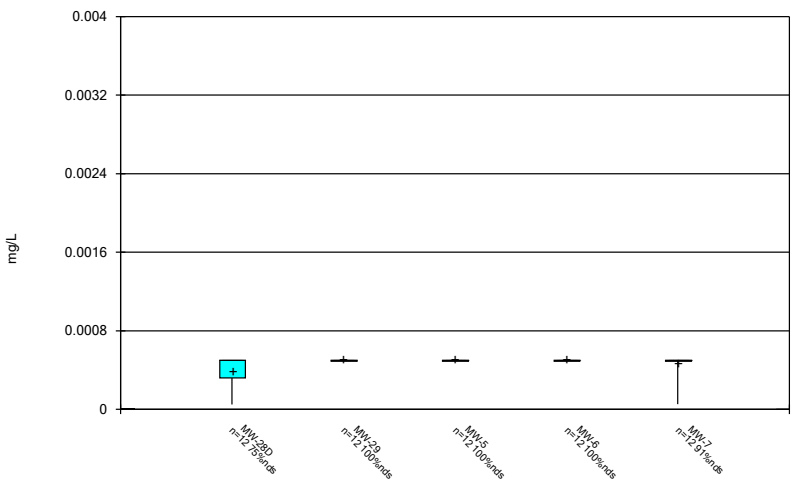


Constituent: Beryllium Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

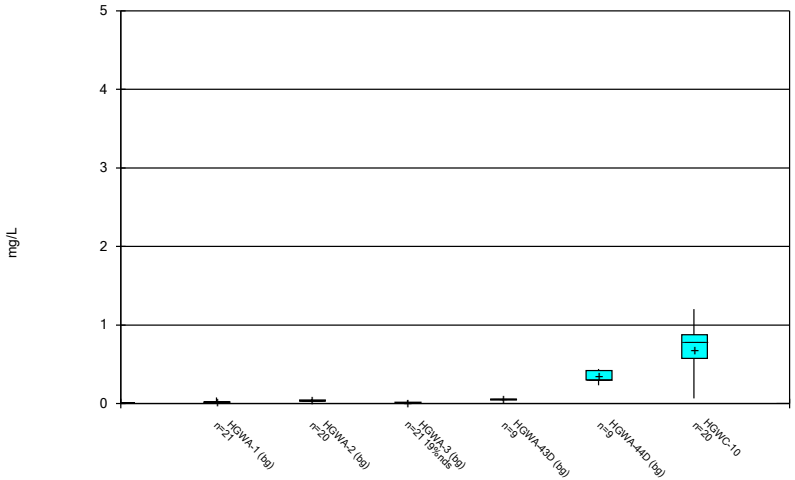
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

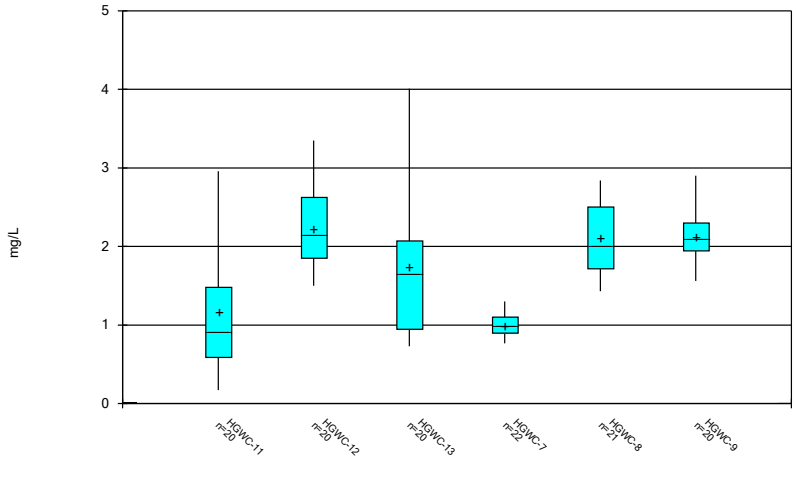
Box & Whiskers Plot



Constituent: Boron Analysis Run 4/14/2023 12:21 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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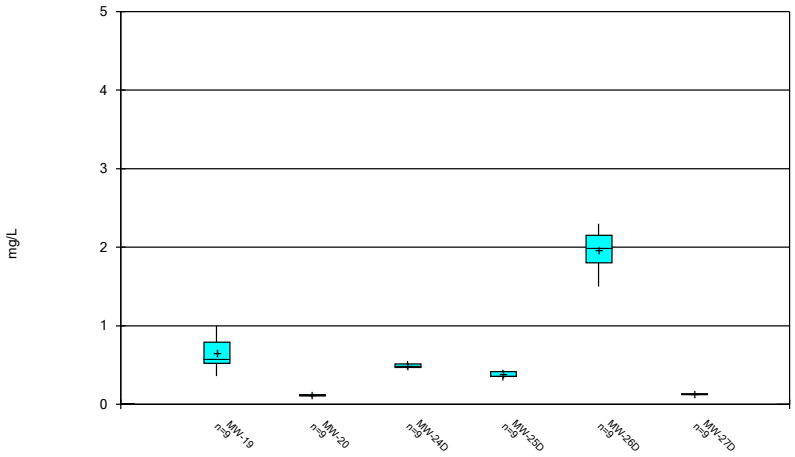
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

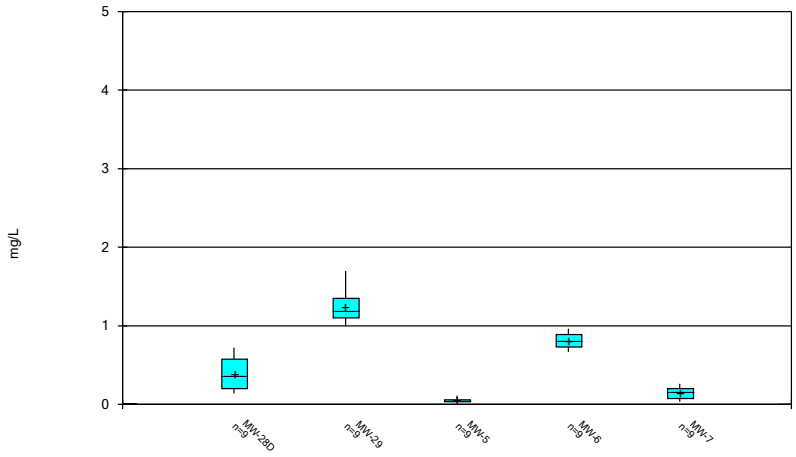
Box & Whiskers Plot



Constituent: Boron Analysis Run 4/14/2023 12:21 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

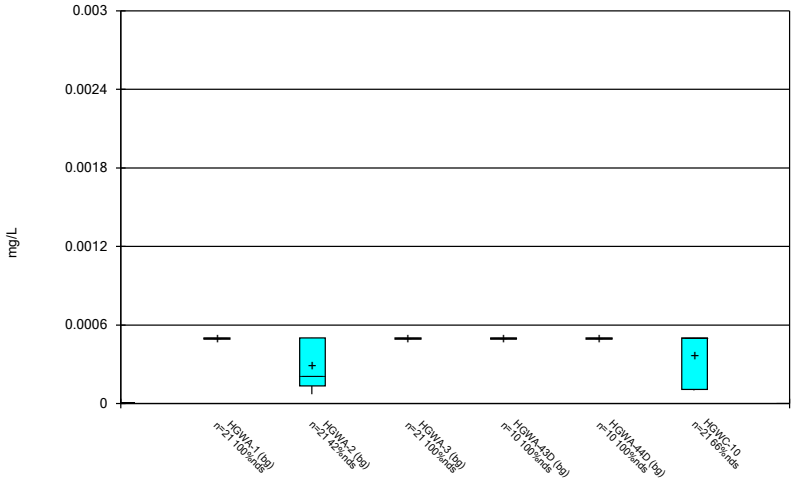
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Boron Analysis Run 4/14/2023 12:21 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

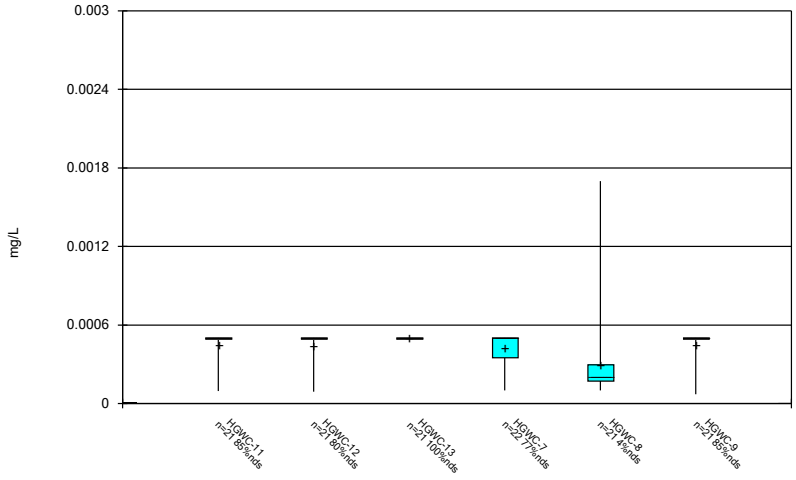


Constituent: Cadmium Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

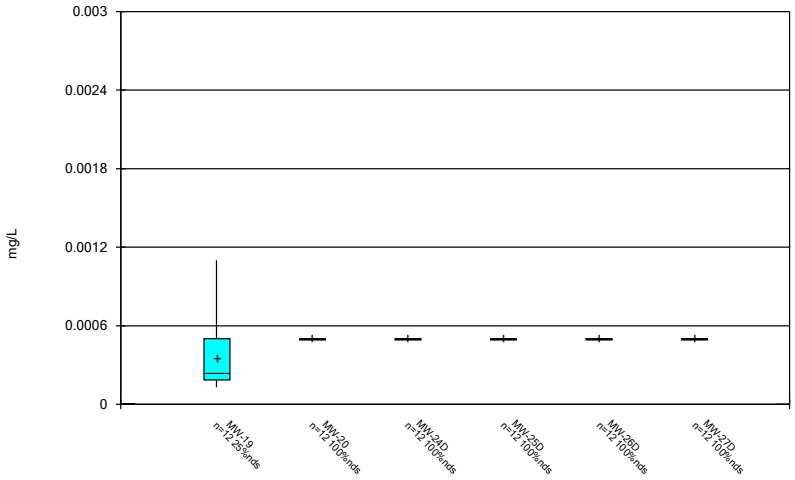


Constituent: Cadmium Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

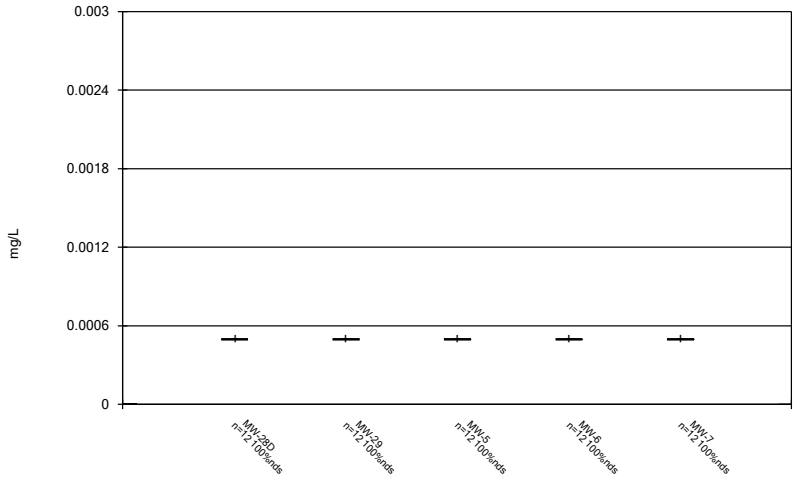


Constituent: Cadmium Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

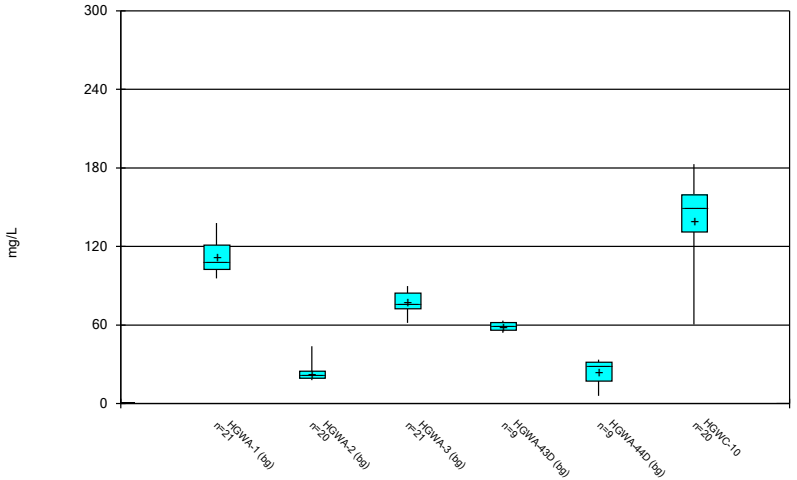
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

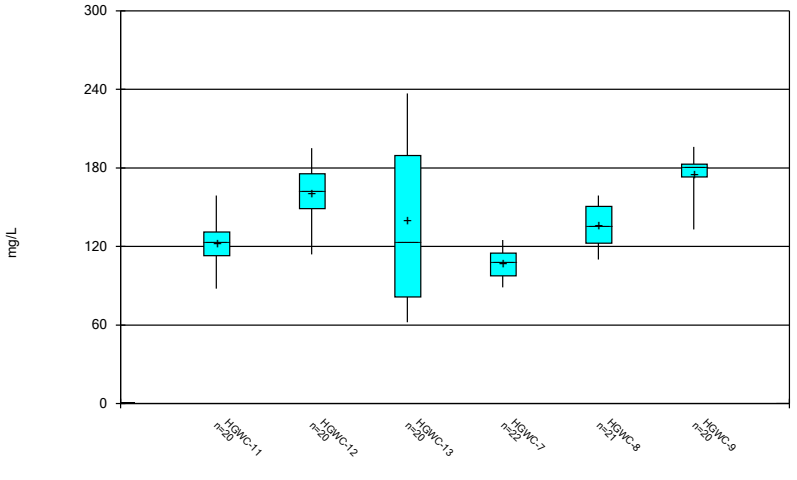


Constituent: Calcium Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

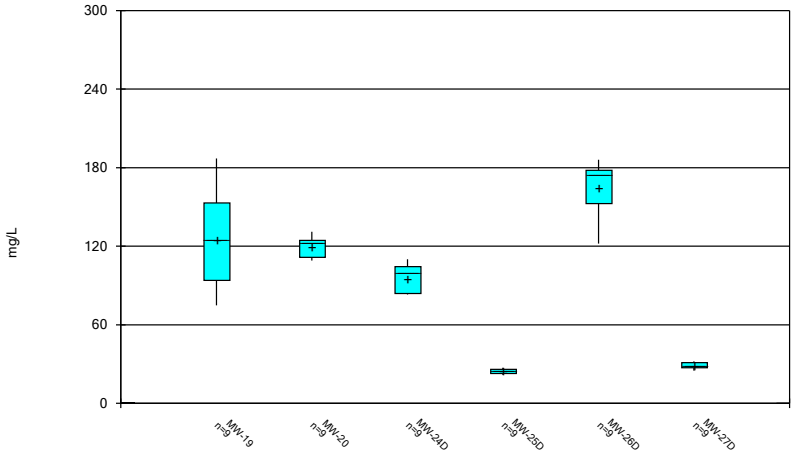


Constituent: Calcium Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

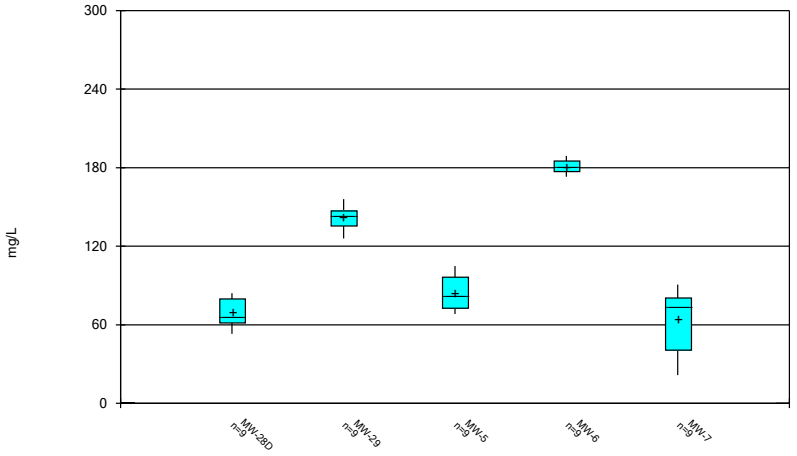


Constituent: Calcium Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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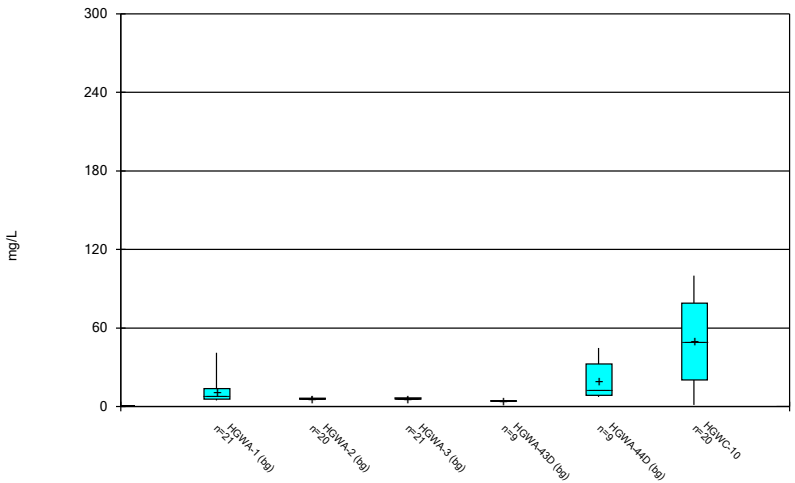
Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

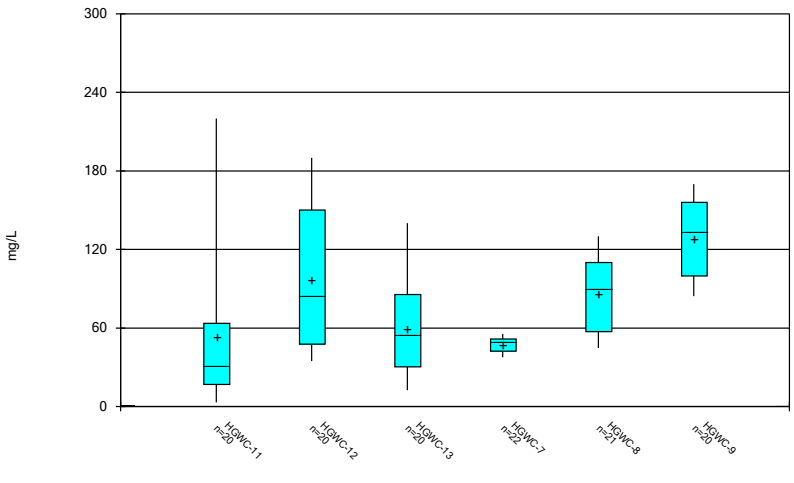


Constituent: Chloride Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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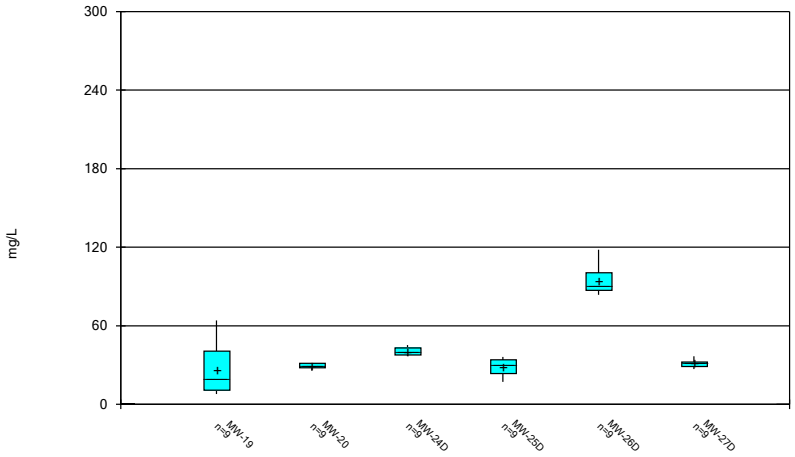
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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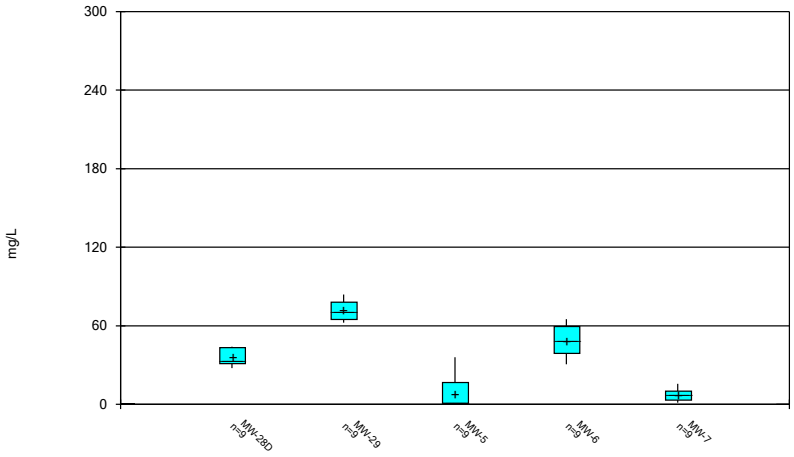
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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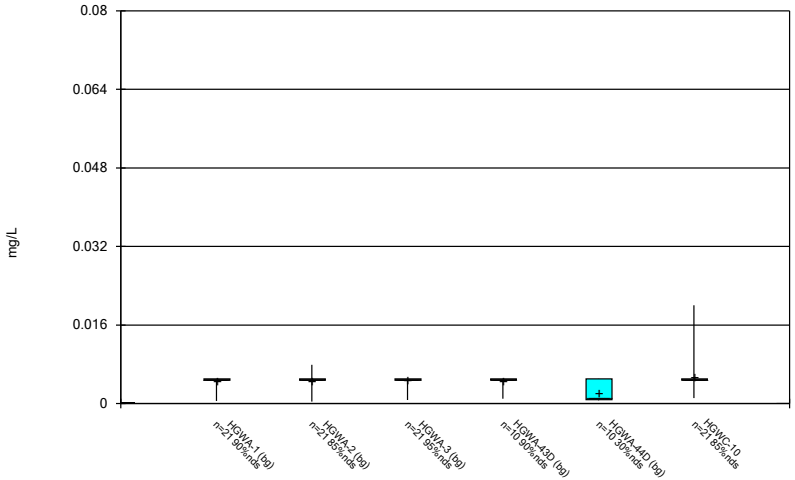
Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

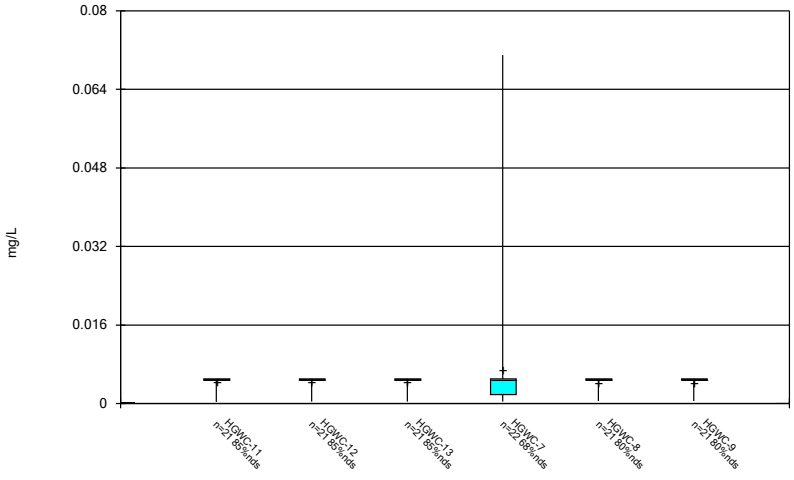


Constituent: Chromium Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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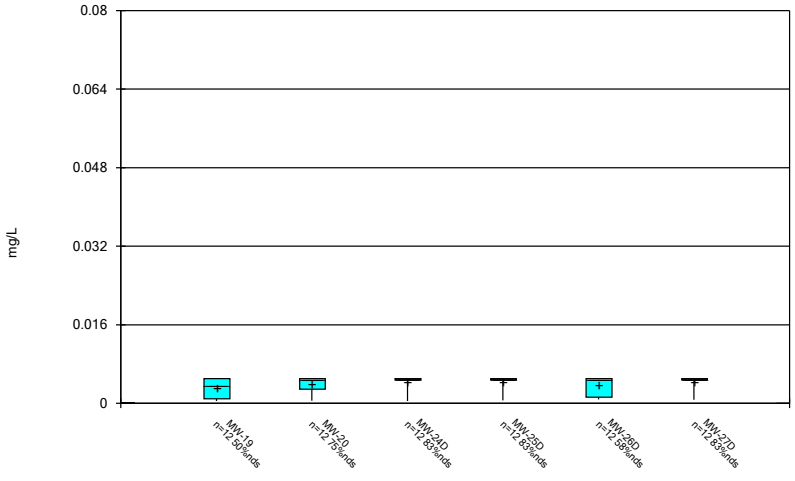
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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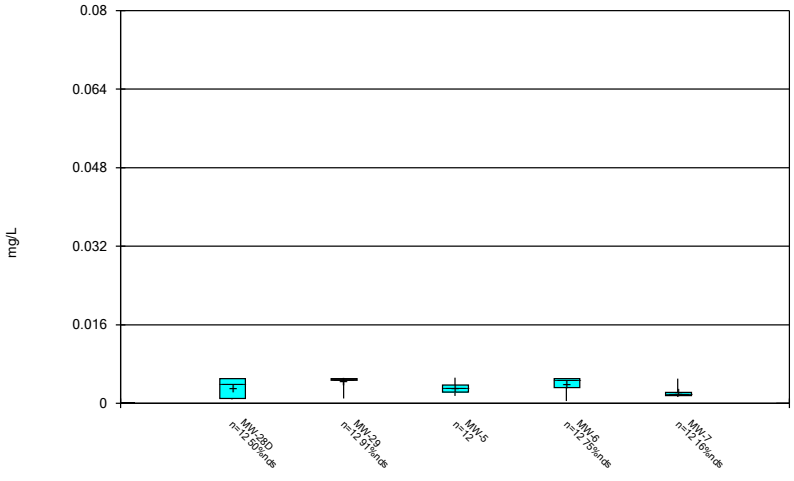
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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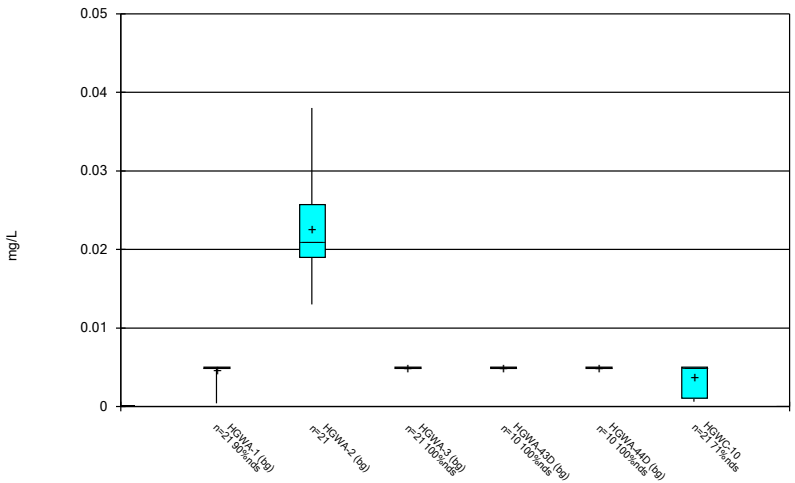
Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

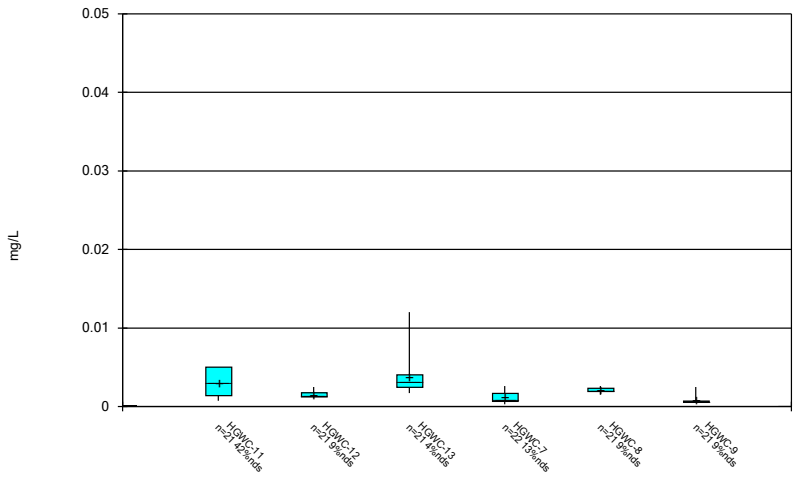


Constituent: Cobalt Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

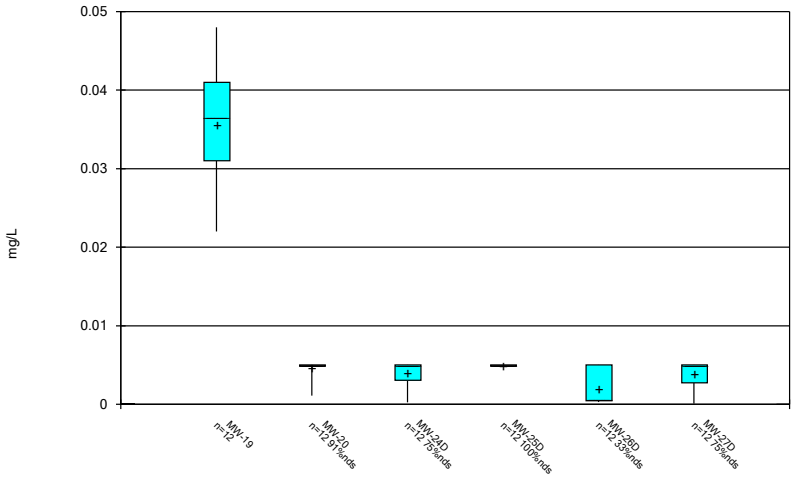


Constituent: Cobalt Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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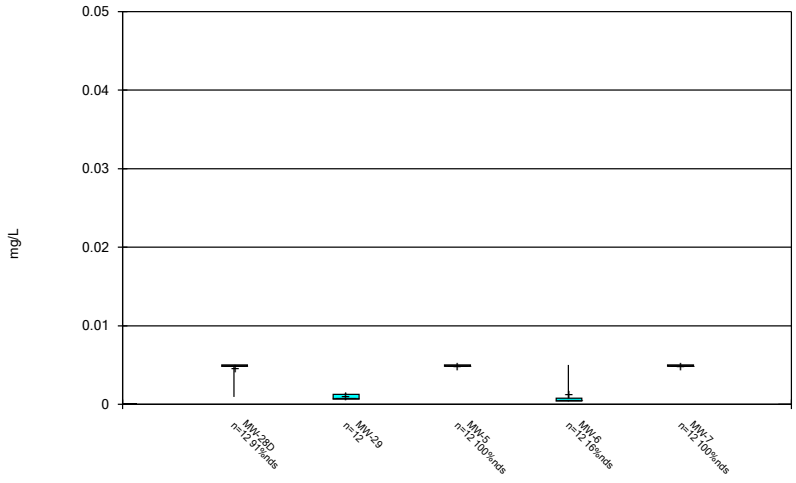
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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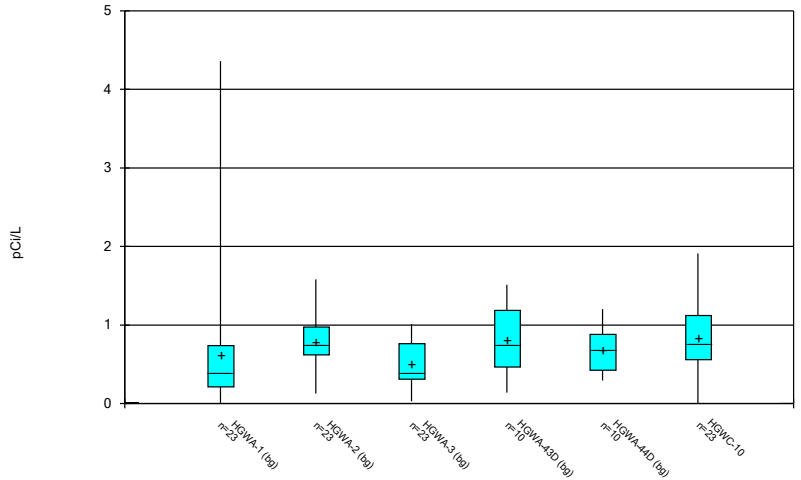
Plant Hammond Client: Southern Company Data: Hammond AP-1

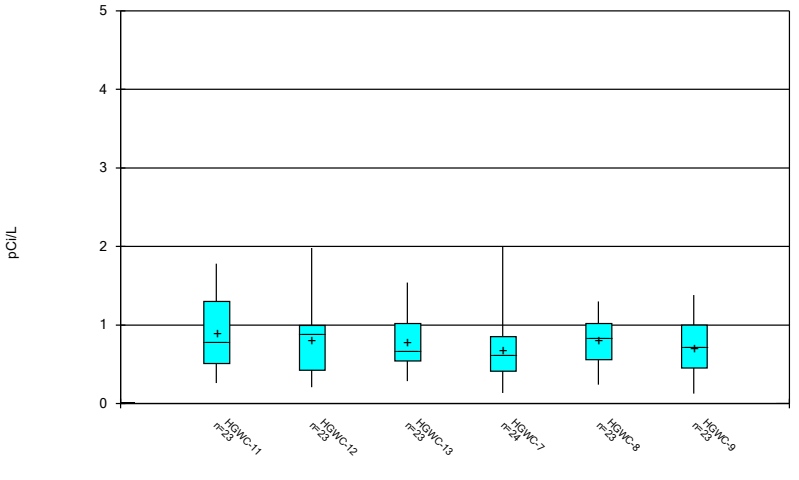
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 4/14/2023 12:21 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

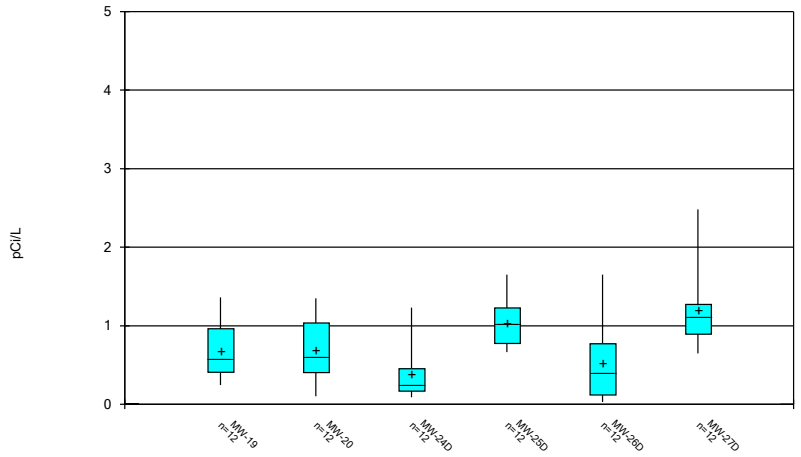
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 4/14/2023 12:21 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

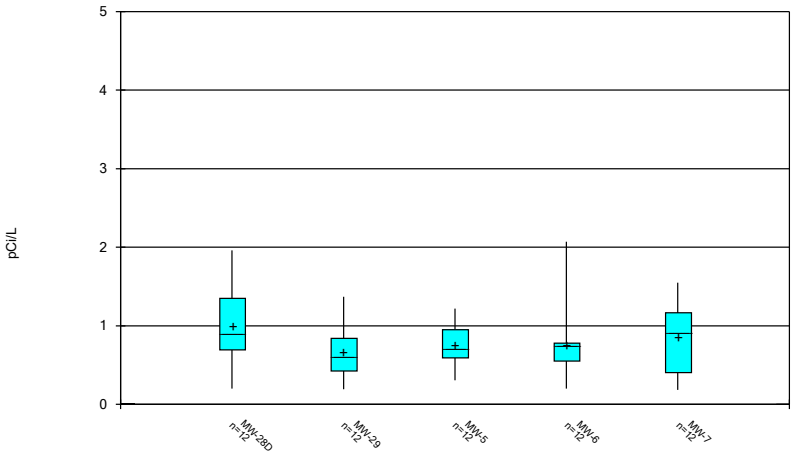
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 4/14/2023 12:21 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

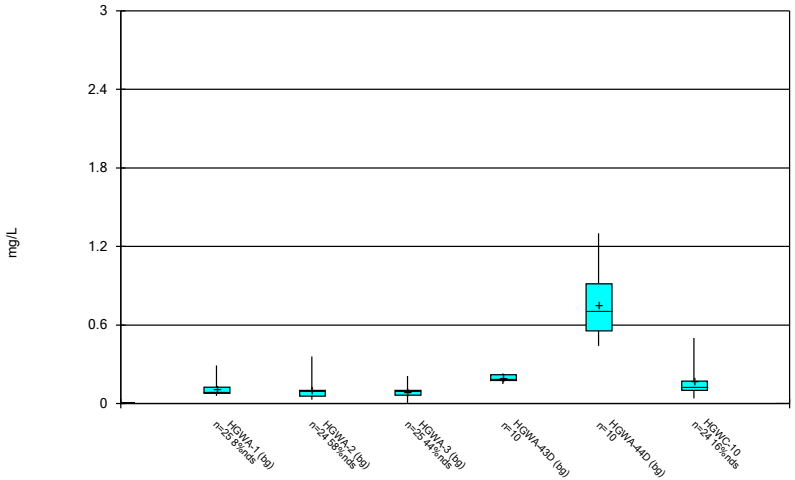
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 4/14/2023 12:21 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

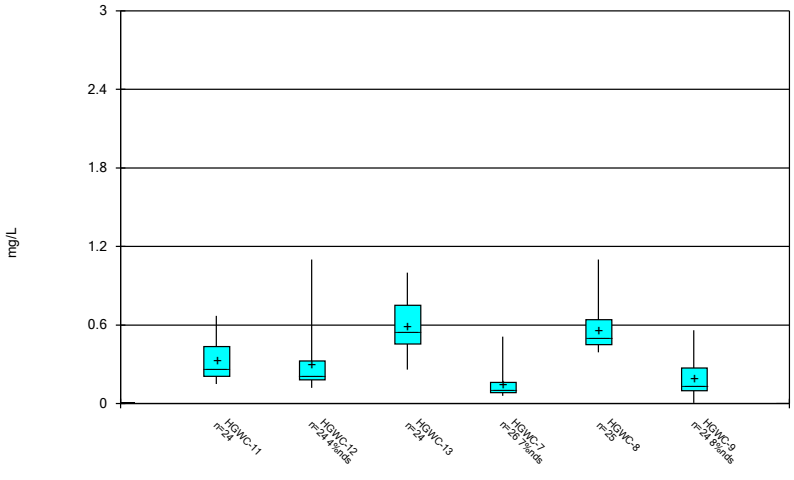


Constituent: Fluoride Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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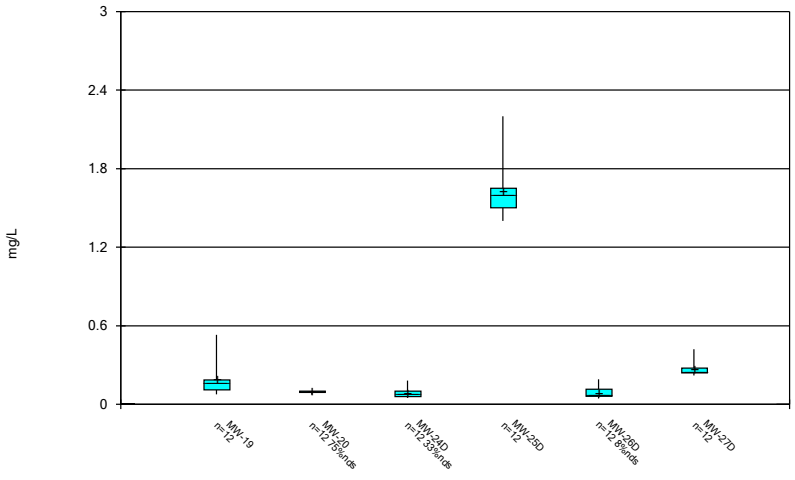
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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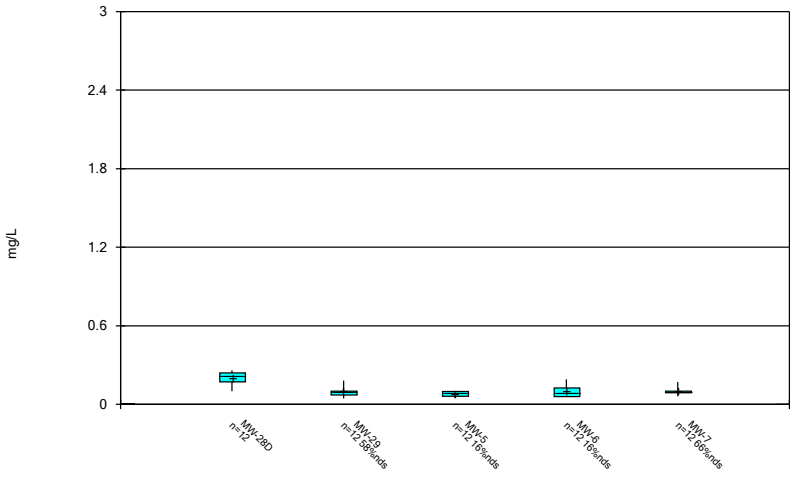
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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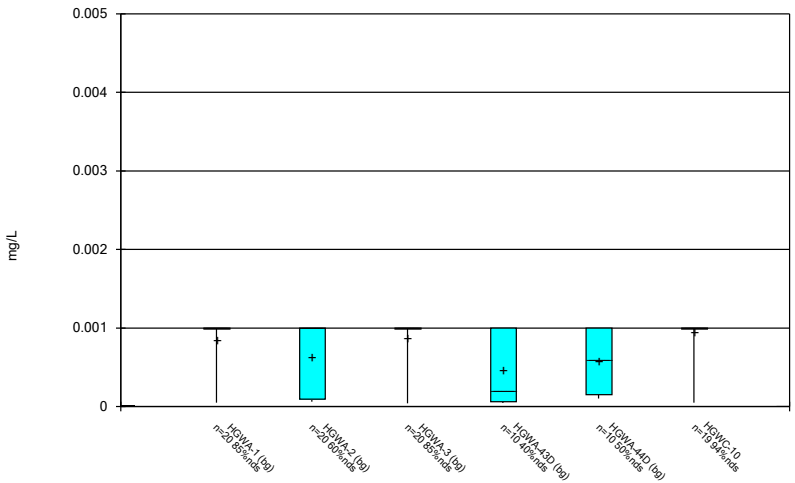
Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

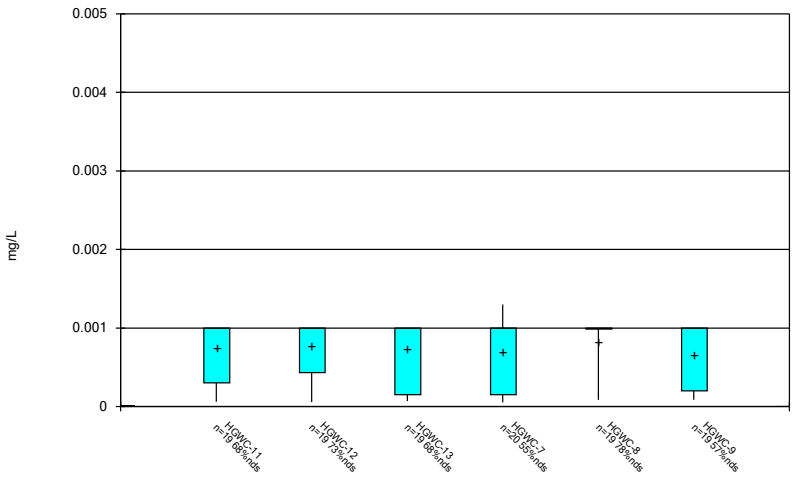


Constituent: Lead Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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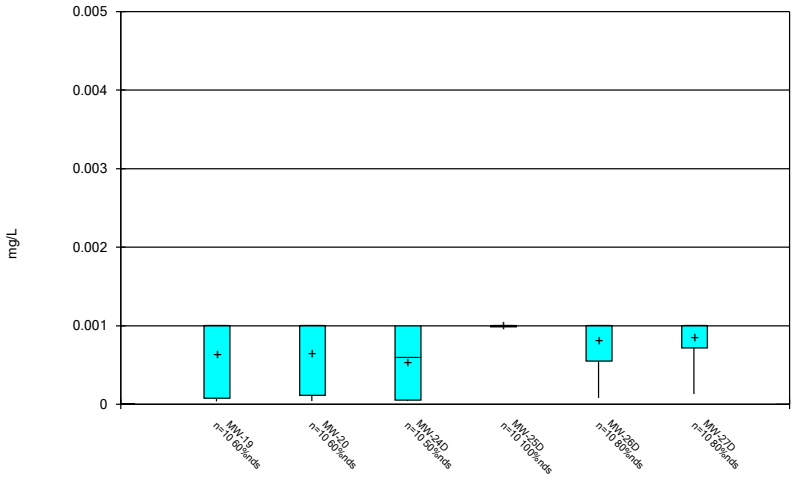
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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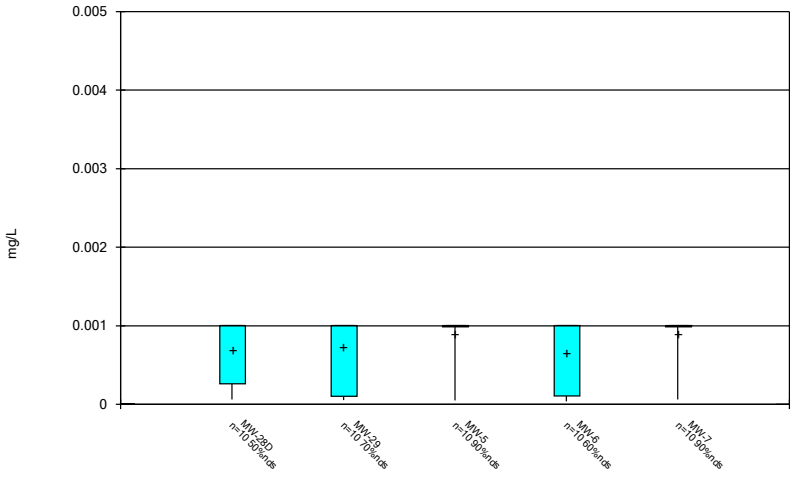
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

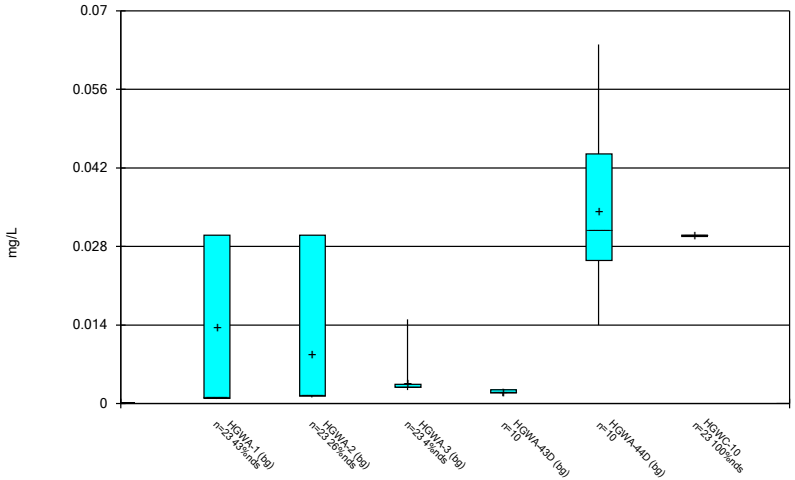


Constituent: Lead Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

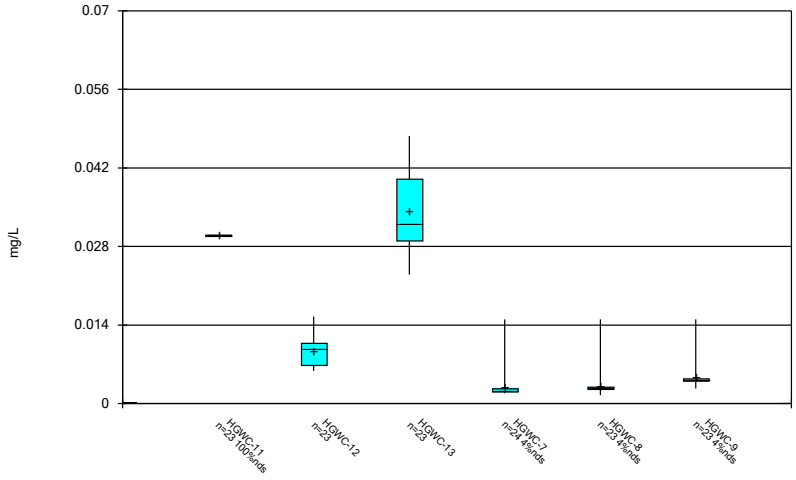


Constituent: Lithium Analysis Run 4/14/2023 12:22 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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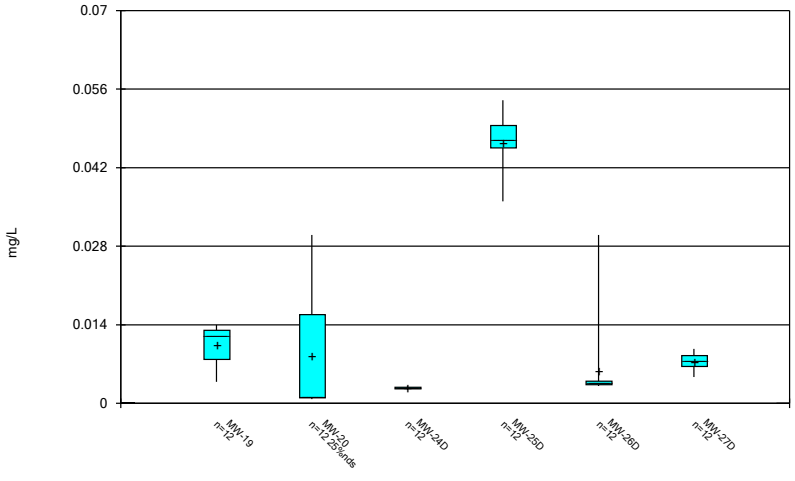
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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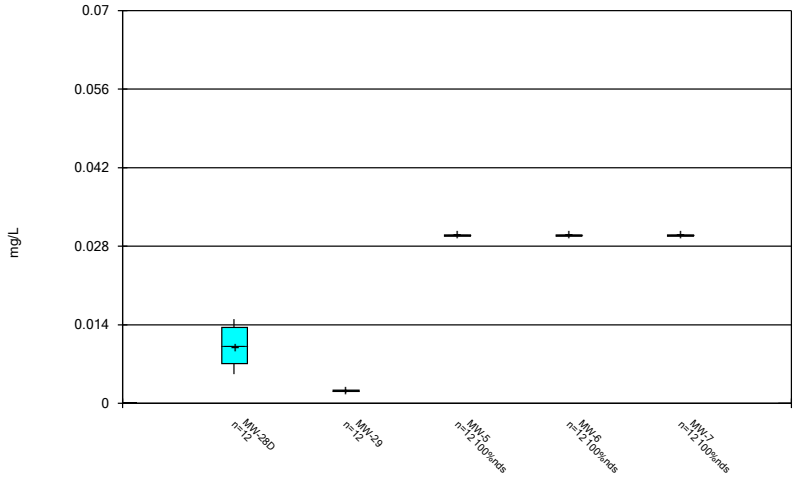
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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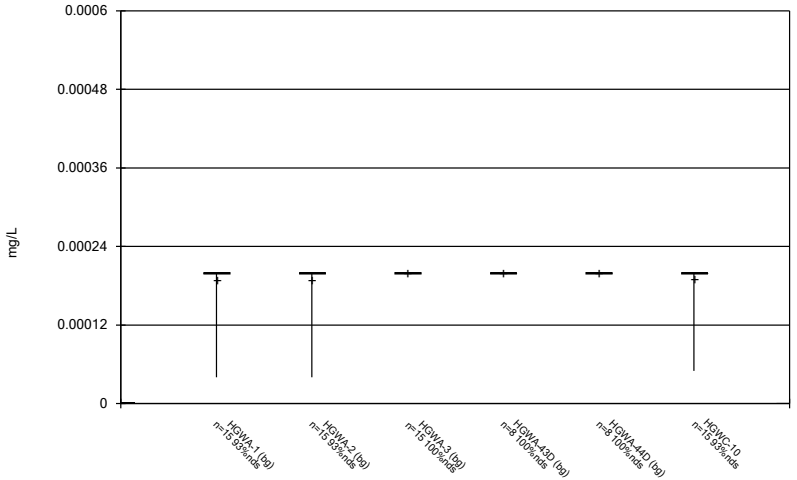
Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

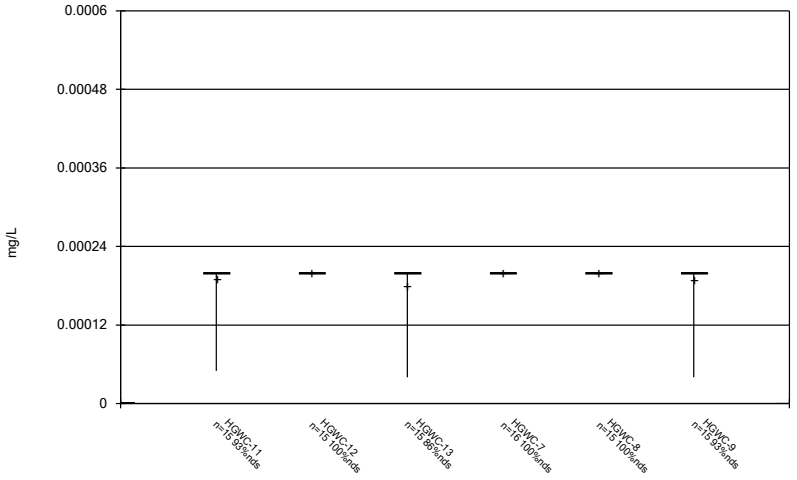


Constituent: Mercury Analysis Run 4/14/2023 12:22 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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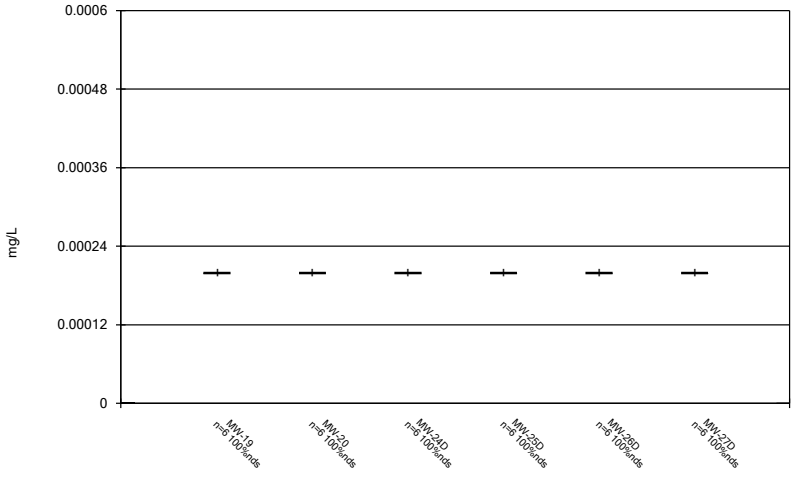
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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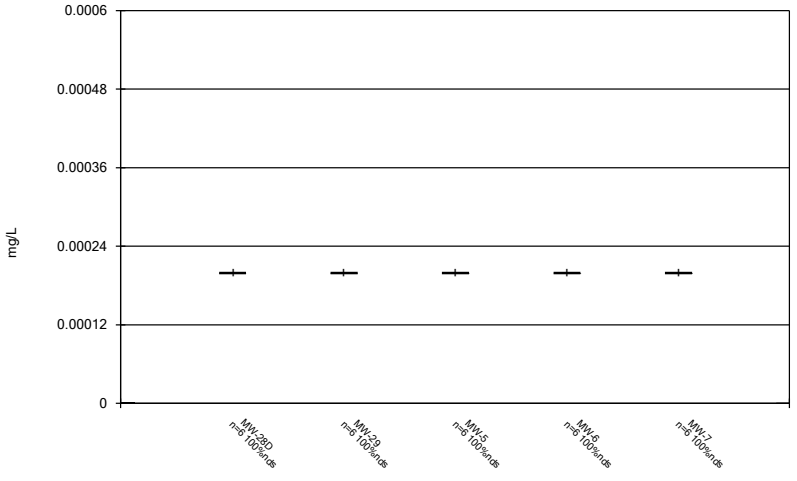
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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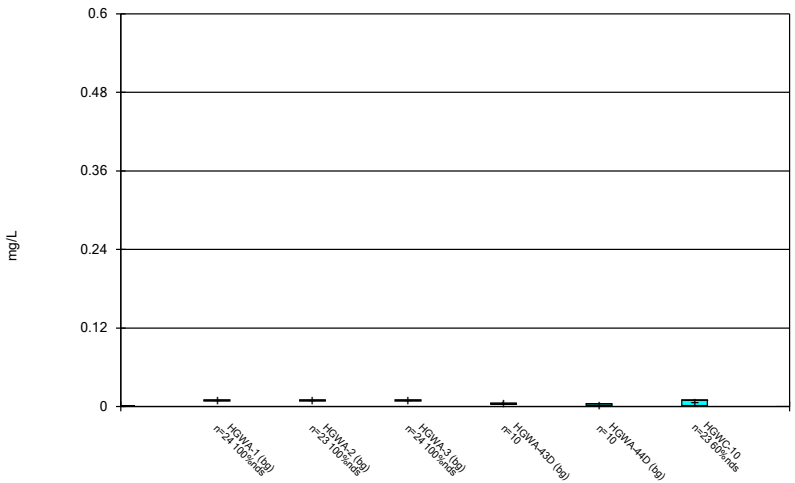
Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

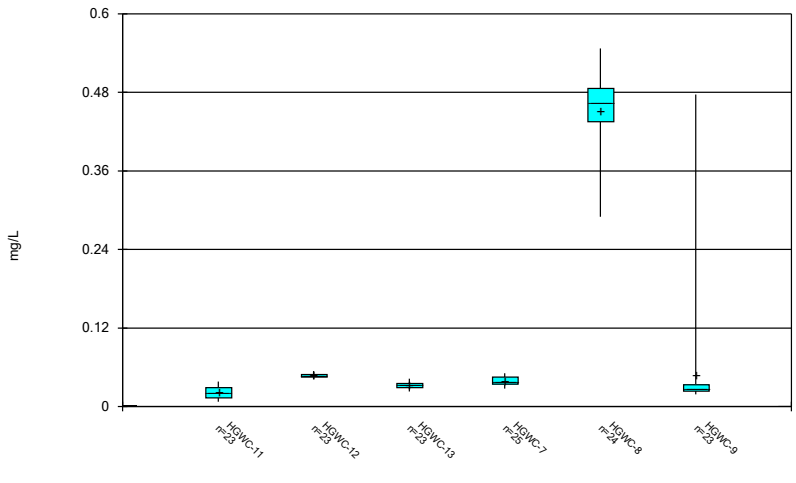


Constituent: Molybdenum Analysis Run 4/14/2023 12:22 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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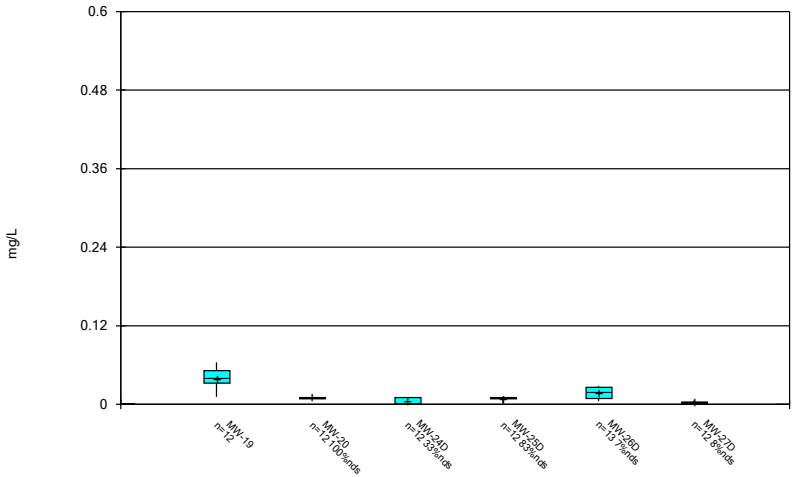
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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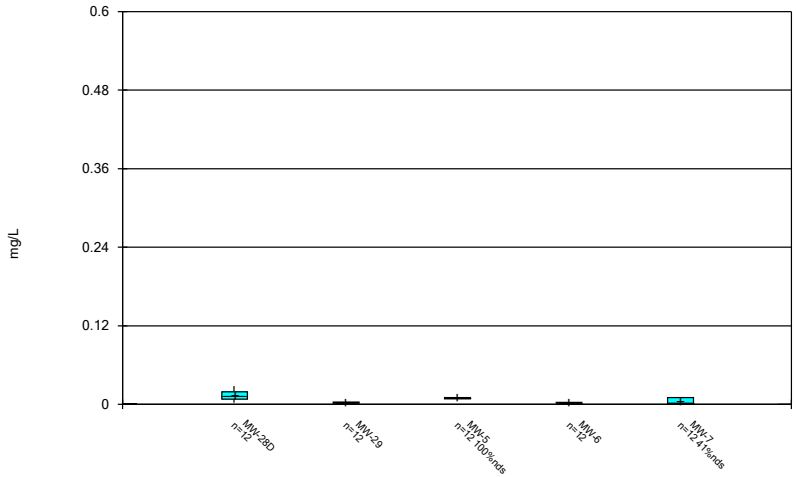
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

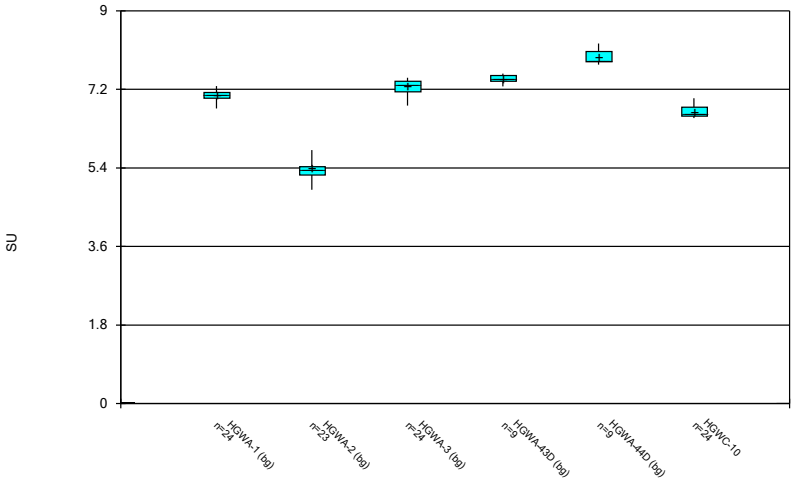


Constituent: Molybdenum Analysis Run 4/14/2023 12:22 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

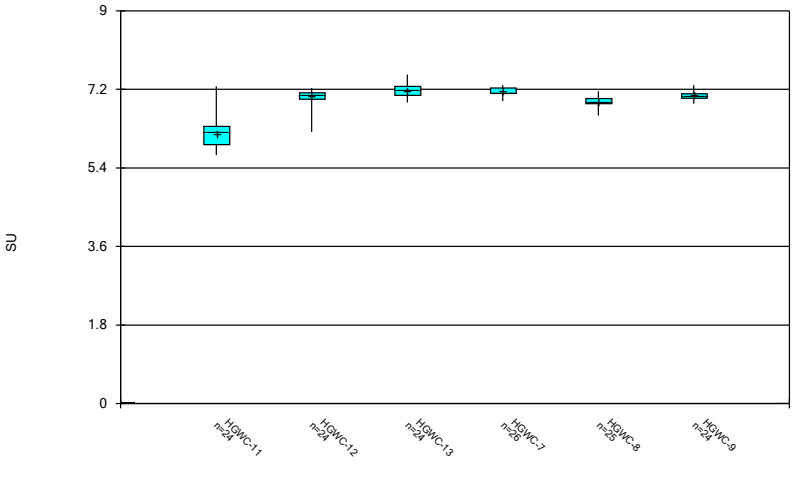


Constituent: pH, Field Analysis Run 4/14/2023 12:22 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

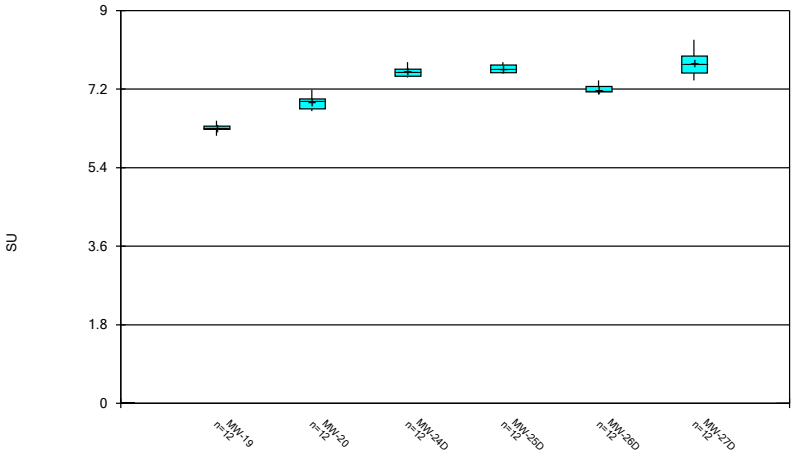


Constituent: pH, Field Analysis Run 4/14/2023 12:22 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

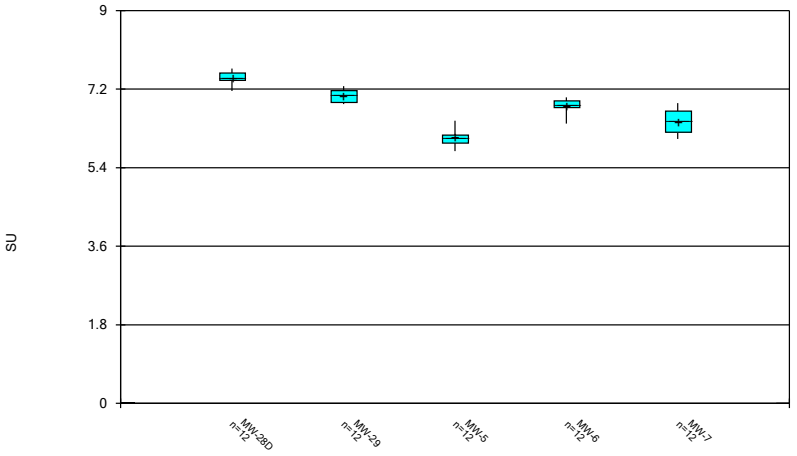


Constituent: pH, Field Analysis Run 4/14/2023 12:22 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

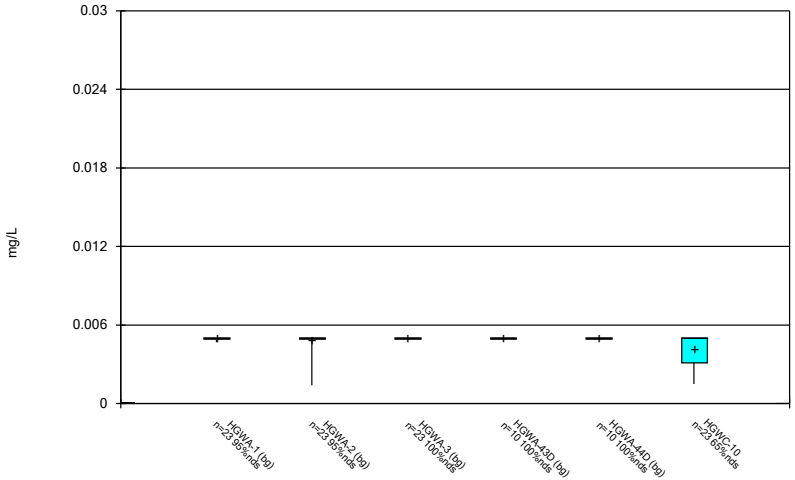
Box & Whiskers Plot



Constituent: pH, Field Analysis Run 4/14/2023 12:22 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

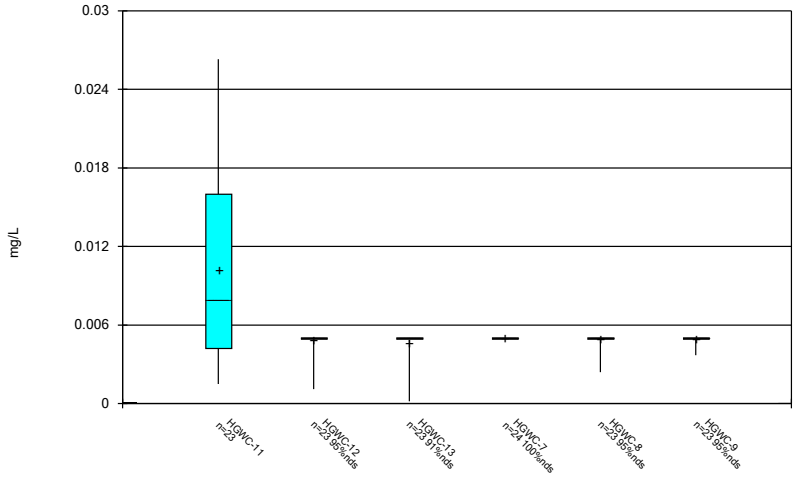


Constituent: Selenium Analysis Run 4/14/2023 12:22 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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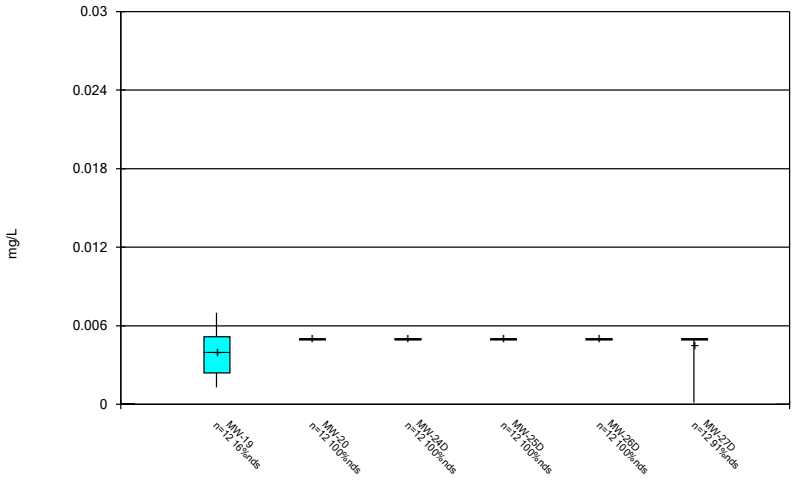
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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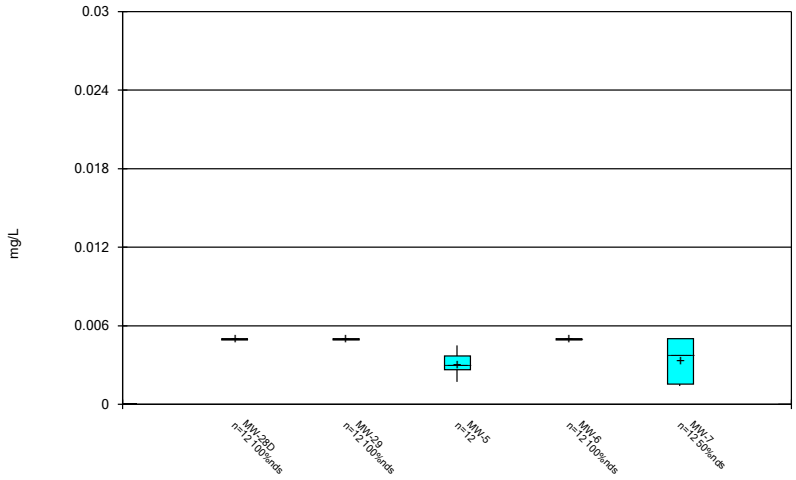
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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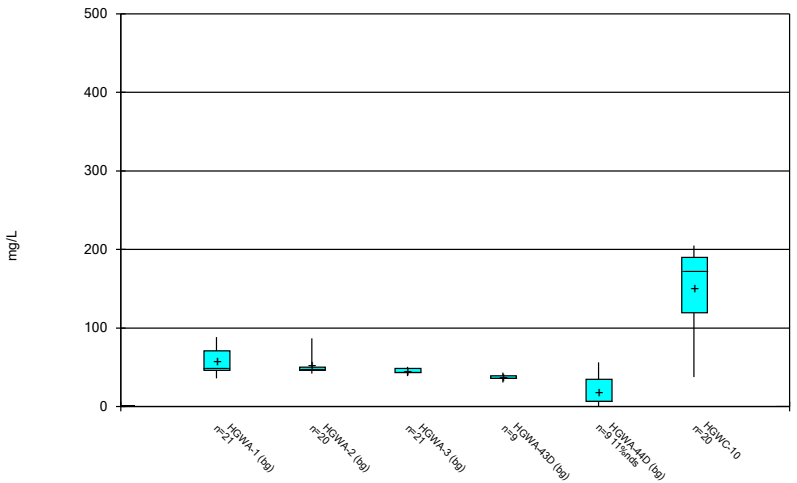

Constituent: Sulfate Analysis Run 4/14/2023 12:22 PM

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Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

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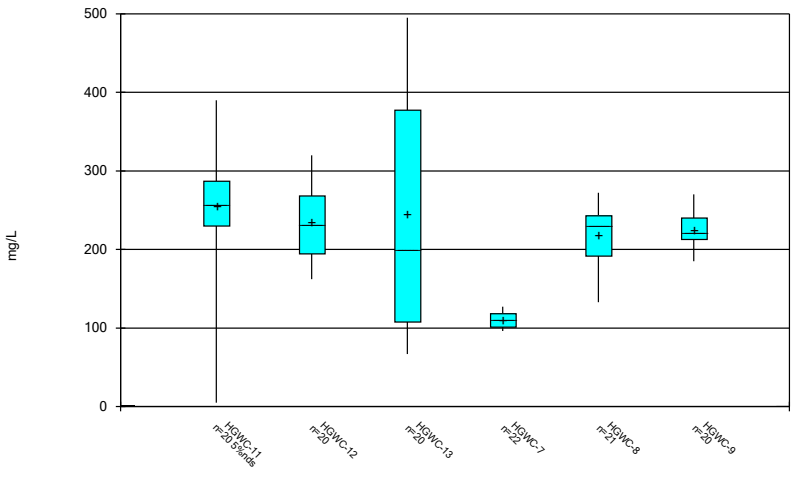

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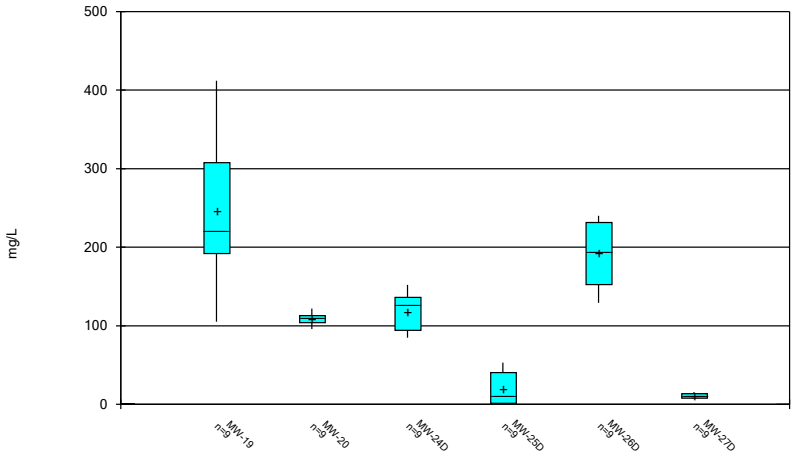

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Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

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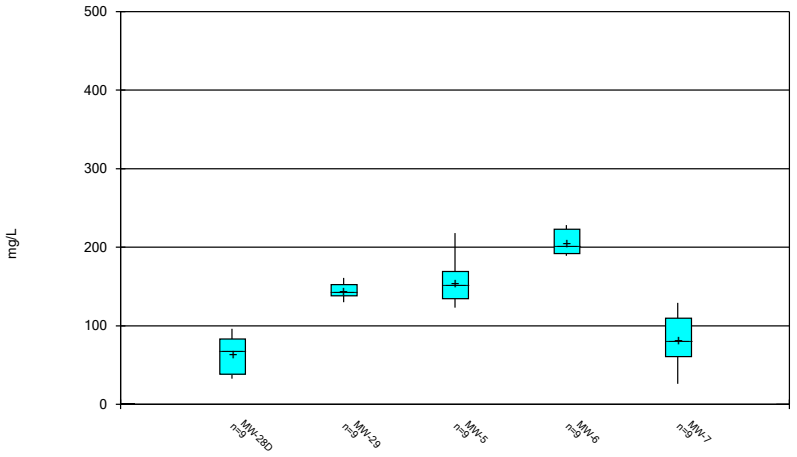

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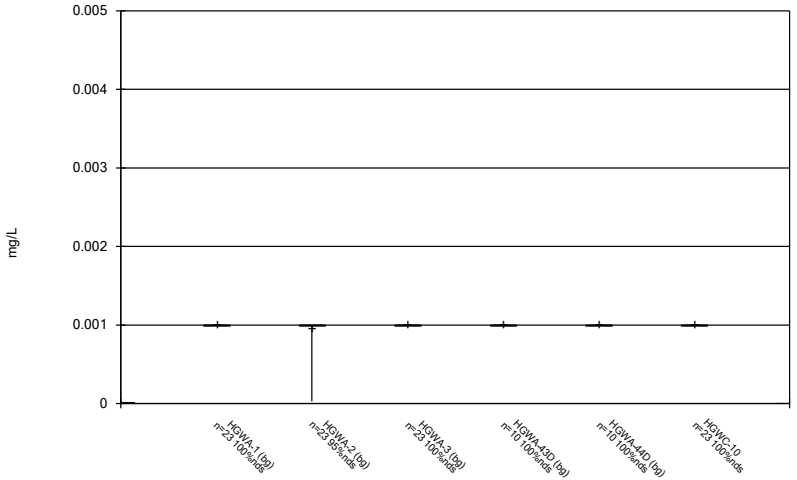
Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

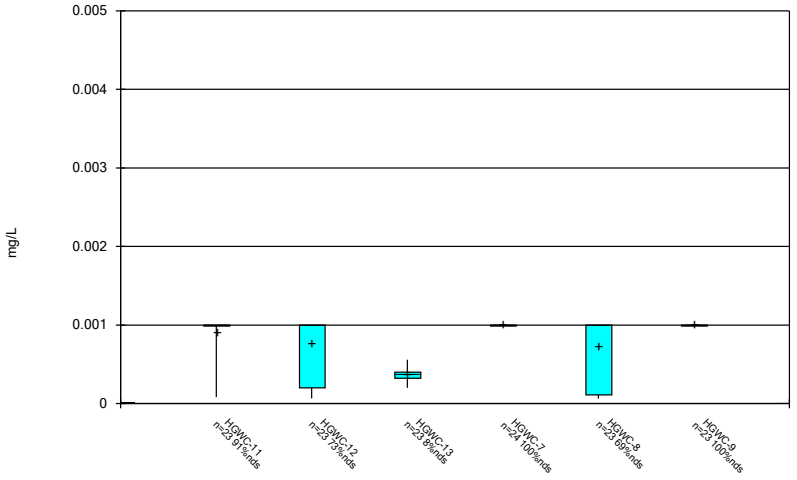


Constituent: Thallium Analysis Run 4/14/2023 12:22 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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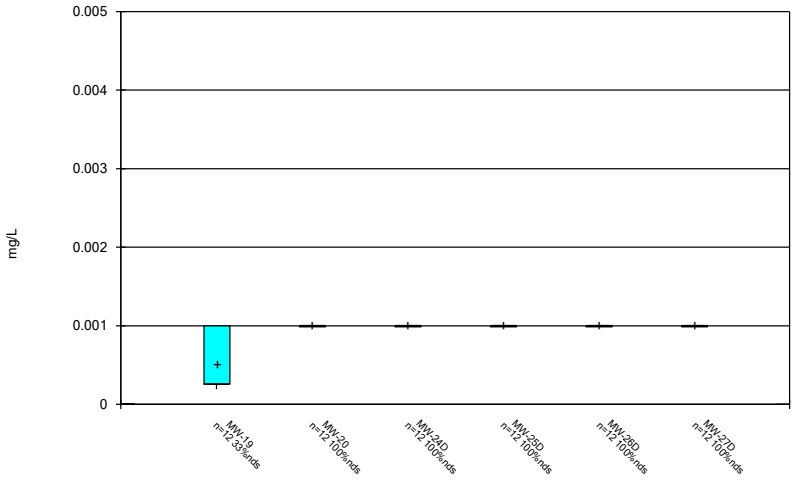
Box & Whiskers Plot



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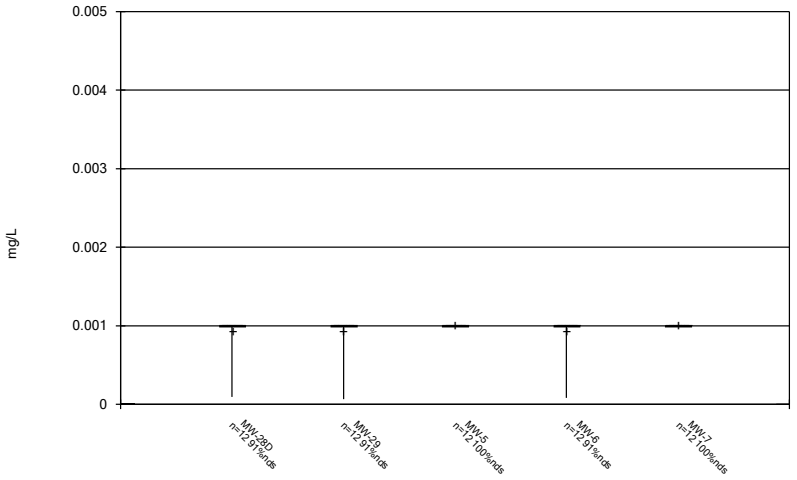
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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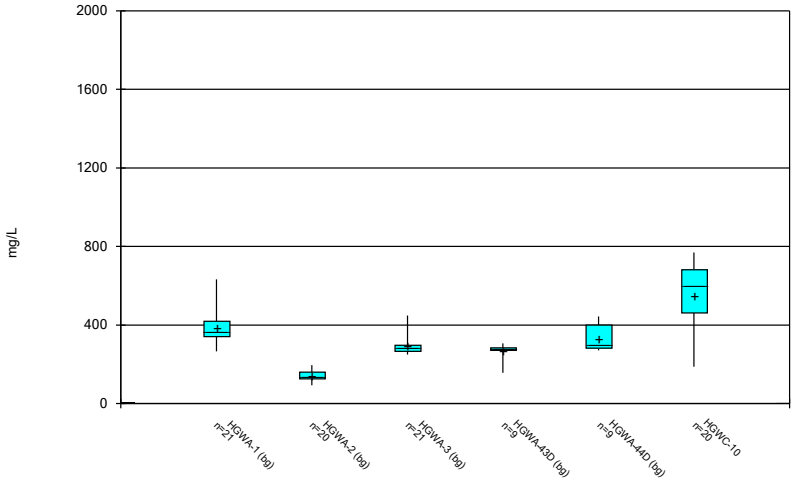
Plant Hammond Client: Southern Company Data: Hammond AP-1

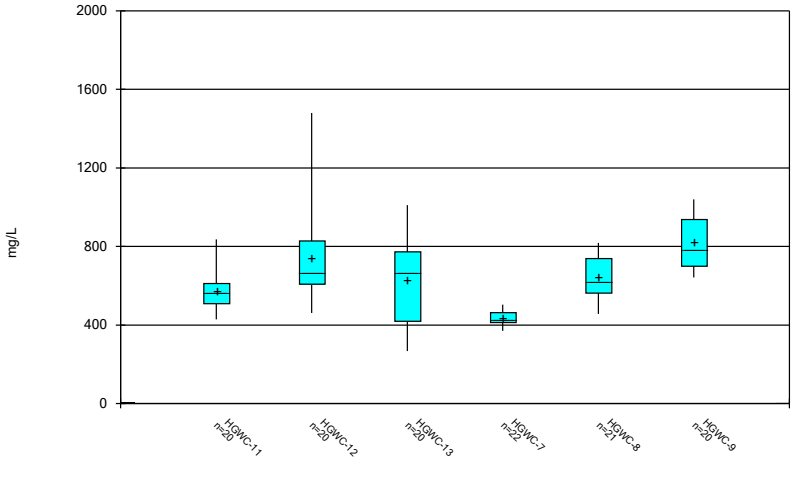
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 4/14/2023 12:22 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 4/14/2023 12:22 PM
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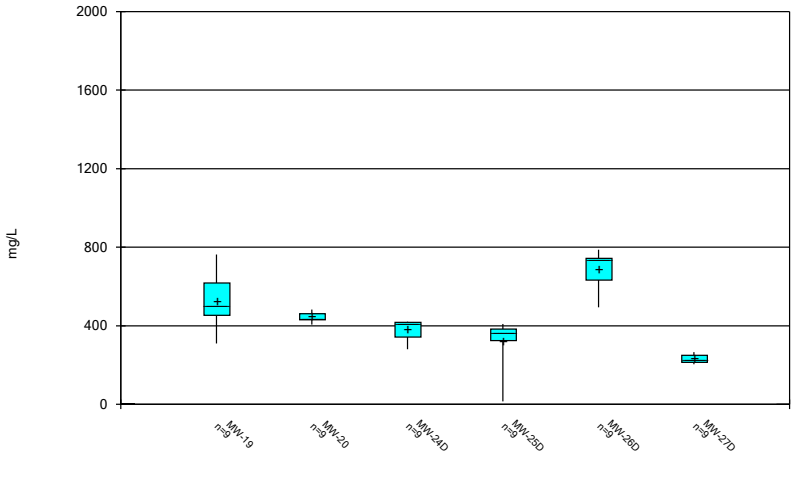
Box & Whiskers Plot



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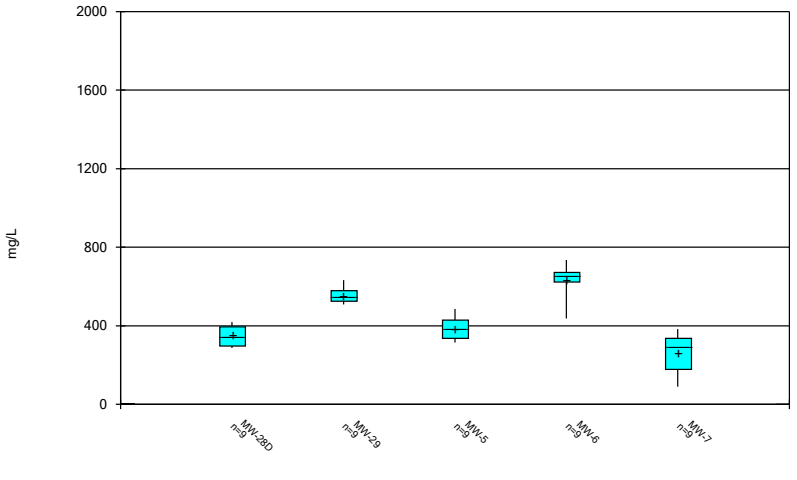
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 4/14/2023 12:22 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

FIGURE C.

Outlier Summary

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 4/14/2023, 12:24 PM

No values were flagged.

FIGURE D.

Appendix III Interwell Prediction Limits - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 4/14/2023, 12:39 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-11	0.44	n/a	1/26/2023	0.5	Yes	80	n/a	n/a	5	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-12	0.44	n/a	1/26/2023	1.5	Yes	80	n/a	n/a	5	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-13	0.44	n/a	1/26/2023	0.83	Yes	80	n/a	n/a	5	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-7	0.44	n/a	1/27/2023	0.93	Yes	80	n/a	n/a	5	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-8	0.44	n/a	2/1/2023	1.9	Yes	80	n/a	n/a	5	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-9	0.44	n/a	1/26/2023	1.9	Yes	80	n/a	n/a	5	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-12	138	n/a	1/26/2023	154	Yes	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-13	138	n/a	1/26/2023	234	Yes	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-9	138	n/a	1/26/2023	173	Yes	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-8	44.8	n/a	2/1/2023	52.4	Yes	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-9	44.8	n/a	1/26/2023	86.9	Yes	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-11	88.2	n/a	1/26/2023	209	Yes	80	n/a	n/a	1.25	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-12	88.2	n/a	1/26/2023	228	Yes	80	n/a	n/a	1.25	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-13	88.2	n/a	1/26/2023	495	Yes	80	n/a	n/a	1.25	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-7	88.2	n/a	1/27/2023	119	Yes	80	n/a	n/a	1.25	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-8	88.2	n/a	2/1/2023	179	Yes	80	n/a	n/a	1.25	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-9	88.2	n/a	1/26/2023	217	Yes	80	n/a	n/a	1.25	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-13	632	n/a	1/26/2023	962	Yes	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-9	632	n/a	1/26/2023	745	Yes	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2

Appendix III Interwell Prediction Limits - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 4/14/2023, 12:39 PM

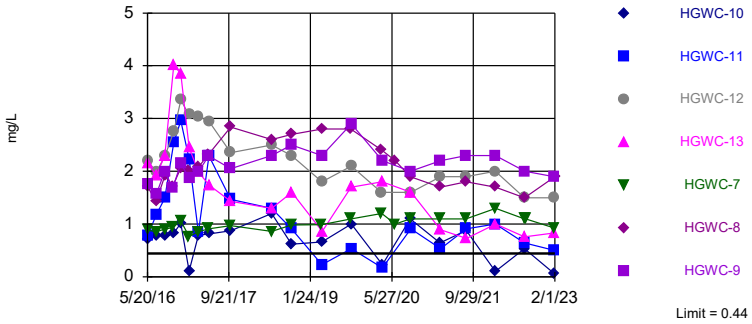
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	HGWC-10	0.44	n/a	1/27/2023	0.065	No	80	n/a	n/a	5	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Boron (mg/L)	**HGWC-11**	**0.44**	**n/a**	**1/26/2023**	**0.5**	**Yes**	**80**	**n/a**	**n/a**	**5**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-12**	**0.44**	**n/a**	**1/26/2023**	**1.5**	**Yes**	**80**	**n/a**	**n/a**	**5**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-13**	**0.44**	**n/a**	**1/26/2023**	**0.83**	**Yes**	**80**	**n/a**	**n/a**	**5**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-7**	**0.44**	**n/a**	**1/27/2023**	**0.93**	**Yes**	**80**	**n/a**	**n/a**	**5**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-8**	**0.44**	**n/a**	**2/1/2023**	**1.9**	**Yes**	**80**	**n/a**	**n/a**	**5**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-9**	**0.44**	**n/a**	**1/26/2023**	**1.9**	**Yes**	**80**	**n/a**	**n/a**	**5**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	HGWC-10	138	n/a	1/27/2023	60.4	No	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-11	138	n/a	1/26/2023	113	No	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Calcium (mg/L)	**HGWC-12**	**138**	**n/a**	**1/26/2023**	**154**	**Yes**	**80**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-13**	**138**	**n/a**	**1/26/2023**	**234**	**Yes**	**80**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	HGWC-7	138	n/a	1/27/2023	124	No	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-8	138	n/a	2/1/2023	110	No	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Calcium (mg/L)	**HGWC-9**	**138**	**n/a**	**1/26/2023**	**173**	**Yes**	**80**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	HGWC-10	44.8	n/a	1/27/2023	1.6	No	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-11	44.8	n/a	1/26/2023	8.8	No	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-12	44.8	n/a	1/26/2023	34.6	No	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-13	44.8	n/a	1/26/2023	12.5	No	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-7	44.8	n/a	1/27/2023	40	No	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Chloride (mg/L)	**HGWC-8**	**44.8**	**n/a**	**2/1/2023**	**52.4**	**Yes**	**80**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**HGWC-9**	**44.8**	**n/a**	**1/26/2023**	**86.9**	**Yes**	**80**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Fluoride (mg/L)	HGWC-10	1.3	n/a	1/27/2023	0.16	No	94	n/a	n/a	28.72	n/a	n/a	0.0002194	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-11	1.3	n/a	1/26/2023	0.2	No	94	n/a	n/a	28.72	n/a	n/a	0.0002194	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-12	1.3	n/a	1/26/2023	0.21	No	94	n/a	n/a	28.72	n/a	n/a	0.0002194	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-13	1.3	n/a	1/26/2023	0.4	No	94	n/a	n/a	28.72	n/a	n/a	0.0002194	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-7	1.3	n/a	1/27/2023	0.1	No	94	n/a	n/a	28.72	n/a	n/a	0.0002194	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-8	1.3	n/a	2/1/2023	0.4	No	94	n/a	n/a	28.72	n/a	n/a	0.0002194	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-9	1.3	n/a	1/26/2023	0.11	No	94	n/a	n/a	28.72	n/a	n/a	0.0002194	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-10	8.25	4.9	1/27/2023	6.89	No	89	n/a	n/a	0	n/a	n/a	0.0004864	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-11	8.25	4.9	1/26/2023	6.23	No	89	n/a	n/a	0	n/a	n/a	0.0004864	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-12	8.25	4.9	1/26/2023	7.1	No	89	n/a	n/a	0	n/a	n/a	0.0004864	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-13	8.25	4.9	1/26/2023	6.9	No	89	n/a	n/a	0	n/a	n/a	0.0004864	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-7	8.25	4.9	1/27/2023	7.25	No	89	n/a	n/a	0	n/a	n/a	0.0004864	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-8	8.25	4.9	2/1/2023	6.6	No	89	n/a	n/a	0	n/a	n/a	0.0004864	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-9	8.25	4.9	1/26/2023	7.07	No	89	n/a	n/a	0	n/a	n/a	0.0004864	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-10	88.2	n/a	1/27/2023	37.3	No	80	n/a	n/a	1.25	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**HGWC-11**	**88.2**	**n/a**	**1/26/2023**	**209**	**Yes**	**80**	**n/a**	**n/a**	**1.25**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-12**	**88.2**	**n/a**	**1/26/2023**	**228**	**Yes**	**80**	**n/a**	**n/a**	**1.25**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-13**	**88.2**	**n/a**	**1/26/2023**	**495**	**Yes**	**80**	**n/a**	**n/a**	**1.25**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-7**	**88.2**	**n/a**	**1/27/2023**	**119**	**Yes**	**80**	**n/a**	**n/a**	**1.25**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-8**	**88.2**	**n/a**	**2/1/2023**	**179**	**Yes**	**80**	**n/a**	**n/a**	**1.25**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-9**	**88.2**	**n/a**	**1/26/2023**	**217**	**Yes**	**80**	**n/a**	**n/a**	**1.25**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	HGWC-10	632	n/a	1/27/2023	188	No	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-11	632	n/a	1/26/2023	429	No	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-12	632	n/a	1/26/2023	624	No	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**HGWC-13**	**632**	**n/a**	**1/26/2023**	**962**	**Yes**	**80**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	HGWC-7	632	n/a	1/27/2023	473	No	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-8	632	n/a	2/1/2023	528	No	80	n/a	n/a	0	n/a	n/a	0.0002983	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**HGWC-9**	**632**	**n/a**	**1/26/2023**	**745**	**Yes**	**80**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002983**	**NP Inter (normality) 1 of 2**

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Exceeds Limit: HGWC-11, HGWC-12, HGWC-13, HGWC-7, HGWC-8, HGWC-9

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 80 background values. 5% NDs. Annual per-constituent alpha = 0.004169. Individual comparison alpha = 0.0002983 (1 of 2). Comparing 7 points to limit.

Constituent: Boron Analysis Run 4/14/2023 12:32 PM View: Appendix III

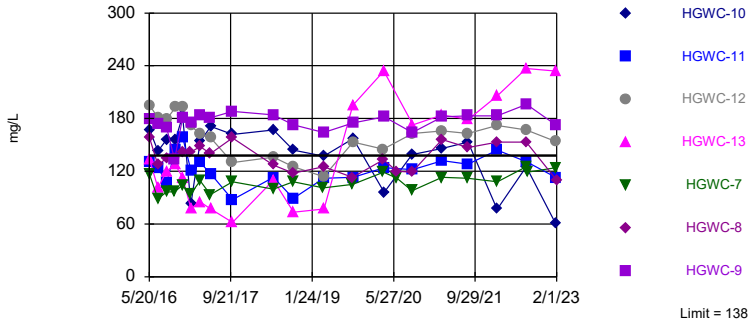
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Exceeds Limit: HGWC-12, HGWC-13, HGWC-9

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 80 background values. Annual per-constituent alpha = 0.004169. Individual comparison alpha = 0.0002983 (1 of 2). Comparing 7 points to limit.

Constituent: Calcium Analysis Run 4/14/2023 12:32 PM View: Appendix III

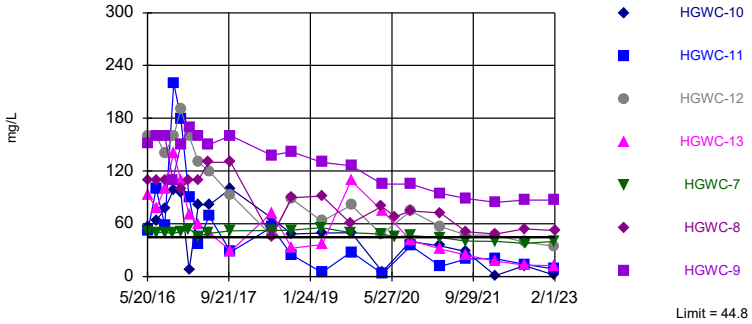
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Exceeds Limit: HGWC-8, HGWC-9

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 80 background values. Annual per-constituent alpha = 0.004169. Individual comparison alpha = 0.0002983 (1 of 2). Comparing 7 points to limit.

Constituent: Chloride Analysis Run 4/14/2023 12:32 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

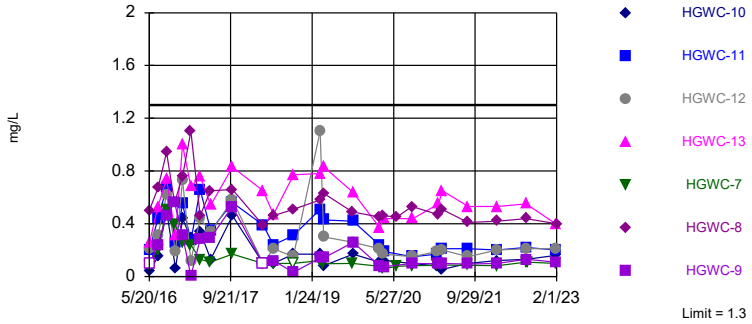
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 94 background values. 28.72% NDs. Annual per-constituent alpha = 0.003068. Individual comparison alpha = 0.0002194 (1 of 2). Comparing 7 points to limit.

Constituent: Fluoride Analysis Run 4/14/2023 12:32 PM View: Appendix III

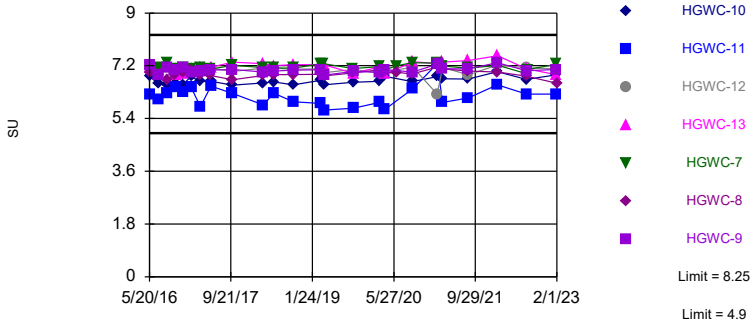
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 89 background values. Annual per-constituent alpha = 0.0068. Individual comparison alpha = 0.0004864 (1 of 2). Comparing 7 points to limit.

Constituent: pH, Field Analysis Run 4/14/2023 12:32 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

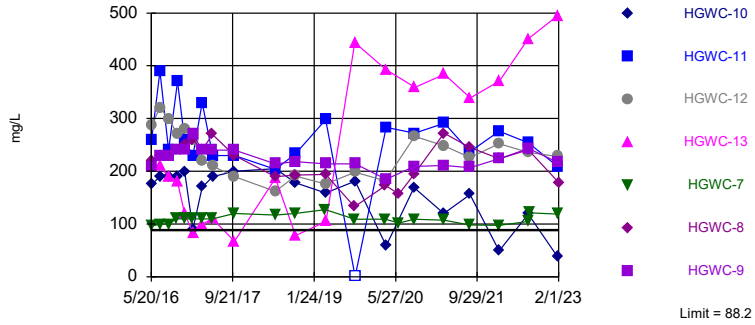
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Exceeds Limit: HGWC-11, HGWC-12, HGWC-13, HGWC-7, HGWC-8, HGWC-9

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 80 background values. 1.25% NDs. Annual per-constituent alpha = 0.004169. Individual comparison alpha = 0.0002983 (1 of 2). Comparing 7 points to limit.

Constituent: Sulfate Analysis Run 4/14/2023 12:32 PM View: Appendix III

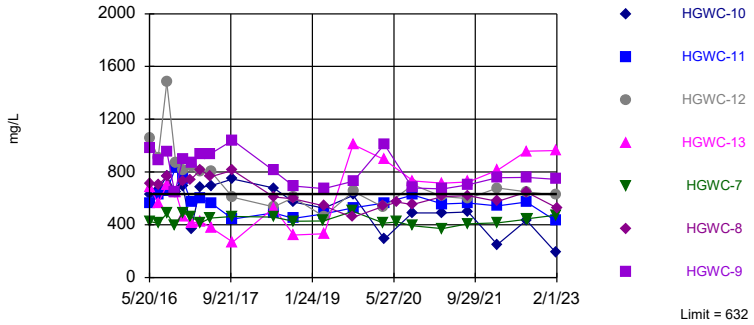
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Exceeds Limit: HGWC-13, HGWC-9

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 80 background values. Annual per-constituent alpha = 0.004169. Individual comparison alpha = 0.0002983 (1 of 2). Comparing 7 points to limit.

Constituent: Total Dissolved Solids Analysis Run 4/14/2023 12:32 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 4/14/2023 12:39 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-7	HGWC-8	HGWC-11	HGWC-13	HGWC-10	HGWC-9
5/19/2016	0.0214 (J)	<0.04	0.0321 (J)						
5/20/2016				0.885	1.71				
5/23/2016						0.787	2.15	0.72	1.76
7/11/2016	0.0142 (J)		0.0337 (J)						
7/12/2016		0.0074 (J)		0.857	1.43	1.17	1.91	0.778	1.56
8/30/2016	0.0074 (J)	<0.04	0.0173 (J)						
9/1/2016				0.904	1.91	1.49	2.3	0.786	2
10/19/2016	0.0224 (J)	0.0085 (J)	0.0341 (J)						
10/20/2016				0.936	1.72				1.68
10/24/2016						2.54	4.01	0.831	
12/6/2016	0.0211 (J)	0.0085 (J)	0.0326 (J)	1.06	2.06				2.15
12/7/2016						2.96	3.85	1.01	
1/24/2017	0.0165 (J)	0.01 (J)	0.0365 (J)						
1/25/2017				0.764	2.01				
1/26/2017						2.23	2.45	0.108	1.87
3/21/2017	0.0187 (J)	0.0079 (J)	0.0349 (J)	0.857	2.08				
3/22/2017						0.84	1.99	0.788	1.99
5/22/2017	0.0782	0.0131 (J)	0.0475						
5/23/2017				0.91	2.32				2.29
5/24/2017						2.29	1.74	0.814	
10/3/2017	0.0198 (J)	0.0097 (J)	0.0386 (J)	0.967	2.84	1.47	1.43	0.871	2.05
6/4/2018	0.02 (J)	0.017 (J)	0.036 (J)						
6/5/2018				0.86		1.3	1.3	1.2	
6/6/2018					2.6				2.3
10/1/2018	0.013 (J)	0.0061 (J)	0.035 (J)						
10/2/2018				0.98	2.7			0.62	2.5
10/3/2018						0.91			
10/5/2018							1.6		
4/1/2019		0.0066 (J)							
4/2/2019	0.016 (J)		0.034 (J)	0.99					
4/3/2019					2.8	0.23		0.66	2.3
4/5/2019							0.86 (J)		
9/23/2019	0.021 (J)	0.0081 (J)	0.04 (J)						
9/24/2019					2.8				
9/25/2019				1.1					
9/26/2019							1.7		
9/27/2019						0.53		1	2.9
3/25/2020	0.025 (J)	0.0096 (J)	0.039 (J)						
3/26/2020									
3/27/2020				1.2	2.4				
3/30/2020							1.8		
3/31/2020						0.17			2.2
4/1/2020								0.23	
6/16/2020	0.021 (J)	0.01 (J)			2.2				
6/17/2020				1					
9/15/2020	0.017 (J)	0.0071 (J)	0.044 (J)						
9/16/2020				1.1	1.9			1.1	
9/17/2020									2
9/18/2020						0.91			
9/21/2020							1.6		
11/10/2020									
12/15/2020									

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 4/14/2023 12:39 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-7	HGWC-8	HGWC-11	HGWC-13	HGWC-10	HGWC-9
1/19/2021									
3/10/2021	0.015 (J)								
3/11/2021		0.015 (J)	0.056						
3/12/2021								0.64	
3/15/2021				1.1	1.7				
3/16/2021						0.53			2.2
3/17/2021							0.89		
8/11/2021	0.02 (J)								
8/12/2021		<0.04	0.044						
8/13/2021									
8/16/2021				1.1					
8/17/2021								0.88	2.3
8/18/2021					1.8	0.91			
8/19/2021							0.73		
2/1/2022	0.016 (J)	0.011 (J)	0.056						
2/9/2022						1		0.1	2.3
2/10/2022				1.3	1.7		1		
8/2/2022	0.012 (J)	<0.04	0.047						
8/3/2022				1.1	1.5	0.64	0.76	0.53	
8/4/2022									2
8/11/2022				1.1					
1/23/2023		0.012 (J)							
1/24/2023	0.015 (J)		0.046						
1/26/2023						0.5	0.83		1.9
1/27/2023				0.93				0.065	
2/1/2023					1.9				

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 4/14/2023 12:39 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-12	HGWA-44D (bg)	HGWA-43D (bg)
5/19/2016			
5/20/2016			
5/23/2016	2.2		
7/11/2016			
7/12/2016	1.98		
8/30/2016			
9/1/2016	2.28		
10/19/2016			
10/20/2016			
10/24/2016	2.75		
12/6/2016			
12/7/2016	3.35		
1/24/2017			
1/25/2017			
1/26/2017	3.07		
3/21/2017			
3/22/2017	3.04		
5/22/2017			
5/23/2017			
5/24/2017	2.95		
10/3/2017	2.35		
6/4/2018			
6/5/2018			
6/6/2018	2.5		
10/1/2018			
10/2/2018			
10/3/2018	2.3		
10/5/2018			
4/1/2019			
4/2/2019			
4/3/2019	1.8		
4/5/2019			
9/23/2019			
9/24/2019			
9/25/2019			
9/26/2019			
9/27/2019	2.1		
3/25/2020			
3/26/2020	1.6		
3/27/2020			
3/30/2020			
3/31/2020			
4/1/2020			
6/16/2020			
6/17/2020			
9/15/2020			
9/16/2020		0.23	0.061 (J)
9/17/2020			
9/18/2020	1.6		
9/21/2020			
11/10/2020		0.29	0.057 (J)
12/15/2020		0.31	0.052 (J)

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 4/14/2023 12:39 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-12	HGWA-44D (bg)	HGWA-43D (bg)
1/19/2021		0.4	0.049 (J)
3/10/2021		0.39	
3/11/2021			0.06
3/12/2021			
3/15/2021			
3/16/2021	1.9		
3/17/2021			
8/11/2021			0.042
8/12/2021			
8/13/2021		0.31	
8/16/2021			
8/17/2021			
8/18/2021	1.9		
8/19/2021			
2/1/2022		0.44	0.05
2/9/2022	2		
2/10/2022			
8/2/2022		0.31	0.043
8/3/2022	1.5		
8/4/2022			
8/11/2022			
1/23/2023			
1/24/2023		0.44	0.037 (J)
1/26/2023	1.5		
1/27/2023			
2/1/2023			

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 4/14/2023 12:39 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-7	HGWC-8	HGWC-11	HGWC-13	HGWC-10	HGWC-9
5/19/2016	138	76.2	22.9						
5/20/2016				117	159				
5/23/2016						131	133	167	179
7/11/2016	97.2		22.3						
7/12/2016		61.5		88.8	127	124	101	143	174
8/30/2016	97.5	65.1	26.4						
9/1/2016				96.3	135	107	120	156	170
10/19/2016	99.2	73.2	21.7						
10/20/2016				96.9	134				133
10/24/2016						145	127	156	
12/6/2016	105	74.9	18.2	104	142				181
12/7/2016						159	113	183	
1/24/2017	95.7	69.6	18.5						
1/25/2017				94.5	142				
1/26/2017						121	77.9	82.6	175
3/21/2017	106	75.7	18.6	109	148				
3/22/2017						130	85.1	154	183
5/22/2017	107	71.5	17.8						
5/23/2017				93.3	140				181
5/24/2017						117	77.1	171	
10/3/2017	102	76.3	20.2	108	158	87.7	62	162	188
6/4/2018	124	73.4	19.1						
6/5/2018				99.8		113	110	167	
6/6/2018					127				184
10/1/2018	108	80.9	20.5 (J)						
10/2/2018				108	118			144	173
10/3/2018						89			
10/5/2018							73.6		
4/1/2019		80.5							
4/2/2019	132		22.5 (J)	101					
4/3/2019					125	112		137	164
4/5/2019							77.1		
9/23/2019	118	71	19.5						
9/24/2019					113				
9/25/2019				105					
9/26/2019							195		
9/27/2019						113		157	175
3/25/2020	127	89.8	23						
3/26/2020									
3/27/2020				119	133				
3/30/2020							234		
3/31/2020						124			182
4/1/2020								96.2	
6/16/2020	130	85.1			120				
6/17/2020				112					
9/15/2020	103	73.1	21.1						
9/16/2020				98	119			139	
9/17/2020									164
9/18/2020						122			
9/21/2020							173		
11/10/2020									
12/15/2020									

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 4/14/2023 12:39 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-7	HGWC-8	HGWC-11	HGWC-13	HGWC-10	HGWC-9
1/19/2021									
3/10/2021	111								
3/11/2021		83.8	43.8						
3/12/2021								146 (M1)	
3/15/2021				113	156				
3/16/2021						132			182
3/17/2021							184		
8/11/2021	113								
8/12/2021		84	21.9						
8/13/2021									
8/16/2021				112					
8/17/2021								153	183
8/18/2021					147	128			
8/19/2021							179		
2/1/2022	106	85.1	27.2						
2/9/2022						144		76.8	183
2/10/2022				108	153		206		
8/2/2022	117	84.6	31.2						
8/3/2022				125	153	131	237	125	
8/4/2022									196
8/11/2022				119					
1/23/2023		85							
1/24/2023	117		29.4						
1/26/2023						113	234		173
1/27/2023				124				60.4	
2/1/2023					110				

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 4/14/2023 12:39 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-12	HGWA-44D (bg)	HGWA-43D (bg)
5/19/2016			
5/20/2016			
5/23/2016	195		
7/11/2016			
7/12/2016	181		
8/30/2016			
9/1/2016	179		
10/19/2016			
10/20/2016			
10/24/2016	193		
12/6/2016			
12/7/2016	193		
1/24/2017			
1/25/2017			
1/26/2017	172		
3/21/2017			
3/22/2017	162		
5/22/2017			
5/23/2017			
5/24/2017	158		
10/3/2017	130		
6/4/2018			
6/5/2018			
6/6/2018	136		
10/1/2018			
10/2/2018			
10/3/2018	125		
10/5/2018			
4/1/2019			
4/2/2019			
4/3/2019	114		
4/5/2019			
9/23/2019			
9/24/2019			
9/25/2019			
9/26/2019			
9/27/2019	153		
3/25/2020			
3/26/2020	145		
3/27/2020			
3/30/2020			
3/31/2020			
4/1/2020			
6/16/2020			
6/17/2020			
9/15/2020			
9/16/2020		30	56
9/17/2020			
9/18/2020	163		
9/21/2020			
11/10/2020		33.6	63.3
12/15/2020		28.7	62.6

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 4/14/2023 12:39 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-12	HGWA-44D (bg)	HGWA-43D (bg)
1/19/2021		33	60.1
3/10/2021		5.9	
3/11/2021			59.6
3/12/2021			
3/15/2021			
3/16/2021	166		
3/17/2021			
8/11/2021			61
8/12/2021			
8/13/2021		28.9	
8/16/2021			
8/17/2021			
8/18/2021	163		
8/19/2021			
2/1/2022		24.8	55.9
2/9/2022	172		
2/10/2022			
8/2/2022		20.9	54.1
8/3/2022	167		
8/4/2022			
8/11/2022			
1/23/2023			
1/24/2023		13.2	56.6
1/26/2023	154		
1/27/2023			
2/1/2023			

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 4/14/2023 12:39 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-7	HGWC-8	HGWC-11	HGWC-13	HGWC-10	HGWC-9
5/19/2016	9.94	5.93	6.14						
5/20/2016				50.4	109				
5/23/2016						51.9	93.2	56.1	152
7/11/2016	6.3		5.9						
7/12/2016		6.2		50	110	100	78	63	160
8/30/2016	6	6.4	6.2						
9/1/2016				50	110	58	100	77	160
10/19/2016	5.8	6.5	6.1						
10/20/2016				49	110				110
10/24/2016						220	140	99	
12/6/2016	5.4	7.2	6	51	100				150
12/7/2016						180	110	96	
1/24/2017	5.2	6.4	6.1						
1/25/2017				54	110				
1/26/2017						90	70	7	170
3/21/2017	4.6	7.5	5.9	46	110				
3/22/2017						37	59	82	160
5/22/2017	4.6	6.5	5.9						
5/23/2017				49	130				150
5/24/2017						69	50	81	
10/3/2017	5.6	6.5	6.3	52	130	28	29	100	160
6/4/2018	13.1	6.3	6.1						
6/5/2018				52.3		56.1	72.3	66.6	
6/6/2018					44.8				138
10/1/2018	6.6	6.4	6.4						
10/2/2018				52.6	89.4			48.3	142
10/3/2018						24.8			
10/5/2018							32.3		
4/1/2019		6.5							
4/2/2019	20.3		5.8	55.5					
4/3/2019					91.6	4.6		49.3	130
4/5/2019							36.4		
9/23/2019	17.7	5.9	5.1						
9/24/2019					60.2				
9/25/2019				49.8					
9/26/2019							109		
9/27/2019						27.9		49.9	126
3/25/2020	20.4	6.1	5.2						
3/26/2020									
3/27/2020				48.3	79.8				
3/30/2020							75.1		
3/31/2020						3.2			105
4/1/2020								5.4	
6/16/2020	41.1	5.8			67.9				
6/17/2020				45.2					
9/15/2020	13.4	6	5						
9/16/2020				46.4	74.6			39.7	
9/17/2020									105
9/18/2020						34.9			
9/21/2020							41.2		
11/10/2020									
12/15/2020									

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 4/14/2023 12:39 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-7	HGWC-8	HGWC-11	HGWC-13	HGWC-10	HGWC-9
1/19/2021									
3/10/2021	7.4								
3/11/2021		5.9	5.1						
3/12/2021								35	
3/15/2021				44.5	72.4				
3/16/2021						11.5			94.7
3/17/2021							31.4		
8/11/2021	9.6								
8/12/2021		4.8	5.2						
8/13/2021									
8/16/2021				40.3					
8/17/2021								28.3	88.6
8/18/2021					50.9	19.9			
8/19/2021							24.4		
2/1/2022	7.5	5.7	7						
2/9/2022						20.4		1.2	84.4
2/10/2022				39.8	48.2		17.4		
8/2/2022	14.1	5.9	7.8						
8/3/2022				37.9	54.1	13.8	13	12.3	
8/4/2022									86.8
8/11/2022				37.7					
1/23/2023		5.6							
1/24/2023	9		7.1						
1/26/2023						8.8	12.5		86.9
1/27/2023				40				1.6	
2/1/2023					52.4				

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 4/14/2023 12:39 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-12	HGWA-44D (bg)	HGWA-43D (bg)
5/19/2016			
5/20/2016			
5/23/2016	160		
7/11/2016			
7/12/2016	160		
8/30/2016			
9/1/2016	140		
10/19/2016			
10/20/2016			
10/24/2016	160		
12/6/2016			
12/7/2016	190		
1/24/2017			
1/25/2017			
1/26/2017	160		
3/21/2017			
3/22/2017	130		
5/22/2017			
5/23/2017			
5/24/2017	120		
10/3/2017	93		
6/4/2018			
6/5/2018			
6/6/2018	46.4		
10/1/2018			
10/2/2018			
10/3/2018	88.4		
10/5/2018			
4/1/2019			
4/2/2019			
4/3/2019	62.8		
4/5/2019			
9/23/2019			
9/24/2019			
9/25/2019			
9/26/2019			
9/27/2019	81		
3/25/2020			
3/26/2020	48		
3/27/2020			
3/30/2020			
3/31/2020			
4/1/2020			
6/16/2020			
6/17/2020			
9/15/2020			
9/16/2020		7.2	4.1
9/17/2020			
9/18/2020	74.6		
9/21/2020			
11/10/2020		7.8	4.4
12/15/2020		9.4	4.7

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 4/14/2023 12:39 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-12	HGWA-44D (bg)	HGWA-43D (bg)
1/19/2021		9.5	4.1
3/10/2021		12.3	
3/11/2021			4.5
3/12/2021			
3/15/2021			
3/16/2021	56.8		
3/17/2021			
8/11/2021			3.5
8/12/2021			
8/13/2021		39.9	
8/16/2021			
8/17/2021			
8/18/2021	47.3		
8/19/2021			
2/1/2022		44.8	4.1
2/9/2022	46.8		
2/10/2022			
8/2/2022		19.8	4.3
8/3/2022	39.2		
8/4/2022			
8/11/2022			
1/23/2023			
1/24/2023		24.9	4.3
1/26/2023	34.6		
1/27/2023			
2/1/2023			

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 4/14/2023 12:39 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-7	HGWC-8	HGWC-12	HGWC-13	HGWC-11	HGWC-9
5/19/2016	0.105 (J)	0.0513 (J)	0.0303 (J)						
5/20/2016				0.0828 (J)	0.499				
5/23/2016						0.212 (J)	0.2587 (J)	0.203 (J)	<0.1
7/11/2016	0.16 (J)		0.05 (J)						
7/12/2016		0.12 (J)		0.2 (J)	0.67	0.31	0.53	0.44	0.24 (J)
8/30/2016	0.09 (J)	0.09 (J)	0.06 (J)						
9/1/2016				0.51	0.94	0.62	0.74	0.67	0.46
10/19/2016	0.1 (J)	0.1 (J)	0.04 (J)						
10/20/2016				0.4	0.56				0.56
10/24/2016						0.19 (J)	0.31	0.26 (J)	
12/6/2016	0.11 (J)	0.21 (J)	0.36	0.26 (J)	0.76				0.31
12/7/2016						0.73	1	0.55	
1/24/2017	0.09 (J)	0.06 (J)	<0.1						
1/25/2017				0.24 (J)	1.1				
1/26/2017						0.12 (J)	0.68	0.27 (J)	0.004 (J)
3/21/2017	0.13 (J)	0.005 (J)	<0.1	0.13 (J)	0.46				
3/22/2017						0.44	0.76	0.66	0.28 (J)
5/22/2017	0.12 (J)	0.05 (J)	<0.1						
5/23/2017				0.11 (J)	0.65				0.29 (J)
5/24/2017						0.34	0.54	0.35	
10/3/2017	0.13 (J)	0.13 (J)	<0.1	0.17 (J)	0.66	0.58	0.83	0.56	0.53
4/2/2018	<0.1		<0.1						
4/3/2018		<0.1		<0.1	0.39				<0.1
4/4/2018						<0.1	0.65	0.39	
6/4/2018	0.074 (J)	<0.1	<0.1						
6/5/2018				0.099 (J)			0.47	0.24 (J)	
6/6/2018					0.46	0.21 (J)			0.12 (J)
10/1/2018	<0.1	<0.1	<0.1						
10/2/2018				<0.1	0.51				0.031 (J)
10/3/2018						0.15 (J)		0.31	
10/5/2018							0.77		
3/12/2019	0.29 (J)	0.072 (J)	0.038 (J)		0.58				
3/13/2019				0.12 (J)			0.78	0.51	0.14 (J)
3/14/2019						1.1			
4/1/2019		0.029 (J)							
4/2/2019	0.1 (J)		0.071 (J)	0.097 (J)					
4/3/2019					0.63	0.3 (J)		0.43	0.14 (J)
4/5/2019							0.83		
9/23/2019	0.078 (J)	<0.1	<0.1						
9/24/2019					0.49				
9/25/2019				0.1 (J)					
9/26/2019							0.64		
9/27/2019						0.26 (J)		0.42	0.26 (J)
3/2/2020	0.076 (J)	<0.1	<0.1						
3/3/2020					0.45	0.21 (J)		0.24 (J)	
3/4/2020				0.077 (J)			0.37		0.08 (J)
3/25/2020	0.098 (J)	<0.1	<0.1						
3/26/2020						0.17 (J)			
3/27/2020				0.059 (J)	0.46				
3/30/2020							0.44		
3/31/2020								0.19 (J)	0.074 (J)
4/1/2020									

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 4/14/2023 12:39 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-7	HGWC-8	HGWC-12	HGWC-13	HGWC-11	HGWC-9
6/16/2020	0.071 (J)	<0.1			0.45				
6/17/2020				0.077 (J)					
9/15/2020	0.082 (J)	<0.1	<0.1						
9/16/2020				0.081 (J)	0.53				
9/17/2020									0.1
9/18/2020						0.15		0.15	
9/21/2020							0.44		
11/10/2020									
12/15/2020									
1/19/2021									
2/8/2021	0.078 (J)								
2/9/2021		0.074 (J)	<0.1						
2/10/2021				0.085 (J)					
2/12/2021						0.19		0.17	
2/15/2021									
2/16/2021					0.47				0.096 (J)
2/22/2021							0.55		
3/10/2021	0.079 (J)								
3/11/2021		<0.1	0.1						
3/12/2021									
3/15/2021				0.086 (J)	0.51				
3/16/2021						0.2		0.21	0.098 (J)
3/17/2021							0.65		
8/11/2021	0.058 (J)								
8/12/2021		<0.1	<0.1						
8/13/2021									
8/16/2021				0.084 (J)					
8/17/2021									0.095 (J)
8/18/2021					0.41	0.15		0.21	
8/19/2021							0.53		
2/1/2022	0.064 (J)	<0.1	<0.1						
2/9/2022						0.2		0.2	0.1
2/10/2022				0.083 (J)	0.42		0.53		
8/2/2022	0.09 (J)	0.067 (J)	0.053 (J)						
8/3/2022				0.11	0.44	0.21	0.55	0.22	
8/4/2022									0.13
8/11/2022				0.11					
1/23/2023		0.061 (J)							
1/24/2023	0.089 (J)		0.053 (J)						
1/26/2023						0.21	0.4	0.2	0.11
1/27/2023				0.1					
2/1/2023					0.4				

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 4/14/2023 12:39 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWA-43D (bg)	HGWA-44D (bg)
5/19/2016			
5/20/2016			
5/23/2016	0.0394 (J)		
7/11/2016			
7/12/2016	0.15 (J)		
8/30/2016			
9/1/2016	0.5		
10/19/2016			
10/20/2016			
10/24/2016	0.06 (J)		
12/6/2016			
12/7/2016	0.44		
1/24/2017			
1/25/2017			
1/26/2017	0.29 (J)		
3/21/2017			
3/22/2017	0.34		
5/22/2017			
5/23/2017			
5/24/2017	0.13 (J)		
10/3/2017	0.46		
4/2/2018			
4/3/2018			
4/4/2018	<0.1		
6/4/2018			
6/5/2018	<0.1		
6/6/2018			
10/1/2018			
10/2/2018	0.17 (J)		
10/3/2018			
10/5/2018			
3/12/2019			
3/13/2019	0.17 (J)		
3/14/2019			
4/1/2019			
4/2/2019			
4/3/2019	0.082 (J)		
4/5/2019			
9/23/2019			
9/24/2019			
9/25/2019			
9/26/2019			
9/27/2019	0.17 (J)		
3/2/2020			
3/3/2020	0.11 (J)		
3/4/2020			
3/25/2020			
3/26/2020			
3/27/2020			
3/30/2020			
3/31/2020			
4/1/2020	0.12 (J)		

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 4/14/2023 12:39 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWA-43D (bg)	HGWA-44D (bg)
6/16/2020			
6/17/2020			
9/15/2020			
9/16/2020	<0.1	0.22	0.52
9/17/2020			
9/18/2020			
9/21/2020			
11/10/2020		0.19	0.59
12/15/2020		0.21	0.67
1/19/2021		0.16	0.74
2/8/2021			
2/9/2021		0.19	0.44
2/10/2021			
2/12/2021			
2/15/2021	0.08 (J)		
2/16/2021			
2/22/2021			
3/10/2021			0.65
3/11/2021		0.2	
3/12/2021	0.054 (J)		
3/15/2021			
3/16/2021			
3/17/2021			
8/11/2021		0.15	
8/12/2021			
8/13/2021			0.87
8/16/2021			
8/17/2021	<0.1		
8/18/2021			
8/19/2021			
2/1/2022		0.19	0.96
2/9/2022	0.12		
2/10/2022			
8/2/2022		0.22	0.8
8/3/2022	0.13		
8/4/2022			
8/11/2022			
1/23/2023			
1/24/2023		0.23	1.3
1/26/2023			
1/27/2023	0.16		
2/1/2023			

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 4/14/2023 12:39 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-7	HGWC-8	HGWC-13	HGWC-12	HGWC-10	HGWC-9
5/19/2016	7.27	7.45	5.81						
5/20/2016				7.14	6.99				
5/23/2016						7.14	7.15	6.83	7.23
7/11/2016	7.06		5.68						
7/12/2016		7.32		7.13	6.88	7.04	6.87	6.58	6.87
8/30/2016	7.28	7.43	5.63						
9/1/2016				7.29	6.73	7.24	7.2	6.54	7.15
10/19/2016	7.02	7.03	5.46						
10/20/2016				7.1	6.9				7.05
10/24/2016						6.9	7.1	6.59	
12/6/2016	7.09	7.08	5.38	7.15	6.98				7.15
12/7/2016						6.91	6.92	6.56	
1/24/2017	7.2	7.39	5.37						
1/25/2017				7.11	7.04				
1/26/2017						7.08	7.05	6.83	6.99
3/21/2017	7.01	6.83	4.9	7.12	6.87				
3/22/2017						7.13	7.08	6.66	7.03
5/22/2017	7.11	7.02	5.2						
5/23/2017				7.08	6.87				7.05
5/24/2017						7.15	7.11	6.67	
10/3/2017	7.21	7.47	5.3	7.21	6.72	7.32	7.01	6.54	7.07
4/2/2018	7.1		5.4						
4/3/2018		7.38		7.14	6.87				6.99
4/4/2018						7.27	7.12	6.61	
6/4/2018	7.06	7.38	5.27						
6/5/2018				7.13		7.2		6.65	
6/6/2018					6.9		7.12		7.02
10/1/2018	7.09	7.13	5.31						
10/2/2018				7.12	6.9			6.55	7.05
10/3/2018							7.08		
10/5/2018						7.24			
3/12/2019	7.03	7.29	5.42		6.91				
3/13/2019				7.27		7.24		6.7	7.06
3/14/2019							7.09		
4/1/2019		7.16							
4/2/2019	6.86		5.41	7.27					
4/3/2019					6.85		6.96	6.55	6.88
4/5/2019						7.24			
9/23/2019	7.02	7.3	5.33						
9/24/2019					6.95				
9/25/2019				7.11					
9/26/2019						6.94			
9/27/2019							7.07	6.64	7.01
3/2/2020	7.1	7.12	5.43						
3/3/2020					7.06		6.95	6.67	
3/4/2020				7.17		7.16			6.97
3/25/2020	6.95	7.4	5.36						
3/26/2020							6.99		
3/27/2020				7.05	6.95				
3/30/2020						6.91			
3/31/2020									7.07
4/1/2020								6.84	

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 4/14/2023 12:39 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-7	HGWC-8	HGWC-13	HGWC-12	HGWC-10	HGWC-9
6/16/2020	6.97 (D)	7.31 (D)			6.97 (D)				
6/17/2020				7.2 (D)					
9/15/2020	7.15	7.29	5.22						
9/16/2020				7.3	6.92			6.66	
9/17/2020									6.99
9/18/2020							7.15		
9/21/2020						7.34			
11/10/2020									
12/15/2020									
1/19/2021									
2/8/2021	7.11								
2/9/2021		7.23	5.42						
2/10/2021				7.29					
2/12/2021							6.23		
2/15/2021								6.83	
2/16/2021					7.16				7.26
2/22/2021						7.27			
3/10/2021	6.95								
3/11/2021		7.33	5.8						
3/12/2021								6.76	
3/15/2021				7.19	7.09				
3/16/2021							7.15		7.1
3/17/2021						7.33			
8/11/2021	6.98								
8/12/2021		7.31	5.05						
8/13/2021									
8/16/2021				7.12					
8/17/2021								6.75	7.1
8/18/2021					7.02		6.89		
8/19/2021						7.38			
2/1/2022	7.19	7.45	5.24						
2/9/2022							7.23	7	7.3
2/10/2022				7.22	6.99	7.54			
8/3/2022				6.93	6.84	7.09	7.13	6.73	
8/4/2022									7.03
8/11/2022				7.07					
1/23/2023		7.32							
1/24/2023	6.76		5.22						
1/26/2023						6.9	7.1		7.07
1/27/2023				7.25				6.89	
2/1/2023					6.6				

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 4/14/2023 12:39 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWA-43D (bg)	HGWA-44D (bg)
5/19/2016			
5/20/2016			
5/23/2016	6.22		
7/11/2016			
7/12/2016	6.04		
8/30/2016			
9/1/2016	6.26		
10/19/2016			
10/20/2016			
10/24/2016	6.46		
12/6/2016			
12/7/2016	6.29		
1/24/2017			
1/25/2017			
1/26/2017	6.46		
3/21/2017			
3/22/2017	5.81		
5/22/2017			
5/23/2017			
5/24/2017	6.51		
10/3/2017	6.25		
4/2/2018			
4/3/2018			
4/4/2018	5.86		
6/4/2018			
6/5/2018	6.27		
6/6/2018			
10/1/2018			
10/2/2018			
10/3/2018	5.97		
10/5/2018			
3/12/2019			
3/13/2019	5.92		
3/14/2019			
4/1/2019			
4/2/2019			
4/3/2019	5.69		
4/5/2019			
9/23/2019			
9/24/2019			
9/25/2019			
9/26/2019			
9/27/2019	5.75		
3/2/2020			
3/3/2020	5.95		
3/4/2020			
3/25/2020			
3/26/2020			
3/27/2020			
3/30/2020			
3/31/2020	5.7		
4/1/2020			

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 4/14/2023 12:39 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWA-43D (bg)	HGWA-44D (bg)
6/16/2020			
6/17/2020			
9/15/2020			
9/16/2020		7.52	7.83
9/17/2020			
9/18/2020	6.42		
9/21/2020			
11/10/2020		7.27	7.84
12/15/2020		7.39	7.87
1/19/2021		7.39	7.86
2/8/2021			
2/9/2021		7.44	7.84
2/10/2021			
2/12/2021	7.27		
2/15/2021			
2/16/2021			
2/22/2021			
3/10/2021			7.92
3/11/2021		7.46	
3/12/2021			
3/15/2021			
3/16/2021	5.95		
3/17/2021			
8/11/2021		7.4	
8/12/2021			
8/13/2021			7.77
8/16/2021			
8/17/2021			
8/18/2021	6.1		
8/19/2021			
2/1/2022		7.52	8.25
2/9/2022	6.55		
2/10/2022			
8/3/2022	6.23		
8/4/2022			
8/11/2022			
1/23/2023			
1/24/2023		7.56	8.22
1/26/2023	6.23		
1/27/2023			
2/1/2023			

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 4/14/2023 12:39 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-7	HGWC-8	HGWC-11	HGWC-13	HGWC-10	HGWC-9
5/19/2016	66.9	42.3	48.6						
5/20/2016				96	219				
5/23/2016						260	215	175	207
7/11/2016	41		45						
7/12/2016		44		100	230	390	210	190	230
8/30/2016	36	40	42						
9/1/2016				100	230	240	190	190	230
10/19/2016	46	43	44						
10/20/2016				110	240				240
10/24/2016						370	180	190	
12/6/2016	59	43	44	110	250				240
12/7/2016						260	120	200	
1/24/2017	46	48	46						
1/25/2017				110	260				
1/26/2017						230	83	90	270
3/21/2017	63	45	46	110	240				
3/22/2017						330	100	170	240
5/22/2017	77	46	48						
5/23/2017				110	270				240
5/24/2017						230	110	190	
10/3/2017	42	48	47	120	230	230	67	200	240
6/4/2018	71.8	46.6	47.8						
6/5/2018				117		204	187	205	
6/6/2018					190				214
10/1/2018	49.1	48.6	48.1						
10/2/2018				120	193			178	218
10/3/2018						233			
10/5/2018							78.3		
4/1/2019		50.4							
4/2/2019	84.3		48.7	127					
4/3/2019					194	298		159	214
4/5/2019							105		
9/23/2019	70.2	43.9	47.2						
9/24/2019					133				
9/25/2019				109					
9/26/2019							444		
9/27/2019						<1		181	214
3/25/2020	85.9	50.5	46.3						
3/26/2020									
3/27/2020				109	173				
3/30/2020							393		
3/31/2020						283			185
4/1/2020								59	
6/16/2020	88.2	49.5			157				
6/17/2020				102					
9/15/2020	47.3	44.7	51.5						
9/16/2020				109	194			169	
9/17/2020									209
9/18/2020						272			
9/21/2020							359		
11/10/2020									
12/15/2020									

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 4/14/2023 12:39 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-7	HGWC-8	HGWC-11	HGWC-13	HGWC-10	HGWC-9
1/19/2021									
3/10/2021	49.6								
3/11/2021		50.4	52.9						
3/12/2021								120	
3/15/2021				107	272				
3/16/2021						291			211
3/17/2021							384		
8/11/2021	48.9								
8/12/2021		38.6	47.4						
8/13/2021									
8/16/2021				98.1					
8/17/2021								156	207
8/18/2021					245	237			
8/19/2021							339		
2/1/2022	43.7	46	67.1						
2/9/2022						276		49.2	224
2/10/2022				97.5	224		371		
8/2/2022	58.1	43.5	86.9						
8/3/2022				105	241	254	451	119	
8/4/2022									243
8/11/2022				121					
1/23/2023		39.5							
1/24/2023	48.3		79.7						
1/26/2023						209	495		217
1/27/2023				119				37.3	
2/1/2023					179				

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 4/14/2023 12:39 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-12	HGWA-44D (bg)	HGWA-43D (bg)
5/19/2016			
5/20/2016			
5/23/2016	288		
7/11/2016			
7/12/2016	320		
8/30/2016			
9/1/2016	300		
10/19/2016			
10/20/2016			
10/24/2016	270		
12/6/2016			
12/7/2016	280		
1/24/2017			
1/25/2017			
1/26/2017	260		
3/21/2017			
3/22/2017	220		
5/22/2017			
5/23/2017			
5/24/2017	210		
10/3/2017	190		
6/4/2018			
6/5/2018			
6/6/2018	162		
10/1/2018			
10/2/2018			
10/3/2018	191		
10/5/2018			
4/1/2019			
4/2/2019			
4/3/2019	176		
4/5/2019			
9/23/2019			
9/24/2019			
9/25/2019			
9/26/2019			
9/27/2019	198		
3/25/2020			
3/26/2020	182		
3/27/2020			
3/30/2020			
3/31/2020			
4/1/2020			
6/16/2020			
6/17/2020			
9/15/2020			
9/16/2020		6.9	43
9/17/2020			
9/18/2020	266		
9/21/2020			
11/10/2020		6.3	39
12/15/2020		6.7	38.8

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 4/14/2023 12:39 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-12	HGWA-44D (bg)	HGWA-43D (bg)
1/19/2021		7.4	37.3
3/10/2021		<1	
3/11/2021			38.6
3/12/2021			
3/15/2021			
3/16/2021	248		
3/17/2021			
8/11/2021			30.5
8/12/2021			
8/13/2021		56.1	
8/16/2021			
8/17/2021			
8/18/2021	226		
8/19/2021			
2/1/2022		56.3	37.5
2/9/2022	252		
2/10/2022			
8/2/2022		13.2	37
8/3/2022	236		
8/4/2022			
8/11/2022			
1/23/2023			
1/24/2023		10.1	34.7
1/26/2023	228		
1/27/2023			
2/1/2023			

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 4/14/2023 12:39 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-7	HGWC-8	HGWC-11	HGWC-13	HGWC-10	HGWC-9
5/19/2016	421	267	143						
5/20/2016				427	711				
5/23/2016						564	683	629	984
7/11/2016	363		125						
7/12/2016		249		410	704	627	563	661	887
8/30/2016	330	254	168						
9/1/2016				484	763	656	702	769	956
10/19/2016	380	357	176						
10/20/2016				393	644				642
10/24/2016						836	647	643	
12/6/2016	377	285	145	492	733				899
12/7/2016						748	465	697	
1/24/2017	342	300	129						
1/25/2017				461	744				
1/26/2017						571	411	368	869
3/21/2017	340	288	103	415	818				
3/22/2017						597	427	683	936
5/22/2017	338	263	92						
5/23/2017				450	765				939
5/24/2017						566	377	696	
10/3/2017	343	300	127	464	812	443	268	746	1040
6/4/2018	415	266	140						
6/5/2018				459		489	528	679	
6/6/2018					611				810
10/1/2018	354	291	135						
10/2/2018				426	597			572	693
10/3/2018						449			
10/5/2018							322		
4/1/2019		284							
4/2/2019	452		133	428					
4/3/2019					543	483		525	673
4/5/2019							331		
9/23/2019	442	268	129						
9/24/2019					457				
9/25/2019				503					
9/26/2019							1010		
9/27/2019						528		624	730
3/25/2020	496	284	138						
3/26/2020									
3/27/2020				413	541				
3/30/2020							895		
3/31/2020						565			1010
4/1/2020								290	
6/16/2020	632	448			573				
6/17/2020				423					
9/15/2020	265	258	124						
9/16/2020				392	552			490	
9/17/2020									680
9/18/2020						626			
9/21/2020							732		
11/10/2020									
12/15/2020									

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 4/14/2023 12:39 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-7	HGWC-8	HGWC-11	HGWC-13	HGWC-10	HGWC-9
1/19/2021									
3/10/2021	348								
3/11/2021		267	169						
3/12/2021								490 (H1)	
3/15/2021				370	614				
3/16/2021						558			672
3/17/2021							716		
8/11/2021	366								
8/12/2021		265	118						
8/13/2021									
8/16/2021				407					
8/17/2021								496	704
8/18/2021					620	566			
8/19/2021							726		
2/1/2022	270	350	156						
2/9/2022						544		250	756
2/10/2022				414	578		814		
8/2/2022	400	287	196						
8/3/2022				441	648	572	958	433	
8/4/2022									760
8/11/2022				445					
1/23/2023		293							
1/24/2023	369		164						
1/26/2023						429	962		745
1/27/2023				473				188	
2/1/2023					528				

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 4/14/2023 12:39 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-12	HGWA-44D (bg)	HGWA-43D (bg)
5/19/2016			
5/20/2016			
5/23/2016	1060		
7/11/2016			
7/12/2016	909		
8/30/2016			
9/1/2016	1480		
10/19/2016			
10/20/2016			
10/24/2016	868		
12/6/2016			
12/7/2016	811		
1/24/2017			
1/25/2017			
1/26/2017	846		
3/21/2017			
3/22/2017	804		
5/22/2017			
5/23/2017			
5/24/2017	803		
10/3/2017	608		
6/4/2018			
6/5/2018			
6/6/2018	535		
10/1/2018			
10/2/2018			
10/3/2018	607		
10/5/2018			
4/1/2019			
4/2/2019			
4/3/2019	462		
4/5/2019			
9/23/2019			
9/24/2019			
9/25/2019			
9/26/2019			
9/27/2019	653		
3/25/2020			
3/26/2020	533		
3/27/2020			
3/30/2020			
3/31/2020			
4/1/2020			
6/16/2020			
6/17/2020			
9/15/2020			
9/16/2020		270	272
9/17/2020			
9/18/2020	704		
9/21/2020			
11/10/2020		287	307
12/15/2020		295	289

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 4/14/2023 12:39 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-12	HGWA-44D (bg)	HGWA-43D (bg)
1/19/2021		278	270
3/10/2021		289	
3/11/2021			279
3/12/2021			
3/15/2021			
3/16/2021	614		
3/17/2021			
8/11/2021			277
8/12/2021			
8/13/2021		436	
8/16/2021			
8/17/2021			
8/18/2021	600		
8/19/2021			
2/1/2022		444	156
2/9/2022	678		
2/10/2022			
8/2/2022		311	278
8/3/2022	650		
8/4/2022			
8/11/2022			
1/23/2023			
1/24/2023		363	271
1/26/2023	624		
1/27/2023			
2/1/2023			

FIGURE E.

Appendix III Trend Tests - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 4/14/2023, 12:44 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-12**	**-0.1782**	**-97**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-13**	**-0.246**	**-121**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-7**	**0.04008**	**125**	**92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**HGWA-3 (bg)**	**2.343**	**113**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**HGWA-3 (bg)**	**-0.1308**	**-102**	**-87**	**Yes**	**21**	**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-8**	**-9.384**	**-113**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**HGWC-9**	**-12.17**	**-134**	**-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**

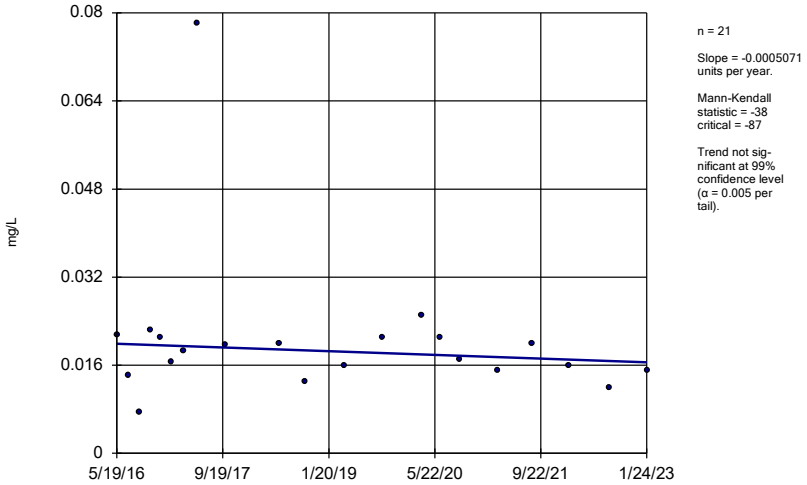
Appendix III Trend Tests - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 4/14/2023, 12:44 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	HGWA-1 (bg)	-0.0005071	-38	-87	No	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	**HGWA-2 (bg)**	**0.002417**	**122**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	HGWA-3 (bg)	0.0004174	28	87	No	21	19.05	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)	HGWC-11	-0.1651	-74	-81	No	20	0	n/a	n/a	0.01	NP
Boron (mg/L)	**HGWC-12**	**-0.1782**	**-97**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-13**	**-0.246**	**-121**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-7**	**0.04008**	**125**	**92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	HGWC-8	-0.0007786	-3	-87	No	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-9	0.05878	64	81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-1 (bg)	2.482	68	87	No	21	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
Calcium (mg/L)	**HGWA-3 (bg)**	**2.343**	**113**	**87**	**Yes**	**21**	**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	-20	-25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-12	-4.398	-55	-81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-13	18.24	66	81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-9	0.9669	42	81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-1 (bg)	0.6249	63	87	No	21	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
Chloride (mg/L)	**HGWA-3 (bg)**	**-0.1308**	**-102**	**-87**	**Yes**	**21**	**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
Chloride (mg/L)	**HGWA-44D (bg)**	**8.893**	**28**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**HGWC-8**	**-9.384**	**-113**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**HGWC-9**	**-12.17**	**-134**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	HGWA-1 (bg)	1.051	29	87	No	21	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-3 (bg)	0.5404	34	87	No	21	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**
Sulfate (mg/L)	HGWA-44D (bg)	3.569	14	25	No	9	11.11	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-11	-8.003	-34	-81	No	20	5	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-12	-9.947	-60	-81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-13	45.96	62	81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-7	0	12	92	No	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-8	-3.675	-27	-87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-9	-2.98	-41	-81	No	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-1 (bg)	3.042	16	87	No	21	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)	1.746	27	87	No	21	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)	HGWC-13	52.01	56	81	No	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-9	-33.15	-52	-81	No	20	0	n/a	n/a	0.01	NP

Sen's Slope Estimator

HGWA-1 (bg)



n = 21

Slope = -0.0005071 units per year.

Mann-Kendall statistic = -38
critical = -87

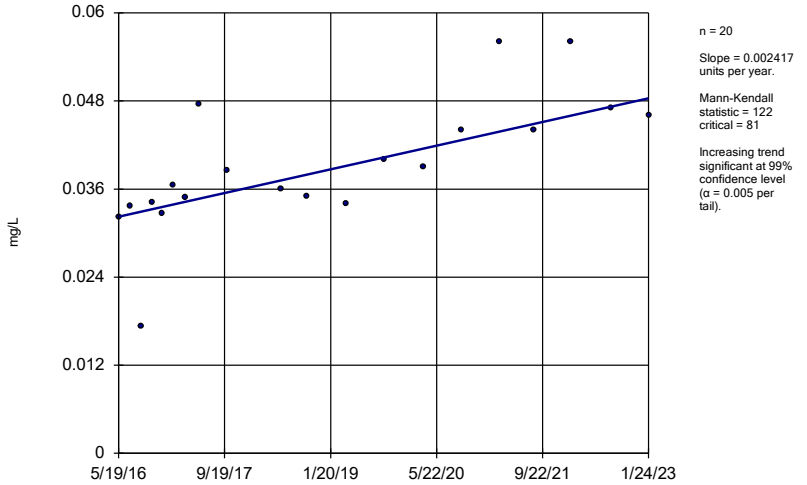
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-2 (bg)



n = 20

Slope = 0.002417 units per year.

Mann-Kendall statistic = 122
critical = 81

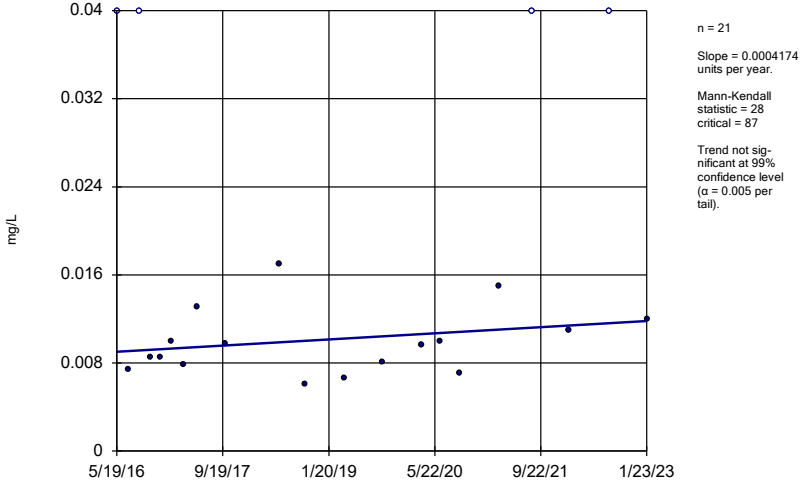
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWA-3 (bg)



n = 21

Slope = 0.0004174 units per year.

Mann-Kendall statistic = 28
critical = 87

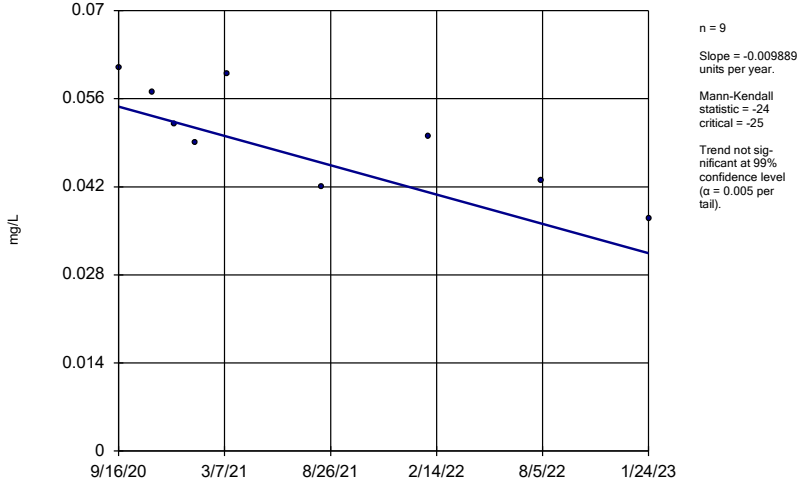
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-43D (bg)



n = 9

Slope = -0.009889 units per year.

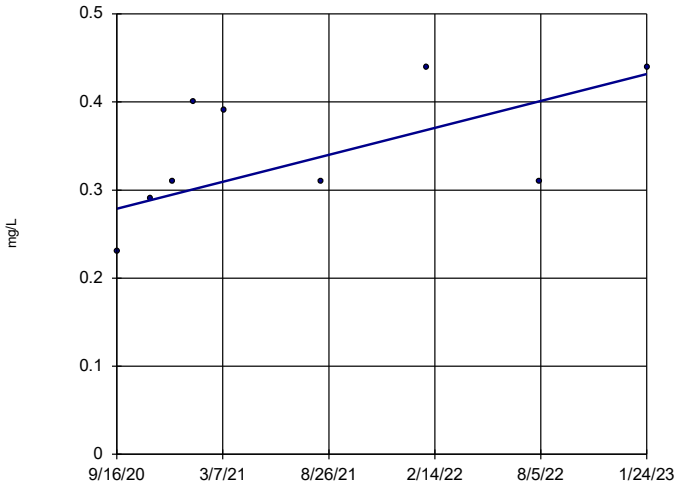
Mann-Kendall statistic = -24
critical = -25

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sen's Slope Estimator

HGWA-44D (bg)



n = 9

Slope = 0.06482 units per year.

Mann-Kendall statistic = 20 critical = 25

Trend not significant at 99% confidence level (α = 0.005 per tail).

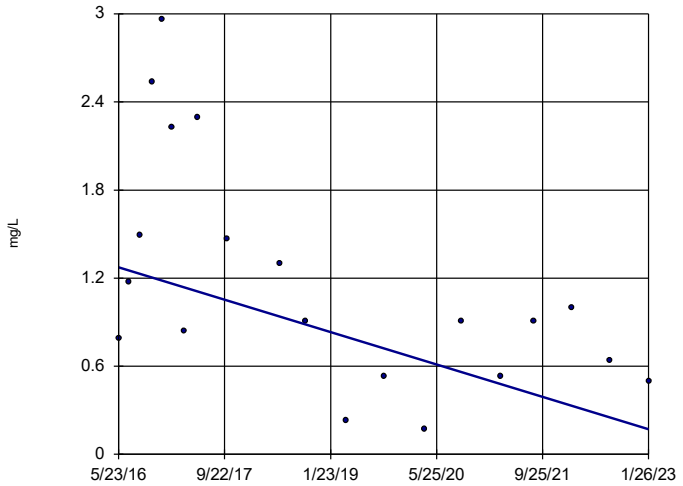
Constituent: Boron Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-11



n = 20

Slope = -0.1651 units per year.

Mann-Kendall statistic = -74 critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

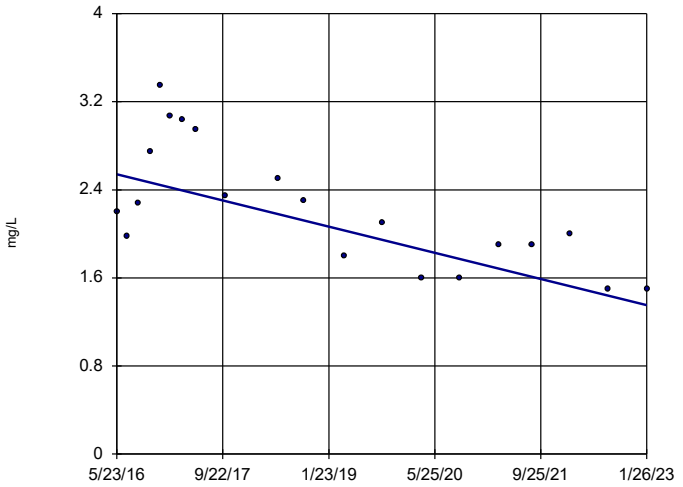
Constituent: Boron Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-12



n = 20

Slope = -0.1782 units per year.

Mann-Kendall statistic = -97 critical = -81

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

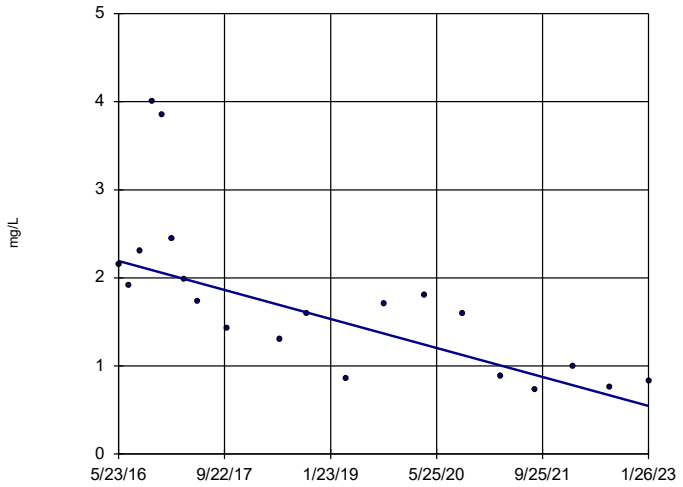
Constituent: Boron Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-13



n = 20

Slope = -0.246 units per year.

Mann-Kendall statistic = -121 critical = -81

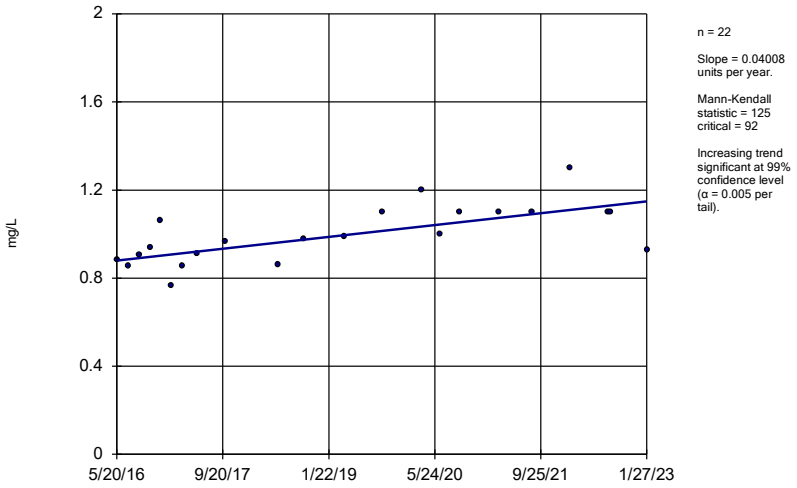
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sen's Slope Estimator

HGWC-7



n = 22

Slope = 0.04008 units per year.

Mann-Kendall statistic = 125 critical = 92

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

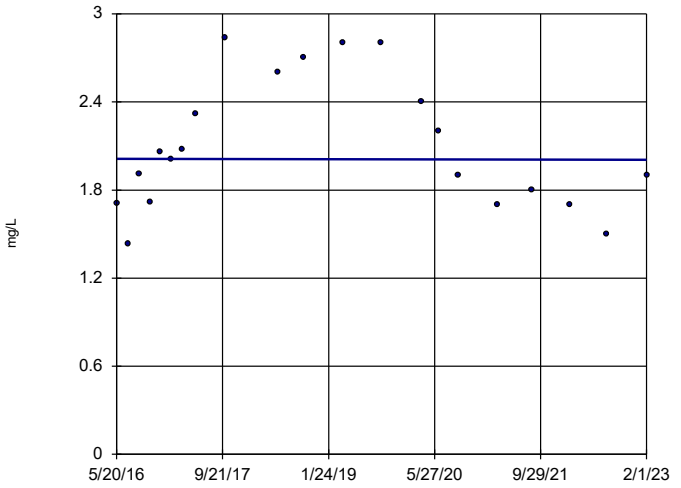
Constituent: Boron Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-8



n = 21

Slope = -0.0007786 units per year.

Mann-Kendall statistic = -3 critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

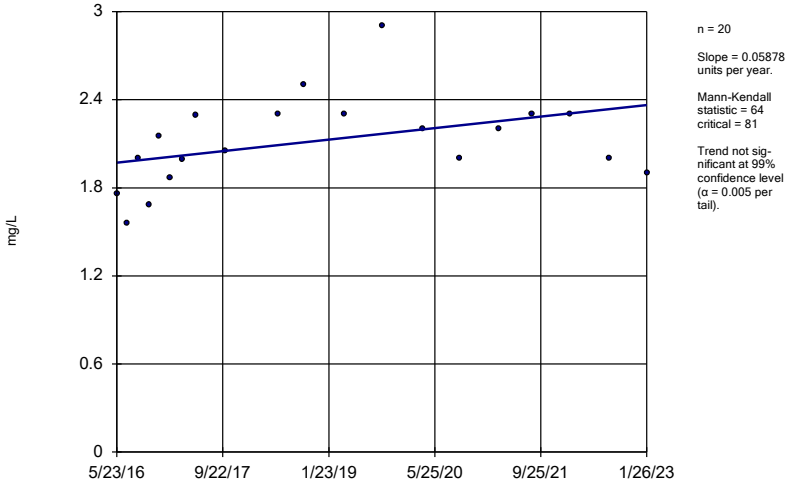
Constituent: Boron Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-9



n = 20

Slope = 0.05878 units per year.

Mann-Kendall statistic = 64 critical = 81

Trend not significant at 99% confidence level (α = 0.005 per tail).

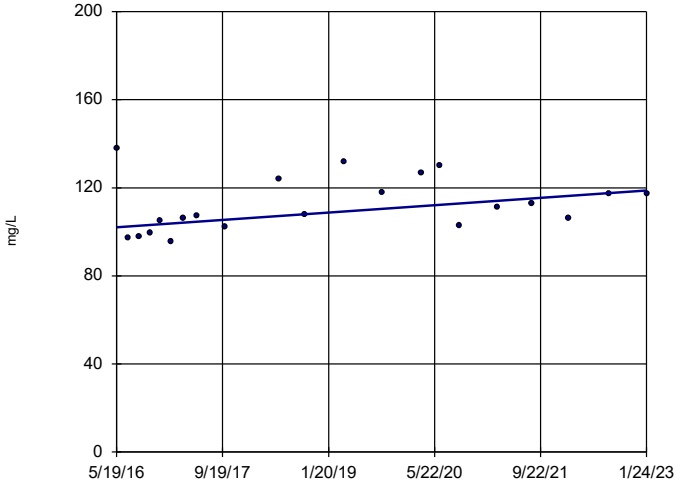
Constituent: Boron Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-1 (bg)



n = 21

Slope = 2.482 units per year.

Mann-Kendall statistic = 68 critical = 87

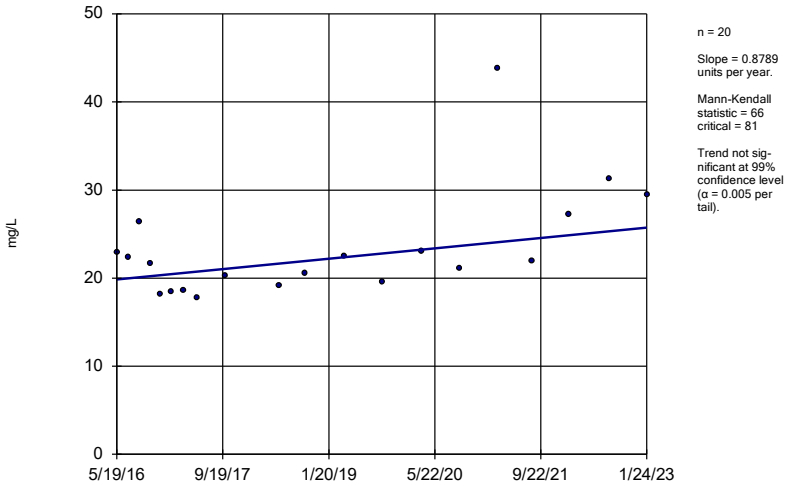
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sen's Slope Estimator

HGWA-2 (bg)



n = 20

Slope = 0.8789 units per year.

Mann-Kendall statistic = 66
critical = 81

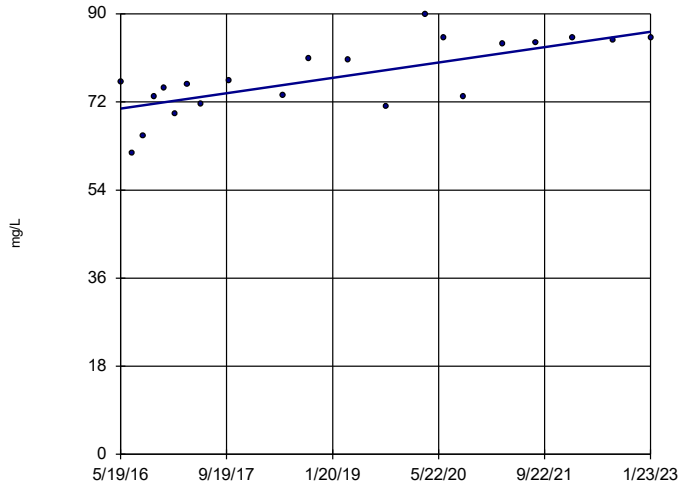
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-3 (bg)



n = 21

Slope = 2.343 units per year.

Mann-Kendall statistic = 113
critical = 87

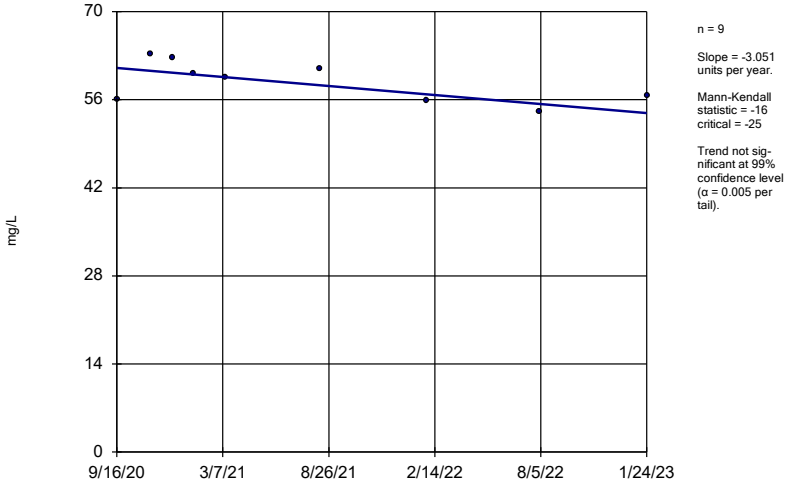
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-43D (bg)



n = 9

Slope = -3.051 units per year.

Mann-Kendall statistic = -16
critical = -25

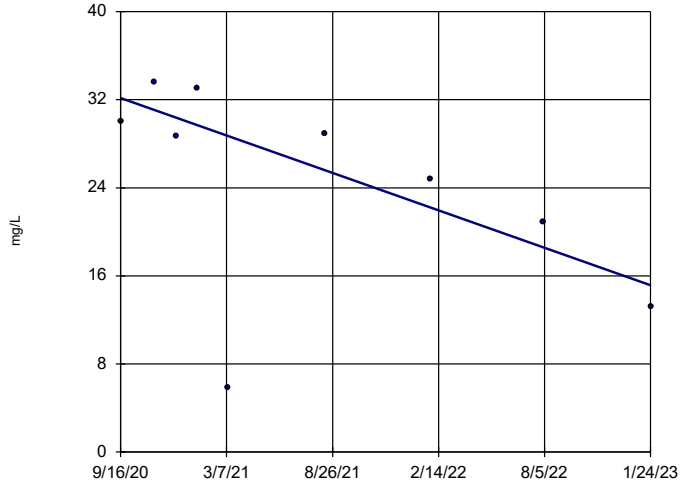
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-44D (bg)



n = 9

Slope = -7.217 units per year.

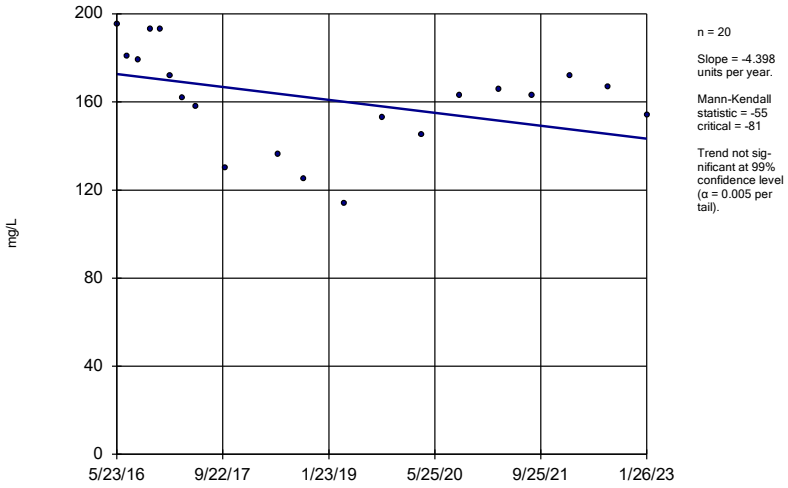
Mann-Kendall statistic = -20
critical = -25

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sen's Slope Estimator

HGWC-12



n = 20

Slope = -4.398 units per year.

Mann-Kendall statistic = -55 critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

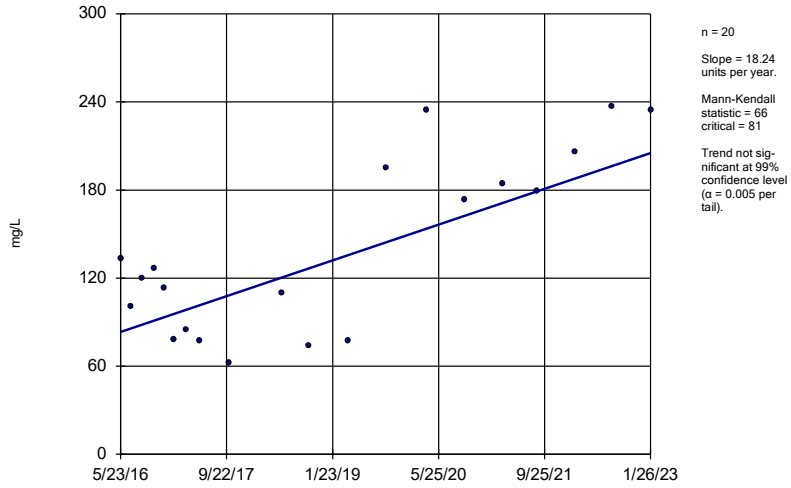
Constituent: Calcium Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-13



n = 20

Slope = 18.24 units per year.

Mann-Kendall statistic = 66 critical = 81

Trend not significant at 99% confidence level (α = 0.005 per tail).

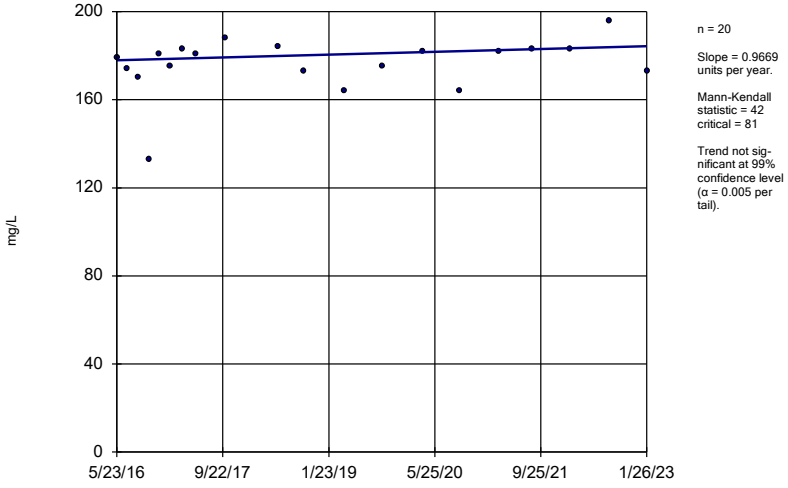
Constituent: Calcium Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-9



n = 20

Slope = 0.9669 units per year.

Mann-Kendall statistic = 42 critical = 81

Trend not significant at 99% confidence level (α = 0.005 per tail).

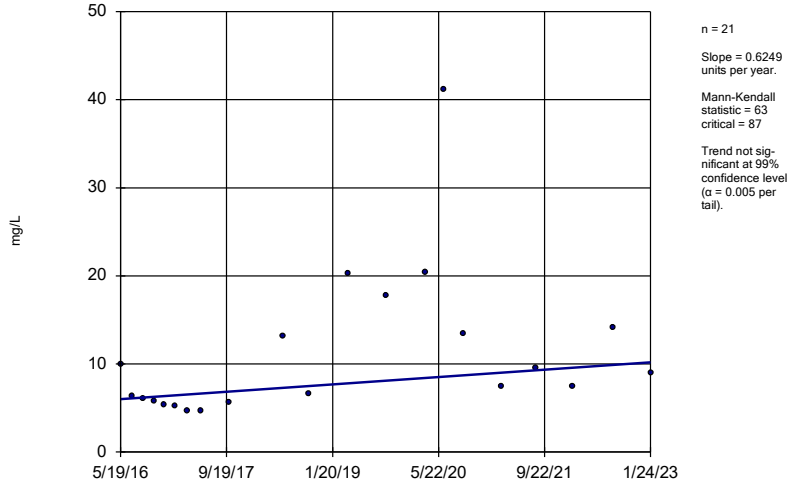
Constituent: Calcium Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-1 (bg)



n = 21

Slope = 0.6249 units per year.

Mann-Kendall statistic = 63 critical = 87

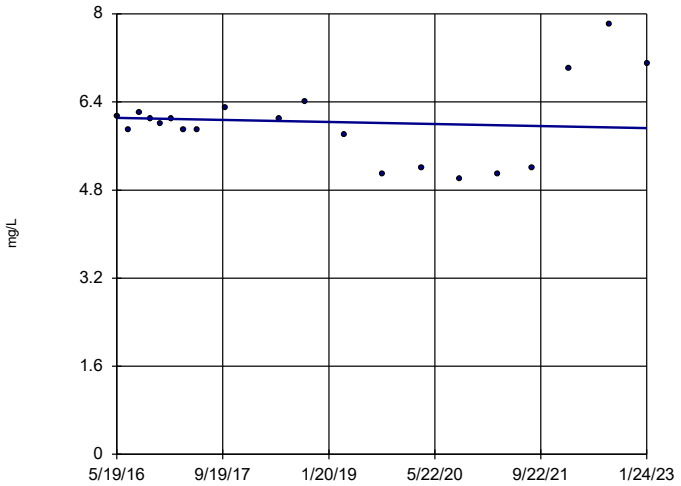
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sen's Slope Estimator

HGWA-2 (bg)



n = 20

Slope = -0.02813 units per year.

Mann-Kendall statistic = -10
critical = -81

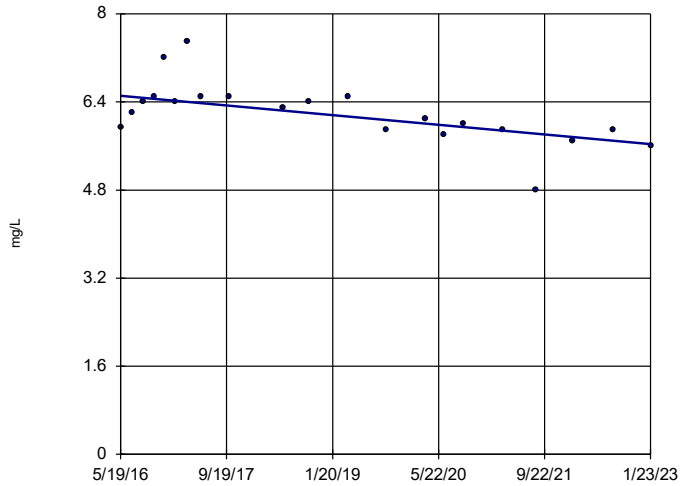
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-3 (bg)



n = 21

Slope = -0.1308 units per year.

Mann-Kendall statistic = -102
critical = -87

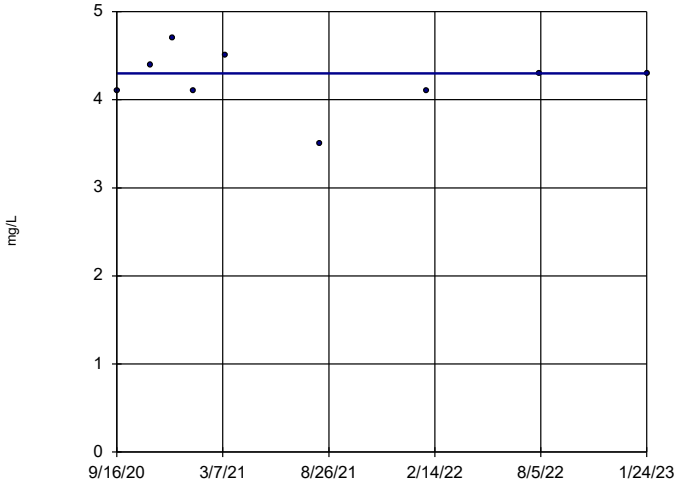
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-43D (bg)



n = 9

Slope = 0 units per year.

Mann-Kendall statistic = -2
critical = -25

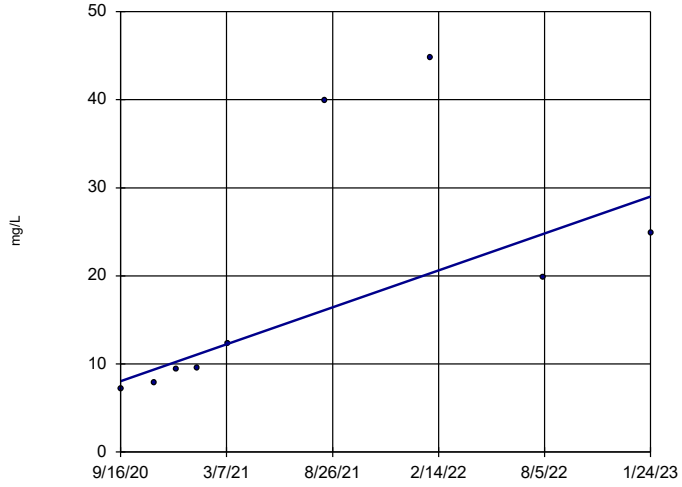
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-44D (bg)



n = 9

Slope = 8.893 units per year.

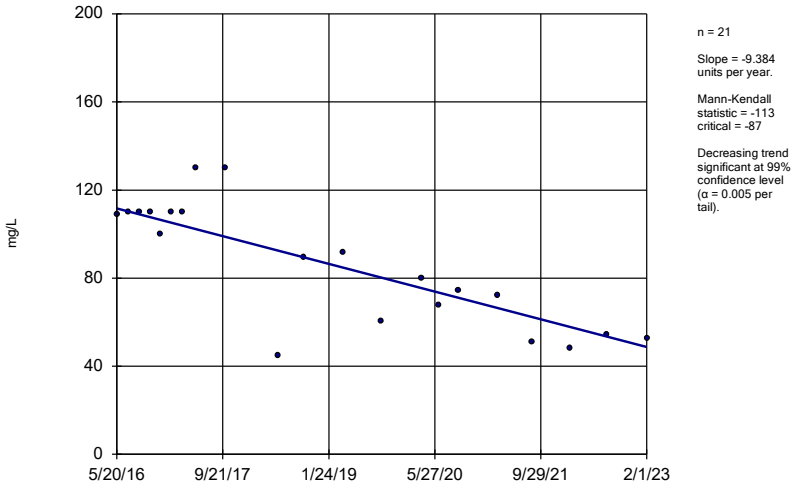
Mann-Kendall statistic = 28
critical = 25

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sen's Slope Estimator

HGWC-8



n = 21

Slope = -9.384 units per year.

Mann-Kendall statistic = -113
critical = -87

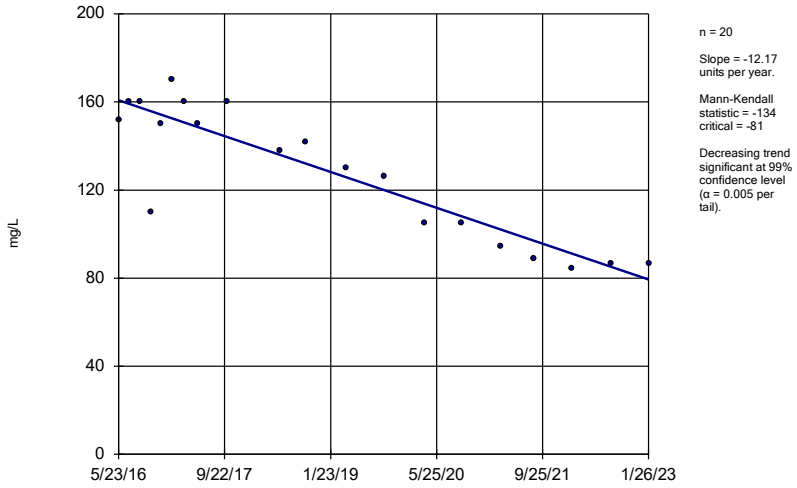
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-9



n = 20

Slope = -12.17 units per year.

Mann-Kendall statistic = -134
critical = -81

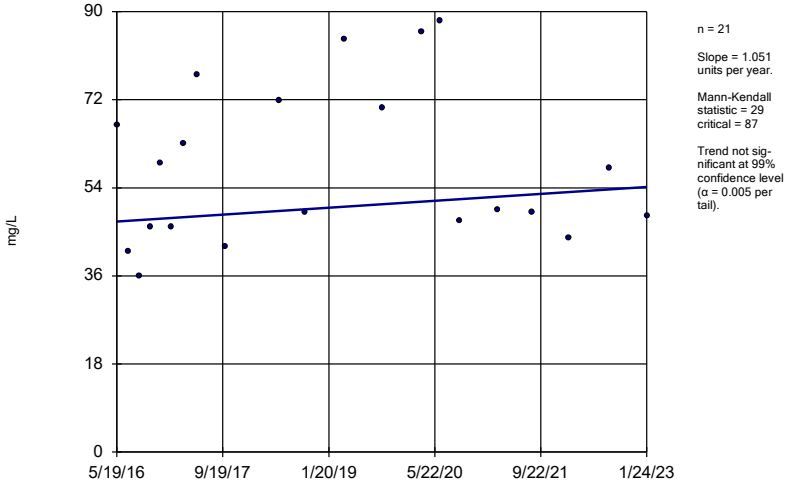
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-1 (bg)



n = 21

Slope = 1.051 units per year.

Mann-Kendall statistic = 29
critical = 87

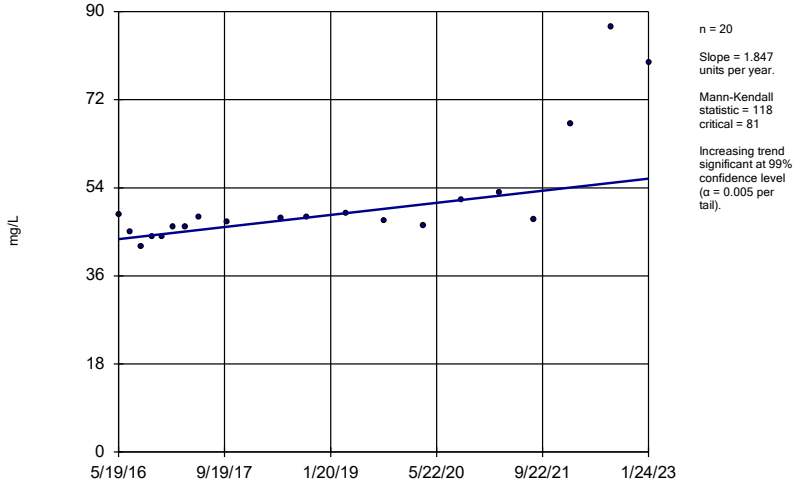
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-2 (bg)



n = 20

Slope = 1.847 units per year.

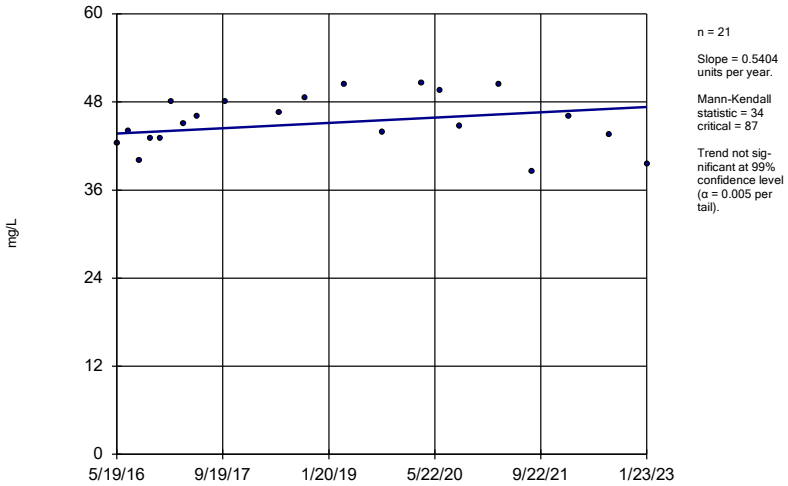
Mann-Kendall statistic = 118
critical = 81

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sen's Slope Estimator

HGWA-3 (bg)



n = 21

Slope = 0.5404 units per year.

Mann-Kendall statistic = 34 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

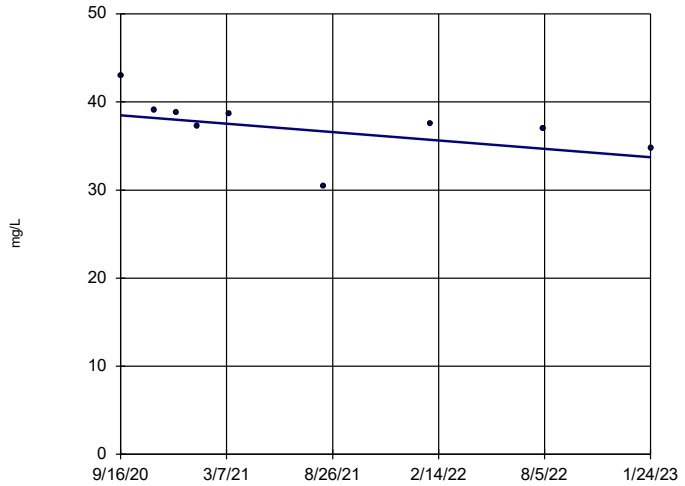
Constituent: Sulfate Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-43D (bg)



n = 9

Slope = -2.015 units per year.

Mann-Kendall statistic = -26 critical = -25

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

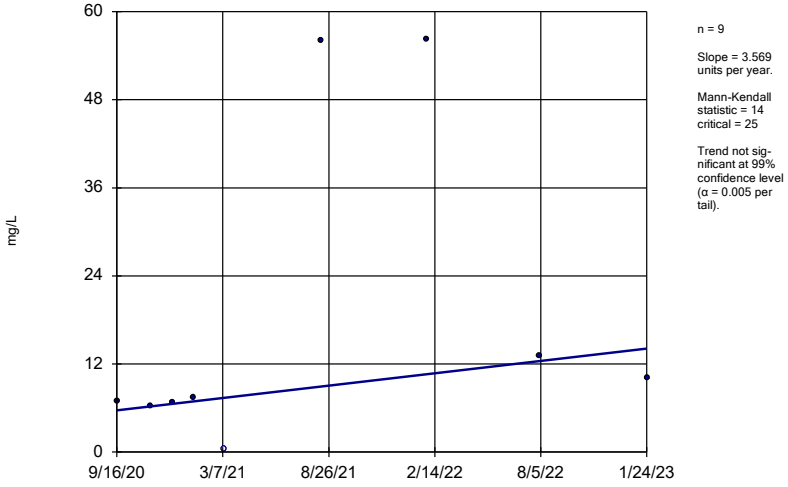
Constituent: Sulfate Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWA-44D (bg)



n = 9

Slope = 3.569 units per year.

Mann-Kendall statistic = 14 critical = 25

Trend not significant at 99% confidence level (α = 0.005 per tail).

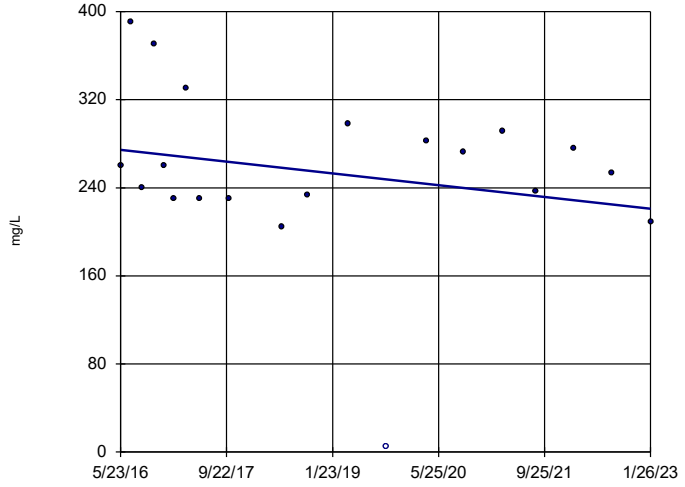
Constituent: Sulfate Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWC-11



n = 20

Slope = -8.003 units per year.

Mann-Kendall statistic = -34 critical = -81

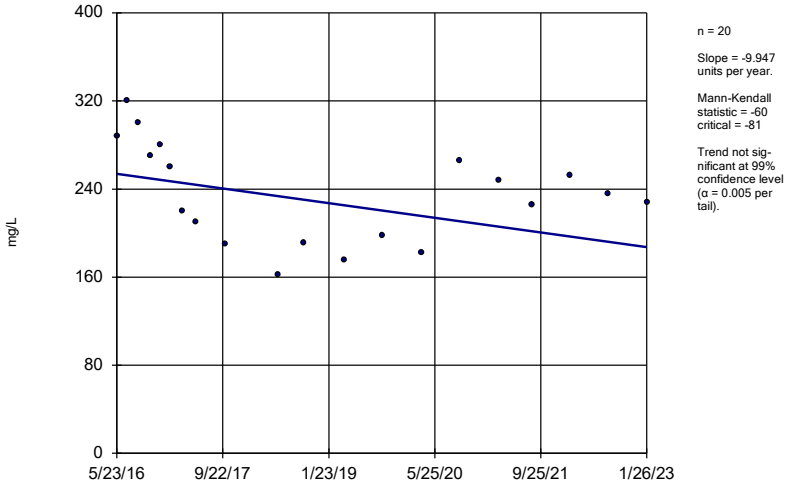
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sen's Slope Estimator

HGWC-12



n = 20

Slope = -9.947 units per year.

Mann-Kendall statistic = -60 critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

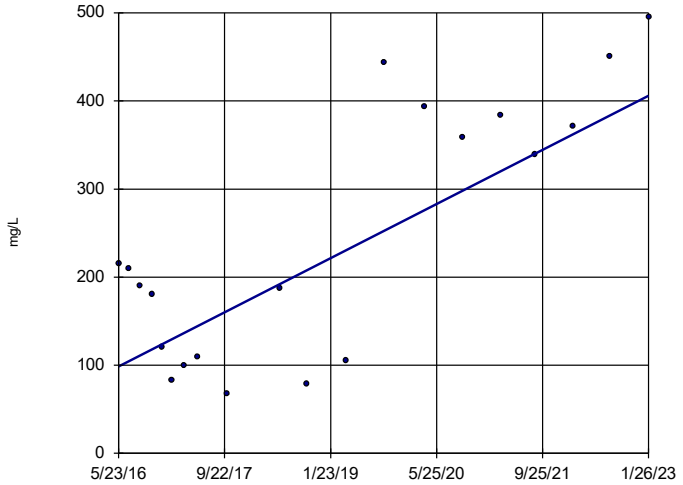
Constituent: Sulfate Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-13



n = 20

Slope = 45.96 units per year.

Mann-Kendall statistic = 62 critical = 81

Trend not significant at 99% confidence level (α = 0.005 per tail).

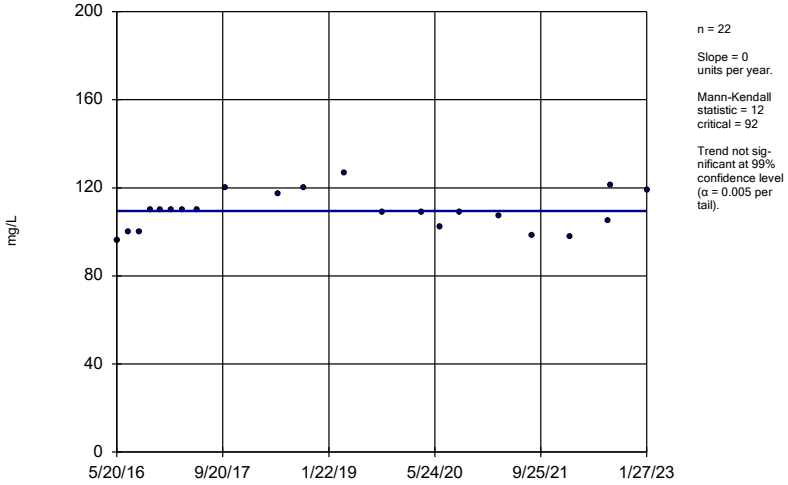
Constituent: Sulfate Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-7



n = 22

Slope = 0 units per year.

Mann-Kendall statistic = 12 critical = 92

Trend not significant at 99% confidence level (α = 0.005 per tail).

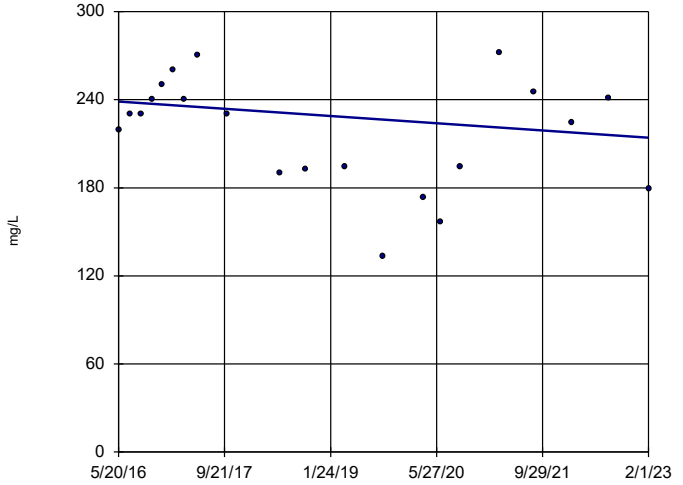
Constituent: Sulfate Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-8



n = 21

Slope = -3.675 units per year.

Mann-Kendall statistic = -27 critical = -87

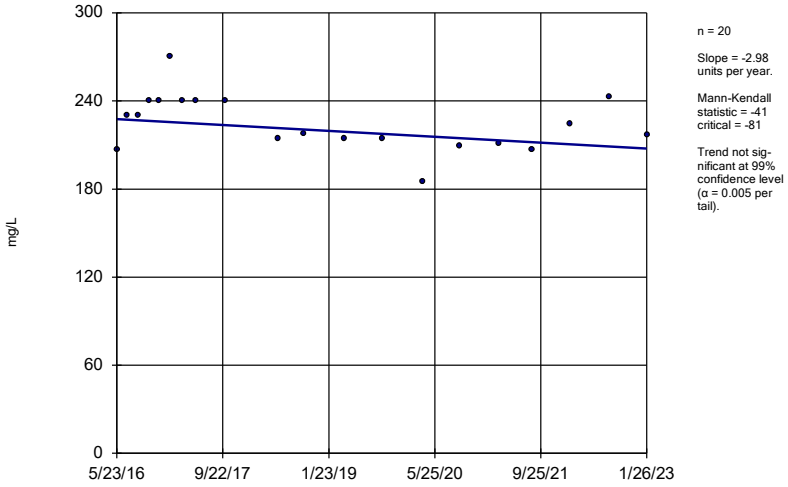
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sen's Slope Estimator

HGWC-9



n = 20

Slope = -2.98 units per year.

Mann-Kendall statistic = -41 critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

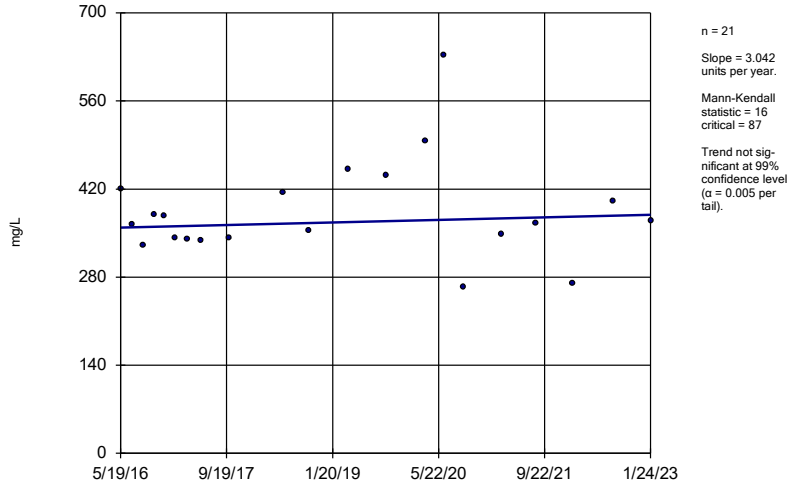
Constituent: Sulfate Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-1 (bg)



n = 21

Slope = 3.042 units per year.

Mann-Kendall statistic = 16 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

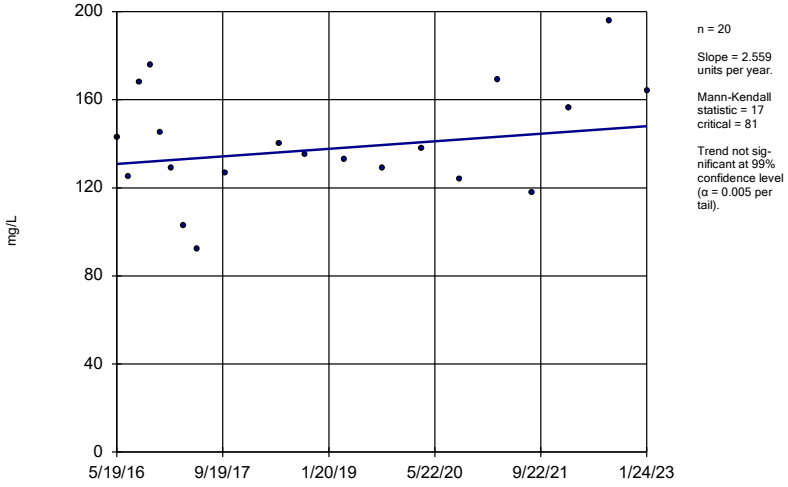
Constituent: Total Dissolved Solids Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-2 (bg)



n = 20

Slope = 2.559 units per year.

Mann-Kendall statistic = 17 critical = 81

Trend not significant at 99% confidence level (α = 0.005 per tail).

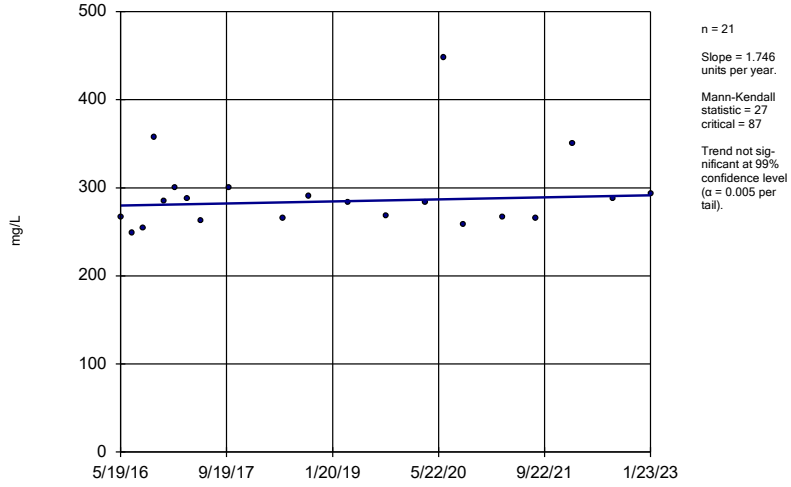
Constituent: Total Dissolved Solids Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-3 (bg)



n = 21

Slope = 1.746 units per year.

Mann-Kendall statistic = 27 critical = 87

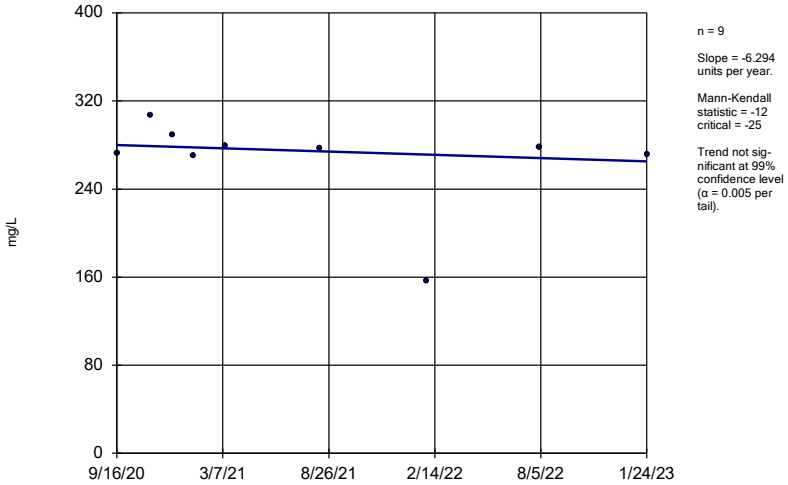
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sen's Slope Estimator

HGWA-43D (bg)



n = 9

Slope = -6.294 units per year.

Mann-Kendall statistic = -12 critical = -25

Trend not significant at 99% confidence level (α = 0.005 per tail).

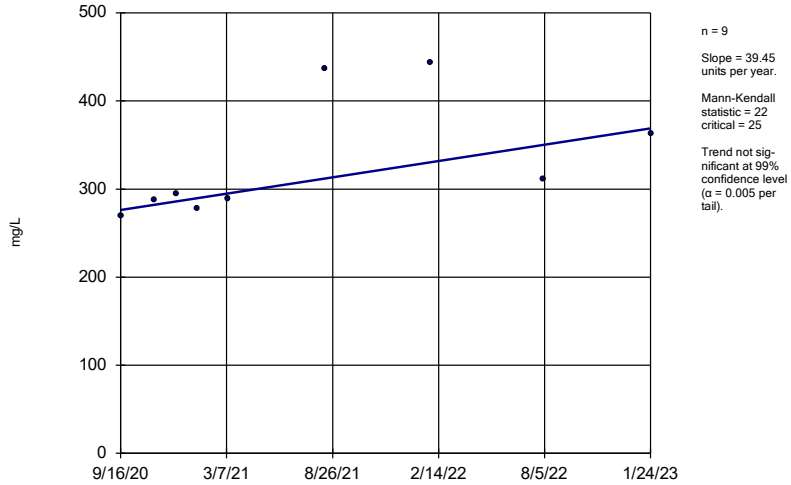
Constituent: Total Dissolved Solids Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-44D (bg)



n = 9

Slope = 39.45 units per year.

Mann-Kendall statistic = 22 critical = 25

Trend not significant at 99% confidence level (α = 0.005 per tail).

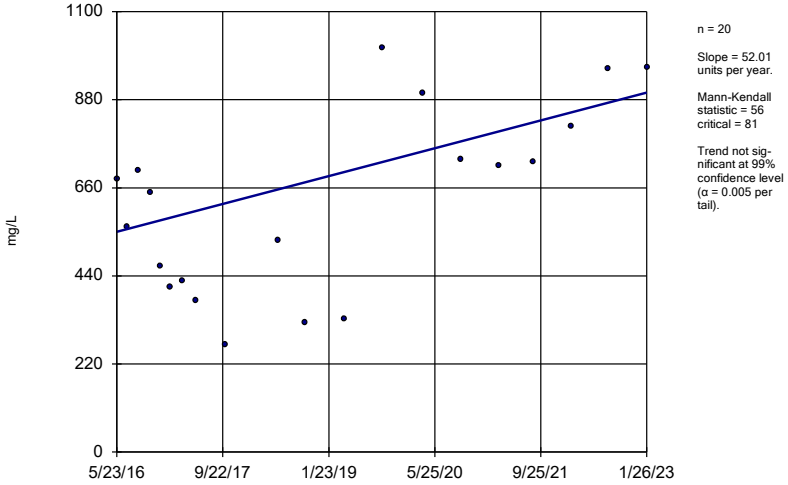
Constituent: Total Dissolved Solids Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-13



n = 20

Slope = 52.01 units per year.

Mann-Kendall statistic = 56 critical = 81

Trend not significant at 99% confidence level (α = 0.005 per tail).

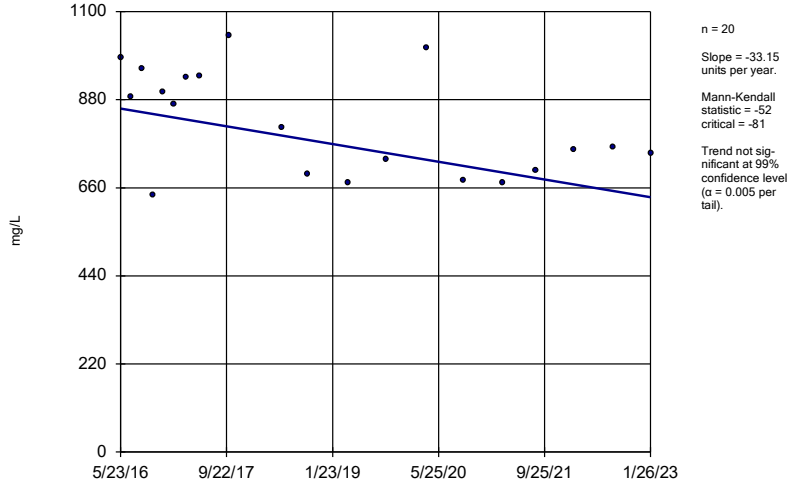
Constituent: Total Dissolved Solids Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-9



n = 20

Slope = -33.15 units per year.

Mann-Kendall statistic = -52 critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

FIGURE F.

Upper Tolerance Limits Summary Table

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 4/14/2023, 12:49 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.003	n/a	n/a	n/a	n/a 83	n/a	n/a	80.72	n/a	n/a	0.01416	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	n/a 89	n/a	n/a	66.29	n/a	n/a	0.01041	NP Inter(NDs)
Barium (mg/L)	n/a	0.46	n/a	n/a	n/a	n/a 89	n/a	n/a	0	n/a	n/a	0.01041	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0005	n/a	n/a	n/a	n/a 83	n/a	n/a	78.31	n/a	n/a	0.01416	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0005	n/a	n/a	n/a	n/a 83	n/a	n/a	85.54	n/a	n/a	0.01416	NP Inter(NDs)
Chromium (mg/L)	n/a	0.0079	n/a	n/a	n/a	n/a 83	n/a	n/a	83.13	n/a	n/a	0.01416	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.038	n/a	n/a	n/a	n/a 83	n/a	n/a	72.29	n/a	n/a	0.01416	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	4.36	n/a	n/a	n/a	n/a 89	n/a	n/a	0	n/a	n/a	0.01041	NP Inter(normality)
Fluoride (mg/L)	n/a	1.3	n/a	n/a	n/a	n/a 94	n/a	n/a	28.72	n/a	n/a	0.008054	NP Inter(normality)
Lead (mg/L)	n/a	0.001	n/a	n/a	n/a	n/a 80	n/a	n/a	68.75	n/a	n/a	0.01652	NP Inter(NDs)
Lithium (mg/L)	n/a	0.064	n/a	n/a	n/a	n/a 89	n/a	n/a	19.1	n/a	n/a	0.01041	NP Inter(normality)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	n/a 61	n/a	n/a	96.72	n/a	n/a	0.04377	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.01	n/a	n/a	n/a	n/a 91	n/a	n/a	78.02	n/a	n/a	0.009394	NP Inter(NDs)
Selenium (mg/L)	n/a	0.005	n/a	n/a	n/a	n/a 89	n/a	n/a	97.75	n/a	n/a	0.01041	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	n/a 89	n/a	n/a	98.88	n/a	n/a	0.01041	NP Inter(NDs)

FIGURE G.

PLANT HAMMOND AP-1 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		0.0079	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.038	0.038
Combined Radium, Total (pCi/L)	5		4.36	5
Fluoride, Total (mg/L)	4		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 indidcates background is higher than MCL or CCR-Rule*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residuals*

**GWPS = Groundwater Protection Statard*

FIGURE H.

Confidence Intervals - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 4/14/2023, 1:13 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**HGWC-13**	**0.4311**	**0.3628**	**0.01**	**Yes**	**23**	**0.397**	**0.06529**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**HGWC-8**	**0.4856**	**0.4241**	**0.1**	**Yes**	**24**	**0.4513**	**0.06596**	**0**	**None**	**x^2**	**0.01**	**Param.**

Confidence Intervals - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 4/14/2023, 1:13 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	HGWC-10	0.003	0.0018	0.006	No	21	0.002831	0.000564	90.48	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-11	0.003	0.00038	0.006	No	21	0.002875	0.0005717	95.24	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-13	0.003	0.00047	0.006	No	21	0.00213	0.001263	66.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-7	0.003	0.0017	0.006	No	22	0.00282	0.0006192	90.91	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-8	0.003	0.00064	0.006	No	21	0.002888	0.000515	95.24	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-9	0.003	0.00092	0.006	No	21	0.002528	0.001002	80.95	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-24D	0.003	0.0017	0.006	No	12	0.002892	0.0003753	91.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-26D	0.003	0.002	0.006	No	12	0.002775	0.0005463	83.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-27D	0.003	0.0003	0.006	No	12	0.001652	0.001409	50	None	No	0.01	NP (normality)
Antimony (mg/L)	MW-28D	0.003	0.0019	0.006	No	12	0.002908	0.0003175	91.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-29	0.003	0.00094	0.006	No	12	0.002828	0.0005947	91.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-6	0.003	0.0014	0.006	No	12	0.002867	0.0004619	91.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-7	0.003	0.00086	0.006	No	12	0.002398	0.0009593	66.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-11	0.005	0.0018	0.01	No	23	0.003554	0.001724	47.83	None	No	0.01	NP (normality)
Arsenic (mg/L)	HGWC-12	0.004183	0.002886	0.01	No	23	0.003535	0.00124	8.696	None	No	0.01	Param.
Arsenic (mg/L)	**HGWC-13**	**0.4311**	**0.3628**	**0.01**	**Yes**	**23**	**0.397**	**0.06529**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	HGWC-7	0.005	0.0019	0.01	No	24	0.004871	0.0006328	95.83	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-8	0.005	0.002	0.01	No	23	0.00487	0.0006255	95.65	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-9	0.005	0.0021	0.01	No	23	0.004305	0.001573	82.61	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-19	0.005	0.00045	0.01	No	12	0.004621	0.001313	91.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-20	0.005	0.00094	0.01	No	12	0.004052	0.001767	75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-25D	0.005	0.001	0.01	No	12	0.003729	0.001895	66.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-26D	0.005	0.0008	0.01	No	12	0.004008	0.001811	75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-27D	0.005	0.00069	0.01	No	12	0.003907	0.001984	75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-28D	0.005	0.0011	0.01	No	12	0.004675	0.001126	91.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-29	0.005	0.00037	0.01	No	12	0.004614	0.001337	91.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-5	0.005	0.0013	0.01	No	12	0.004692	0.001068	91.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-6	0.005	0.0034	0.01	No	12	0.004867	0.0004619	91.67	None	No	0.01	NP (NDs)
Barium (mg/L)	HGWC-10	0.08399	0.06212	2	No	23	0.07306	0.02091	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-11	0.05051	0.03278	2	No	23	0.04283	0.01895	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	HGWC-12	0.123	0.083	2	No	23	0.09896	0.02104	0	None	No	0.01	NP (normality)
Barium (mg/L)	HGWC-13	0.08825	0.06754	2	No	23	0.0779	0.0198	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-7	0.07378	0.06797	2	No	24	0.07088	0.005696	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-8	0.07372	0.06219	2	No	23	0.06796	0.01102	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-9	0.1187	0.1011	2	No	23	0.1099	0.01686	0	None	No	0.01	Param.
Barium (mg/L)	MW-19	0.06184	0.04583	2	No	12	0.05383	0.01021	0	None	No	0.01	Param.
Barium (mg/L)	MW-20	0.09568	0.08599	2	No	12	0.09083	0.006177	0	None	No	0.01	Param.
Barium (mg/L)	MW-24D	0.081	0.048	2	No	12	0.0605	0.02098	0	None	No	0.01	NP (normality)
Barium (mg/L)	MW-25D	0.596	0.4157	2	No	12	0.5058	0.1149	0	None	No	0.01	Param.
Barium (mg/L)	MW-26D	0.1217	0.07335	2	No	12	0.0975	0.03078	0	None	No	0.01	Param.
Barium (mg/L)	MW-27D	1.2	0.94	2	No	12	1.056	0.1609	0	None	No	0.01	NP (normality)
Barium (mg/L)	MW-28D	0.7309	0.3408	2	No	12	0.5358	0.2486	0	None	No	0.01	Param.
Barium (mg/L)	MW-29	0.08349	0.07551	2	No	12	0.0795	0.00509	0	None	No	0.01	Param.
Barium (mg/L)	MW-5	0.05211	0.04456	2	No	12	0.04833	0.004812	0	None	No	0.01	Param.
Barium (mg/L)	MW-6	0.09038	0.07995	2	No	12	0.08517	0.006645	0	None	No	0.01	Param.
Barium (mg/L)	MW-7	0.0617	0.04896	2	No	12	0.05533	0.008117	0	None	No	0.01	Param.
Beryllium (mg/L)	HGWC-11	0.0005	0.00012	0.004	No	21	0.0003713	0.0001875	66.67	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-13	0.0005	0.000097	0.004	No	21	0.0003254	0.0002069	57.14	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-7	0.0005	0.00019	0.004	No	22	0.0004476	0.0001363	86.36	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-8	0.003	0.000074	0.004	No	21	0.001885	0.001456	61.9	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-19	0.0005	0.000058	0.004	No	12	0.0004632	0.0001276	91.67	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-28D	0.0005	0.000054	0.004	No	12	0.0003952	0.0001909	75	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-7	0.0005	0.000051	0.004	No	12	0.0004626	0.0001296	91.67	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-10	0.0005	0.000115	0.005	No	21	0.0003721	0.0001864	66.67	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-11	0.0005	0.0001	0.005	No	21	0.0004427	0.0001439	85.71	None	No	0.01	NP (NDs)

Confidence Intervals - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 4/14/2023, 1:13 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cadmium (mg/L)	HGWC-12	0.0005	0.0003	0.005	No	21	0.00044	0.0001313	80.95	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-7	0.0005	0.0002	0.005	No	22	0.0004268	0.0001394	77.27	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-8	0.0003	0.00017	0.005	No	21	0.0002924	0.0003358	4.762	None	No	0.01	NP (normality)
Cadmium (mg/L)	HGWC-9	0.0005	0.0002	0.005	No	21	0.0004462	0.0001368	85.71	None	No	0.01	NP (NDs)
Cadmium (mg/L)	MW-19	0.0003417	0.0001502	0.005	No	12	0.0003508	0.0002735	25	Kaplan-Meier	ln(x)	0.01	Param.
Chromium (mg/L)	HGWC-10	0.02	0.0012	0.1	No	21	0.005348	0.00355	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-11	0.005	0.0012	0.1	No	21	0.004386	0.001547	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-12	0.005	0.0025	0.1	No	21	0.004467	0.001382	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-13	0.005	0.00059	0.1	No	21	0.00436	0.001608	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-7	0.005	0.0021	0.1	No	22	0.006984	0.0144	68.18	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-8	0.005	0.0015	0.1	No	21	0.004215	0.001666	80.95	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-9	0.005	0.0013	0.1	No	21	0.004219	0.001657	80.95	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-19	0.005	0.00059	0.1	No	12	0.003035	0.002099	50	None	No	0.01	NP (normality)
Chromium (mg/L)	MW-20	0.005	0.00068	0.1	No	12	0.003908	0.001975	75	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-24D	0.005	0.0017	0.1	No	12	0.004343	0.001558	83.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-25D	0.005	0.0012	0.1	No	12	0.004317	0.001599	83.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-26D	0.005	0.001	0.1	No	12	0.003505	0.001913	58.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-27D	0.005	0.00082	0.1	No	12	0.004293	0.001651	83.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-28D	0.005	0.00081	0.1	No	12	0.003137	0.002009	50	None	No	0.01	NP (normality)
Chromium (mg/L)	MW-29	0.005	0.001	0.1	No	12	0.004667	0.001155	91.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-5	0.003948	0.002236	0.1	No	12	0.003092	0.001091	0	None	No	0.01	Param.
Chromium (mg/L)	MW-6	0.005	0.00059	0.1	No	12	0.003952	0.001908	75	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-7	0.005	0.0015	0.1	No	12	0.002292	0.001295	16.67	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-10	0.005	0.0009	0.038	No	21	0.00379	0.001963	71.43	None	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-11	0.005	0.0014	0.038	No	21	0.003103	0.001799	42.86	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-12	0.0018	0.0012	0.038	No	21	0.00151	0.0004265	9.524	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-13	0.004201	0.002611	0.038	No	21	0.003686	0.002213	4.762	None	ln(x)	0.01	Param.
Cobalt (mg/L)	HGWC-7	0.00147	0.0007471	0.038	No	22	0.001179	0.0007416	13.64	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	HGWC-8	0.002242	0.001945	0.038	No	21	0.002094	0.0002693	9.524	None	No	0.01	Param.
Cobalt (mg/L)	HGWC-9	0.0007	0.00051	0.038	No	21	0.0008643	0.0006357	9.524	None	No	0.01	NP (normality)
Cobalt (mg/L)	MW-19	0.04167	0.0295	0.038	No	12	0.03558	0.007751	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-20	0.005	0.0011	0.038	No	12	0.004675	0.001126	91.67	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-24D	0.005	0.00056	0.038	No	12	0.003909	0.001982	75	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-26D	0.005	0.00044	0.038	No	12	0.001979	0.002232	33.33	None	No	0.01	NP (normality)
Cobalt (mg/L)	MW-27D	0.005	0.0004	0.038	No	12	0.003828	0.002121	75	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-28D	0.005	0.00093	0.038	No	12	0.004661	0.001175	91.67	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-29	0.001228	0.0007098	0.038	No	12	0.0009692	0.0003305	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-6	0.005	0.00041	0.038	No	12	0.001263	0.001752	16.67	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	HGWC-10	1.067	0.604	5	No	23	0.8353	0.4423	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-11	1.134	0.6526	5	No	23	0.8934	0.4603	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-12	1.031	0.5721	5	No	23	0.8014	0.4385	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-13	0.9792	0.5965	5	No	23	0.7879	0.3658	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-7	0.8409	0.4167	5	No	24	0.6782	0.4762	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-8	0.9538	0.656	5	No	23	0.8049	0.2847	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-9	0.8913	0.5289	5	No	23	0.7101	0.3464	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-19	0.9587	0.412	5	No	12	0.6853	0.3484	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-20	1.002	0.3888	5	No	12	0.6953	0.3906	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-24D	0.5788	0.1374	5	No	12	0.3767	0.3495	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-25D	1.279	0.8145	5	No	12	1.047	0.296	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-26D	0.9284	0.1186	5	No	12	0.5235	0.516	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-27D	1.544	0.8213	5	No	12	1.196	0.5082	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-28D	1.385	0.6077	5	No	12	0.9962	0.4951	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-29	0.9393	0.3837	5	No	12	0.6615	0.354	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-5	0.9737	0.5478	5	No	12	0.7608	0.2714	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-6	1.015	0.4421	5	No	12	0.7613	0.4499	0	None	ln(x)	0.01	Param.

Confidence Intervals - All Results

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Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Combined Radium 226 + 228 (pCi/L)	MW-7	1.18	0.5086	5	No	12	0.8444	0.428	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-10	0.1861	0.08031	4	No	24	0.174	0.1317	16.67	Kaplan-Meier	x^(1/3)	0.01	Param.
Fluoride (mg/L)	HGWC-11	0.3995	0.2471	4	No	24	0.3355	0.1595	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	HGWC-12	0.34	0.17	4	No	24	0.3084	0.2332	4.167	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-13	0.687	0.5004	4	No	24	0.5937	0.1829	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-7	0.15	0.084	4	No	26	0.145	0.1052	7.692	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-8	0.63	0.45	4	No	25	0.556	0.1706	0	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-9	0.2386	0.1022	4	No	24	0.1895	0.1498	8.333	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	MW-19	0.2612	0.1025	4	No	12	0.1892	0.1289	0	None	x^(1/3)	0.01	Param.
Fluoride (mg/L)	MW-20	0.1	0.074	4	No	12	0.09392	0.01119	75	None	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-24D	0.09451	0.04923	4	No	12	0.0855	0.03602	33.33	Kaplan-Meier	sqrt(x)	0.01	Param.
Fluoride (mg/L)	MW-25D	1.7	1.4	4	No	12	1.625	0.2006	0	None	No	0.01	NP (normality)
Fluoride (mg/L)	MW-26D	0.1259	0.05694	4	No	12	0.09142	0.04394	8.333	None	No	0.01	Param.
Fluoride (mg/L)	MW-27D	0.3	0.22	4	No	12	0.2683	0.05219	0	None	No	0.01	NP (normality)
Fluoride (mg/L)	MW-28D	0.2415	0.1635	4	No	12	0.2025	0.04975	0	None	No	0.01	Param.
Fluoride (mg/L)	MW-29	0.18	0.068	4	No	12	0.09433	0.03293	58.33	None	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-5	0.0865	0.05882	4	No	12	0.0795	0.01968	16.67	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	MW-6	0.1052	0.05616	4	No	12	0.09983	0.05	16.67	Kaplan-Meier	ln(x)	0.01	Param.
Fluoride (mg/L)	MW-7	0.17	0.069	4	No	12	0.09808	0.0268	66.67	Kaplan-Meier	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-10	0.001	0.00005	0.015	No	19	0.00095	0.0002179	94.74	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-11	0.001	0.00021	0.015	No	19	0.0007399	0.0003974	68.42	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-12	0.001	0.000096	0.015	No	19	0.0007757	0.0003928	73.68	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-13	0.001	0.00015	0.015	No	19	0.0007258	0.0004152	68.42	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-7	0.001	0.0001	0.015	No	20	0.0006997	0.0004322	55	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-8	0.001	0.0002	0.015	No	19	0.0008172	0.0003643	78.95	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-9	0.001	0.00014	0.015	No	19	0.0006481	0.000426	57.89	None	No	0.01	NP (NDs)
Lead (mg/L)	MW-19	0.001	0.000071	0.015	No	10	0.0006304	0.0004775	60	None	No	0.011	NP (NDs)
Lead (mg/L)	MW-20	0.001	0.0001	0.015	No	10	0.0006439	0.0004608	60	None	No	0.011	NP (NDs)
Lead (mg/L)	MW-24D	0.001	0.000042	0.015	No	10	0.0005456	0.0004809	50	None	No	0.011	NP (normality)
Lead (mg/L)	MW-26D	0.001	0.0001	0.015	No	10	0.000818	0.0003837	80	None	No	0.011	NP (NDs)
Lead (mg/L)	MW-27D	0.001	0.00043	0.015	No	10	0.000856	0.0003117	80	None	No	0.011	NP (NDs)
Lead (mg/L)	MW-28D	0.001	0.00018	0.015	No	10	0.0007022	0.0003965	50	None	No	0.011	NP (normality)
Lead (mg/L)	MW-29	0.001	0.00009	0.015	No	10	0.0007252	0.0004427	70	None	No	0.011	NP (NDs)
Lead (mg/L)	MW-5	0.001	0.001	0.015	No	10	0.0009047	0.0003014	90	None	No	0.011	NP (NDs)
Lead (mg/L)	MW-6	0.001	0.000084	0.015	No	10	0.000651	0.000454	60	None	No	0.011	NP (NDs)
Lead (mg/L)	MW-7	0.001	0.001	0.015	No	10	0.0009062	0.0002966	90	None	No	0.011	NP (NDs)
Lithium (mg/L)	HGWC-12	0.01048	0.008019	0.064	No	23	0.009248	0.00235	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-13	0.03735	0.03093	0.064	No	23	0.03414	0.006137	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-7	0.0026	0.002	0.064	No	24	0.002958	0.002614	4.167	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-8	0.0029	0.0025	0.064	No	23	0.003196	0.002599	4.348	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-9	0.0044	0.004	0.064	No	23	0.004596	0.002319	4.348	None	No	0.01	NP (normality)
Lithium (mg/L)	MW-19	0.01297	0.008428	0.064	No	12	0.01046	0.003347	0	None	x^2	0.01	Param.
Lithium (mg/L)	MW-20	0.03	0.00082	0.064	No	12	0.008322	0.01307	25	None	No	0.01	NP (normality)
Lithium (mg/L)	MW-24D	0.002843	0.00254	0.064	No	12	0.002692	0.0001929	0	None	No	0.01	Param.
Lithium (mg/L)	MW-25D	0.0502	0.0428	0.064	No	12	0.0465	0.004719	0	None	No	0.01	Param.
Lithium (mg/L)	MW-26D	0.0041	0.0032	0.064	No	12	0.005775	0.007636	0	None	No	0.01	NP (normality)
Lithium (mg/L)	MW-27D	0.008546	0.006254	0.064	No	12	0.0074	0.00146	0	None	No	0.01	Param.
Lithium (mg/L)	MW-28D	0.01282	0.007277	0.064	No	12	0.01005	0.003534	0	None	No	0.01	Param.
Lithium (mg/L)	MW-29	0.002354	0.00203	0.064	No	12	0.002192	0.0002065	0	None	No	0.01	Param.
Mercury (mg/L)	HGWC-10	0.0002	0.00005	0.002	No	15	0.00019	0.00003873	93.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-11	0.0002	0.00005	0.002	No	15	0.00019	0.00003873	93.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-13	0.0002	0.00005	0.002	No	15	0.0001793	0.00005457	86.67	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-9	0.0002	0.00004	0.002	No	15	0.0001893	0.00004131	93.33	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	HGWC-10	0.01	0.0014	0.1	No	23	0.006591	0.004354	60.87	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	HGWC-11	0.02635	0.01705	0.1	No	23	0.0217	0.008891	0	None	No	0.01	Param.

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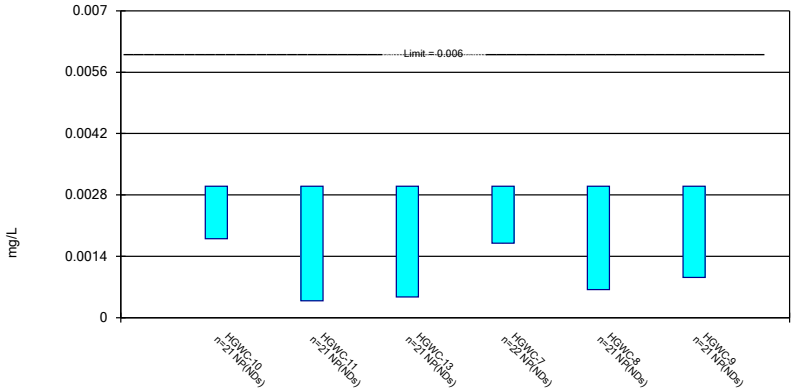
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Molybdenum (mg/L)	HGWC-12	0.04914	0.04557	0.1	No	23	0.04735	0.003411	0	None	No	0.01	Param.
Molybdenum (mg/L)	HGWC-13	0.03523	0.03001	0.1	No	23	0.03262	0.004987	0	None	No	0.01	Param.
Molybdenum (mg/L)	HGWC-7	0.04271	0.03586	0.1	No	25	0.03928	0.006866	0	None	No	0.01	Param.
Molybdenum (mg/L)	**HGWC-8**	**0.4856**	**0.4241**	**0.1**	**Yes**	**24**	**0.4513**	**0.06596**	**0**	**None**	**x^2**	**0.01**	**Param.**
Molybdenum (mg/L)	HGWC-9	0.033	0.0236	0.1	No	23	0.04746	0.09377	0	None	No	0.01	NP (normality)
Molybdenum (mg/L)	MW-19	0.05279	0.02587	0.1	No	12	0.03933	0.01715	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-24D	0.01	0.0008	0.1	No	12	0.00392	0.004496	33.33	None	No	0.01	NP (normality)
Molybdenum (mg/L)	MW-25D	0.01	0.0022	0.1	No	12	0.008595	0.003292	83.33	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-26D	0.02425	0.01175	0.1	No	13	0.018	0.008412	7.692	None	No	0.01	Param.
Molybdenum (mg/L)	MW-27D	0.003636	0.001403	0.1	No	12	0.002583	0.001576	8.333	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	MW-28D	0.01969	0.007547	0.1	No	12	0.01362	0.007735	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-29	0.003287	0.002479	0.1	No	12	0.002883	0.0005149	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-6	0.002699	0.002284	0.1	No	12	0.002492	0.0002644	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-7	0.01	0.0014	0.1	No	12	0.005283	0.004211	41.67	None	No	0.01	NP (normality)
Selenium (mg/L)	HGWC-10	0.005	0.0031	0.05	No	23	0.004174	0.001266	65.22	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-11	0.01395	0.006463	0.05	No	23	0.0102	0.007153	0	None	No	0.01	Param.
Selenium (mg/L)	HGWC-12	0.005	0.0011	0.05	No	23	0.00483	0.0008132	95.65	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-13	0.005	0.0016	0.05	No	23	0.004643	0.001203	91.3	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-8	0.005	0.0024	0.05	No	23	0.004887	0.0005421	95.65	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-9	0.005	0.0037	0.05	No	23	0.004943	0.0002711	95.65	None	No	0.01	NP (NDs)
Selenium (mg/L)	MW-19	0.00488	0.002282	0.05	No	12	0.00395	0.001709	16.67	Kaplan-Meier	No	0.01	Param.
Selenium (mg/L)	MW-27D	0.005	0.00012	0.05	No	12	0.004593	0.001409	91.67	Kaplan-Meier	No	0.01	NP (NDs)
Selenium (mg/L)	MW-5	0.003736	0.002447	0.05	No	12	0.003092	0.0008218	0	None	No	0.01	Param.
Selenium (mg/L)	MW-7	0.005	0.0014	0.05	No	12	0.003383	0.00172	50	None	No	0.01	NP (normality)
Thallium (mg/L)	HGWC-11	0.001	0.00008	0.002	No	23	0.00092	0.0002651	91.3	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-12	0.001	0.0002	0.002	No	23	0.0007663	0.0004029	73.91	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-13	0.0004273	0.0003377	0.002	No	23	0.0003825	0.00008561	8.696	None	No	0.01	Param.
Thallium (mg/L)	HGWC-8	0.001	0.00011	0.002	No	23	0.0007247	0.0004261	69.57	None	No	0.01	NP (NDs)
Thallium (mg/L)	MW-19	0.001	0.00023	0.002	No	12	0.0005025	0.0003683	33.33	None	No	0.01	NP (normality)
Thallium (mg/L)	MW-28D	0.001	0.000092	0.002	No	12	0.0009243	0.0002621	91.67	None	No	0.01	NP (NDs)
Thallium (mg/L)	MW-29	0.001	0.000064	0.002	No	12	0.000922	0.0002702	91.67	None	No	0.01	NP (NDs)
Thallium (mg/L)	MW-6	0.001	0.000082	0.002	No	12	0.0009235	0.000265	91.67	None	No	0.01	NP (NDs)

Non-Parametric Confidence Interval

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

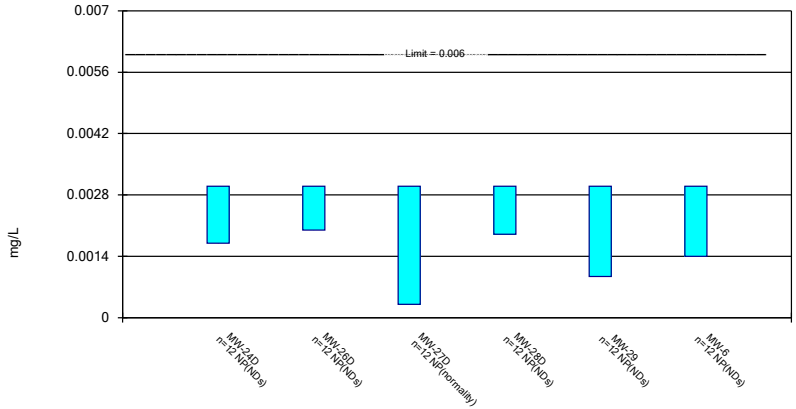


Constituent: Antimony Analysis Run 4/14/2023 1:07 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

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

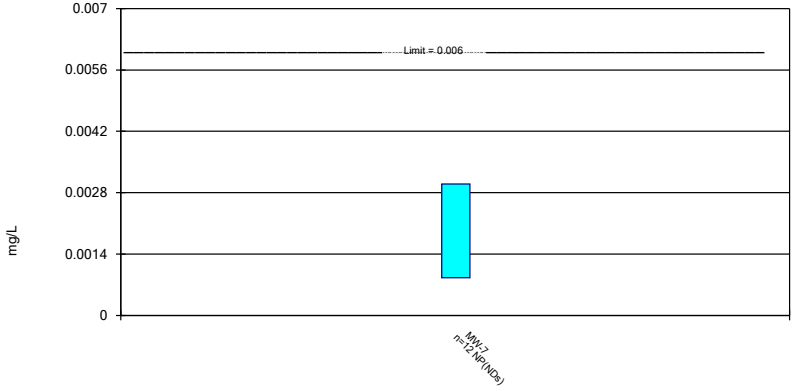


Constituent: Antimony Analysis Run 4/14/2023 1:07 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

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

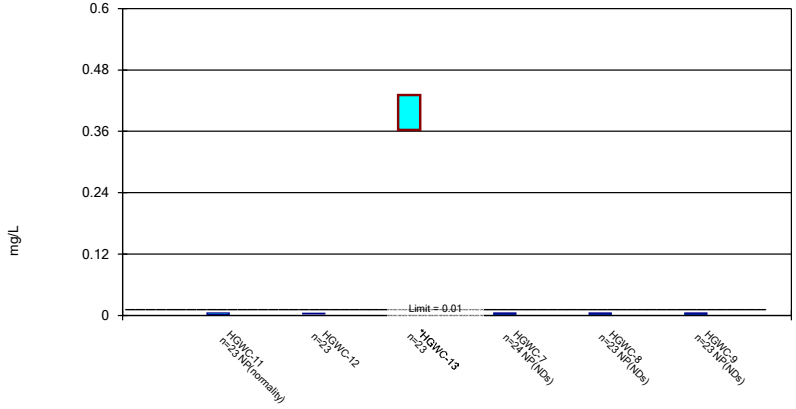


Constituent: Antimony Analysis Run 4/14/2023 1:07 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

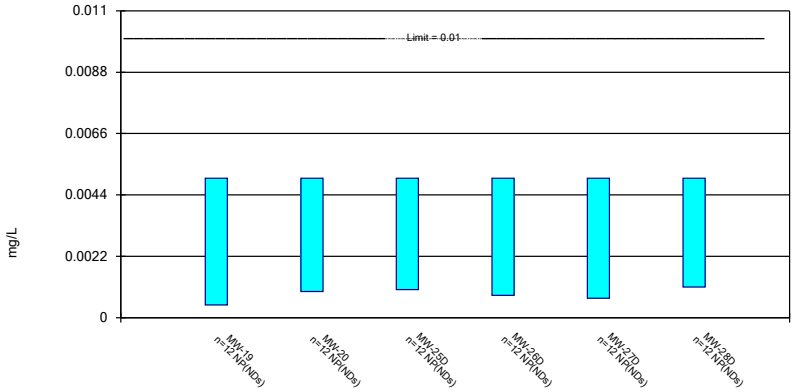
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 4/14/2023 1:07 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Non-Parametric Confidence Interval

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

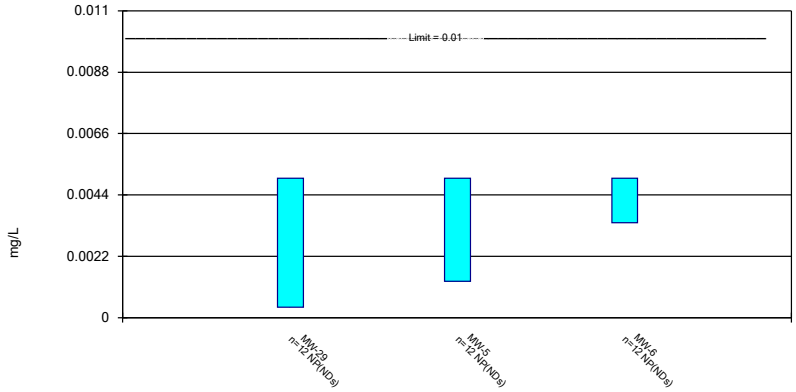


Constituent: Arsenic Analysis Run 4/14/2023 1:07 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

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

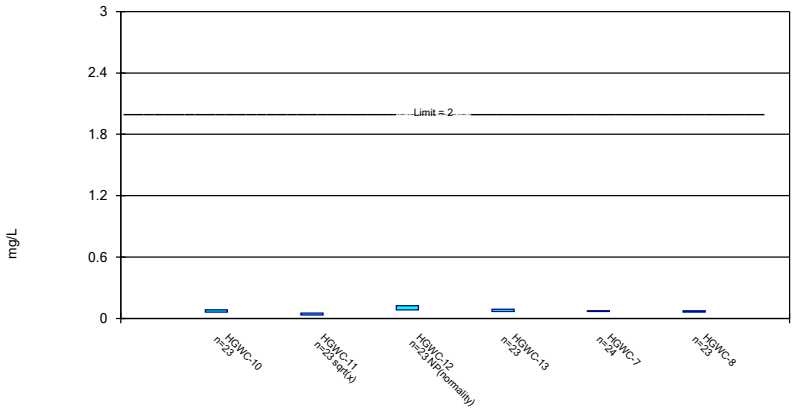


Constituent: Arsenic Analysis Run 4/14/2023 1:07 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

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

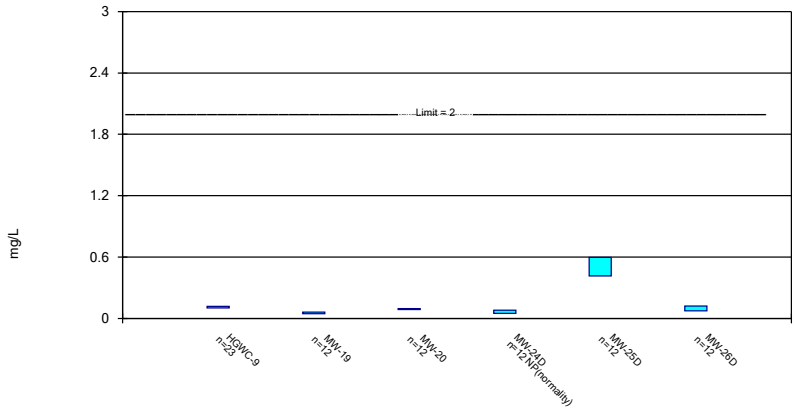


Constituent: Barium Analysis Run 4/14/2023 1:07 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

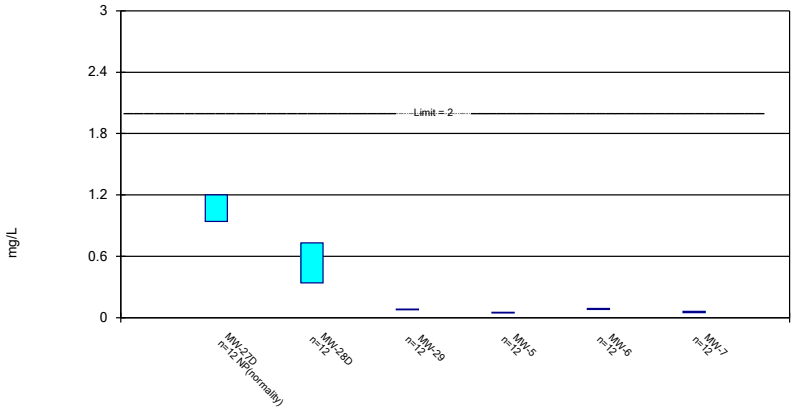
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 4/14/2023 1:07 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

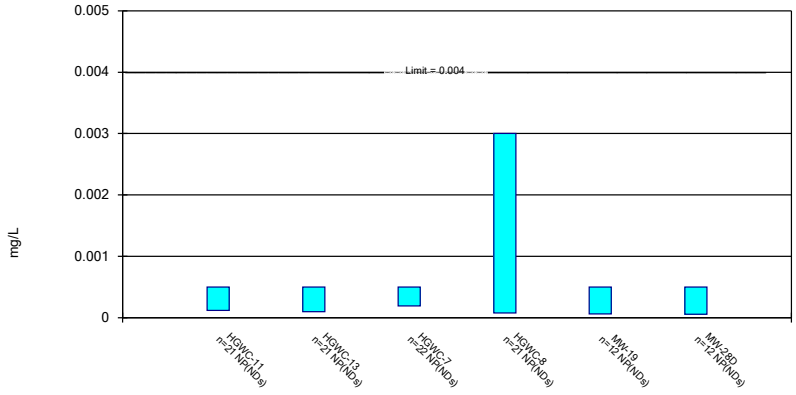
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 4/14/2023 1:07 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Non-Parametric Confidence Interval

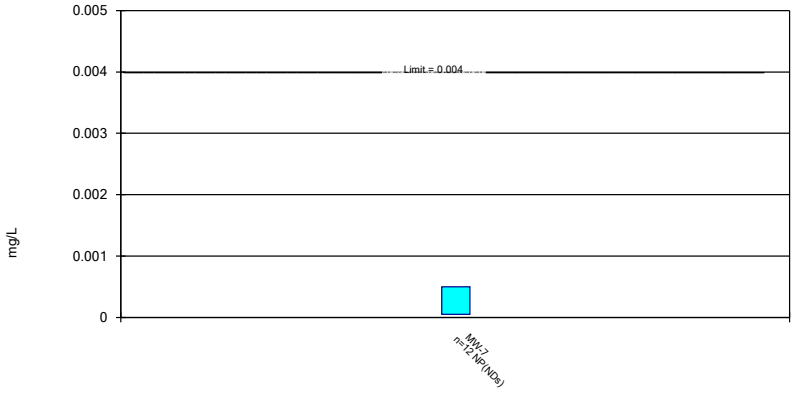
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Beryllium Analysis Run 4/14/2023 1:07 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Non-Parametric Confidence Interval

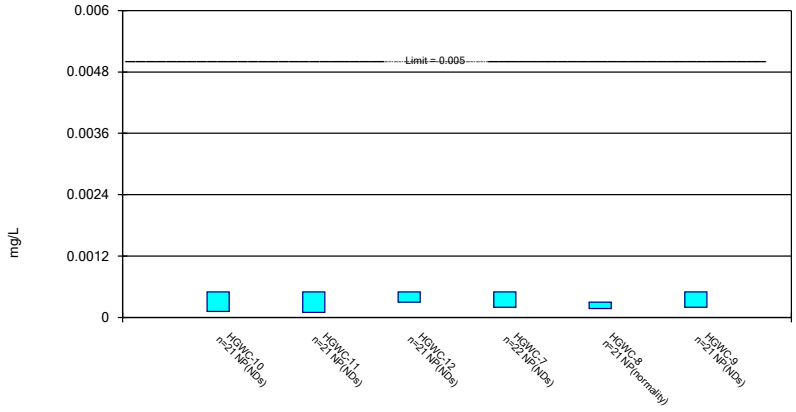
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Beryllium Analysis Run 4/14/2023 1:07 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Non-Parametric Confidence Interval

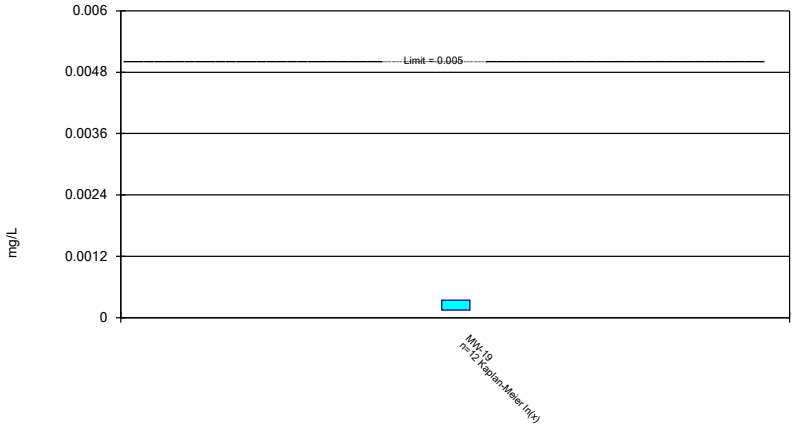
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Cadmium Analysis Run 4/14/2023 1:07 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric Confidence Interval

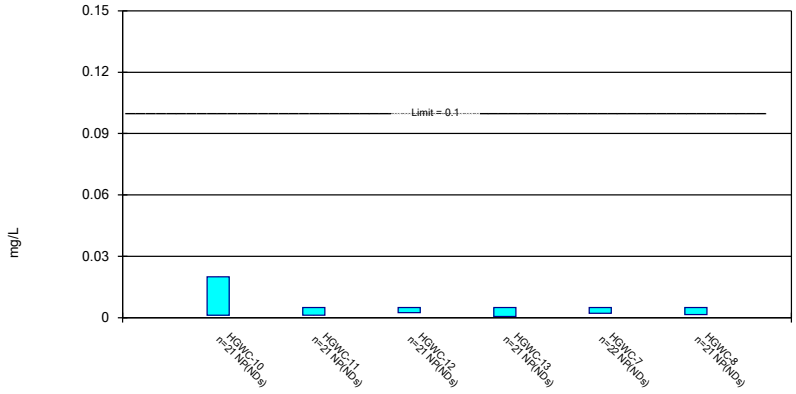
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 4/14/2023 1:07 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Non-Parametric Confidence Interval

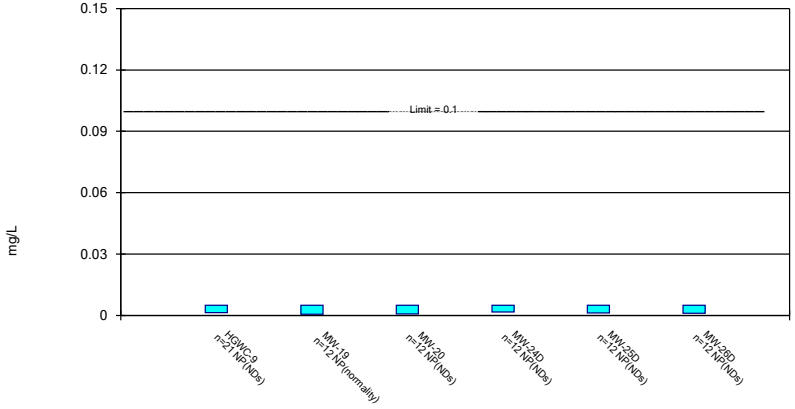
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 4/14/2023 1:07 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Non-Parametric Confidence Interval

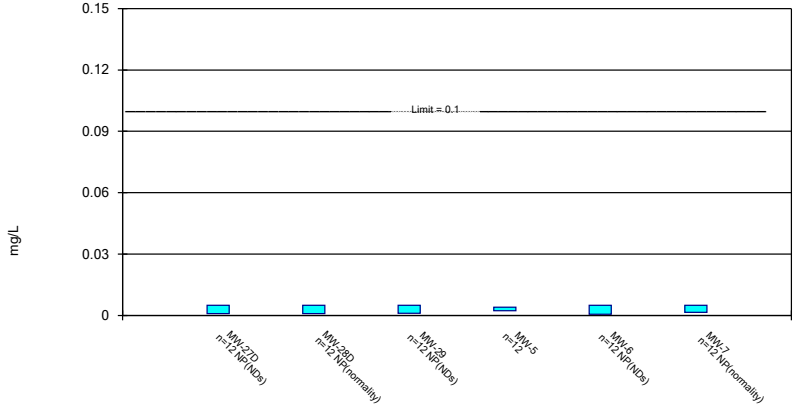
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 4/14/2023 1:07 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

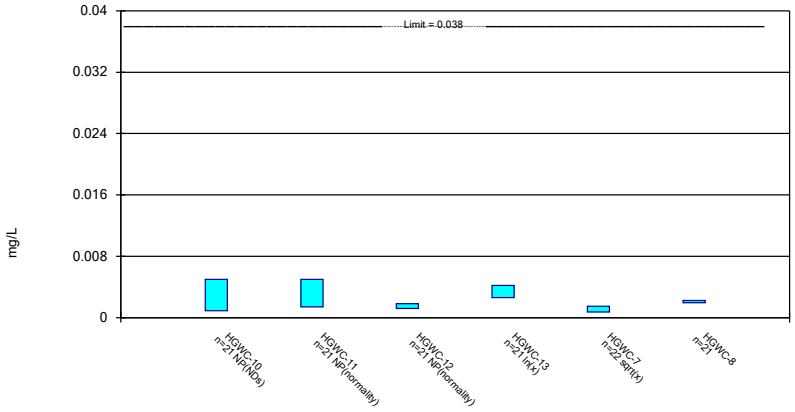
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chromium Analysis Run 4/14/2023 1:07 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

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

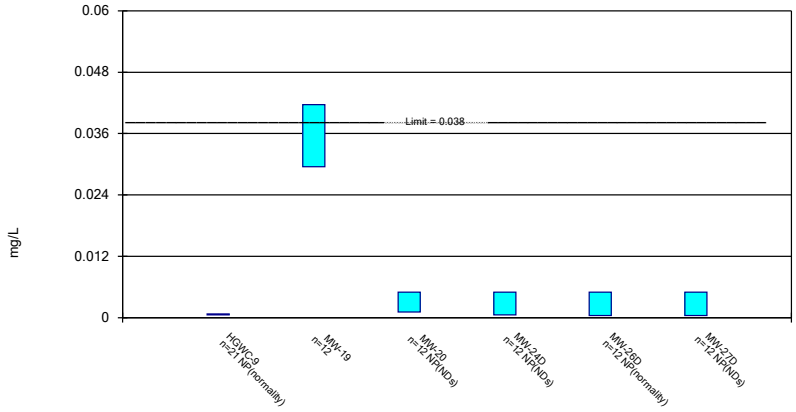


Constituent: Cobalt Analysis Run 4/14/2023 1:07 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

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

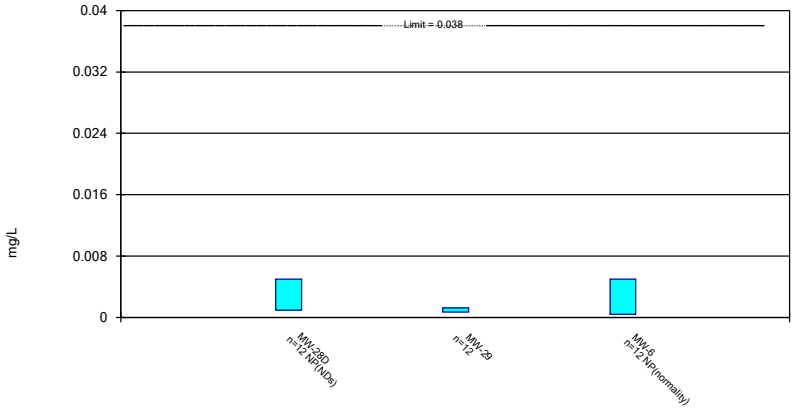


Constituent: Cobalt Analysis Run 4/14/2023 1:07 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

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

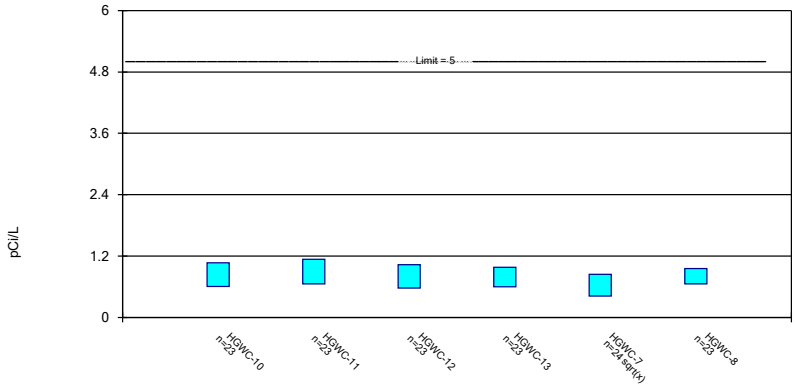


Constituent: Cobalt Analysis Run 4/14/2023 1:07 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric Confidence Interval

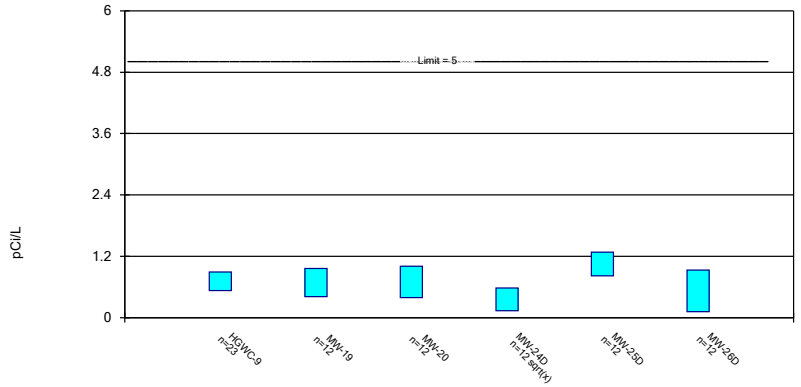
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric Confidence Interval

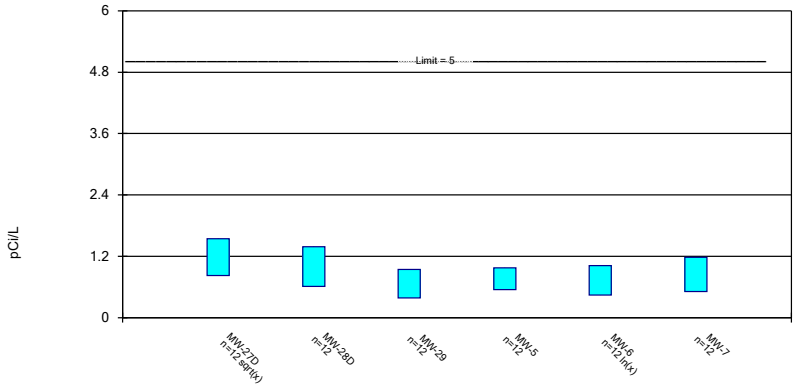
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric Confidence Interval

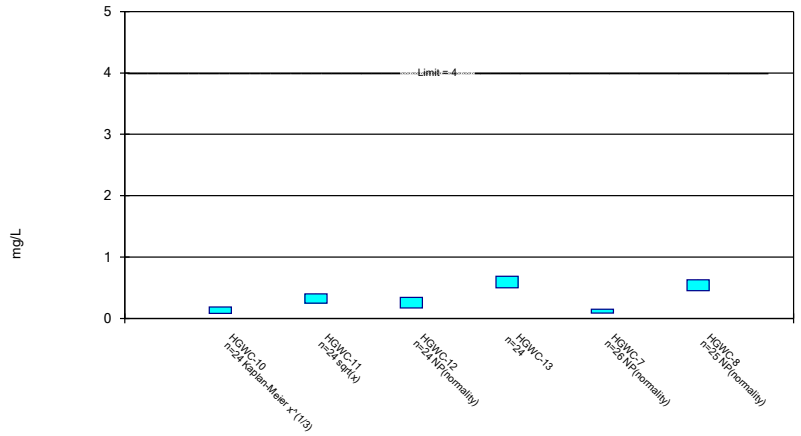
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

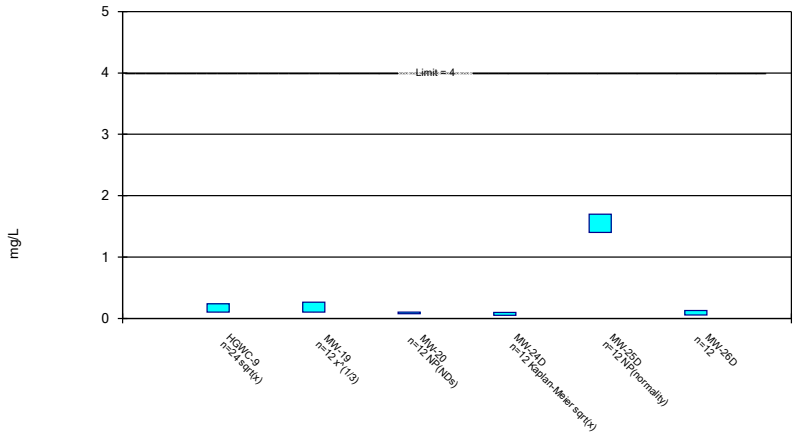
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

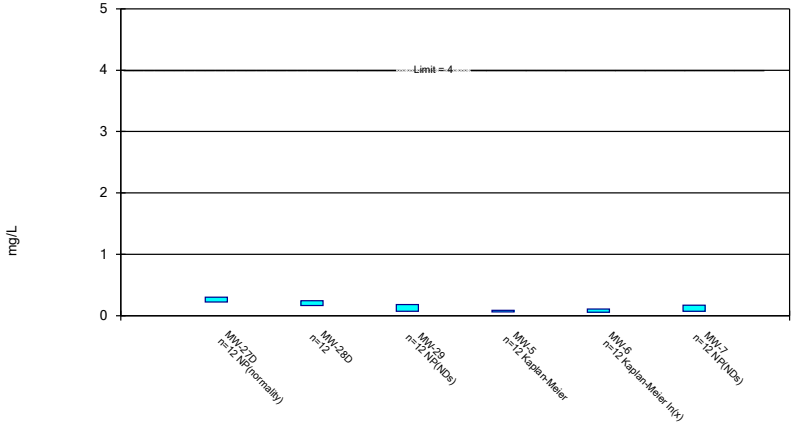
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

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

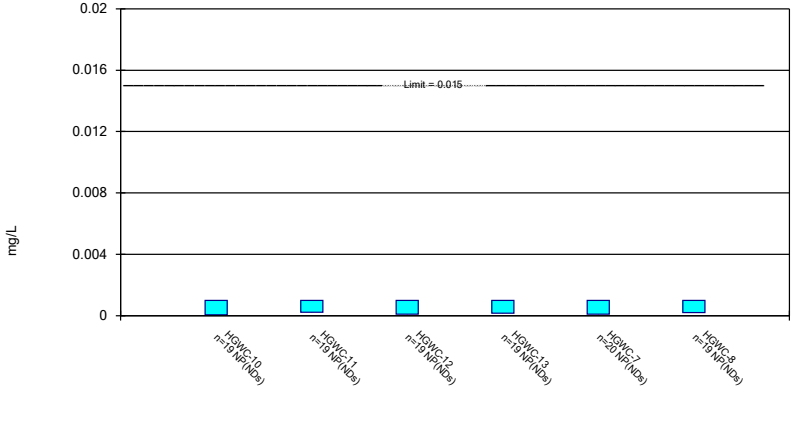


Constituent: Fluoride Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

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

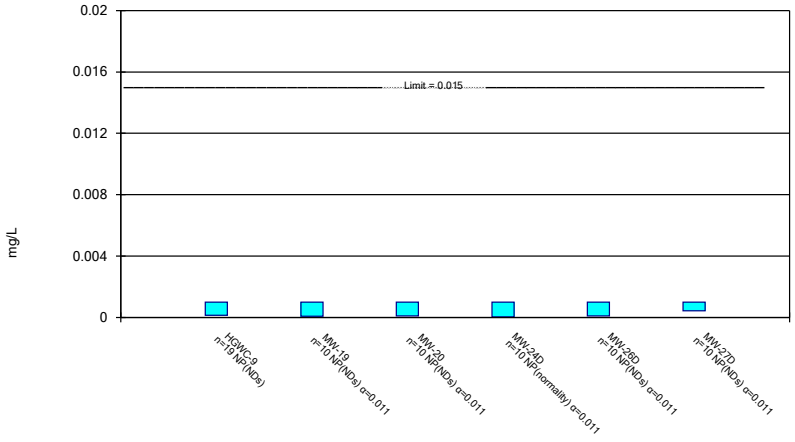


Constituent: Lead Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

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

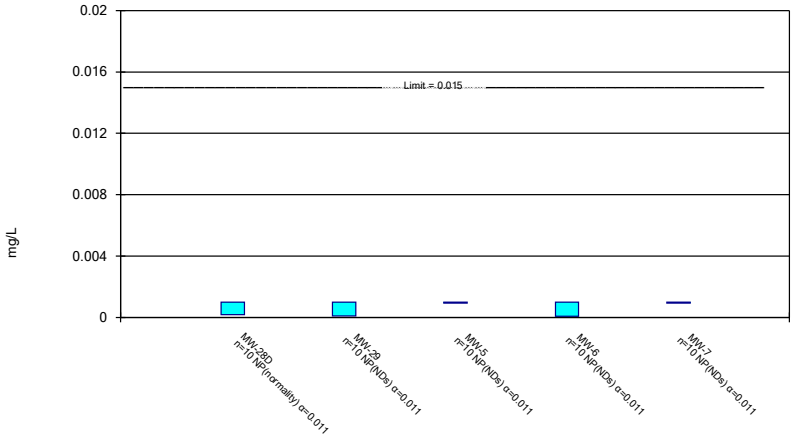


Constituent: Lead Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

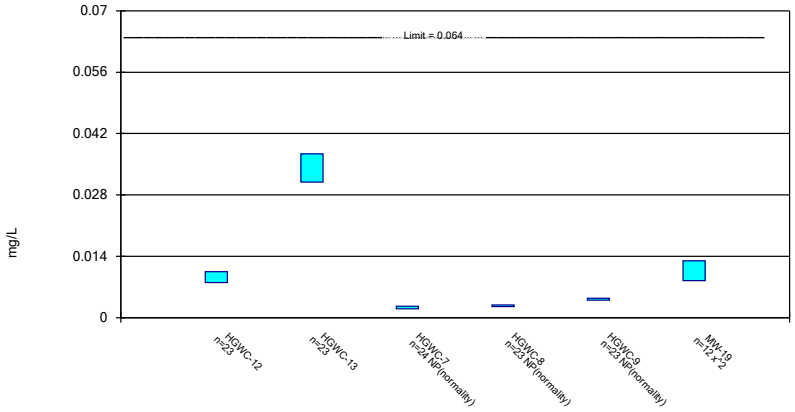
Compliance Limit is not exceeded.



Constituent: Lead Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

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

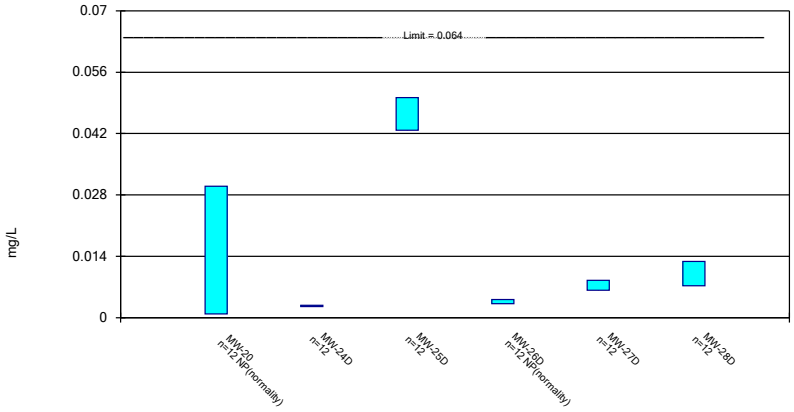


Constituent: Lithium Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

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

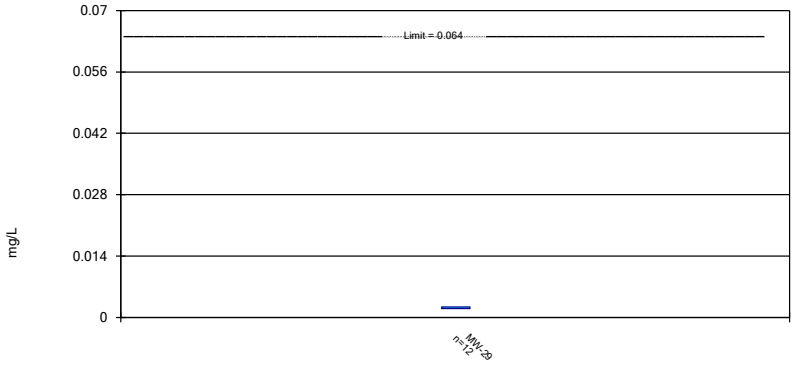


Constituent: Lithium Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric Confidence Interval

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

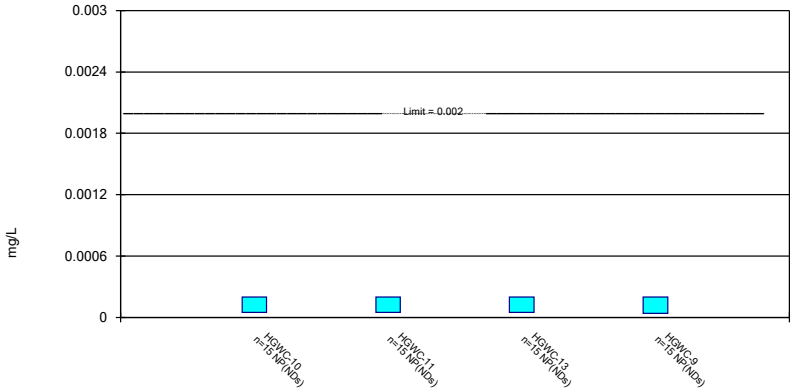


Constituent: Lithium Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

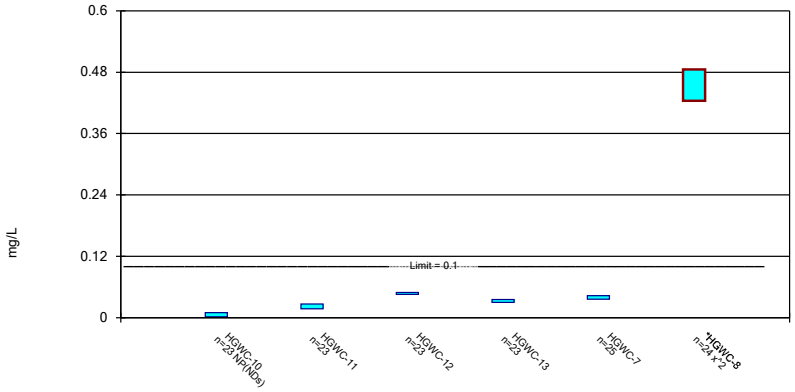
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

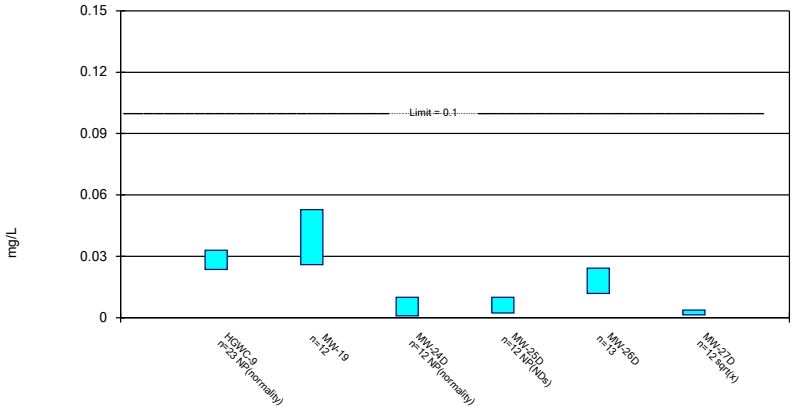


Constituent: Molybdenum Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

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

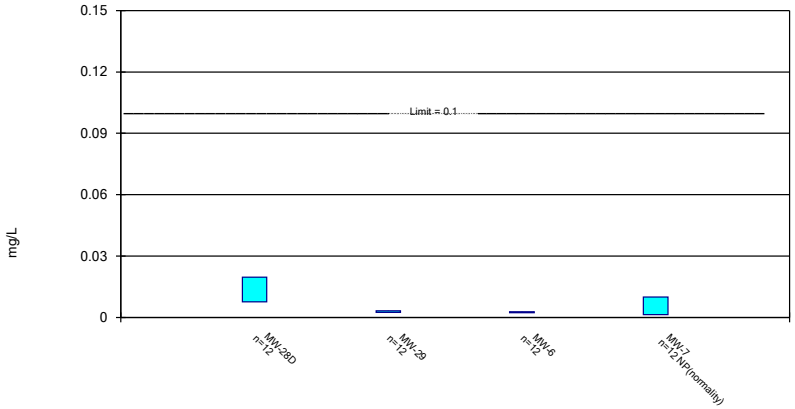


Constituent: Molybdenum Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

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

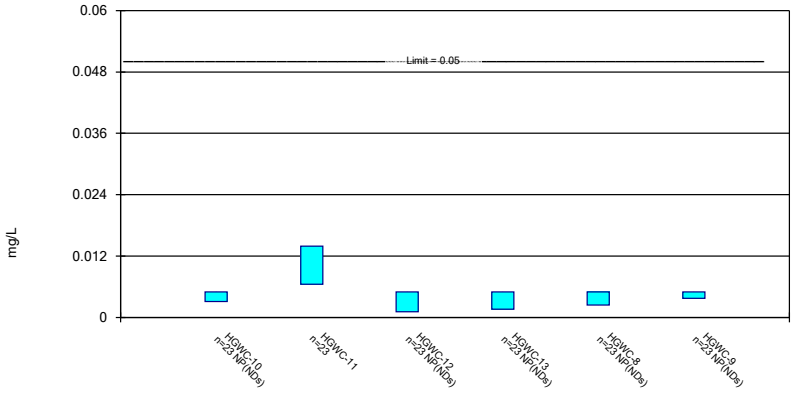


Constituent: Molybdenum Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

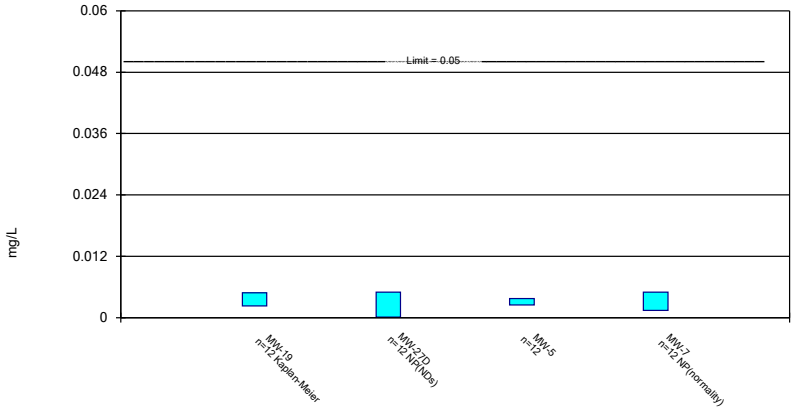
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

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.

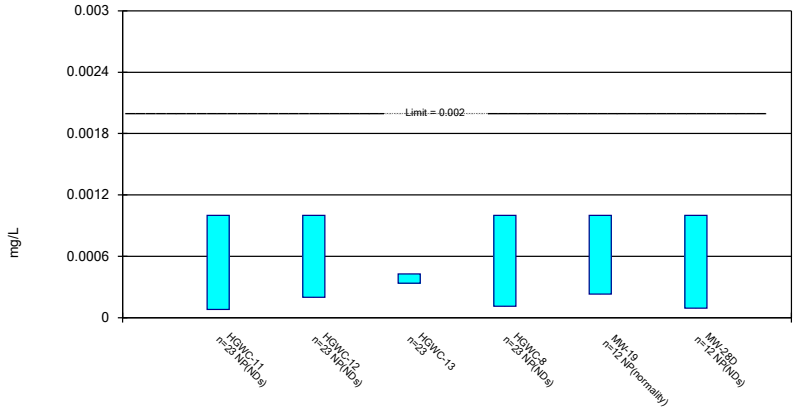


Constituent: Selenium Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

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

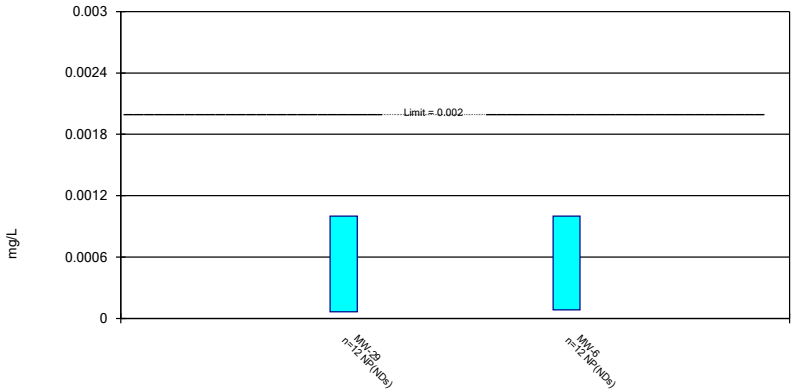


Constituent: Thallium Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

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



Constituent: Thallium Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				<0.003	<0.003	
5/23/2016	<0.003	<0.003	<0.003			<0.003
7/12/2016	<0.003	<0.003	0.0003 (J)	<0.003	<0.003	<0.003
9/1/2016	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
10/20/2016				<0.003	<0.003	<0.003
10/24/2016	<0.003	<0.003	<0.003			
12/6/2016				<0.003	<0.003	<0.003
12/7/2016	<0.003	<0.003	<0.003			
1/25/2017				<0.003	<0.003	
1/26/2017	<0.003	<0.003	<0.003			<0.003
3/21/2017				<0.003	<0.003	
3/22/2017	<0.003	<0.003	<0.003			<0.003
5/23/2017				<0.003	<0.003	<0.003
5/24/2017	<0.003	<0.003	<0.003			
4/3/2018				<0.003	<0.003	<0.003
4/4/2018	<0.003	<0.003	<0.003			
3/12/2019					<0.003	
3/13/2019	<0.003	<0.003	<0.003	<0.003		<0.003
4/2/2019				<0.003		
4/3/2019	<0.003	<0.003			<0.003	<0.003
4/5/2019			0.00021 (J)			
9/24/2019					<0.003	
9/25/2019				<0.003		
9/26/2019			<0.003			
9/27/2019	<0.003	<0.003				<0.003
3/3/2020	<0.003	<0.003			<0.003	
3/4/2020			0.00061 (J)	<0.003		0.00032 (J)
3/27/2020				<0.003	<0.003	
3/30/2020			0.00036 (J)			
3/31/2020		<0.003				0.00042 (J)
4/1/2020	<0.003					
9/16/2020	<0.003			0.00034 (J)	<0.003	
9/17/2020						<0.003
9/18/2020		0.00038 (J)				
9/21/2020			0.00029 (J)			
2/10/2021				<0.003		
2/12/2021		<0.003				
2/15/2021	0.00065 (J)					
2/16/2021					0.00064 (J)	0.00043 (J)
2/22/2021			0.00047 (J)			
3/12/2021	<0.003					
3/15/2021				<0.003	<0.003	
3/16/2021		<0.003				<0.003
3/17/2021			0.00049 (J)			
8/16/2021				0.0017 (J)		
8/17/2021	<0.003					<0.003
8/18/2021		<0.003			<0.003	
8/19/2021			<0.003			
2/9/2022	<0.003	<0.003				<0.003
2/10/2022			<0.003	<0.003	<0.003	
8/3/2022	0.0018 (J)	<0.003	<0.003	<0.003	<0.003	
8/4/2022						<0.003

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-13	HGWC-7	HGWC-8	HGWC-9
8/11/2022				<0.003		
1/26/2023		<0.003	<0.003			0.00092 (J)
1/27/2023	<0.003			<0.003		
2/1/2023					<0.003	
Mean	0.002831	0.002875	0.00213	0.00282	0.002888	0.002528
Std. Dev.	0.000564	0.0005717	0.001263	0.0006192	0.000515	0.001002
Upper Lim.	0.003	0.003	0.003	0.003	0.003	0.003
Lower Lim.	0.0018	0.00038	0.00047	0.0017	0.00064	0.00092

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-24D	MW-26D	MW-27D	MW-28D	MW-29	MW-6
3/12/2019				<0.003	<0.003	
3/13/2019	<0.003	<0.003	<0.003			<0.003
4/2/2019				<0.003	<0.003	
4/3/2019		<0.003				<0.003
4/4/2019			0.00016 (J)			
4/8/2019	<0.003					
9/24/2019					<0.003	
9/26/2019	<0.003	<0.003	0.0003 (J)	<0.003		<0.003
3/2/2020					<0.003	
3/3/2020						<0.003
3/4/2020	0.0017 (J)	0.002 (J)	0.00037 (J)	<0.003		
3/27/2020				<0.003		<0.003
3/30/2020	<0.003				<0.003	
3/31/2020		0.0013 (J)				
4/2/2020			0.0003 (J)			
9/16/2020					<0.003	
9/17/2020		<0.003				
9/18/2020			0.00031 (J)			
9/21/2020	<0.003			<0.003		0.0014 (J)
2/10/2021				0.0019 (J)		
2/15/2021					0.00094 (J)	
2/16/2021	<0.003	<0.003	0.00038 (J)			<0.003
3/12/2021			<0.003			
3/15/2021				<0.003	<0.003	
3/16/2021						<0.003
3/17/2021	<0.003	<0.003				
8/16/2021					<0.003	
8/17/2021		<0.003	<0.003			<0.003
8/18/2021				<0.003		
8/19/2021	<0.003					
2/9/2022		<0.003				<0.003
2/10/2022	<0.003		<0.003	<0.003	<0.003	
8/3/2022	<0.003		<0.003		<0.003	<0.003
8/4/2022		<0.003		<0.003		
1/26/2023	<0.003	<0.003		<0.003	<0.003	<0.003
1/27/2023			<0.003			
Mean	0.002892	0.002775	0.001652	0.002908	0.002828	0.002867
Std. Dev.	0.0003753	0.0005463	0.001409	0.0003175	0.0005947	0.0004619
Upper Lim.	0.003	0.003	0.003	0.003	0.003	0.003
Lower Lim.	0.0017	0.002	0.0003	0.0019	0.00094	0.0014

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-7
3/13/2019	0.00086 (J)
4/3/2019	<0.003
9/26/2019	<0.003
3/3/2020	0.0013 (J)
3/30/2020	<0.003
9/21/2020	0.00051 (J)
2/15/2021	0.0021 (J)
3/15/2021	<0.003
8/17/2021	<0.003
2/8/2022	<0.003
8/4/2022	<0.003
1/26/2023	<0.003
Mean	0.002398
Std. Dev.	0.0009593
Upper Lim.	0.003
Lower Lim.	0.00086

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				<0.005	<0.005	
5/23/2016	<0.005	0.0046 (J)	0.329			<0.005
7/12/2016	0.0015 (J)	0.005	0.297	<0.005	<0.005	<0.005
9/1/2016	<0.005	0.0043 (J)	0.314	<0.005	<0.005	<0.005
10/20/2016				<0.005	<0.005	<0.005
10/24/2016	<0.005	0.0049 (J)	0.334			
12/6/2016				<0.005	<0.005	<0.005
12/7/2016	<0.005	0.0046 (J)	0.35			
1/25/2017				<0.005	<0.005	
1/26/2017	<0.005	<0.005	0.424			<0.005
3/21/2017				<0.005	<0.005	
3/22/2017	0.0053	0.0019 (J)	0.419			0.0008 (J)
5/23/2017				<0.005	<0.005	<0.005
5/24/2017	<0.005	0.0022 (J)	0.393			
4/3/2018				<0.005	<0.005	<0.005
4/4/2018	<0.005	<0.005	0.49			
6/5/2018	0.0012 (J)		0.38	<0.005		
6/6/2018		0.0048 (J)			<0.005	<0.005
10/2/2018				0.0019 (J)	<0.005	<0.005
10/3/2018	<0.005	0.0037 (J)				
10/5/2018			0.34			
3/12/2019					<0.005	
3/13/2019	0.0024 (J)		0.42	<0.005		0.00075 (J)
3/14/2019		0.0026 (J)				
4/2/2019				<0.005		
4/3/2019	0.00094 (J)	0.0022 (J)			<0.005	<0.005
4/5/2019			0.36			
9/24/2019					<0.005	
9/25/2019				<0.005		
9/26/2019			0.44			
9/27/2019	0.0018 (J)	0.0061				0.00037 (J)
3/3/2020	0.0022 (J)	0.0023 (J)			<0.005	
3/4/2020			0.52	<0.005		<0.005
3/26/2020		0.0028 (J)				
3/27/2020				<0.005	<0.005	
3/30/2020			0.47			
3/31/2020	0.0022 (J)					<0.005
9/16/2020				<0.005	<0.005	
9/17/2020						<0.005
9/18/2020	0.00081 (J)	0.0031 (J)				
9/21/2020			0.39			
2/10/2021				<0.005		
2/12/2021	0.002 (J)	0.0045 (J)				
2/16/2021					<0.005	<0.005
2/22/2021			0.45			
3/15/2021				<0.005	<0.005	
3/16/2021	0.0017 (J)	0.0038 (J)				<0.005
3/17/2021			0.39			
8/16/2021				<0.005		
8/17/2021						<0.005
8/18/2021	<0.005	0.0028 (J)			<0.005	
8/19/2021			0.31			

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
2/9/2022	0.0047 (J)	0.0053				0.0021 (J)
2/10/2022			0.38	<0.005	0.002 (J)	
8/3/2022	<0.005	0.0023 (J)	0.4	<0.005	<0.005	
8/4/2022						<0.005
8/11/2022				<0.005		
1/26/2023	<0.005	0.0025 (J)	0.53			<0.005
1/27/2023				<0.005		
2/1/2023					<0.005	
Mean	0.003554	0.003535	0.397	0.004871	0.00487	0.004305
Std. Dev.	0.001724	0.00124	0.06529	0.0006328	0.0006255	0.001573
Upper Lim.	0.005	0.004183	0.4311	0.005	0.005	0.005
Lower Lim.	0.0018	0.002886	0.3628	0.0019	0.002	0.0021

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-25D	MW-26D	MW-27D	MW-28D
3/12/2019						<0.005
3/13/2019		0.0023 (J)		<0.005	<0.005	
3/14/2019	<0.005		0.0019 (J)			
4/2/2019		<0.005				<0.005
4/3/2019	<0.005		<0.005	<0.005		
4/4/2019					0.0002 (J)	
9/25/2019		<0.005				
9/26/2019				<0.005	<0.005	<0.005
9/27/2019	<0.005		0.0011 (J)			
3/2/2020		0.00038 (J)				
3/3/2020			0.001 (J)			
3/4/2020	0.00045 (J)			0.0006 (J)	0.00069 (J)	<0.005
3/26/2020	<0.005		0.00075 (J)			
3/27/2020		<0.005				<0.005
3/31/2020				<0.005		
4/2/2020					<0.005	
9/17/2020		<0.005		<0.005		
9/18/2020			<0.005		<0.005	
9/21/2020	<0.005					<0.005
2/10/2021						0.0011 (J)
2/11/2021		0.00094 (J)				
2/12/2021	<0.005		<0.005			
2/16/2021				0.0008 (J)	0.001 (J)	
3/12/2021					<0.005	
3/15/2021		<0.005				<0.005
3/16/2021			<0.005			
3/17/2021	<0.005			<0.005		
8/17/2021		<0.005		<0.005	<0.005	
8/18/2021	<0.005					<0.005
8/19/2021			<0.005			
2/9/2022	<0.005		<0.005	0.0017 (J)		
2/10/2022		<0.005			<0.005	<0.005
8/3/2022					<0.005	
8/4/2022	<0.005	<0.005	<0.005	<0.005		<0.005
1/26/2023	<0.005	<0.005	<0.005	<0.005		<0.005
1/27/2023					<0.005	
Mean	0.004621	0.004052	0.003729	0.004008	0.003907	0.004675
Std. Dev.	0.001313	0.001767	0.001895	0.001811	0.001984	0.001126
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.00045	0.00094	0.001	0.0008	0.00069	0.0011

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-29	MW-5	MW-6
3/12/2019	<0.005		
3/13/2019		<0.005	<0.005
4/2/2019	<0.005		
4/3/2019		<0.005	<0.005
9/24/2019	<0.005		
9/25/2019		<0.005	
9/26/2019			<0.005
3/2/2020	<0.005	<0.005	
3/3/2020			<0.005
3/26/2020		<0.005	
3/27/2020			<0.005
3/30/2020	0.00037 (J)		
9/16/2020	<0.005		
9/17/2020		<0.005	
9/21/2020			<0.005
2/15/2021	<0.005		
2/16/2021		<0.005	<0.005
3/15/2021	<0.005		
3/16/2021		<0.005	<0.005
8/16/2021	<0.005		
8/17/2021		<0.005	<0.005
2/9/2022		0.0013 (J)	0.0034 (J)
2/10/2022	<0.005		
8/3/2022	<0.005	<0.005	<0.005
1/26/2023	<0.005	<0.005	<0.005
Mean	0.004614	0.004692	0.004867
Std. Dev.	0.001337	0.001068	0.0004619
Upper Lim.	0.005	0.005	0.005
Lower Lim.	0.00037	0.0013	0.0034

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8
5/20/2016					0.0687	0.0808
5/23/2016	0.0877	0.0466	0.133	0.0779		
7/12/2016	0.0926	0.0616	0.135	0.0697	0.0731	0.083
9/1/2016	0.0994	0.0497	0.123	0.07	0.0747	0.0829
10/20/2016					0.072	0.0811
10/24/2016	0.101	0.0794	0.135	0.0882		
12/6/2016					0.0752	0.0845
12/7/2016	0.107	0.1	0.13	0.0798		
1/25/2017					0.0747	0.078
1/26/2017	0.0538	0.0696	0.127	0.0738		
3/21/2017					0.0722	0.0791
3/22/2017	0.0962	0.0346	0.112	0.0755		
5/23/2017					0.0794	0.0846
5/24/2017	0.0996	0.0437	0.106	0.0627		
4/3/2018					0.075	0.065
4/4/2018	0.084	0.029	0.083	0.099		
6/5/2018	0.086	0.039		0.13	0.071	
6/6/2018			0.09			0.063
10/2/2018	0.076				0.078	0.061
10/3/2018		0.033	0.087			
10/5/2018				0.076		
3/12/2019						0.062
3/13/2019	0.044	0.024		0.1	0.083	
3/14/2019			0.081			
4/2/2019					0.072	
4/3/2019	0.076	0.023	0.077			0.066
4/5/2019				0.079		
9/24/2019						0.053
9/25/2019					0.061	
9/26/2019				0.11		
9/27/2019	0.078	0.033	0.096			
3/3/2020	0.048	0.022	0.092			0.052
3/4/2020				0.1	0.068	
3/26/2020			0.089			
3/27/2020					0.059	0.059
3/30/2020				0.08		
3/31/2020		0.026				
4/1/2020	0.058					
9/16/2020	0.068				0.068	0.06
9/18/2020		0.043	0.086			
9/21/2020				0.052		
2/10/2021					0.069	
2/12/2021		0.039	0.09			
2/15/2021	0.06					
2/16/2021						0.069
2/22/2021				0.061		
3/12/2021	0.058					
3/15/2021					0.074	0.063
3/16/2021		0.035	0.084			
3/17/2021				0.056		
8/16/2021					0.068	
8/17/2021	0.055					

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8
8/18/2021		0.04	0.083			0.062
8/19/2021				0.049		
2/9/2022	0.042	0.042	0.075			
2/10/2022				0.053	0.063	0.056
8/3/2022	0.069	0.041	0.086	0.07	0.066	0.06
8/11/2022					0.071	
1/26/2023		0.031	0.076	0.079		
1/27/2023	0.041				0.065	
2/1/2023						0.058
Mean	0.07306	0.04283	0.09896	0.0779	0.07088	0.06796
Std. Dev.	0.02091	0.01895	0.02104	0.0198	0.005696	0.01102
Upper Lim.	0.08399	0.05051	0.123	0.08825	0.07378	0.07372
Lower Lim.	0.06212	0.03278	0.083	0.06754	0.06797	0.06219

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-9	MW-19	MW-20	MW-24D	MW-25D	MW-26D
5/23/2016	0.117					
7/12/2016	0.13					
9/1/2016	0.13					
10/20/2016	0.0806					
12/6/2016	0.128					
1/26/2017	0.142					
3/22/2017	0.122					
5/23/2017	0.127					
4/3/2018	0.1					
6/6/2018	0.11					
10/2/2018	0.11					
3/13/2019	0.1		0.087	0.053		0.099
3/14/2019		0.06			0.44	
4/2/2019			0.08			
4/3/2019	0.12	0.05			0.38	0.12
4/8/2019				0.043		
9/25/2019			0.085			
9/26/2019				0.12		0.12
9/27/2019	0.11	0.068			0.39	
3/2/2020			0.099			
3/3/2020					0.42	
3/4/2020	0.11	0.069		0.081		0.17
3/26/2020		0.067			0.45	
3/27/2020			0.093			
3/30/2020				0.056		
3/31/2020	0.11					0.11
9/17/2020	0.11		0.096			0.099
9/18/2020					0.44	
9/21/2020		0.056		0.053		
2/11/2021			0.093			
2/12/2021		0.051			0.46	
2/16/2021	0.11			0.062		0.093
3/15/2021			0.096			
3/16/2021	0.11				0.51	
3/17/2021		0.049		0.055		0.094
8/17/2021	0.095		0.089			0.072
8/18/2021		0.045				
8/19/2021				0.048	0.58	
2/9/2022	0.096	0.042			0.6	0.066
2/10/2022			0.082	0.048		
8/3/2022				0.053		
8/4/2022	0.091	0.05	0.093		0.75	0.062
1/26/2023	0.069	0.039	0.097	0.054	0.65	0.065
Mean	0.1099	0.05383	0.09083	0.0605	0.5058	0.0975
Std. Dev.	0.01686	0.01021	0.006177	0.02098	0.1149	0.03078
Upper Lim.	0.1187	0.06184	0.09568	0.081	0.596	0.1217
Lower Lim.	0.1011	0.04583	0.08599	0.048	0.4157	0.07335

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-27D	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019		0.82	0.089			
3/13/2019	1.5			0.056	0.1	0.063
4/2/2019		0.37	0.078			
4/3/2019				0.049	0.09	0.058
4/4/2019	1.2					
9/24/2019			0.081			
9/25/2019				0.046		
9/26/2019	0.95	0.15			0.089	0.066
3/2/2020			0.088	0.049		
3/3/2020					0.09	0.043
3/4/2020	0.95	0.77				
3/26/2020				0.046		
3/27/2020		0.64			0.086	
3/30/2020			0.08			0.05
4/2/2020	1					
9/16/2020			0.076			
9/17/2020				0.043		
9/18/2020	1					
9/21/2020		0.18			0.083	0.065
2/10/2021		0.26				
2/15/2021			0.081			0.048
2/16/2021	1			0.05	0.085	
3/12/2021	1.1					
3/15/2021		0.45	0.078			0.053
3/16/2021				0.046	0.081	
8/16/2021			0.074			
8/17/2021	1.1			0.045	0.081	0.057
8/18/2021		0.53				
2/8/2022						0.053
2/9/2022				0.042	0.074	
2/10/2022	0.99	0.76	0.072			
8/3/2022	0.94		0.081	0.058	0.084	
8/4/2022		0.7				0.064
1/26/2023		0.8	0.076	0.05	0.079	0.044
1/27/2023	0.94					
Mean	1.056	0.5358	0.0795	0.04833	0.08517	0.05533
Std. Dev.	0.1609	0.2486	0.00509	0.004812	0.006645	0.008117
Upper Lim.	1.2	0.7309	0.08349	0.05211	0.09038	0.0617
Lower Lim.	0.94	0.3408	0.07551	0.04456	0.07995	0.04896

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-13	HGWC-7	HGWC-8	MW-19	MW-28D
5/20/2016			<0.0005	<0.003		
5/23/2016	<0.0005	<0.0005				
7/12/2016	<0.0005	<0.0005	<0.0005	<0.003		
9/1/2016	<0.0005	<0.0005	<0.0005	<0.003		
10/20/2016			<0.0005	<0.003		
10/24/2016	<0.0005	<0.0005				
12/6/2016			<0.0005	<0.003		
12/7/2016	<0.0005	<0.0005				
1/25/2017			<0.0005	<0.003		
1/26/2017	<0.0005	<0.0005				
3/21/2017			<0.0005	<0.003		
3/22/2017	9E-05 (J)	<0.0005				
5/23/2017			<0.0005	<0.003		
5/24/2017	<0.0005	<0.0005				
4/3/2018			<0.0005	<0.003		
4/4/2018	<0.0005	<0.0005				
3/12/2019				<0.003		<0.0005
3/13/2019	0.0001 (J)	6.2E-05 (J)	<0.0005			
3/14/2019					<0.0005	
4/2/2019			<0.0005			<0.0005
4/3/2019	0.00017 (J)			7.4E-05 (J)	<0.0005	
4/5/2019		<0.0005				
9/24/2019				<0.003		
9/25/2019			<0.0005			
9/26/2019		0.00011 (J)				<0.0005
9/27/2019	8.6E-05 (J)				<0.0005	
3/3/2020	0.00012 (J)			<0.003		
3/4/2020		9.3E-05 (J)	7.7E-05 (J)		<0.0005	0.00014 (J)
3/26/2020					<0.0005	
3/27/2020			<0.0005	<0.003		<0.0005
3/30/2020		9.9E-05 (J)				
3/31/2020	0.00015 (J)					
9/16/2020			<0.0005	0.0001 (J)		
9/18/2020	<0.0005					
9/21/2020		0.00011 (J)			<0.0005	<0.0005
2/10/2021			8.1E-05 (J)			5.4E-05 (J)
2/12/2021	<0.0005				<0.0005	
2/16/2021				7.1E-05 (J)		
2/22/2021		9.7E-05 (J)				
3/15/2021			0.00019 (J)	7.8E-05 (J)		4.8E-05 (J)
3/16/2021	8.1E-05 (J)					
3/17/2021		9E-05 (J)			<0.0005	
8/16/2021			<0.0005			
8/18/2021	<0.0005			8.7E-05 (J)	5.8E-05 (J)	<0.0005
8/19/2021		7.3E-05 (J)				
2/9/2022	<0.0005				<0.0005	
2/10/2022		<0.0005	<0.0005	7.1E-05 (J)		<0.0005
8/3/2022	<0.0005	<0.0005	<0.0005	5.6E-05 (J)		
8/4/2022					<0.0005	<0.0005
8/11/2022			<0.0005			
1/26/2023	<0.0005	9.9E-05 (J)			<0.0005	<0.0005
1/27/2023			<0.0005			

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-13	HGWC-7	HGWC-8	MW-19	MW-28D
2/1/2023				5.6E-05 (J)		
Mean	0.0003713	0.0003254	0.0004476	0.001885	0.0004632	0.0003952
Std. Dev.	0.0001875	0.0002069	0.0001363	0.001456	0.0001276	0.0001909
Upper Lim.	0.0005	0.0005	0.0005	0.003	0.0005	0.0005
Lower Lim.	0.00012	9.7E-05	0.00019	7.4E-05	5.8E-05	5.4E-05

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-7
3/13/2019	<0.0005
4/3/2019	5.1E-05 (J)
9/26/2019	<0.0005
3/3/2020	<0.0005
3/30/2020	<0.0005
9/21/2020	<0.0005
2/15/2021	<0.0005
3/15/2021	<0.0005
8/17/2021	<0.0005
2/8/2022	<0.0005
8/4/2022	<0.0005
1/26/2023	<0.0005
Mean	0.0004626
Std. Dev.	0.0001296
Upper Lim.	0.0005
Lower Lim.	5.1E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-7	HGWC-8	HGWC-9
5/20/2016				<0.0005	0.00024 (J)	
5/23/2016	0.000115 (J)	<0.0005	<0.0005			<0.0005
7/12/2016	<0.0005	<0.0005	<0.0005	<0.0005	0.0002 (J)	<0.0005
9/1/2016	0.0001 (J)	<0.0005	<0.0005	<0.0005	0.0001 (J)	<0.0005
10/20/2016				<0.0005	0.0001 (J)	0.0002 (J)
10/24/2016	0.0001 (J)	<0.0005	<0.0005			
12/6/2016				0.0002 (J)	0.0017	0.0001 (J)
12/7/2016	0.0001 (J)	0.0001 (J)	0.0002 (J)			
1/25/2017				0.0002 (J)	0.0002 (J)	
1/26/2017	<0.0005	<0.0005	<0.0005			<0.0005
3/21/2017				0.0002 (J)	0.0002 (J)	
3/22/2017	0.0001 (J)	0.0001 (J)	0.0003 (J)			7E-05 (J)
5/23/2017				0.0001 (J)	0.0003 (J)	<0.0005
5/24/2017	0.0002 (J)	<0.0005	9E-05 (J)			
4/3/2018				<0.0005	<0.001	<0.0005
4/4/2018	<0.0005	<0.0005	<0.0005			
3/12/2019					0.0002 (J)	
3/13/2019	<0.0005	<0.0005		<0.0005		<0.0005
3/14/2019			<0.0005			
4/2/2019				<0.0005		
4/3/2019	0.0001 (J)	9.6E-05 (J)	<0.0005		0.00032 (J)	<0.0005
9/24/2019					0.0002 (J)	
9/25/2019				<0.0005		
9/27/2019	<0.0005	<0.0005	<0.0005			<0.0005
3/3/2020	<0.0005	<0.0005	0.00015 (J)		0.00017 (J)	
3/4/2020				<0.0005		<0.0005
3/26/2020			<0.0005			
3/27/2020				<0.0005	0.00014 (J)	
3/31/2020		<0.0005				<0.0005
4/1/2020	<0.0005					
9/16/2020	<0.0005			<0.0005	0.00023 (J)	
9/17/2020						<0.0005
9/18/2020		<0.0005	<0.0005			
2/10/2021				<0.0005		
2/12/2021		<0.0005	<0.0005			
2/15/2021	<0.0005					
2/16/2021					0.00037 (J)	<0.0005
3/12/2021	<0.0005					
3/15/2021				<0.0005	0.00017 (J)	
3/16/2021		<0.0005	<0.0005			<0.0005
8/16/2021				<0.0005		
8/17/2021	<0.0005					<0.0005
8/18/2021		<0.0005	<0.0005		0.0002 (J)	
2/9/2022	<0.0005	<0.0005	<0.0005			<0.0005
2/10/2022				<0.0005	0.00029 (J)	
8/3/2022	<0.0005	<0.0005	<0.0005	<0.0005	0.00017 (J)	
8/4/2022						<0.0005
8/11/2022				<0.0005		
1/26/2023		<0.0005	<0.0005			<0.0005
1/27/2023	<0.0005			0.00019 (J)		
2/1/2023					0.00014 (J)	
Mean	0.0003721	0.0004427	0.00044	0.0004268	0.0002924	0.0004462

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-7	HGWC-8	HGWC-9
Std. Dev.	0.0001864	0.0001439	0.0001313	0.0001394	0.0003358	0.0001368
Upper Lim.	0.0005	0.0005	0.0005	0.0005	0.0003	0.0005
Lower Lim.	0.000115	0.0001	0.0003	0.0002	0.00017	0.0002

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19
3/14/2019	<0.0005
4/3/2019	<0.0005
9/27/2019	0.00013 (J)
3/4/2020	0.00026 (J)
3/26/2020	0.00019 (J)
9/21/2020	0.00018 (J)
2/12/2021	0.0002 (J)
3/17/2021	0.00016 (J)
8/18/2021	0.00027 (J)
2/9/2022	0.0011
8/4/2022	0.00022 (J)
1/26/2023	<0.0005
Mean	0.0003508
Std. Dev.	0.0002735
Upper Lim.	0.0003417
Lower Lim.	0.0001502

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8
5/20/2016					<0.005	<0.005
5/23/2016	<0.005	<0.005	<0.005	<0.005		
7/12/2016	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
9/1/2016	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
10/20/2016					<0.005	<0.005
10/24/2016	<0.005	<0.005	<0.005	<0.005		
12/6/2016					<0.005	<0.005
12/7/2016	<0.005	<0.005	<0.005	<0.005		
1/25/2017					<0.005	<0.005
1/26/2017	<0.005	<0.005	<0.005	<0.005		
3/21/2017					<0.005	0.0005 (J)
3/22/2017	<0.005	0.0003 (J)	0.0004 (J)	0.0004 (J)		
5/23/2017					<0.005	<0.005
5/24/2017	<0.005	<0.005	<0.005	<0.005		
4/3/2018					<0.005	<0.005
4/4/2018	<0.005	<0.005	<0.005	<0.005		
3/12/2019						<0.005
3/13/2019	<0.005	<0.005		<0.005	<0.005	
3/14/2019			0.0025 (J)			
4/2/2019					<0.005	
4/3/2019	0.02	<0.005	<0.005			<0.005
4/5/2019				<0.005		
9/24/2019						<0.005
9/25/2019					0.071	
9/26/2019				<0.005		
9/27/2019	<0.005	<0.005	<0.005			
3/3/2020	<0.005	0.00061 (J)	<0.005			0.0007 (J)
3/4/2020				<0.005	0.0016 (J)	
3/26/2020			<0.005			
3/27/2020					0.0004 (J)	<0.005
3/30/2020				0.00059 (J)		
3/31/2020		<0.005				
4/1/2020	<0.005					
9/16/2020	<0.005				0.00074 (J)	0.0015 (J)
9/18/2020		<0.005	0.00091 (J)			
9/21/2020				0.00056 (J)		
2/10/2021					0.0014 (J)	
2/12/2021		<0.005	<0.005			
2/15/2021	<0.005					
2/16/2021						<0.005
2/22/2021				<0.005		
3/12/2021	<0.005					
3/15/2021					0.0021 (J)	0.00082 (J)
3/16/2021		<0.005	<0.005			
3/17/2021				<0.005		
8/16/2021					<0.005	
8/17/2021	<0.005					
8/18/2021		<0.005	<0.005			<0.005
8/19/2021				<0.005		
2/9/2022	0.0011 (J)	<0.005	<0.005			
2/10/2022				<0.005	<0.005	<0.005
8/3/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8
8/11/2022					<0.005	
1/26/2023		0.0012 (J)	<0.005	<0.005		
1/27/2023	0.0012 (J)				0.0014 (J)	
2/1/2023						<0.005
Mean	0.005348	0.004386	0.004467	0.00436	0.006984	0.004215
Std. Dev.	0.00355	0.001547	0.001382	0.001608	0.0144	0.001666
Upper Lim.	0.02	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.0012	0.0012	0.0025	0.00059	0.0021	0.0015

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-9	MW-19	MW-20	MW-24D	MW-25D	MW-26D
5/23/2016	<0.005					
7/12/2016	<0.005					
9/1/2016	<0.005					
10/20/2016	<0.005					
12/6/2016	<0.005					
1/26/2017	<0.005					
3/22/2017	<0.005					
5/23/2017	<0.005					
4/3/2018	<0.005					
3/13/2019	<0.005		<0.005	<0.005		<0.005
3/14/2019		<0.005			<0.005	
4/2/2019			<0.005			
4/3/2019	<0.005	<0.005			<0.005	<0.005
4/8/2019				<0.005		
9/25/2019			<0.005			
9/26/2019				0.00042 (J)		0.00076 (J)
9/27/2019	<0.005	<0.005			<0.005	
3/2/2020			0.00071 (J)			
3/3/2020					<0.005	
3/4/2020	<0.005	0.00066 (J)		<0.005		0.0028 (J)
3/26/2020		0.00047 (J)			0.00061 (J)	
3/27/2020			0.00051 (J)			
3/30/2020				<0.005		
3/31/2020	0.00052 (J)					0.001 (J)
9/17/2020	<0.005		<0.005			<0.005
9/18/2020					<0.005	
9/21/2020		0.0014 (J)		<0.005		
2/11/2021			<0.005			
2/12/2021		0.00059 (J)			<0.005	
2/16/2021	0.00067 (J)			<0.005		0.001 (J)
3/15/2021			0.00068 (J)			
3/16/2021	<0.005				<0.005	
3/17/2021		0.0022 (J)		0.0017 (J)		0.0015 (J)
8/17/2021	<0.005		<0.005			<0.005
8/18/2021		<0.005				
8/19/2021				<0.005	<0.005	
2/9/2022	0.0011 (J)	<0.005			<0.005	<0.005
2/10/2022			<0.005	<0.005		
8/3/2022				<0.005		
8/4/2022	<0.005	<0.005	<0.005		<0.005	<0.005
1/26/2023	0.0013 (J)	0.0011 (J)	<0.005	<0.005	0.0012 (J)	<0.005
Mean	0.004219	0.003035	0.003908	0.004343	0.004317	0.003505
Std. Dev.	0.001657	0.002099	0.001975	0.001558	0.001599	0.001913
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.0013	0.00059	0.00068	0.0017	0.0012	0.001

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-27D	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019		<0.005	<0.005			
3/13/2019	<0.005			0.003 (J)	<0.005	<0.005
4/2/2019		<0.005	<0.005			
4/3/2019				0.003 (J)	<0.005	0.0023 (J)
4/4/2019	<0.005					
9/24/2019			<0.005			
9/25/2019				0.0052 (J)		
9/26/2019	<0.005	0.00081 (J)			<0.005	0.0013 (J)
3/2/2020			<0.005	0.0042 (J)		
3/3/2020					0.00044 (J)	0.0015 (J)
3/4/2020	<0.005	0.0027 (J)				
3/26/2020				0.0044 (J)		
3/27/2020		<0.005			0.00059 (J)	
3/30/2020			0.001 (J)			0.0021 (J)
4/2/2020	<0.005					
9/16/2020			<0.005			
9/17/2020				0.0021 (J)		
9/18/2020	0.0007 (J)					
9/21/2020		0.00085 (J)			<0.005	0.0017 (J)
2/10/2021		0.0014 (J)				
2/15/2021			<0.005			0.0015 (J)
2/16/2021	0.00082 (J)			0.0032 (J)	<0.005	
3/12/2021	<0.005					
3/15/2021		0.00078 (J)	<0.005			0.0018 (J)
3/16/2021				0.0024 (J)	<0.005	
8/16/2021			<0.005			
8/17/2021	<0.005			0.0018 (J)	<0.005	<0.005
8/18/2021		<0.005				
2/8/2022						0.0016 (J)
2/9/2022				0.0031 (J)	<0.005	
2/10/2022	<0.005	0.0011 (J)	<0.005			
8/3/2022	<0.005		<0.005	0.0015 (J)	<0.005	
8/4/2022		<0.005				0.002 (J)
1/26/2023		<0.005	<0.005	0.0032 (J)	0.0014 (J)	0.0017 (J)
1/27/2023	<0.005					
Mean	0.004293	0.003137	0.004667	0.003092	0.003952	0.002292
Std. Dev.	0.001651	0.002009	0.001155	0.001091	0.001908	0.001295
Upper Lim.	0.005	0.005	0.005	0.003948	0.005	0.005
Lower Lim.	0.00082	0.00081	0.001	0.002236	0.00059	0.0015

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8
5/20/2016					<0.005	0.00207 (J)
5/23/2016	<0.005	<0.005	<0.005	0.00361 (J)		
7/12/2016	0.0006 (J)	0.0021 (J)	0.0018 (J)	0.0032 (J)	0.0003 (J)	0.0019 (J)
9/1/2016	0.0007 (J)	0.0025 (J)	0.0016 (J)	0.0033 (J)	<0.005	0.0023 (J)
10/20/2016					0.0008 (J)	0.002 (J)
10/24/2016	0.0009 (J)	0.0032 (J)	0.0017 (J)	0.004 (J)		
12/6/2016					0.0009 (J)	0.0026 (J)
12/7/2016	0.0012 (J)	0.003 (J)	0.0021 (J)	0.0034 (J)		
1/25/2017					0.0005 (J)	0.002 (J)
1/26/2017	<0.005	0.0014 (J)	0.0016 (J)	0.0024 (J)		
3/21/2017					0.0005 (J)	0.0023 (J)
3/22/2017	0.0006 (J)	0.0014 (J)	0.0018 (J)	0.0026 (J)		
5/23/2017					0.0005 (J)	0.0023 (J)
5/24/2017	0.0006 (J)	0.0008 (J)	0.0015 (J)	0.0022 (J)		
4/3/2018					<0.005	<0.005
4/4/2018	<0.005	<0.005	<0.005	<0.005		
3/12/2019						0.002 (J)
3/13/2019	<0.005	0.00098 (J)		0.0022 (J)	0.00067 (J)	
3/14/2019			0.0011 (J)			
4/2/2019					0.00069 (J)	
4/3/2019	<0.005	0.0018 (J)	0.0011 (J)			0.0019 (J)
4/5/2019				0.0017 (J)		
9/24/2019						0.0015 (J)
9/25/2019					0.0026 (J)	
9/26/2019				0.0042 (J)		
9/27/2019	<0.005	0.00071 (J)	0.0012 (J)			
3/3/2020	<0.005	0.00087 (J)	0.0013 (J)			0.002 (J)
3/4/2020				0.0066	0.0011 (J)	
3/26/2020			0.0012 (J)			
3/27/2020					0.00074 (J)	0.0018 (J)
3/30/2020				0.0053		
3/31/2020		0.0014 (J)				
4/1/2020	<0.005					
9/16/2020	<0.005				0.00065 (J)	0.0019 (J)
9/18/2020		<0.005	0.0014 (J)			
9/21/2020				0.0032 (J)		
2/10/2021					0.00081 (J)	
2/12/2021		<0.005	0.0012 (J)			
2/15/2021	<0.005					
2/16/2021						0.002 (J)
2/22/2021				0.003 (J)		
3/12/2021	<0.005					
3/15/2021					0.0014 (J)	0.0019 (J)
3/16/2021		<0.005	0.0012 (J)			
3/17/2021				0.0029 (J)		
8/16/2021					0.0012 (J)	
8/17/2021	<0.005					
8/18/2021		<0.005	0.0012 (J)			0.002 (J)
8/19/2021				0.0024 (J)		
2/9/2022	<0.005	<0.005	0.0013 (J)			
2/10/2022				0.0026 (J)	0.0011 (J)	0.0021 (J)
8/3/2022	<0.005	<0.005	0.0012 (J)	0.0041 (J)	0.0015 (J)	0.0024 (J)

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8
8/11/2022					0.0018 (J)	
1/26/2023		<0.005	0.0012 (J)	0.012		
1/27/2023	<0.005				0.00067 (J)	
2/1/2023						<0.005
Mean	0.00379	0.003103	0.00151	0.003686	0.001179	0.002094
Std. Dev.	0.001963	0.001799	0.0004265	0.002213	0.0007416	0.0002693
Upper Lim.	0.005	0.005	0.0018	0.004201	0.00147	0.002242
Lower Lim.	0.0009	0.0014	0.0012	0.002611	0.0007471	0.001945

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-9	MW-19	MW-20	MW-24D	MW-26D	MW-27D
5/23/2016	<0.005					
7/12/2016	0.0006 (J)					
9/1/2016	0.0007 (J)					
10/20/2016	0.002 (J)					
12/6/2016	0.0011 (J)					
1/26/2017	0.0006 (J)					
3/22/2017	0.0005 (J)					
5/23/2017	0.0006 (J)					
4/3/2018	<0.005					
3/13/2019	0.00065 (J)		0.0011 (J)	<0.005	<0.005	<0.005
3/14/2019		0.025				
4/2/2019			<0.005			
4/3/2019	0.00069 (J)	0.036			<0.005	
4/4/2019						9.1E-05 (J)
4/8/2019				0.00025 (J)		
9/25/2019			<0.005			
9/26/2019				0.0011 (J)	0.00053 (J)	<0.005
9/27/2019	0.00057 (J)	0.033				
3/2/2020			<0.005			
3/4/2020	0.00053 (J)	0.048		0.00056 (J)	<0.005	0.00045 (J)
3/26/2020		0.045				
3/27/2020			<0.005			
3/30/2020				<0.005		
3/31/2020	0.00051 (J)				0.0003 (J)	
4/2/2020						<0.005
9/17/2020	0.0007 (J)		<0.005		<0.005	
9/18/2020						<0.005
9/21/2020		0.032		<0.005		
2/11/2021			<0.005			
2/12/2021		0.037				
2/16/2021	0.00061 (J)			<0.005	0.00045 (J)	0.0004 (J)
3/12/2021						<0.005
3/15/2021			<0.005			
3/16/2021	0.00069 (J)					
3/17/2021		0.037		<0.005	0.00044 (J)	
8/17/2021	0.00045 (J)		<0.005		0.00045 (J)	<0.005
8/18/2021		0.039				
8/19/2021				<0.005		
2/9/2022	0.00051 (J)	0.03			0.00059 (J)	
2/10/2022			<0.005	<0.005		<0.005
8/3/2022				<0.005		<0.005
8/4/2022	0.00046 (J)	0.043	<0.005		0.00048 (J)	
1/26/2023	0.00068 (J)	0.022	<0.005	<0.005	0.00051 (J)	
1/27/2023						<0.005
Mean	0.0008643	0.03558	0.004675	0.003909	0.001979	0.003828
Std. Dev.	0.0006357	0.007751	0.001126	0.001982	0.002232	0.002121
Upper Lim.	0.0007	0.04167	0.005	0.005	0.005	0.005
Lower Lim.	0.00051	0.0295	0.0011	0.00056	0.00044	0.0004

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-6
3/12/2019	<0.005	0.00057 (J)	
3/13/2019			0.00055 (J)
4/2/2019	<0.005	0.00084 (J)	
4/3/2019			<0.005
9/24/2019		0.0015 (J)	
9/26/2019	<0.005		0.00036 (J)
3/2/2020		0.00067 (J)	
3/3/2020			0.00094 (J)
3/4/2020	0.00093 (J)		
3/27/2020	<0.005		0.00059 (J)
3/30/2020		0.00063 (J)	
9/16/2020		0.0013 (J)	
9/21/2020	<0.005		0.00041 (J)
2/10/2021	<0.005		
2/15/2021		0.00097 (J)	
2/16/2021			0.00045 (J)
3/15/2021	<0.005	0.0011 (J)	
3/16/2021			0.00042 (J)
8/16/2021		0.0014 (J)	
8/17/2021			<0.005
8/18/2021	<0.005		
2/9/2022			0.00059 (J)
2/10/2022	<0.005	0.00089 (J)	
8/3/2022		0.0012 (J)	0.00041 (J)
8/4/2022	<0.005		
1/26/2023	<0.005	0.00056 (J)	0.00044 (J)
Mean	0.004661	0.0009692	0.001263
Std. Dev.	0.001175	0.0003305	0.001752
Upper Lim.	0.005	0.001228	0.005
Lower Lim.	0.00093	0.0007098	0.00041

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8
5/20/2016					0.62 (U)	0.56 (U)
5/23/2016	0.419 (U)	0.509 (U)	1.12	0.625 (U)		
7/12/2016	0.855	0.784 (U)	1.61	0.478 (U)	0.283 (U)	0.636 (U)
9/1/2016	0.844 (U)	0.261 (U)	1.23	0.595 (U)	0.703 (U)	0.818 (U)
10/20/2016					1.97	1.04 (U)
10/24/2016	0.917 (U)	1.42	1.98	1.54		
12/6/2016					2	0.771 (U)
12/7/2016	0.558 (U)	0.781 (U)	0.319 (U)	0.657 (U)		
1/25/2017					1.06 (U)	0.859 (U)
1/26/2017	0.922 (U)	0.842 (U)	0.54 (U)	1.22		
3/21/2017					0.668 (U)	0.851 (U)
3/22/2017	0.751 (U)	0.318 (U)	0.635 (U)	0.285 (U)		
5/23/2017					0.621 (U)	0.705 (U)
5/24/2017	0.725 (U)	0.687 (U)	1.01	0.655 (U)		
4/3/2018					0.538 (U)	0.311 (U)
4/4/2018	0.715 (U)	1.5	0.956	0.882 (U)		
6/5/2018	0.718 (U)	0.549 (U)		1.1 (U)	0.985 (U)	
6/6/2018			0.424 (U)			0.896 (U)
10/2/2018	0.948				0.837 (U)	1.21
10/3/2018		1.48	0.57 (U)			
10/5/2018				0.558 (U)		
3/12/2019						0.544 (U)
3/13/2019	1.19 (U)	0.584 (U)		0.39 (U)	0.403 (U)	
3/14/2019			0.992 (U)			
4/2/2019					0.865 (U)	
4/3/2019	1.82 (U)	0.36 (U)	0.734 (U)			0.885 (U)
4/5/2019				0.422 (U)		
9/24/2019						1.3
9/25/2019					0.884 (U)	
9/26/2019				0.939 (U)		
9/27/2019	1.16 (U)	1.78	0.958 (U)			
3/3/2020	0.667 (U)	0.716 (U)	0.971 (U)			0.835 (U)
3/4/2020				0.708 (U)	0.624 (U)	
3/26/2020			0.209 (U)			
3/27/2020					0.485 (U)	1.04 (U)
3/30/2020				0.602 (U)		
3/31/2020		1.3 (U)				
4/1/2020	0.235 (U)					
9/16/2020	0 (U)				0.135 (U)	0.526 (U)
9/18/2020		1.24 (U)	0.916 (U)			
9/21/2020				1.53		
2/10/2021					0.281 (U)	
2/12/2021		1.1	0.236 (U)			
2/15/2021	1.91					
2/16/2021						0.764 (U)
2/22/2021				1.02		
3/12/2021	1.12 (U)					
3/15/2021					0.666 (U)	1.3 (U)
3/16/2021		1.71	0.245 (U)			
3/17/2021				1.45 (U)		
8/16/2021					0.143 (U)	
8/17/2021	0.595 (U)					

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8
8/18/2021		0.919 (U)	0.919 (U)			1.02 (U)
8/19/2021				0.764 (U)		
2/9/2022	0.49 (U)	0.444 (U)	0.564 (U)			
2/10/2022				0.442 (U)	0.175 (U)	0.945 (U)
8/3/2022	0.454 (U)	0.823 (U)	0.418 (U)	0.54 (U)	0.42 (U)	0.455 (U)
8/11/2022					0.461 (U)	
1/26/2023		0.441 (U)	0.877	0.719		
1/27/2023	1.2				0.45 (U)	
2/1/2023						0.241 (U)
Mean	0.8353	0.8934	0.8014	0.7879	0.6782	0.8049
Std. Dev.	0.4423	0.4603	0.4385	0.3658	0.4762	0.2847
Upper Lim.	1.067	1.134	1.031	0.9792	0.8409	0.9538
Lower Lim.	0.604	0.6526	0.5721	0.5965	0.4167	0.656

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-9	MW-19	MW-20	MW-24D	MW-25D	MW-26D
5/23/2016	0.826 (U)					
7/12/2016	0.511 (U)					
9/1/2016	0.762 (U)					
10/20/2016	1.17					
12/6/2016	0.126 (U)					
1/26/2017	0.515 (U)					
3/22/2017	0.451 (U)					
5/23/2017	0.924 (U)					
4/3/2018	0.732 (U)					
6/6/2018	0.813 (U)					
10/2/2018	0.61 (U)					
3/13/2019	1 (U)		0.538 (U)	0.311 (U)		0.627 (U)
3/14/2019		0.347 (U)			1.28 (U)	
4/2/2019			1.02 (U)			
4/3/2019	0.156 (U)	0.884 (U)			0.662 (U)	0.205 (U)
4/8/2019				0.573 (U)		
9/25/2019			1.35 (U)			
9/26/2019				0.878 (U)		0.912 (U)
9/27/2019	0.428 (U)	0.534 (U)			0.945 (U)	
3/2/2020			0.653 (U)			
3/3/2020					1.36	
3/4/2020	1.03	1.04		0.333 (U)		1.27 (U)
3/26/2020		1.1 (U)			0.793 (U)	
3/27/2020			0.1 (U)			
3/30/2020				0.107 (U)		
3/31/2020	1.2 (U)					1.65
9/17/2020	1.38 (U)		0.469 (U)			0.42 (U)
9/18/2020					1.17 (U)	
9/21/2020		1.36 (U)		1.23 (U)		
2/11/2021			0.334 (U)			
2/12/2021		0.764 (U)			1.17	
2/16/2021	1.17 (U)			0.156 (U)		0.505 (U)
3/15/2021			1.24 (U)			
3/16/2021	0.446 (U)				0.742 (U)	
3/17/2021		0.466 (U)		0.174 (U)		0.165 (U)
8/17/2021	0.771 (U)		0.709 (U)			0.0468 (U)
8/18/2021		0.642 (U)				
8/19/2021				0.227 (U)	0.935 (U)	
2/9/2022	0.198 (U)	0.245 (U)			0.754 (U)	0.0677 (U)
2/10/2022			0.32 (U)	0.178 (U)		
8/3/2022				0.263 (U)		
8/4/2022	0.597 (U)	0.509 (U)	1.05 (U)		1.65	0.0273 (U)
1/26/2023	0.516 (U)	0.333 (U)	0.561 (U)	0.0906 (U)	1.1	0.386 (U)
Mean	0.7101	0.6853	0.6953	0.3767	1.047	0.5235
Std. Dev.	0.3464	0.3484	0.3906	0.3495	0.296	0.516
Upper Lim.	0.8913	0.9587	1.002	0.5788	1.279	0.9284
Lower Lim.	0.5289	0.412	0.3888	0.1374	0.8145	0.1186

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-27D	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019		0.926 (U)	1.37			
3/13/2019	1.81			0.621 (U)	2.07	1.23
4/2/2019		0.479 (U)	0.62 (U)			
4/3/2019				0.932 (U)	0.872 (U)	1.05 (U)
4/4/2019	1.33					
9/24/2019			0.675 (U)			
9/25/2019				0.798 (U)		
9/26/2019	0.974 (U)	0.997 (U)			0.745 (U)	0.947 (U)
3/2/2020			0.413 (U)	0.964 (U)		
3/3/2020					0.757 (U)	1.15
3/4/2020	1.12	1.31				
3/26/2020				1.1		
3/27/2020		1.59			0.758 (U)	
3/30/2020			0.885 (U)			0.83 (U)
4/2/2020	2.48					
9/16/2020			0.193 (U)			
9/17/2020				0.618 (U)		
9/18/2020	1.13 (U)					
9/21/2020		1.39 (U)			0.796 (U)	1.55 (U)
2/10/2021		0.201 (U)				
2/15/2021			1.17 (U)			0.892 (U)
2/16/2021	1.21			0.466 (U)	0.198 (U)	
3/12/2021	0.649 (U)					
3/15/2021		0.564 (U)	0.436 (U)			0.386 (U)
3/16/2021				1.22	0.727 (U)	
8/16/2021			0.208 (U)			
8/17/2021	1.06 (U)			0.304 (U)	0.557 (U)	0.183 (U)
8/18/2021		0.876 (U)				
2/8/2022						0.417 (U)
2/9/2022				0.567 (U)	0.619 (U)	
2/10/2022	0.809 (U)	1.96 (U)	0.594 (U)			
8/3/2022	0.685 (U)		0.581 (U)	0.63 (U)	0.543 (U)	
8/4/2022		0.84 (U)				1.18 (U)
1/26/2023		0.821	0.793 (U)	0.909	0.493 (U)	0.318 (U)
1/27/2023	1.1					
Mean	1.196	0.9962	0.6615	0.7608	0.7613	0.8444
Std. Dev.	0.5082	0.4951	0.354	0.2714	0.4499	0.428
Upper Lim.	1.544	1.385	0.9393	0.9737	1.015	1.18
Lower Lim.	0.8213	0.6077	0.3837	0.5478	0.4421	0.5086

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8
5/20/2016					0.0828 (J)	0.499
5/23/2016	0.0394 (J)	0.203 (J)	0.212 (J)	0.2587 (J)		
7/12/2016	0.15 (J)	0.44	0.31	0.53	0.2 (J)	0.67
9/1/2016	0.5	0.67	0.62	0.74	0.51	0.94
10/20/2016					0.4	0.56
10/24/2016	0.06 (J)	0.26 (J)	0.19 (J)	0.31		
12/6/2016					0.26 (J)	0.76
12/7/2016	0.44	0.55	0.73	1		
1/25/2017					0.24 (J)	1.1
1/26/2017	0.29 (J)	0.27 (J)	0.12 (J)	0.68		
3/21/2017					0.13 (J)	0.46
3/22/2017	0.34	0.66	0.44	0.76		
5/23/2017					0.11 (J)	0.65
5/24/2017	0.13 (J)	0.35	0.34	0.54		
10/3/2017	0.46	0.56	0.58	0.83	0.17 (J)	0.66
4/3/2018					<0.3	0.39
4/4/2018	<0.1	0.39	<0.3	0.65		
6/5/2018	<0.1	0.24 (J)		0.47	0.099 (J)	
6/6/2018			0.21 (J)			0.46
10/2/2018	0.17 (J)				<0.3	0.51
10/3/2018		0.31	0.15 (J)			
10/5/2018				0.77		
3/12/2019						0.58
3/13/2019	0.17 (J)	0.51		0.78	0.12 (J)	
3/14/2019			1.1			
4/2/2019					0.097 (J)	
4/3/2019	0.082 (J)	0.43	0.3 (J)			0.63
4/5/2019				0.83		
9/24/2019						0.49
9/25/2019					0.1 (J)	
9/26/2019				0.64		
9/27/2019	0.17 (J)	0.42	0.26 (J)			
3/3/2020	0.11 (J)	0.24 (J)	0.21 (J)			0.45
3/4/2020				0.37	0.077 (J)	
3/26/2020			0.17 (J)			
3/27/2020					0.059 (J)	0.46
3/30/2020				0.44		
3/31/2020		0.19 (J)				
4/1/2020	0.12 (J)					
6/16/2020						0.45
6/17/2020					0.077 (J)	
9/16/2020	<0.1				0.081 (J)	0.53
9/18/2020		0.15	0.15			
9/21/2020				0.44		
2/10/2021					0.085 (J)	
2/12/2021		0.17	0.19			
2/15/2021	0.08 (J)					
2/16/2021						0.47
2/22/2021				0.55		
3/12/2021	0.054 (J)					
3/15/2021					0.086 (J)	0.51
3/16/2021		0.21	0.2			

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8
3/17/2021				0.65		
8/16/2021					0.084 (J)	
8/17/2021	<0.1					
8/18/2021		0.21	0.15			0.41
8/19/2021				0.53		
2/9/2022	0.12	0.2	0.2			
2/10/2022				0.53	0.083 (J)	0.42
8/3/2022	0.13	0.22	0.21	0.55	0.11	0.44
8/11/2022					0.11	
1/26/2023		0.2	0.21	0.4		
1/27/2023	0.16				0.1	
2/1/2023						0.4
Mean	0.174	0.3355	0.3084	0.5937	0.145	0.556
Std. Dev.	0.1317	0.1595	0.2332	0.1829	0.1052	0.1706
Upper Lim.	0.1861	0.3995	0.34	0.687	0.15	0.63
Lower Lim.	0.08031	0.2471	0.17	0.5004	0.084	0.45

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-9	MW-19	MW-20	MW-24D	MW-25D	MW-26D
5/23/2016	<0.3					
7/12/2016	0.24 (J)					
9/1/2016	0.46					
10/20/2016	0.56					
12/6/2016	0.31					
1/26/2017	0.004 (J)					
3/22/2017	0.28 (J)					
5/23/2017	0.29 (J)					
10/3/2017	0.53					
4/3/2018	<0.3					
6/6/2018	0.12 (J)					
10/2/2018	0.031 (J)					
3/13/2019	0.14 (J)		0.072 (J)	0.074 (J)		0.052 (J)
3/14/2019		0.35			2.2	
4/2/2019			<0.1			
4/3/2019	0.14 (J)	0.19 (J)			1.6	0.044 (J)
4/8/2019				0.048 (J)		
9/25/2019			<0.1			
9/26/2019				0.18 (J)		0.19 (J)
9/27/2019	0.26 (J)	0.53			1.5	
3/2/2020			<0.1			
3/3/2020					1.4	
3/4/2020	0.08 (J)	0.096 (J)		0.051 (J)		0.052 (J)
3/26/2020		0.12 (J)			1.6	
3/27/2020			<0.1			
3/30/2020				0.064 (J)		
3/31/2020	0.074 (J)					<0.3
9/17/2020	0.1		<0.1			0.069 (J)
9/18/2020					1.6	
9/21/2020		0.17		<0.1		
2/11/2021			<0.1			
2/12/2021		0.16			1.6	
2/16/2021	0.096 (J)			<0.1		0.071 (J)
3/15/2021			<0.1			
3/16/2021	0.098 (J)				1.7	
3/17/2021		0.18		<0.1		0.072 (J)
8/17/2021	0.095 (J)		<0.1			0.075 (J)
8/18/2021		0.12				
8/19/2021				<0.1	1.5	
2/9/2022	0.1	0.076 (J)			1.7	0.092 (J)
2/10/2022			<0.1	0.051 (J)		
8/3/2022				0.075 (J)		
8/4/2022	0.13	0.18	0.074 (J)		1.5	0.12
1/26/2023	0.11	0.098 (J)	0.081 (J)	0.083 (J)	1.6	0.11
Mean	0.1895	0.1892	0.09392	0.0855	1.625	0.09142
Std. Dev.	0.1498	0.1289	0.01119	0.03602	0.2006	0.04394
Upper Lim.	0.2386	0.2612	0.1	0.09451	1.7	0.1259
Lower Lim.	0.1022	0.1025	0.074	0.04923	1.4	0.05694

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-27D	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019		0.24 (J)	0.07 (J)			
3/13/2019	0.28 (J)			0.1 (J)	0.19 (J)	0.069 (J)
4/2/2019		0.18 (J)	0.045 (J)			
4/3/2019				0.049 (J)	0.15 (J)	<0.1
4/4/2019	0.26 (J)					
9/24/2019			0.18 (J)			
9/25/2019				0.076 (J)		
9/26/2019	0.42	0.22 (J)			0.19 (J)	0.17 (J)
3/2/2020			<0.1	0.065 (J)		
3/3/2020					0.062 (J)	<0.1
3/4/2020	0.25 (J)	0.26 (J)				
3/26/2020				0.082 (J)		
3/27/2020		0.26 (J)			<0.1	
3/30/2020			<0.1			<0.1
4/2/2020	0.24 (J)					
9/16/2020			<0.1			
9/17/2020				0.094 (J)		
9/18/2020	0.22					
9/21/2020		0.1			<0.1	<0.1
2/10/2021		0.16				
2/15/2021			<0.1			<0.1
2/16/2021	0.25			0.051 (J)	0.059 (J)	
3/12/2021	0.24					
3/15/2021		0.24	<0.1			<0.1
3/16/2021				<0.1	0.06 (J)	
8/16/2021			<0.1			
8/17/2021	0.24			<0.1	0.055 (J)	<0.1
8/18/2021		0.14				
2/8/2022						<0.1
2/9/2022				0.056 (J)	0.059 (J)	
2/10/2022	0.25	0.22	<0.1			
8/3/2022	0.27		0.069 (J)	0.094 (J)	0.085 (J)	
8/4/2022		0.19				0.078 (J)
1/26/2023		0.22	0.068 (J)	0.087 (J)	0.088 (J)	0.06 (J)
1/27/2023	0.3					
Mean	0.2683	0.2025	0.09433	0.0795	0.09983	0.09808
Std. Dev.	0.05219	0.04975	0.03293	0.01968	0.05	0.0268
Upper Lim.	0.3	0.2415	0.18	0.0865	0.1052	0.17
Lower Lim.	0.22	0.1635	0.068	0.05882	0.05616	0.069

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8
5/20/2016					<0.001	<0.001
5/23/2016	<0.001	<0.001	<0.001	<0.001		
7/12/2016	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
9/1/2016	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
10/20/2016					<0.001	<0.001
10/24/2016	<0.001	<0.001	<0.001	<0.001		
12/6/2016					0.0001 (J)	<0.001
12/7/2016	<0.001	<0.001	<0.001	<0.001		
1/25/2017					0.0001 (J)	<0.001
1/26/2017	<0.001	<0.001	<0.001	<0.001		
3/21/2017					9E-05 (J)	<0.001
3/22/2017	<0.001	0.0003 (J)	<0.001	7E-05 (J)		
5/23/2017					8E-05 (J)	<0.001
5/24/2017	<0.001	9E-05 (J)	<0.001	<0.001		
4/3/2018					<0.001	<0.001
4/4/2018	<0.001	<0.001	<0.001	<0.001		
3/12/2019						<0.001
3/13/2019	<0.001	<0.001		<0.001	<0.001	
3/14/2019			<0.001			
3/3/2020	<0.001	0.00021 (J)	5.6E-05 (J)			0.00013 (J)
3/4/2020				0.00014 (J)	0.00051 (J)	
3/26/2020			0.00043 (J)			
3/27/2020					5.4E-05 (J)	<0.001
3/30/2020				0.0001 (J)		
3/31/2020		0.0003 (J)				
4/1/2020	5E-05 (J)					
9/16/2020	<0.001				0.0002 (J)	0.0002 (J)
9/18/2020		6E-05 (J)	9.6E-05 (J)			
9/21/2020				0.00015 (J)		
2/10/2021					0.00056 (J)	
2/12/2021		<0.001	6.7E-05 (J)			
2/15/2021	<0.001					
2/16/2021						8.6E-05 (J)
2/22/2021				0.00018 (J)		
3/12/2021	<0.001					
3/15/2021					0.0013	0.00011 (J)
3/16/2021		9.9E-05 (J)	8.9E-05 (J)			
3/17/2021				0.00015 (J)		
8/16/2021					<0.001	
8/17/2021	<0.001					
8/18/2021		<0.001	<0.001			<0.001
8/19/2021				<0.001		
2/9/2022	<0.001	<0.001	<0.001			
2/10/2022				<0.001	<0.001	<0.001
8/3/2022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/11/2022					<0.001	
1/26/2023		<0.001	<0.001	<0.001		
1/27/2023	<0.001				<0.001	
2/1/2023						<0.001
Mean	0.00095	0.0007399	0.0007757	0.0007258	0.0006997	0.0008172
Std. Dev.	0.0002179	0.0003974	0.0003928	0.0004152	0.0004322	0.0003643
Upper Lim.	0.001	0.001	0.001	0.001	0.001	0.001

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8
Lower Lim.	5E-05	0.00021	9.6E-05	0.00015	0.0001	0.0002

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-9	MW-19	MW-20	MW-24D	MW-26D	MW-27D
5/23/2016	<0.001					
7/12/2016	<0.001					
9/1/2016	<0.001					
10/20/2016	<0.001					
12/6/2016	0.0002 (J)					
1/26/2017	0.0001 (J)					
3/22/2017	<0.001					
5/23/2017	0.0001 (J)					
4/3/2018	<0.001					
3/13/2019	<0.001		<0.001	<0.001	<0.001	<0.001
3/14/2019		<0.001				
3/2/2020			0.00017 (J)			
3/4/2020	8.4E-05 (J)	0.00011 (J)		0.00019 (J)	<0.001	<0.001
3/26/2020		<0.001				
3/27/2020			0.00013 (J)			
3/30/2020				6.4E-05 (J)		
3/31/2020	0.00014 (J)				0.0001 (J)	
4/2/2020						0.00013 (J)
9/17/2020	0.00022 (J)		<0.001		<0.001	
9/18/2020						<0.001
9/21/2020		8.5E-05 (J)		4.2E-05 (J)		
2/11/2021			3.9E-05 (J)			
2/12/2021		7.1E-05 (J)				
2/16/2021	0.0002 (J)			0.00012 (J)	8E-05 (J)	0.00043 (J)
3/12/2021						<0.001
3/15/2021			0.0001 (J)			
3/16/2021	0.00027 (J)					
3/17/2021		3.8E-05 (J)		4E-05 (J)	<0.001	
8/17/2021	<0.001		<0.001		<0.001	<0.001
8/18/2021		<0.001				
8/19/2021				<0.001		
2/9/2022	<0.001	<0.001			<0.001	
2/10/2022			<0.001	<0.001		<0.001
8/3/2022				<0.001		<0.001
8/4/2022	<0.001	<0.001	<0.001		<0.001	
1/26/2023	<0.001	<0.001	<0.001	<0.001	<0.001	
1/27/2023						<0.001
Mean	0.0006481	0.0006304	0.0006439	0.0005456	0.000818	0.000856
Std. Dev.	0.000426	0.0004775	0.0004608	0.0004809	0.0003837	0.0003117
Upper Lim.	0.001	0.001	0.001	0.001	0.001	0.001
Lower Lim.	0.00014	7.1E-05	0.0001	4.2E-05	0.0001	0.00043

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	<0.001	<0.001			
3/13/2019			<0.001	<0.001	<0.001
3/2/2020		9E-05 (J)	4.7E-05 (J)		
3/3/2020				0.00013 (J)	6.2E-05 (J)
3/4/2020	0.001 (J)				
3/26/2020			<0.001		
3/27/2020	6.2E-05 (J)			<0.001	
3/30/2020		0.00011 (J)			<0.001
9/16/2020		<0.001			
9/17/2020			<0.001		
9/21/2020	0.00018 (J)			0.00026 (J)	<0.001
2/10/2021	0.00044 (J)				
2/15/2021		5.2E-05 (J)			<0.001
2/16/2021			<0.001	8.4E-05 (J)	
3/15/2021	0.00034 (J)	<0.001			<0.001
3/16/2021			<0.001	3.6E-05 (J)	
8/16/2021		<0.001			
8/17/2021			<0.001	<0.001	<0.001
8/18/2021	<0.001				
2/8/2022					<0.001
2/9/2022			<0.001	<0.001	
2/10/2022	<0.001	<0.001			
8/3/2022		<0.001	<0.001	<0.001	
8/4/2022	<0.001				<0.001
1/26/2023	<0.001	<0.001	<0.001	<0.001	<0.001
Mean	0.0007022	0.0007252	0.0009047	0.000651	0.0009062
Std. Dev.	0.0003965	0.0004427	0.0003014	0.000454	0.0002966
Upper Lim.	0.001	0.001	0.001	0.001	0.001
Lower Lim.	0.00018	9E-05	0.001	8.4E-05	0.001

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9	MW-19
5/20/2016			<0.03	<0.03		
5/23/2016	0.0107 (J)	0.0422 (J)			<0.03	
7/12/2016	0.0113 (J)	0.0366 (J)	0.0021 (J)	0.0023 (J)	0.004 (J)	
9/1/2016	0.0118 (J)	0.04 (J)	0.0025 (J)	0.0029 (J)	0.0044 (J)	
10/20/2016			0.0021 (J)	0.0027 (J)	0.0027 (J)	
10/24/2016	0.0114 (J)	0.0435 (J)				
12/6/2016			0.0026 (J)	0.0032 (J)	0.005 (J)	
12/7/2016	0.0155 (J)	0.0477 (J)				
1/25/2017			0.0024 (J)	0.0026 (J)		
1/26/2017	0.0099 (J)	0.0342 (J)			0.0042 (J)	
3/21/2017			0.0026 (J)	0.0029 (J)		
3/22/2017	0.0098 (J)	0.0353 (J)			0.0043 (J)	
5/23/2017			0.0026 (J)	0.0029 (J)	0.0048 (J)	
5/24/2017	0.0105 (J)	0.0317 (J)				
4/3/2018			0.0023 (J)	0.0025 (J)	0.0043 (J)	
4/4/2018	0.008 (J)	0.031 (J)				
6/5/2018		0.031 (J)	0.0022 (J)			
6/6/2018	0.0095 (J)			0.0023 (J)	0.0043 (J)	
10/2/2018			0.003 (J)	0.0025 (J)	0.004 (J)	
10/3/2018	0.0083 (J)					
10/5/2018		0.027 (J)				
3/12/2019				0.0025 (J)		
3/13/2019		0.029 (J)	0.0024 (J)		0.004 (J)	
3/14/2019	0.0058 (J)					0.0089 (J)
4/2/2019			0.002 (J)			
4/3/2019	0.0066 (J)			0.0025 (J)	0.004 (J)	0.0061 (J)
4/5/2019		0.023 (J)				
9/24/2019				0.0024 (J)		
9/25/2019			0.0019 (J)			
9/26/2019		0.035				
9/27/2019	0.011 (J)				0.0044 (J)	0.013 (J)
3/3/2020	0.0063 (J)			0.0028 (J)		
3/4/2020		0.041	0.0034 (J)		0.004 (J)	0.01 (J)
3/26/2020	0.0063 (J)					0.013 (J)
3/27/2020			0.002 (J)	0.0026 (J)		
3/30/2020		0.038				
3/31/2020					0.0043 (J)	
9/16/2020			0.0026 (J)	0.0033 (J)		
9/17/2020					0.004 (J)	
9/18/2020	0.01 (J)					
9/21/2020		0.028 (J)				0.013 (J)
2/10/2021			0.0032 (J)			
2/12/2021	0.0094 (J)					0.012 (J)
2/16/2021				0.0027 (J)	0.0045 (J)	
2/22/2021		0.032				
3/15/2021			0.0038 (J)	0.0029 (J)		
3/16/2021	0.0081 (J)				0.0046 (J)	
3/17/2021		0.031				0.012 (J)
8/16/2021			0.0025 (J)			
8/17/2021					0.004 (J)	
8/18/2021	0.0099 (J)			0.0029 (J)		0.014 (J)
8/19/2021		0.028 (J)				

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9	MW-19
2/9/2022	0.01 (J)				0.0041 (J)	0.0067 (J)
2/10/2022		0.031	0.0022 (J)	0.003 (J)		
8/3/2022	0.0068 (J)	0.029 (J)	0.0019 (J)	0.0026 (J)		
8/4/2022					0.0036 (J)	0.013 (J)
8/11/2022			0.0019 (J)			
1/26/2023	0.0058 (J)	0.04			0.0032 (J)	0.0038 (J)
1/27/2023			0.0018 (J)			
2/1/2023				0.0015 (J)		
Mean	0.009248	0.03414	0.002958	0.003196	0.004596	0.01046
Std. Dev.	0.00235	0.006137	0.002614	0.002599	0.002319	0.003347
Upper Lim.	0.01048	0.03735	0.0026	0.0029	0.0044	0.01297
Lower Lim.	0.008019	0.03093	0.002	0.0025	0.004	0.008428

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-20	MW-24D	MW-25D	MW-26D	MW-27D	MW-28D
3/12/2019						0.011 (J)
3/13/2019	0.0016 (J)	0.0029 (J)		0.0033 (J)	0.0097 (J)	
3/14/2019			0.05			
4/2/2019	0.0015 (J)					0.0052 (J)
4/3/2019			0.047 (J)	0.0034 (J)		
4/4/2019					0.0069 (J)	
4/8/2019		0.0027 (J)				
9/25/2019	<0.03					
9/26/2019		0.003 (J)		0.0041 (J)	0.0055 (J)	0.0055 (J)
9/27/2019			0.047			
3/2/2020	0.00082 (J)					
3/3/2020			0.05			
3/4/2020		0.0026 (J)		0.03 (J)	0.0047 (J)	0.015 (J)
3/26/2020			0.054			
3/27/2020	0.0012 (J)					0.014 (J)
3/30/2020		0.0027 (J)				
3/31/2020				0.0036 (J)		
4/2/2020					0.0068 (J)	
9/17/2020	<0.03			0.0032 (J)		
9/18/2020			0.046		0.0084 (J)	
9/21/2020		0.0024 (J)				0.0053 (J)
2/10/2021						0.0092 (J)
2/11/2021	0.001 (J)					
2/12/2021			0.045			
2/16/2021		0.0028 (J)		0.0038 (J)	0.0078 (J)	
3/12/2021					0.009 (J)	
3/15/2021	0.0011 (J)					0.013 (J)
3/16/2021			0.049			
3/17/2021		0.0027 (J)		0.004 (J)		
8/17/2021	0.00091 (J)			0.0036 (J)	0.0079 (J)	
8/18/2021						0.0086 (J)
8/19/2021		0.0027 (J)	0.046			
2/9/2022			0.048	0.0039 (J)		
2/10/2022	0.00099 (J)	0.0029 (J)			0.0086 (J)	0.014 (J)
8/3/2022		0.0024 (J)			0.0063 (J)	
8/4/2022	0.00075 (J)		0.04	0.0033 (J)		0.0088 (J)
1/26/2023	<0.03	0.0025 (J)	0.036	0.0031 (J)		0.011 (J)
1/27/2023					0.0072 (J)	
Mean	0.008322	0.002692	0.0465	0.005775	0.0074	0.01005
Std. Dev.	0.01307	0.0001929	0.004719	0.007636	0.00146	0.003534
Upper Lim.	0.03	0.002843	0.0502	0.0041	0.008546	0.01282
Lower Lim.	0.00082	0.00254	0.0428	0.0032	0.006254	0.007277

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-29
3/12/2019	0.0024 (J)
4/2/2019	0.0021 (J)
9/24/2019	0.0022 (J)
3/2/2020	0.0025 (J)
3/30/2020	0.0023 (J)
9/16/2020	0.0021 (J)
2/15/2021	0.0024 (J)
3/15/2021	0.0022 (J)
8/16/2021	0.0021 (J)
2/10/2022	0.0023 (J)
8/3/2022	0.0018 (J)
1/26/2023	0.0019 (J)
Mean	0.002192
Std. Dev.	0.0002065
Upper Lim.	0.002354
Lower Lim.	0.00203

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-13	HGWC-9
5/23/2016	<0.0002	<0.0002	<0.0002	<0.0002
7/12/2016	<0.0002	<0.0002	<0.0002	<0.0002
9/1/2016	<0.0002	<0.0002	<0.0002	<0.0002
10/20/2016				<0.0002
10/24/2016	<0.0002	<0.0002	<0.0002	
12/6/2016				<0.0002
12/7/2016	<0.0002	<0.0002	<0.0002	
1/26/2017	5E-05 (J)	5E-05 (J)	4E-05 (J)	4E-05 (J)
3/22/2017	<0.0002	<0.0002	<0.0002	<0.0002
5/23/2017				<0.0002
5/24/2017	<0.0002	<0.0002	5E-05 (J)	
4/3/2018				<0.0002
4/4/2018	<0.0002	<0.0002	<0.0002	
3/13/2019	<0.0002	<0.0002	<0.0002	<0.0002
3/3/2020	<0.0002	<0.0002		
3/4/2020			<0.0002	<0.0002
2/12/2021		<0.0002		
2/15/2021	<0.0002			
2/16/2021				<0.0002
2/22/2021			<0.0002	
2/9/2022	<0.0002	<0.0002		<0.0002
2/10/2022			<0.0002	
8/3/2022	<0.0002	<0.0002	<0.0002	
8/4/2022				<0.0002
1/26/2023		<0.0002	<0.0002	<0.0002
1/27/2023	<0.0002			
Mean	0.00019	0.00019	0.0001793	0.0001893
Std. Dev.	3.873E-05	3.873E-05	5.457E-05	4.131E-05
Upper Lim.	0.0002	0.0002	0.0002	0.0002
Lower Lim.	5E-05	5E-05	5E-05	4E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8
5/20/2016					0.028	0.446
5/23/2016	<0.01	0.0164	0.0413 (J)	0.027		
7/12/2016	0.0013 (J)	0.0251	0.0484	0.0316	0.0273	0.455
9/1/2016	<0.01	0.0259	0.0474	0.0336	0.0274	0.481
10/20/2016					0.036	0.472
10/24/2016	<0.01	0.0293	0.047	0.0352		
12/6/2016					0.0365	0.52
12/7/2016	<0.01	0.0209	0.0432	0.0383		
1/25/2017					0.0317	0.478
1/26/2017	<0.01	0.0277	0.0484	0.041		
3/21/2017					0.0346	0.547
3/22/2017	0.0013 (J)	0.011	0.0494	0.0426		
5/23/2017					0.0336	0.482
5/24/2017	0.0014 (J)	0.0373	0.047	0.04		
4/3/2018					0.032	0.44
4/4/2018	<0.01	0.013	0.052	0.027		
6/5/2018	<0.01	0.029		0.027	0.036	
6/6/2018			0.054			0.49
10/2/2018	<0.01				0.039	0.47
10/3/2018		0.02	0.054			
10/5/2018				0.033		
3/12/2019						0.5
3/13/2019	<0.01	0.012		0.033	0.04	
3/14/2019			0.046			
4/2/2019					0.041	
4/3/2019	0.0021 (J)	0.01	0.049			0.5
4/5/2019				0.03		
9/24/2019						0.54
9/25/2019					0.047	
9/26/2019				0.026		
9/27/2019	0.0014 (J)	0.016	0.052			
3/3/2020	<0.01	0.011	0.045			0.44
3/4/2020				0.03	0.045	
3/26/2020			0.045			
3/27/2020					0.044	0.42
3/30/2020				0.029		
3/31/2020		0.0074 (J)				
4/1/2020	<0.01					
6/16/2020						0.45
6/17/2020					0.048	
9/16/2020	0.0014 (J)				0.046	0.43
9/18/2020		0.032	0.046			
9/21/2020				0.032		
2/10/2021					0.051	
2/12/2021		0.023	0.048			
2/15/2021	<0.01					
2/16/2021						0.46
2/22/2021				0.036		
3/12/2021	0.0007 (J)					
3/15/2021					0.047	0.41
3/16/2021		0.015	0.044			
3/17/2021				0.035		

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8
8/16/2021					0.045	
8/17/2021	0.0012 (J)					
8/18/2021		0.038	0.045			0.48
8/19/2021				0.032		
2/9/2022	<0.01	0.03	0.042			
2/10/2022				0.033	0.045	0.34
8/3/2022	0.00079 (J)	0.027	0.047	0.035	0.038	0.29
8/11/2022					0.044	
1/26/2023		0.022	0.048	0.023		
1/27/2023	<0.01				0.039	
2/1/2023						0.29
Mean	0.006591	0.0217	0.04735	0.03262	0.03928	0.4513
Std. Dev.	0.004354	0.008891	0.003411	0.004987	0.006866	0.06596
Upper Lim.	0.01	0.02635	0.04914	0.03523	0.04271	0.4856
Lower Lim.	0.0014	0.01705	0.04557	0.03001	0.03586	0.4241

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-9	MW-19	MW-24D	MW-25D	MW-26D	MW-27D
5/23/2016	0.0187					
7/12/2016	0.0229					
9/1/2016	0.0239					
10/20/2016	0.477					
12/6/2016	0.0236					
1/26/2017	0.0234					
3/22/2017	0.0219					
5/23/2017	0.0242					
4/3/2018	0.025					
6/6/2018	0.027					
10/2/2018	0.028					
3/13/2019	0.028		<0.01		<0.01	<0.01
3/14/2019		0.057		0.0022 (J)		
4/3/2019	0.03	0.04		<0.01	0.0083 (J)	
4/4/2019						0.0018 (J)
4/8/2019			0.00027 (J)			
9/26/2019			<0.01		0.017	0.0042 (J)
9/27/2019	0.033	0.063		<0.01		
11/25/2019					0.02	
3/3/2020				<0.01		
3/4/2020	0.031	0.032	<0.01		0.0074 (J)	0.0058 (J)
3/26/2020		0.033		<0.01		
3/30/2020			<0.01			
3/31/2020	0.031				0.0093 (J)	
4/2/2020						0.003 (J)
9/17/2020	0.03				0.014	
9/18/2020				0.00094 (J)		0.0018 (J)
9/21/2020		0.064	0.00099 (J)			
2/12/2021		0.046		<0.01		
2/16/2021	0.035		0.00096 (J)		0.022	0.0019 (J)
3/12/2021						0.0008 (J)
3/16/2021	0.035			<0.01		
3/17/2021		0.043	0.001 (J)		0.023	
8/17/2021	0.035				0.024	0.0016 (J)
8/18/2021		0.032				
8/19/2021			0.00087 (J)	<0.01		
2/9/2022	0.034	0.011		<0.01	0.028	
2/10/2022			0.0008 (J)			0.0017 (J)
8/3/2022			0.00095 (J)			0.002 (J)
8/4/2022	0.033	0.039		<0.01	0.028	
1/26/2023	0.021	0.012	0.0012 (J)	<0.01	0.028	
1/27/2023						0.0014 (J)
Mean	0.04746	0.03933	0.00392	0.008595	0.018	0.002583
Std. Dev.	0.09377	0.01715	0.004496	0.003292	0.008412	0.001576
Upper Lim.	0.033	0.05279	0.01	0.01	0.02425	0.003636
Lower Lim.	0.0236	0.02587	0.0008	0.0022	0.01175	0.001403

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-6	MW-7
3/12/2019	0.013	0.0038 (J)		
3/13/2019			0.0021 (J)	<0.01
4/2/2019	0.028	0.0028 (J)		
4/3/2019			0.0021 (J)	<0.01
9/24/2019		0.0021 (J)		
9/26/2019	0.017		0.0026 (J)	0.0033 (J)
3/2/2020		0.0025 (J)		
3/3/2020			0.0022 (J)	<0.01
3/4/2020	0.009 (J)			
3/27/2020	0.0068 (J)		0.0026 (J)	
3/30/2020		0.0029 (J)		<0.01
9/16/2020		0.0021 (J)		
9/21/2020	0.018		0.0025 (J)	0.0015 (J)
2/10/2021	0.02			
2/15/2021		0.0029 (J)		0.0015 (J)
2/16/2021			0.0025 (J)	
3/15/2021	0.013	0.0031 (J)		0.0015 (J)
3/16/2021			0.0023 (J)	
8/16/2021		0.0027 (J)		
8/17/2021			0.0027 (J)	0.003 (J)
8/18/2021	0.022			
2/8/2022				0.0012 (J)
2/9/2022			0.0026 (J)	
2/10/2022	0.0031 (J)	0.0036 (J)		
8/3/2022		0.0032 (J)	0.0028 (J)	
8/4/2022	0.011			0.0014 (J)
1/26/2023	0.0025 (J)	0.0029 (J)	0.0029 (J)	<0.01
Mean	0.01362	0.002883	0.002492	0.005283
Std. Dev.	0.007735	0.0005149	0.0002644	0.004211
Upper Lim.	0.01969	0.003287	0.002699	0.01
Lower Lim.	0.007547	0.002479	0.002284	0.0014

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-8	HGWC-9
5/20/2016					<0.005	
5/23/2016	<0.005	0.0106	<0.005	<0.005		<0.005
7/12/2016	<0.005	0.0057 (J)	<0.005	<0.005	<0.005	<0.005
9/1/2016	<0.005	0.0057 (J)	<0.005	<0.005	<0.005	<0.005
10/20/2016					<0.005	<0.005
10/24/2016	<0.005	0.0021 (J)	<0.005	<0.005		
12/6/2016					0.0024 (J)	0.0037 (J)
12/7/2016	<0.005	0.0015 (J)	0.0011 (J)	<0.005		
1/25/2017					<0.005	
1/26/2017	0.0041 (J)	0.0062 (J)	<0.005	<0.005		<0.005
3/21/2017					<0.005	
3/22/2017	<0.005	0.0263	<0.005	<0.005		<0.005
5/23/2017					<0.005	<0.005
5/24/2017	<0.005	0.0038 (J)	<0.005	<0.005		
4/3/2018					<0.005	<0.005
4/4/2018	<0.005	0.021	<0.005	<0.005		
6/5/2018	<0.005	0.0062 (J)		<0.005		
6/6/2018			<0.005		<0.005	<0.005
10/2/2018	0.0023 (J)				<0.005	<0.005
10/3/2018		0.009 (J)	<0.005			
10/5/2018				<0.005		
3/12/2019					<0.005	
3/13/2019	0.0015 (J)	0.023		<0.005		<0.005
3/14/2019			<0.005			
4/3/2019	<0.005	0.016	<0.005		<0.005	<0.005
4/5/2019				0.00018 (J)		
9/24/2019					<0.005	
9/26/2019				<0.005		
9/27/2019	<0.005	0.013	<0.005			<0.005
3/3/2020	<0.005	0.016	<0.005		<0.005	
3/4/2020				<0.005		<0.005
3/26/2020			<0.005			
3/27/2020					<0.005	
3/30/2020				<0.005		
3/31/2020		0.019				<0.005
4/1/2020	0.002 (J)					
9/16/2020	<0.005				<0.005	
9/17/2020						<0.005
9/18/2020		0.0042 (J)	<0.005			
9/21/2020				0.0016 (J)		
2/12/2021		0.0079 (J)	<0.005			
2/15/2021	0.0028 (J)					
2/16/2021					<0.005	<0.005
2/22/2021				<0.005		
3/12/2021	<0.005					
3/15/2021					<0.005	
3/16/2021		0.015	<0.005			<0.005
3/17/2021				<0.005		
8/17/2021	<0.005					<0.005
8/18/2021		0.0033 (J)	<0.005		<0.005	
8/19/2021				<0.005		
2/9/2022	0.0031 (J)	0.0035 (J)	<0.005			<0.005

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-8	HGWC-9
2/10/2022				<0.005	<0.005	
8/3/2022	0.0017 (J)	0.0057	<0.005	<0.005	<0.005	
8/4/2022						<0.005
1/26/2023		0.01	<0.005	<0.005		<0.005
1/27/2023	0.0035 (J)					
2/1/2023					<0.005	
Mean	0.004174	0.0102	0.00483	0.004643	0.004887	0.004943
Std. Dev.	0.001266	0.007153	0.0008132	0.001203	0.0005421	0.0002711
Upper Lim.	0.005	0.01395	0.005	0.005	0.005	0.005
Lower Lim.	0.0031	0.006463	0.0011	0.0016	0.0024	0.0037

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-27D	MW-5	MW-7
3/13/2019		<0.005	0.0033 (J)	0.0016 (J)
3/14/2019	<0.005			
4/3/2019	0.007 (J)		0.0027 (J)	<0.005
4/4/2019		0.00012 (J)		
9/25/2019			0.0021 (J)	
9/26/2019		<0.005		0.0014 (J)
9/27/2019	0.0013 (J)			
3/2/2020			0.0041 (J)	
3/3/2020				<0.005
3/4/2020	0.0044 (J)	<0.005		
3/26/2020	0.0053 (J)		0.0039 (J)	
3/30/2020				0.0014 (J)
4/2/2020		<0.005		
9/17/2020			0.0028 (J)	
9/18/2020		<0.005		
9/21/2020	0.0033 (J)			0.0026 (J)
2/12/2021	0.0021 (J)			
2/15/2021				<0.005
2/16/2021		<0.005	0.0035 (J)	
3/12/2021		<0.005		
3/15/2021				0.0021 (J)
3/16/2021			0.0026 (J)	
3/17/2021	<0.005			
8/17/2021		<0.005	0.0017 (J)	<0.005
8/18/2021	0.0026 (J)			
2/8/2022				0.0015 (J)
2/9/2022	0.0036 (J)		0.0027 (J)	
2/10/2022		<0.005		
8/3/2022		<0.005	0.0032 (J)	
8/4/2022	0.0022 (J)			<0.005
1/26/2023	0.0056		0.0045 (J)	<0.005
1/27/2023		<0.005		
Mean	0.00395	0.004593	0.003092	0.003383
Std. Dev.	0.001709	0.001409	0.0008218	0.00172
Upper Lim.	0.00488	0.005	0.003736	0.005
Lower Lim.	0.002282	0.00012	0.002447	0.0014

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-8	MW-19	MW-28D
5/20/2016				<0.001		
5/23/2016	<0.001	<0.001	0.000378 (J)			
7/12/2016	8E-05 (J)	0.0002 (J)	0.0004 (J)	7E-05 (J)		
9/1/2016	<0.001	<0.001	0.0004 (J)	<0.001		
10/20/2016				<0.001		
10/24/2016	<0.001	<0.001	0.0005 (J)			
12/6/2016				<0.001		
12/7/2016	<0.001	<0.001	0.0004 (J)			
1/25/2017				<0.001		
1/26/2017	<0.001	<0.001	0.0004 (J)			
3/21/2017				9E-05 (J)		
3/22/2017	<0.001	0.0001 (J)	0.0004 (J)			
5/23/2017				8E-05 (J)		
5/24/2017	8E-05 (J)	9E-05 (J)	0.0003 (J)			
4/3/2018				<0.001		
4/4/2018	<0.001	<0.001	0.00032 (J)			
6/5/2018	<0.001		0.00035 (J)			
6/6/2018		<0.001		<0.001		
10/2/2018				<0.001		
10/3/2018	<0.001	<0.001				
10/5/2018			0.00025 (J)			
3/12/2019				<0.001		<0.001
3/13/2019	<0.001		0.00039 (J)			
3/14/2019		<0.001			<0.001	
4/2/2019						<0.001
4/3/2019	<0.001	<0.001		<0.001	<0.001	
4/5/2019			0.00034 (J)			
9/24/2019				0.00011 (J)		
9/26/2019			0.00039 (J)			<0.001
9/27/2019	<0.001	8.8E-05 (J)			0.00027 (J)	
3/3/2020	<0.001	6.6E-05 (J)		6.1E-05 (J)		
3/4/2020			0.00056 (J)		0.00026 (J)	9.2E-05 (J)
3/26/2020		8E-05 (J)			0.00026 (J)	
3/27/2020				7.7E-05 (J)		<0.001
3/30/2020			0.00048 (J)			
3/31/2020	<0.001					
9/16/2020				<0.001		
9/18/2020	<0.001	<0.001				
9/21/2020			0.00036 (J)		0.0003 (J)	<0.001
2/10/2021						<0.001
2/12/2021	<0.001	<0.001			0.00019 (J)	
2/16/2021				<0.001		
2/22/2021			0.0003 (J)			
3/15/2021				<0.001		<0.001
3/16/2021	<0.001	<0.001				
3/17/2021			0.00037 (J)		0.00026 (J)	
8/18/2021	<0.001	<0.001		<0.001	0.00023 (J)	<0.001
8/19/2021			0.0002 (J)			
2/9/2022	<0.001	<0.001			<0.001	
2/10/2022			<0.001	<0.001		<0.001
8/3/2022	<0.001	<0.001	<0.001	0.00018 (J)		
8/4/2022					0.00026 (J)	<0.001

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-8	MW-19	MW-28D
1/26/2023	<0.001	<0.001	0.00031 (J)		<0.001	<0.001
2/1/2023				<0.001		
Mean	0.00092	0.0007663	0.0003825	0.0007247	0.0005025	0.0009243
Std. Dev.	0.0002651	0.0004029	8.561E-05	0.0004261	0.0003683	0.0002621
Upper Lim.	0.001	0.001	0.0004273	0.001	0.001	0.001
Lower Lim.	8E-05	0.0002	0.0003377	0.00011	0.00023	9.2E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 4/14/2023 1:13 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-29	MW-6
3/12/2019	<0.001	
3/13/2019		<0.001
4/2/2019	<0.001	
4/3/2019		<0.001
9/24/2019	6.4E-05 (J)	
9/26/2019		<0.001
3/2/2020	<0.001	
3/3/2020		8.2E-05 (J)
3/27/2020		<0.001
3/30/2020	<0.001	
9/16/2020	<0.001	
9/21/2020		<0.001
2/15/2021	<0.001	
2/16/2021		<0.001
3/15/2021	<0.001	
3/16/2021		<0.001
8/16/2021	<0.001	
8/17/2021		<0.001
2/9/2022		<0.001
2/10/2022	<0.001	
8/3/2022	<0.001	<0.001
1/26/2023	<0.001	<0.001
Mean	0.000922	0.0009235
Std. Dev.	0.0002702	0.000265
Upper Lim.	0.001	0.001
Lower Lim.	6.4E-05	8.2E-05

ND substitution: RL or RL/2 if <15% NDs.

FIGURE I.

Appendix IV Trend Tests - All Results (No Significant)

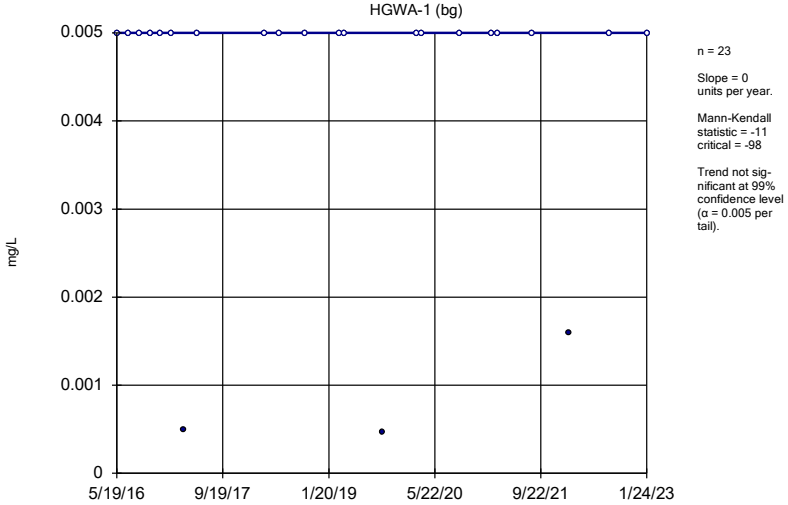
Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 4/14/2023, 1:16 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Arsenic (mg/L)	HGWA-1 (bg)	0	-11	-98	No	23	86.96	n/a	n/a	0.01	NP
Arsenic (mg/L)	HGWA-2 (bg)	0	34	98	No	23	60.87	n/a	n/a	0.01	NP
Arsenic (mg/L)	HGWA-3 (bg)	0	22	98	No	23	60.87	n/a	n/a	0.01	NP
Arsenic (mg/L)	HGWA-43D (bg)	0	5	30	No	10	40	n/a	n/a	0.01	NP
Arsenic (mg/L)	HGWA-44D (bg)	0	-10	-30	No	10	70	n/a	n/a	0.01	NP
Arsenic (mg/L)	HGWC-13	0.01498	85	98	No	23	0	n/a	n/a	0.01	NP
Molybdenum (mg/L)	HGWA-1 (bg)	0	0	105	No	24	100	n/a	n/a	0.01	NP
Molybdenum (mg/L)	HGWA-2 (bg)	0	0	98	No	23	100	n/a	n/a	0.01	NP
Molybdenum (mg/L)	HGWA-3 (bg)	0	0	105	No	24	100	n/a	n/a	0.01	NP
Molybdenum (mg/L)	HGWA-43D (bg)	-0.0007215	-20	-30	No	10	0	n/a	n/a	0.01	NP
Molybdenum (mg/L)	HGWA-44D (bg)	0.000373	20	30	No	10	0	n/a	n/a	0.01	NP
Molybdenum (mg/L)	HGWC-8	-0.01469	-99	-105	No	24	0	n/a	n/a	0.01	NP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWA-1 (bg)



n = 23

Slope = 0 units per year.

Mann-Kendall statistic = -11
critical = -98

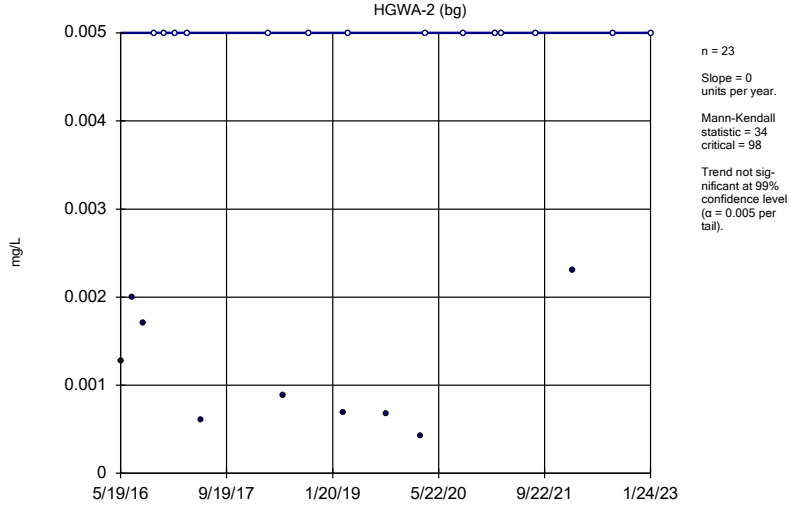
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 4/14/2023 1:14 PM View: Appendix IV - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWA-2 (bg)



n = 23

Slope = 0 units per year.

Mann-Kendall statistic = 34
critical = 98

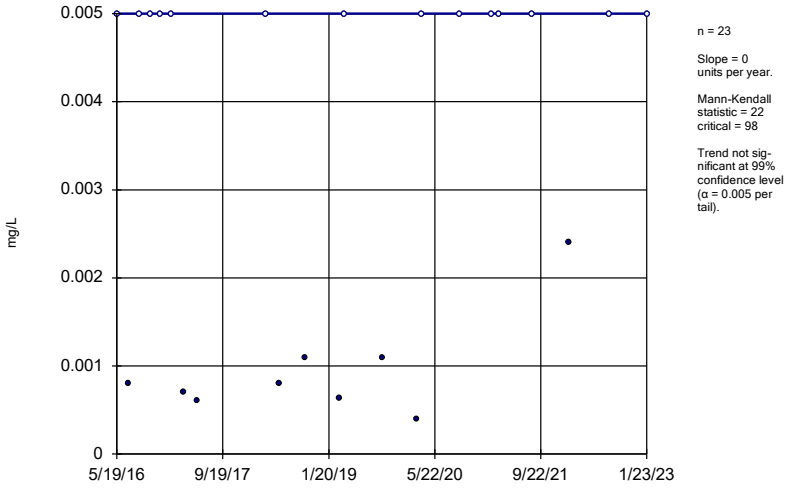
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 4/14/2023 1:14 PM View: Appendix IV - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWA-3 (bg)



n = 23

Slope = 0 units per year.

Mann-Kendall statistic = 22
critical = 98

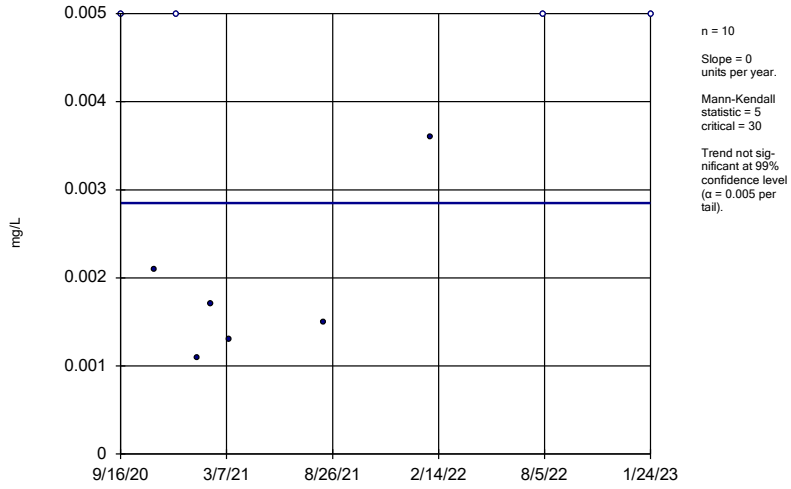
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 4/14/2023 1:14 PM View: Appendix IV - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWA-43D (bg)



n = 10

Slope = 0 units per year.

Mann-Kendall statistic = 5
critical = 30

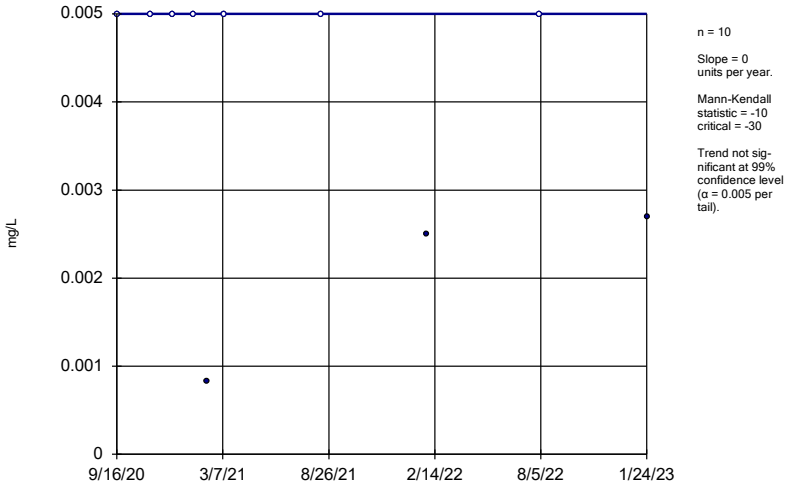
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 4/14/2023 1:14 PM View: Appendix IV - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWA-44D (bg)



n = 10

Slope = 0 units per year.

Mann-Kendall statistic = -10 critical = -30

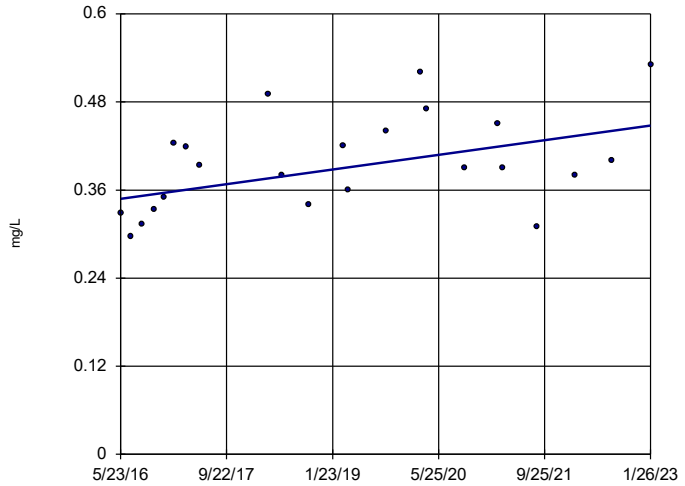
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 4/14/2023 1:14 PM View: Appendix IV - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-13



n = 23

Slope = 0.01498 units per year.

Mann-Kendall statistic = 85 critical = 98

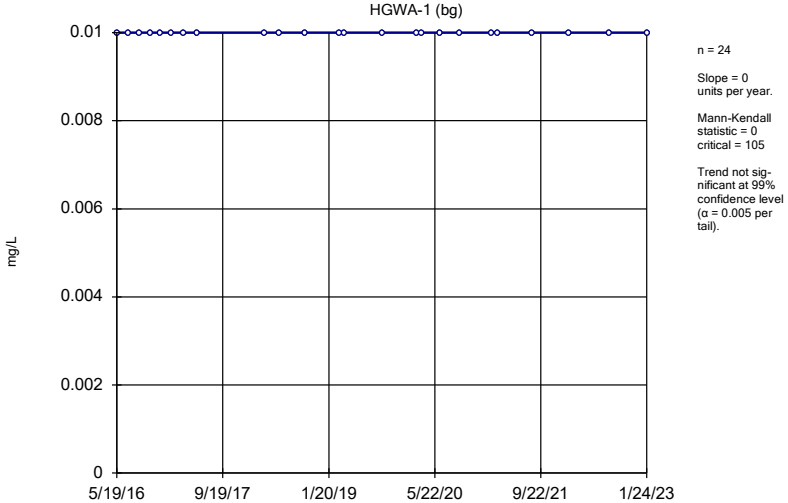
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 4/14/2023 1:14 PM View: Appendix IV - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWA-1 (bg)



n = 24

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 105

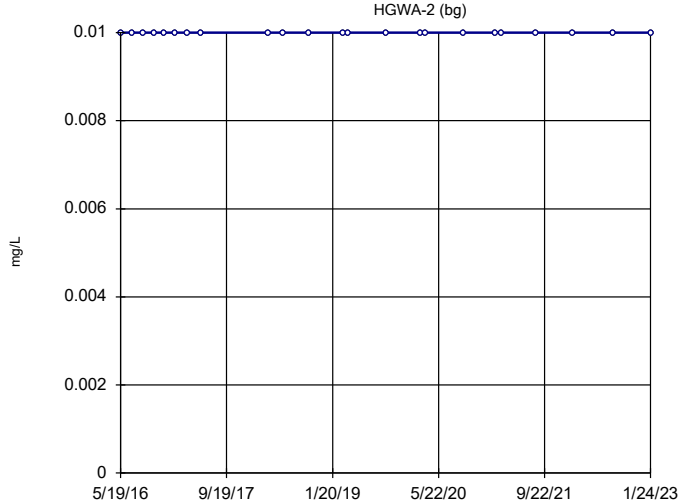
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Molybdenum Analysis Run 4/14/2023 1:14 PM View: Appendix IV - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWA-2 (bg)



n = 23

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 98

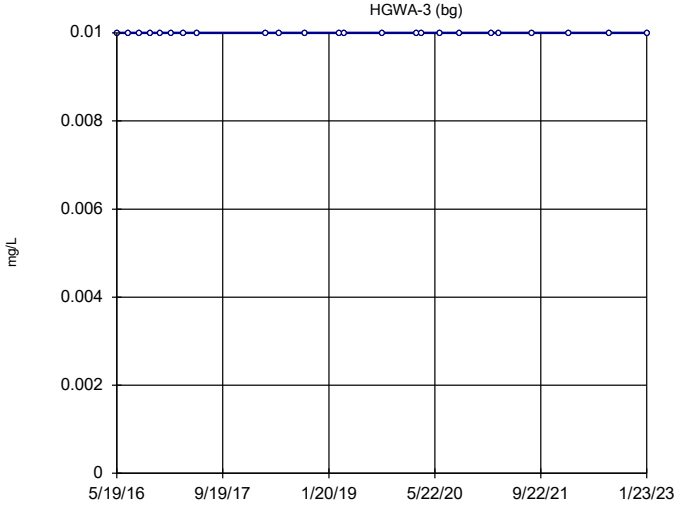
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Molybdenum Analysis Run 4/14/2023 1:14 PM View: Appendix IV - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWA-3 (bg)



n = 24

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 105

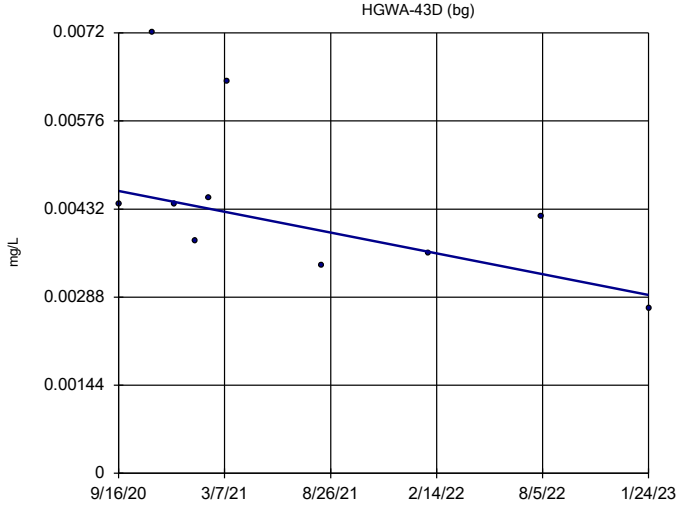
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Molybdenum Analysis Run 4/14/2023 1:14 PM View: Appendix IV - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-43D (bg)



n = 10

Slope = -0.0007215 units per year.

Mann-Kendall statistic = -20
critical = -30

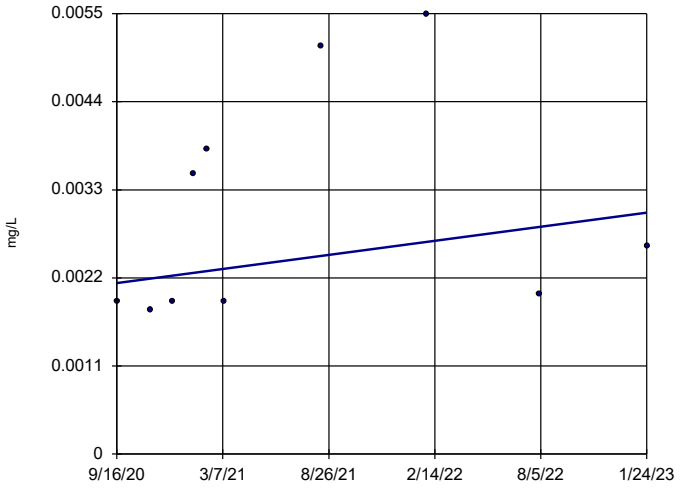
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Molybdenum Analysis Run 4/14/2023 1:14 PM View: Appendix IV - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-44D (bg)



n = 10

Slope = 0.000373 units per year.

Mann-Kendall statistic = 20
critical = 30

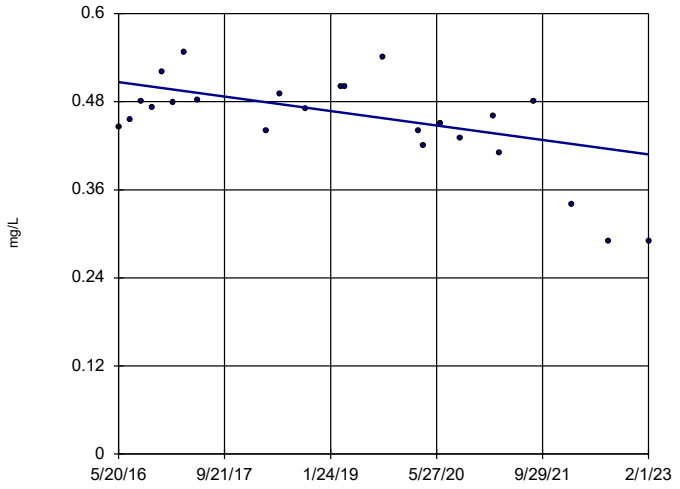
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Molybdenum Analysis Run 4/14/2023 1:14 PM View: Appendix IV - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-8



n = 24

Slope = -0.01469 units per year.

Mann-Kendall statistic = -99
critical = -105

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Molybdenum Analysis Run 4/14/2023 1:14 PM View: Appendix IV - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

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 1 (AP-1)
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-1. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015), the Georgia Environmental Protection Division (EPD) Rules for Solid Waste Management Chapter 391-3-4-.10 and follows the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling began for the Coal Combustion Residuals (CCR) program in 2016, and at least 8 background samples have been collected at each of the upgradient and downgradient groundwater monitoring wells. The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** HGWA-1, HGWA-2, HGWA-3, HGWA-43D, and HGWA-44D
- **Downgradient wells:** HGWC-7, HGWC-8, HGWC-9, HGWC-10, HGWC-11, HGWC-12, and HGWC-13
- **Assessment wells:** MW-5, MW-6, MW-7, MW-19, MW-20, MW-24D, MW-25D, MW-26D, MW-27D, MW-28D, and MW-29

Sampling at upgradient wells HGWA-43D and HGWA-44D began in September 2020 and all data from these wells are included in construction of interwell statistical limits.

Sampling at assessment wells began in March 2019 and data from these wells are plotted on the time series graphs and box plots, and are evaluated for Appendix IV constituents using confidence intervals which require a minimum sample size of n=4. Wells MW-30D and MW-40D were included as assessment wells during previous reporting periods, but were reclassified as "piezometers" based on the findings presented in the alternate source demonstration included as an appendix of the 2020 Annual Groundwater Monitoring & Corrective Action Report, submitted to Georgia EPD in January 2021. Because of this reclassification, data for wells MW-30D and MW-40D are not presented in this report.

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Andrew Collins, Project Manager of Groundwater Stats Consulting. The statistical analysis was performed according to the groundwater 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 (2009).

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) **–** antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A summary of Appendix IV downgradient and assessment well/constituent pairs with 100% non-detects follows this letter.

For all constituents, a substitution of the most recent reporting limit is used for non-detect data. In the cases of lithium, historical reporting limits vary among the wells. Therefore, the reporting limits of 0.03 mg/L, respectively, were 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. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. No 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 with the previous screening to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance. The EPA suggests the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations.

Statistical Methods – Appendix III Parameters

The following Appendix III parameters are evaluated using interwell prediction limits combined with a 1-of-2 resample plan: 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 limit. This

technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Note that values shown on data pages reflect raw data and any non-detects that have been substituted with one-half of the reporting limit will be shown as the original reporting limit.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data during each event after careful screening for any new outliers. In some cases, an earlier portion of data may require deselection prior to construction of limits to provide sensitive limits that will rapidly detect changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs. When this step is required a summary of any adjusted records will be provided. No records were adjusted at this time.

Statistical Analysis 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. No new values were flagged as shown in the outlier summary following this report (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). Interwell prediction limits pool 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 initial exceedances are present.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When a resample confirms the initial exceedance, a statistically significant increase (SSI) is identified and further research would be required to identify the cause of the exceedance (i.e., impact from the site, natural variation, or an off-site source). If the

resample falls within the statistical limit, the initial exceedance is considered to be a false positive result and, therefore, no exceedance is noted and no further action is necessary. If no resample is collected, the original result is considered a confirmed exceedance.

When the August 2023 compliance data from downgradient wells were compared to interwell prediction limits, exceedances were identified for the following well/constituent pairs:

- Boron: HGWC-10, HGWC-12, HGWC-13, HGWC-7, HGWC-8, and HGWC-9
- Calcium: HGWC-10, HGWC-12, HGWC-13, and HGWC-9
- Chloride: HGWC-8 and HGWC-9
- Sulfate: HGWC-10, HGWC-11, HGWC-12, HGWC-13, HGWC-8, and HGWC-9
- TDS: HGWC-12, HGWC-13, and HGWC-9

A summary table of these findings is provided along with the prediction limits.

Trend Test Evaluation – Appendix III

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable at the 99% confidence level (Figure E). Upgradient well data are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. 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-7
- Calcium: HGWA-3 (upgradient)
- Chloride: HGWA-44D (upgradient)
- Sulfate: HGWA-2 (upgradient)

Decreasing trends:

- Boron: HGWA-43D (upgradient) HGWC-12, and HGWC-13
- Chloride: HGWA-3 (upgradient), HGWC-8, and HGWC-9
- Sulfate: HGWA-43D (upgradient) and HGWC-10
- TDS: HGWC-12

Statistical Methods – Appendix IV Parameters

Appendix IV parameters are evaluated by statistically comparing the mean or median of each downgradient well/constituent pair against corresponding Groundwater Protection Standards (GWPS). The GWPS may be either regulatory (Maximum Contaminant Limits (MCL) or CCR rule-specified limits) or site-specific limits that are based on upgradient background groundwater quality. Site-specific background limits are determined using tolerance limits, and the comparison of downgradient means or medians to GWPS is performed using confidence intervals. The methods are described below.

Statistical Evaluation of Appendix IV Parameters – August 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 containing 100% non-detects do not require analyses.

Data from all wells for Appendix IV parameters are reassessed for outliers during each analysis. The highest value for lithium at upgradient well HGWA-44D was flagged in order to maintain conservative limits from a regulatory perspective. A summary of flagged outliers follows this report (Figure C).

Interwell Upper Tolerance Limits

Interwell upper tolerance limits were used to calculate site-specific background limits from all available pooled upgradient well data through August 2023 for Appendix IV constituents (Figure F). As mentioned above, a reporting limit of 0.005 mg/L was substituted for arsenic and a reporting limit of 0.03 mg/L was substituted for lithium. Parametric tolerance limits are used when data follow a normal or transformed-normal distribution. When data contained greater than 50% non-detects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used.

Groundwater Protection Standards

The background limits were then used when determining the groundwater protection standard (GWPS) under 40 CFR §257.95(h) and Georgia EPD Rule 391-3-4-.10(6)(a). On July 30, 2018, US EPA revised the Federal CCR rule updating GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR §257.95(h)(2). Effective on February 22, 2022, Georgia EPD incorporated the updated GWPS into the current Georgia EPD Rules

for Solid Waste Management 391-3-4-.10(6)(a). In accordance with the updated Rules, the GWPS is:

- The maximum contaminant level (MCL) established under §141.62 and §141.66 of this title
- Where an MCL has not been established for a constituent, Federal and State CCR Rules specify levels for cobalt (0.006 mg/L), lead (0.015 mg/L), lithium (0.040 mg/L), and molybdenum (0.100 mg/L)
- The respective background level for a constituent when the background level is higher than the MCL or Federal CCR Rule identified GWPS

Following Georgia EPD Rule requirements and the Federal CCR requirements, GWPS were established for statistical comparison of Appendix IV constituents for this sample event (Figure G).

Confidence Intervals

To complete the statistical comparison to GWPS, confidence intervals using data through August 2023 were constructed for each of the Appendix IV constituents in each downgradient well and assessment wells with 4 or more samples.

The Sanitas software was used to calculate the tolerance limits and the confidence intervals. These intervals were constructed as either parametric or nonparametric confidence intervals depending on the data distribution and percentage of non-detects. When data followed a normal or transformed-normal distribution, parametric confidence intervals were used for Appendix IV parameters. Nonparametric confidence intervals, which use the appropriate order statistics, depending on the sample size, as interval limits, were constructed when data did not follow a normal or transformed-normal distribution or when there were greater than 50% non-detects. The lower confidence limit, which is constructed with 99% confidence for parametric confidence intervals, is compared to the GWPS prepared as described above. The achievable confidence level associated with nonparametric confidence intervals is dependent upon the number samples available.

Confidence intervals were compared to the GWPS prepared as described above (Figure H). Only when the entire confidence interval is above a GWPS is the downgradient well/constituent pair considered to exceed its respective standard. If there is an exceedance of the GWPS, a statistically significant level (SSL) exceedance is identified. Summaries of the confidence interval results, along with graphical comparison against GWPS follow this letter. Exceedances were noted for the following well/constituent pairs:

- Arsenic: HGWC-13
- Molybdenum: HGWC-8

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:
- Arsenic: HGWC-13

Decreasing trends:
- Molybdenum: HGWA-43D (upgradient) and HGWC-8

Resample Reports – October 2023

Additional data was collected in October 2023 for barium at downgradient well MW-28D. A confidence interval was constructed for this well/constituent pair (Figure J). No exceedance was identified; therefore, no further action was required.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Hammond AP-1. 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

Analysis Run 10/17/2023 1:17 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Antimony (mg/L)
HGWC-12, MW-19, MW-20, MW-25D, MW-5

Arsenic (mg/L)
HGWC-10, MW-24D, MW-7

Beryllium (mg/L)
HGWC-10, HGWC-12, HGWC-9, MW-20, MW-24D, MW-25D, MW-26D, MW-27D, MW-29, MW-5, MW-6

Cadmium (mg/L)
HGWC-13, MW-20, MW-24D, MW-25D, MW-26D, MW-27D, MW-28D, MW-29, MW-5, MW-6, MW-7

Cobalt (mg/L)
MW-25D, MW-5, MW-7

Lead (mg/L)
MW-25D

Lithium (mg/L)
HGWC-10, HGWC-11, MW-5, MW-6, MW-7

Mercury (mg/L)
HGWC-12, HGWC-7, HGWC-8, MW-19, MW-20, MW-24D, MW-26D, MW-27D, MW-28D, MW-5, MW-6, MW-7

Molybdenum (mg/L)
MW-20, MW-5

Selenium (mg/L)
HGWC-7, MW-20, MW-24D, MW-25D, MW-26D, MW-28D, MW-29, MW-6

Thallium (mg/L)
HGWC-10, HGWC-7, HGWC-9, MW-20, MW-24D, MW-25D, MW-26D, MW-27D, MW-5, MW-7

Appendix III Interwell Prediction Limits - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 10/17/2023, 12:59 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-10**	**0.55**	**n/a**	**8/10/2023**	**0.65**	**Yes**	**85**	**n/a**	**n/a**	**4.706**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-12**	**0.55**	**n/a**	**8/10/2023**	**1.4**	**Yes**	**85**	**n/a**	**n/a**	**4.706**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-13**	**0.55**	**n/a**	**8/12/2023**	**1**	**Yes**	**85**	**n/a**	**n/a**	**4.706**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-7**	**0.55**	**n/a**	**8/12/2023**	**0.82**	**Yes**	**85**	**n/a**	**n/a**	**4.706**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-8**	**0.55**	**n/a**	**8/12/2023**	**1.7**	**Yes**	**85**	**n/a**	**n/a**	**4.706**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-9**	**0.55**	**n/a**	**8/11/2023**	**2.1**	**Yes**	**85**	**n/a**	**n/a**	**4.706**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-10**	**138**	**n/a**	**8/10/2023**	**155**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-12**	**138**	**n/a**	**8/10/2023**	**156**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-13**	**138**	**n/a**	**8/12/2023**	**172**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-9**	**138**	**n/a**	**8/11/2023**	**168**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**HGWC-8**	**44.8**	**n/a**	**8/12/2023**	**53.1**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**HGWC-9**	**44.8**	**n/a**	**8/11/2023**	**78.9**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-10**	**89.9**	**n/a**	**8/10/2023**	**128**	**Yes**	**85**	**n/a**	**n/a**	**1.176**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-11**	**89.9**	**n/a**	**8/10/2023**	**190**	**Yes**	**85**	**n/a**	**n/a**	**1.176**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-12**	**89.9**	**n/a**	**8/10/2023**	**209**	**Yes**	**85**	**n/a**	**n/a**	**1.176**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-13**	**89.9**	**n/a**	**8/12/2023**	**347**	**Yes**	**85**	**n/a**	**n/a**	**1.176**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-8**	**89.9**	**n/a**	**8/12/2023**	**170**	**Yes**	**85**	**n/a**	**n/a**	**1.176**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-9**	**89.9**	**n/a**	**8/11/2023**	**197**	**Yes**	**85**	**n/a**	**n/a**	**1.176**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**HGWC-12**	**632**	**n/a**	**8/10/2023**	**683**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**HGWC-13**	**632**	**n/a**	**8/12/2023**	**803**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**HGWC-9**	**632**	**n/a**	**8/11/2023**	**757**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**

Appendix III Interwell Prediction Limits - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 10/17/2023, 12:59 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-10**	**0.55**	**n/a**	**8/10/2023**	**0.65**	**Yes**	**85**	**n/a**	**n/a**	**4.706**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	HGWC-11	0.55	n/a	8/10/2023	0.44	No	85	n/a	n/a	4.706	n/a	n/a	0.0002677	NP Inter (normality) 1 of 2
Boron (mg/L)	**HGWC-12**	**0.55**	**n/a**	**8/10/2023**	**1.4**	**Yes**	**85**	**n/a**	**n/a**	**4.706**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-13**	**0.55**	**n/a**	**8/12/2023**	**1**	**Yes**	**85**	**n/a**	**n/a**	**4.706**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-7**	**0.55**	**n/a**	**8/12/2023**	**0.82**	**Yes**	**85**	**n/a**	**n/a**	**4.706**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-8**	**0.55**	**n/a**	**8/12/2023**	**1.7**	**Yes**	**85**	**n/a**	**n/a**	**4.706**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-9**	**0.55**	**n/a**	**8/11/2023**	**2.1**	**Yes**	**85**	**n/a**	**n/a**	**4.706**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-10**	**138**	**n/a**	**8/10/2023**	**155**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	HGWC-11	138	n/a	8/10/2023	100	No	85	n/a	n/a	0	n/a	n/a	0.0002677	NP Inter (normality) 1 of 2
Calcium (mg/L)	**HGWC-12**	**138**	**n/a**	**8/10/2023**	**156**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-13**	**138**	**n/a**	**8/12/2023**	**172**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	HGWC-7	138	n/a	8/12/2023	101	No	85	n/a	n/a	0	n/a	n/a	0.0002677	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-8	138	n/a	8/12/2023	122	No	85	n/a	n/a	0	n/a	n/a	0.0002677	NP Inter (normality) 1 of 2
Calcium (mg/L)	**HGWC-9**	**138**	**n/a**	**8/11/2023**	**168**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	HGWC-10	44.8	n/a	8/10/2023	13.4	No	85	n/a	n/a	0	n/a	n/a	0.0002677	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-11	44.8	n/a	8/10/2023	6.5	No	85	n/a	n/a	0	n/a	n/a	0.0002677	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-12	44.8	n/a	8/10/2023	30.6	No	85	n/a	n/a	0	n/a	n/a	0.0002677	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-13	44.8	n/a	8/12/2023	15.3	No	85	n/a	n/a	0	n/a	n/a	0.0002677	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-7	44.8	n/a	8/12/2023	33.3	No	85	n/a	n/a	0	n/a	n/a	0.0002677	NP Inter (normality) 1 of 2
Chloride (mg/L)	**HGWC-8**	**44.8**	**n/a**	**8/12/2023**	**53.1**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**HGWC-9**	**44.8**	**n/a**	**8/11/2023**	**78.9**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Fluoride (mg/L)	HGWC-10	1.3	n/a	8/10/2023	0.05J	No	99	n/a	n/a	27.27	n/a	n/a	0.0001973	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-11	1.3	n/a	8/10/2023	0.15	No	99	n/a	n/a	27.27	n/a	n/a	0.0001973	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-12	1.3	n/a	8/10/2023	0.17	No	99	n/a	n/a	27.27	n/a	n/a	0.0001973	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-13	1.3	n/a	8/12/2023	0.32	No	99	n/a	n/a	27.27	n/a	n/a	0.0001973	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-7	1.3	n/a	8/12/2023	0.071J	No	99	n/a	n/a	27.27	n/a	n/a	0.0001973	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-8	1.3	n/a	8/12/2023	0.59	No	99	n/a	n/a	27.27	n/a	n/a	0.0001973	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-9	1.3	n/a	8/11/2023	0.12	No	99	n/a	n/a	27.27	n/a	n/a	0.0001973	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-10	8.25	4.9	8/10/2023	6.81	No	94	n/a	n/a	0	n/a	n/a	0.0004389	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-11	8.25	4.9	8/10/2023	5.9	No	94	n/a	n/a	0	n/a	n/a	0.0004389	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-12	8.25	4.9	8/10/2023	7.08	No	94	n/a	n/a	0	n/a	n/a	0.0004389	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-13	8.25	4.9	8/12/2023	6.89	No	94	n/a	n/a	0	n/a	n/a	0.0004389	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-7	8.25	4.9	8/12/2023	7.36	No	94	n/a	n/a	0	n/a	n/a	0.0004389	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-8	8.25	4.9	8/12/2023	6.84	No	94	n/a	n/a	0	n/a	n/a	0.0004389	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-9	8.25	4.9	8/11/2023	7.09	No	94	n/a	n/a	0	n/a	n/a	0.0004389	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**HGWC-10**	**89.9**	**n/a**	**8/10/2023**	**128**	**Yes**	**85**	**n/a**	**n/a**	**1.176**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-11**	**89.9**	**n/a**	**8/10/2023**	**190**	**Yes**	**85**	**n/a**	**n/a**	**1.176**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-12**	**89.9**	**n/a**	**8/10/2023**	**209**	**Yes**	**85**	**n/a**	**n/a**	**1.176**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-13**	**89.9**	**n/a**	**8/12/2023**	**347**	**Yes**	**85**	**n/a**	**n/a**	**1.176**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	HGWC-7	89.9	n/a	8/12/2023	84.2	No	85	n/a	n/a	1.176	n/a	n/a	0.0002677	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**HGWC-8**	**89.9**	**n/a**	**8/12/2023**	**170**	**Yes**	**85**	**n/a**	**n/a**	**1.176**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-9**	**89.9**	**n/a**	**8/11/2023**	**197**	**Yes**	**85**	**n/a**	**n/a**	**1.176**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	HGWC-10	632	n/a	8/10/2023	504	No	85	n/a	n/a	0	n/a	n/a	0.0002677	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-11	632	n/a	8/10/2023	438	No	85	n/a	n/a	0	n/a	n/a	0.0002677	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**HGWC-12**	**632**	**n/a**	**8/10/2023**	**683**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**HGWC-13**	**632**	**n/a**	**8/12/2023**	**803**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	HGWC-7	632	n/a	8/12/2023	378	No	85	n/a	n/a	0	n/a	n/a	0.0002677	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-8	632	n/a	8/12/2023	564	No	85	n/a	n/a	0	n/a	n/a	0.0002677	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**HGWC-9**	**632**	**n/a**	**8/11/2023**	**757**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**

Appendix III Trend Tests - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 10/17/2023, 1:02 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-12**	**-0.1831**	**-117**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-13**	**-0.2266**	**-130**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-7**	**0.03451**	**105**	**98**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**HGWA-3 (bg)**	**1.995**	**116**	**92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**HGWA-3 (bg)**	**-0.1444**	**-121**	**-92**	**Yes**	**22**	**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-8**	**-9.039**	**-126**	**-92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**HGWC-9**	**-11.9**	**-154**	**-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**
Sulfate (mg/L)	**HGWC-10**	**-10.13**	**-97**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**HGWC-12**	**-46.96**	**-98**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 10/17/2023, 1:02 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	HGWA-1 (bg)	-0.0002605	-21	-92	No	22	0	n/a	n/a	0.01	NP
Boron (mg/L)	**HGWA-2 (bg)**	**0.002577**	**142**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	HGWA-3 (bg)	0.0003424	32	92	No	22	18.18	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)	HGWA-44D (bg)	0.08822	29	30	No	10	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-10	-0.03144	-36	-87	No	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	**HGWC-12**	**-0.1831**	**-117**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-13**	**-0.2266**	**-130**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-7**	**0.03451**	**105**	**98**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	HGWC-8	-0.003765	-18	-92	No	22	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-9	0.05318	64	87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-1 (bg)	2.19	78	92	No	22	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
Calcium (mg/L)	**HGWA-3 (bg)**	**1.995**	**116**	**92**	**Yes**	**22**	**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
Calcium (mg/L)	HGWA-44D (bg)	-7.57	-27	-30	No	10	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-10	-4.775	-74	-87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-12	-3.992	-61	-87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-13	16.21	70	87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-9	0.5043	28	87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-1 (bg)	0.7747	82	92	No	22	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
Chloride (mg/L)	**HGWA-3 (bg)**	**-0.1444**	**-121**	**-92**	**Yes**	**22**	**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
Chloride (mg/L)	**HGWA-44D (bg)**	**7.347**	**33**	**30**	**Yes**	**10**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**HGWC-8**	**-9.039**	**-126**	**-92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**HGWC-9**	**-11.9**	**-154**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	HGWA-1 (bg)	1.304	38	92	No	22	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-3 (bg)	0.1933	13	92	No	22	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**
Sulfate (mg/L)	HGWA-44D (bg)	1.358	7	30	No	10	10	n/a	n/a	0.01	NP
Sulfate (mg/L)	**HGWC-10**	**-10.13**	**-97**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	HGWC-11	-9.651	-52	-87	No	21	4.762	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-12	-9.599	-68	-87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-13	40.99	68	87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-8	-5.775	-44	-92	No	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-9	-3.688	-59	-87	No	21	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-1 (bg)	4.498	33	92	No	22	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)	1.304	29	92	No	22	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)	**HGWC-12**	**-46.96**	**-98**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	HGWC-13	44.64	66	87	No	21	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-9	-28.95	-54	-87	No	21	0	n/a	n/a	0.01	NP

Upper Tolerance Limits Summary Table

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 10/25/2023, 2:30 PM

Constituent	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	0.003	n/a	n/a	n/a	n/a	88	81.82	n/a	0.01096	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	n/a	n/a	n/a	94	68.09	n/a	0.008054	NP Inter(NDs)
Barium (mg/L)	0.46	n/a	n/a	n/a	n/a	94	0	n/a	0.008054	NP Inter(normality)
Beryllium (mg/L)	0.0005	n/a	n/a	n/a	n/a	88	78.41	n/a	0.01096	NP Inter(NDs)
Cadmium (mg/L)	0.0005	n/a	n/a	n/a	n/a	88	85.23	n/a	0.01096	NP Inter(NDs)
Chromium (mg/L)	0.0079	n/a	n/a	n/a	n/a	88	84.09	n/a	0.01096	NP Inter(NDs)
Cobalt (mg/L)	0.038	n/a	n/a	n/a	n/a	88	71.59	n/a	0.01096	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	4.36	n/a	n/a	n/a	n/a	94	0	n/a	0.008054	NP Inter(normality)
Fluoride (mg/L)	1.3	n/a	n/a	n/a	n/a	99	27.27	n/a	0.006232	NP Inter(normality)
Lead (mg/L)	0.001	n/a	n/a	n/a	n/a	85	70.59	n/a	0.01278	NP Inter(NDs)
Lithium (mg/L)	0.064	n/a	n/a	n/a	n/a	93	19.35	n/a	0.008478	NP Inter(normality)
Mercury (mg/L)	0.0002	n/a	n/a	n/a	n/a	66	96.97	n/a	0.03387	NP Inter(NDs)
Molybdenum (mg/L)	0.01	n/a	n/a	n/a	n/a	96	77.08	n/a	0.007269	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	n/a	n/a	n/a	94	96.81	n/a	0.008054	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	n/a	n/a	94	98.94	n/a	0.008054	NP Inter(NDs)

PLANT HAMMOND AP-1 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		0.0079	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.038	0.038
Combined Radium, Total (pCi/L)	5		4.36	5
Fluoride, Total (mg/L)	4		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 indidcates background is higher than MCL or CCR-Rule*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residuals*

**GWPS = Groundwater Protection Statard*

Confidence Intervals Summary Table - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 10/25/2023, 2:35 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**HGWC-13**	**0.4387**	**0.3671**	**0.01**	**Yes**	**24**	**0.07021**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**HGWC-8**	**0.4809**	**0.4128**	**0.1**	**Yes**	**25**	**0.0683**	**0**	**None**	**No**	**0.01**	**Param.**

Confidence Intervals Summary Table - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 10/25/2023, 2:35 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	HGWC-10	0.003	0.0018	0.006	No	22	0.0005516	90.91	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-11	0.003	0.00038	0.006	No	22	0.0005586	95.45	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-13	0.003	0.00049	0.006	No	22	0.001246	68.18	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-7	0.003	0.0017	0.006	No	23	0.0006062	91.3	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-8	0.003	0.00064	0.006	No	22	0.0005032	95.45	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-9	0.003	0.00092	0.006	No	22	0.0009833	81.82	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-24D	0.003	0.0017	0.006	No	13	0.0003606	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-26D	0.003	0.002	0.006	No	13	0.0005267	84.62	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-27D	0.003	0.0003	0.006	No	13	0.0014	53.85	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-28D	0.003	0.0019	0.006	No	13	0.0003051	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-29	0.003	0.00094	0.006	No	13	0.0005713	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-6	0.003	0.0014	0.006	No	13	0.0004438	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-7	0.003	0.00086	0.006	No	13	0.0009336	69.23	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-11	0.005	0.0018	0.01	No	24	0.001712	50	None	No	0.01	NP (normality)
Arsenic (mg/L)	HGWC-12	0.00412	0.002863	0.01	No	24	0.001231	12.5	None	No	0.01	Param.
Arsenic (mg/L)	**HGWC-13**	**0.4387**	**0.3671**	**0.01**	**Yes**	**24**	**0.07021**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	HGWC-7	0.005	0.0019	0.01	No	25	0.00062	96	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-8	0.005	0.002	0.01	No	24	0.0006124	95.83	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-9	0.005	0.0021	0.01	No	24	0.001545	83.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-19	0.005	0.00045	0.01	No	13	0.001262	92.31	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-20	0.005	0.00094	0.01	No	13	0.001712	76.92	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-25D	0.005	0.001	0.01	No	13	0.001848	69.23	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-26D	0.005	0.0008	0.01	No	13	0.001756	76.92	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-27D	0.005	0.00069	0.01	No	13	0.001923	76.92	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-28D	0.005	0.0011	0.01	No	13	0.001082	92.31	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-29	0.005	0.00037	0.01	No	13	0.001284	92.31	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-5	0.005	0.0013	0.01	No	13	0.001026	92.31	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-6	0.005	0.0034	0.01	No	13	0.0004438	92.31	None	No	0.01	NP (NDs)
Barium (mg/L)	HGWC-10	0.08272	0.06105	2	No	24	0.02124	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-11	0.04951	0.03242	2	No	24	0.01881	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	HGWC-12	0.123	0.083	2	No	24	0.02115	0	None	No	0.01	NP (normality)
Barium (mg/L)	HGWC-13	0.08714	0.06691	2	No	24	0.01983	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-7	0.07342	0.06746	2	No	25	0.005986	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-8	0.07264	0.06129	2	No	24	0.01126	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	HGWC-9	0.1176	0.09867	2	No	24	0.01858	0	None	No	0.01	Param.
Barium (mg/L)	MW-19	0.0607	0.04361	2	No	13	0.0115	0	None	No	0.01	Param.
Barium (mg/L)	MW-20	0.09542	0.08658	2	No	13	0.005944	0	None	No	0.01	Param.
Barium (mg/L)	MW-24D	0.081	0.048	2	No	13	0.0202	0	None	No	0.01	NP (normality)
Barium (mg/L)	MW-25D	0.6136	0.4295	2	No	13	0.1238	0	None	No	0.01	Param.
Barium (mg/L)	MW-26D	0.1178	0.07123	2	No	13	0.03134	0	None	No	0.01	Param.
Barium (mg/L)	MW-27D	1.2	0.94	2	No	13	0.1555	0	None	No	0.01	NP (normality)
Barium (mg/L)	MW-28D	0.9551	0.3145	2	No	13	0.5193	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	MW-29	0.08303	0.07389	2	No	13	0.006146	0	None	No	0.01	Param.
Barium (mg/L)	MW-5	0.05173	0.04488	2	No	13	0.004608	0	None	No	0.01	Param.
Barium (mg/L)	MW-6	0.08986	0.07753	2	No	13	0.00829	0	None	No	0.01	Param.
Barium (mg/L)	MW-7	0.06144	0.04979	2	No	13	0.007837	0	None	No	0.01	Param.
Beryllium (mg/L)	HGWC-11	0.0005	0.00012	0.004	No	22	0.000194	63.64	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-13	0.0005	0.000097	0.004	No	22	0.0002075	54.55	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-7	0.0005	0.00019	0.004	No	23	0.0001336	86.96	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-8	0.0005	0.000078	0.004	No	22	0.0002099	63.64	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-19	0.0005	0.000058	0.004	No	13	0.0001226	92.31	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-28D	0.0005	0.000054	0.004	No	13	0.0001851	76.92	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-7	0.0005	0.000051	0.004	No	13	0.0001245	92.31	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-10	0.0005	0.000115	0.005	No	22	0.0001839	68.18	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-11	0.0005	0.0001	0.005	No	22	0.000141	86.36	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-12	0.0005	0.0003	0.005	No	22	0.0001288	81.82	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-7	0.0005	0.0002	0.005	No	23	0.0001371	78.26	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-8	0.0003	0.00017	0.005	No	22	0.0003292	4.545	None	No	0.01	NP (normality)
Cadmium (mg/L)	HGWC-9	0.0005	0.0002	0.005	No	22	0.000134	86.36	None	No	0.01	NP (NDs)
Cadmium (mg/L)	MW-19	0.0003198	0.0001473	0.005	No	13	0.0002661	23.08	Kaplan-Meier	ln(x)	0.01	Param.
Chromium (mg/L)	HGWC-10	0.02	0.0012	0.1	No	22	0.003466	86.36	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-11	0.005	0.0012	0.1	No	22	0.001516	86.36	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-12	0.005	0.0025	0.1	No	22	0.001353	86.36	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-13	0.005	0.00059	0.1	No	22	0.001575	86.36	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-7	0.005	0.0021	0.1	No	23	0.01408	69.57	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-8	0.005	0.0015	0.1	No	22	0.001635	81.82	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-9	0.005	0.0013	0.1	No	22	0.001625	81.82	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-19	0.005	0.00059	0.1	No	13	0.002083	53.85	None	No	0.01	NP (NDs)

Confidence Intervals Summary Table - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 10/25/2023, 2:35 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chromium (mg/L)	MW-20	0.005	0.00068	0.1	No	13	0.001915	76.92	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-24D	0.005	0.0017	0.1	No	13	0.001502	84.62	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-25D	0.005	0.0012	0.1	No	13	0.001543	84.62	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-26D	0.005	0.001	0.1	No	13	0.001878	61.54	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-27D	0.005	0.00082	0.1	No	13	0.001592	84.62	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-28D	0.005	0.00081	0.1	No	13	0.001991	53.85	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-29	0.005	0.001	0.1	No	13	0.001109	92.31	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-5	0.003816	0.002199	0.1	No	13	0.001087	0	None	No	0.01	Param.
Chromium (mg/L)	MW-6	0.005	0.00059	0.1	No	13	0.001849	76.92	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-7	0.0023	0.0015	0.1	No	13	0.001259	15.38	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-10	0.005	0.0012	0.038	No	22	0.001933	72.73	None	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-11	0.005	0.0014	0.038	No	22	0.001801	45.45	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-12	0.0017	0.0012	0.038	No	22	0.001094	9.091	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-13	0.0042	0.0026	0.038	No	22	0.003718	4.545	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-7	0.001586	0.0007039	0.038	No	23	0.001483	13.04	None	ln(x)	0.01	Param.
Cobalt (mg/L)	HGWC-8	0.0023	0.0019	0.038	No	22	0.003091	9.091	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-9	0.0007	0.00053	0.038	No	22	0.00131	9.091	None	No	0.01	NP (normality)
Cobalt (mg/L)	MW-19	0.04072	0.02913	0.038	No	13	0.007794	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-20	0.005	0.0011	0.038	No	13	0.001082	92.31	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-24D	0.005	0.00056	0.038	No	13	0.001921	76.92	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-26D	0.005	0.00044	0.038	No	13	0.002295	38.46	None	No	0.01	NP (normality)
Cobalt (mg/L)	MW-27D	0.005	0.0004	0.038	No	13	0.002057	76.92	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-28D	0.005	0.00093	0.038	No	13	0.001129	92.31	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-29	0.001421	0.0007121	0.038	No	13	0.0005295	7.692	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	MW-6	0.00094	0.00041	0.038	No	13	0.001694	15.38	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	HGWC-10	1.056	0.6144	5	No	24	0.4326	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-11	1.106	0.6289	5	No	24	0.4677	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-12	1.009	0.5651	5	No	24	0.4347	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-13	0.9631	0.5954	5	No	24	0.3603	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-7	0.8357	0.428	5	No	25	0.4663	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-8	0.9454	0.6612	5	No	24	0.2785	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-9	0.8903	0.543	5	No	24	0.3403	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-19	0.9195	0.413	5	No	13	0.3406	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-20	0.9599	0.396	5	No	13	0.3792	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-24D	0.5693	0.1574	5	No	13	0.3358	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-25D	1.252	0.8297	5	No	13	0.2841	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-26D	0.8929	0.1581	5	No	13	0.4941	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-27D	1.479	0.7939	5	No	13	0.51	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-28D	1.616	0.6323	5	No	13	0.6615	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-29	0.8957	0.3631	5	No	13	0.3582	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-5	0.9444	0.5523	5	No	13	0.2637	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-6	0.872	0.493	5	No	13	0.4313	0	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	MW-7	1.127	0.4685	5	No	13	0.4429	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-10	0.1782	0.07724	4	No	25	0.1313	16	Kaplan-Meier	x^(1/3)	0.01	Param.
Fluoride (mg/L)	HGWC-11	0.3899	0.2407	4	No	25	0.1605	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	HGWC-12	0.31	0.17	4	No	25	0.2299	4	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-13	0.6761	0.4894	4	No	25	0.1872	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-7	0.15	0.083	4	No	27	0.1041	7.407	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-8	0.6099	0.4748	4	No	26	0.1673	0	None	ln(x)	0.01	Param.
Fluoride (mg/L)	HGWC-9	0.233	0.103	4	No	25	0.1473	8	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	MW-19	0.2368	0.108	4	No	13	0.1242	0	None	ln(x)	0.01	Param.
Fluoride (mg/L)	MW-20	0.1	0.074	4	No	13	0.01084	76.92	None	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-24D	0.09377	0.05216	4	No	13	0.03452	30.77	Kaplan-Meier	sqrt(x)	0.01	Param.
Fluoride (mg/L)	MW-25D	1.7	1.5	4	No	13	0.1951	0	None	No	0.01	NP (normality)
Fluoride (mg/L)	MW-26D	0.1221	0.05944	4	No	13	0.04213	7.692	None	No	0.01	Param.
Fluoride (mg/L)	MW-27D	0.3	0.24	4	No	13	0.05003	0	None	No	0.01	NP (normality)
Fluoride (mg/L)	MW-28D	0.2443	0.1696	4	No	13	0.05023	0	None	No	0.01	Param.
Fluoride (mg/L)	MW-29	0.18	0.068	4	No	13	0.03156	61.54	None	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-5	0.08458	0.05951	4	No	13	0.01921	15.38	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	MW-6	0.15	0.055	4	No	13	0.0496	15.38	None	No	0.01	NP (normality)
Fluoride (mg/L)	MW-7	0.17	0.069	4	No	13	0.02567	69.23	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-10	0.001	0.00005	0.015	No	20	0.0002124	95	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-11	0.001	0.0003	0.015	No	20	0.0003911	70	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-12	0.001	0.00043	0.015	No	20	0.0003856	75	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-13	0.001	0.00015	0.015	No	20	0.0004088	70	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-7	0.001	0.0001	0.015	No	21	0.0004263	57.14	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-8	0.001	0.0002	0.015	No	20	0.000357	80	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-9	0.001	0.0002	0.015	No	20	0.0004221	60	None	No	0.01	NP (NDs)

Confidence Intervals Summary Table - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 10/25/2023, 2:35 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lead (mg/L)	MW-19	0.001	0.000071	0.015	No	11	0.0004665	63.64	None	No	0.006	NP (NDs)
Lead (mg/L)	MW-20	0.001	0.0001	0.015	No	11	0.0004502	63.64	None	No	0.006	NP (NDs)
Lead (mg/L)	MW-24D	0.001	0.000042	0.015	No	11	0.0004763	54.55	None	No	0.006	NP (NDs)
Lead (mg/L)	MW-26D	0.001	0.0001	0.015	No	11	0.0003681	81.82	None	No	0.006	NP (NDs)
Lead (mg/L)	MW-27D	0.001	0.00043	0.015	No	11	0.0002989	81.82	None	No	0.006	NP (NDs)
Lead (mg/L)	MW-28D	0.001	0.00018	0.015	No	11	0.0003867	54.55	None	No	0.006	NP (NDs)
Lead (mg/L)	MW-29	0.001	0.00009	0.015	No	11	0.0004281	72.73	None	No	0.006	NP (NDs)
Lead (mg/L)	MW-5	0.001	0.001	0.015	No	11	0.0002873	90.91	None	No	0.006	NP (NDs)
Lead (mg/L)	MW-6	0.001	0.000084	0.015	No	11	0.0004433	63.64	None	No	0.006	NP (NDs)
Lead (mg/L)	MW-7	0.001	0.001	0.015	No	11	0.0002828	90.91	None	No	0.006	NP (NDs)
Lithium (mg/L)	HGWC-12	0.01036	0.007988	0.064	No	24	0.002326	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-13	0.03837	0.03131	0.064	No	24	0.006919	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-7	0.0026	0.0021	0.064	No	25	0.004541	4	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-8	0.0029	0.0025	0.064	No	24	0.004593	4.167	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-9	0.0044	0.004	0.064	No	24	0.004295	4.167	None	No	0.01	NP (normality)
Lithium (mg/L)	MW-19	0.01289	0.008115	0.064	No	13	0.003208	0	None	No	0.01	Param.
Lithium (mg/L)	MW-20	0.03	0.00082	0.064	No	13	0.01389	30.77	None	No	0.01	NP (normality)
Lithium (mg/L)	MW-24D	0.002867	0.002564	0.064	No	13	0.0002035	0	None	No	0.01	Param.
Lithium (mg/L)	MW-25D	0.04964	0.04206	0.064	No	13	0.005097	0	None	No	0.01	Param.
Lithium (mg/L)	MW-26D	0.0041	0.0031	0.064	No	13	0.007354	0	None	No	0.01	NP (normality)
Lithium (mg/L)	MW-27D	0.008425	0.006344	0.064	No	13	0.001399	0	None	No	0.01	Param.
Lithium (mg/L)	MW-28D	0.01331	0.007708	0.064	No	13	0.003765	0	None	No	0.01	Param.
Lithium (mg/L)	MW-29	0.002328	0.00201	0.064	No	13	0.0002136	0	None	No	0.01	Param.
Mercury (mg/L)	HGWC-10	0.0002	0.00005	0.002	No	16	0.0000375	93.75	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-11	0.0002	0.00005	0.002	No	16	0.0000375	93.75	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-13	0.0002	0.00005	0.002	No	16	0.00005297	87.5	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-9	0.0002	0.00004	0.002	No	16	0.00004	93.75	None	No	0.01	NP (NDs)
Mercury (mg/L)	MW-25D	0.0002	0.00013	0.002	No	7	0.00002646	85.71	None	No	0.008	NP (NDs)
Mercury (mg/L)	MW-29	0.0002	0.00017	0.002	No	7	0.00001134	85.71	None	No	0.008	NP (NDs)
Molybdenum (mg/L)	HGWC-10	0.01	0.0014	0.1	No	24	0.004388	58.33	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	HGWC-11	0.02588	0.01687	0.1	No	24	0.008837	0	None	No	0.01	Param.
Molybdenum (mg/L)	HGWC-12	0.04919	0.04574	0.1	No	24	0.003379	0	None	No	0.01	Param.
Molybdenum (mg/L)	HGWC-13	0.03496	0.0289	0.1	No	24	0.005941	0	None	No	0.01	Param.
Molybdenum (mg/L)	HGWC-7	0.04238	0.03571	0.1	No	26	0.006839	0	None	No	0.01	Param.
Molybdenum (mg/L)	**HGWC-8**	**0.4809**	**0.4128**	**0.1**	**Yes**	**25**	**0.0683**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	HGWC-9	0.033	0.0236	0.1	No	24	0.09178	0	None	No	0.01	NP (normality)
Molybdenum (mg/L)	MW-19	0.05113	0.02656	0.1	No	13	0.01652	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-24D	0.01	0.0008	0.1	No	13	0.004341	30.77	None	No	0.01	NP (normality)
Molybdenum (mg/L)	MW-25D	0.01	0.0022	0.1	No	13	0.003176	84.62	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-26D	0.02349	0.01194	0.1	No	14	0.008152	7.143	None	No	0.01	Param.
Molybdenum (mg/L)	MW-27D	0.003468	0.001448	0.1	No	13	0.001521	7.692	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	MW-28D	0.01874	0.006572	0.1	No	13	0.008179	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-29	0.00326	0.002525	0.1	No	13	0.0004941	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-6	0.00269	0.00231	0.1	No	13	0.000255	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-7	0.01	0.0014	0.1	No	13	0.004122	38.46	None	No	0.01	NP (normality)
Selenium (mg/L)	HGWC-10	0.005	0.0031	0.05	No	24	0.001249	66.67	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-11	0.01372	0.006577	0.05	No	24	0.007001	0	None	No	0.01	Param.
Selenium (mg/L)	HGWC-12	0.005	0.0011	0.05	No	24	0.0007961	95.83	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-13	0.005	0.0016	0.05	No	24	0.001179	91.67	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-8	0.005	0.0024	0.05	No	24	0.0005307	95.83	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-9	0.005	0.0037	0.05	No	24	0.0002654	95.83	None	No	0.01	NP (NDs)
Selenium (mg/L)	MW-19	0.004794	0.002441	0.05	No	13	0.001637	15.38	Kaplan-Meier	No	0.01	Param.
Selenium (mg/L)	MW-27D	0.005	0.00012	0.05	No	13	0.001353	92.31	Kaplan-Meier	No	0.01	NP (NDs)
Selenium (mg/L)	MW-5	0.003635	0.002381	0.05	No	13	0.0008431	0	None	No	0.01	Param.
Selenium (mg/L)	MW-7	0.005	0.0015	0.05	No	13	0.001707	53.85	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-11	0.001	0.00008	0.002	No	24	0.0002597	91.67	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-12	0.001	0.0002	0.002	No	24	0.000397	75	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-13	0.0004223	0.0003342	0.002	No	24	0.00008631	8.333	None	No	0.01	Param.
Thallium (mg/L)	HGWC-8	0.001	0.00011	0.002	No	24	0.0004205	70.83	None	No	0.01	NP (NDs)
Thallium (mg/L)	MW-19	0.001	0.00023	0.002	No	13	0.0003787	38.46	None	No	0.01	NP (normality)
Thallium (mg/L)	MW-28D	0.001	0.000092	0.002	No	13	0.0002518	92.31	None	No	0.01	NP (NDs)
Thallium (mg/L)	MW-29	0.001	0.000064	0.002	No	13	0.0002596	92.31	None	No	0.01	NP (NDs)
Thallium (mg/L)	MW-6	0.001	0.000082	0.002	No	13	0.0002546	92.31	None	No	0.01	NP (NDs)

Appendix IV Trend Tests - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 10/25/2023, 2:37 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Arsenic (mg/L)	**HGWC-13**	**0.01769**	**108**	**81**	**Yes**	**24**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Molybdenum (mg/L)	**HGWA-43D (bg)**	**-0.0009202**	**-30**	**-27**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Molybdenum (mg/L)	**HGWC-8**	**-0.01769**	**-118**	**-85**	**Yes**	**25**	**0**	**n/a**	**n/a**	**0.05**	**NP**

Appendix IV Trend Tests - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 10/25/2023, 2:37 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Arsenic (mg/L)	HGWA-1 (bg)	0	-8	-81	No	24	87.5	n/a	n/a	0.05	NP
Arsenic (mg/L)	HGWA-2 (bg)	0	43	81	No	24	62.5	n/a	n/a	0.05	NP
Arsenic (mg/L)	HGWA-3 (bg)	0	31	81	No	24	62.5	n/a	n/a	0.05	NP
Arsenic (mg/L)	HGWA-43D (bg)	0.0004771	11	27	No	11	45.45	n/a	n/a	0.05	NP
Arsenic (mg/L)	HGWA-44D (bg)	0	-7	-27	No	11	72.73	n/a	n/a	0.05	NP
Arsenic (mg/L)	**HGWC-13**	**0.01769**	**108**	**81**	**Yes**	**24**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Molybdenum (mg/L)	HGWA-1 (bg)	0	0	85	No	25	100	n/a	n/a	0.05	NP
Molybdenum (mg/L)	HGWA-2 (bg)	0	0	81	No	24	100	n/a	n/a	0.05	NP
Molybdenum (mg/L)	HGWA-3 (bg)	0	0	85	No	25	100	n/a	n/a	0.05	NP
Molybdenum (mg/L)	**HGWA-43D (bg)**	**-0.0009202**	**-30**	**-27**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Molybdenum (mg/L)	HGWA-44D (bg)	0.0001159	10	27	No	11	0	n/a	n/a	0.05	NP
Molybdenum (mg/L)	**HGWC-8**	**-0.01769**	**-118**	**-85**	**Yes**	**25**	**0**	**n/a**	**n/a**	**0.05**	**NP**

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FIGURE A.

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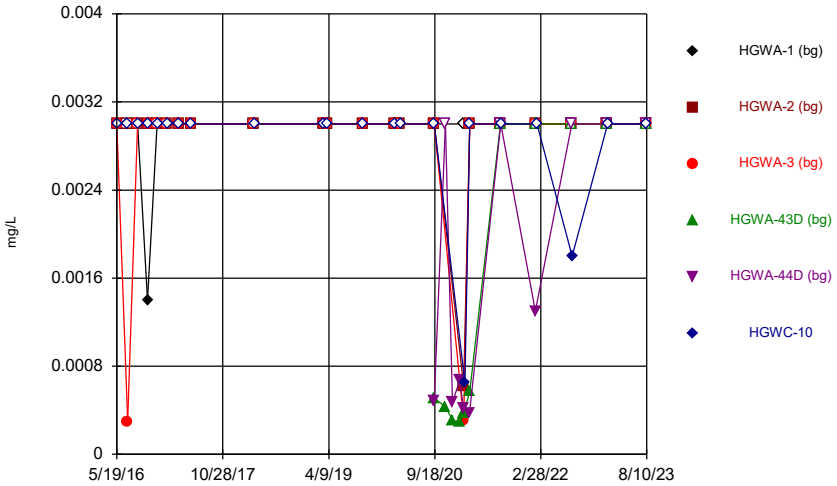
Hollow symbols indicate censored values.

Time Series



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Plant Hammond Client: Southern Company Data: Hammond AP-1

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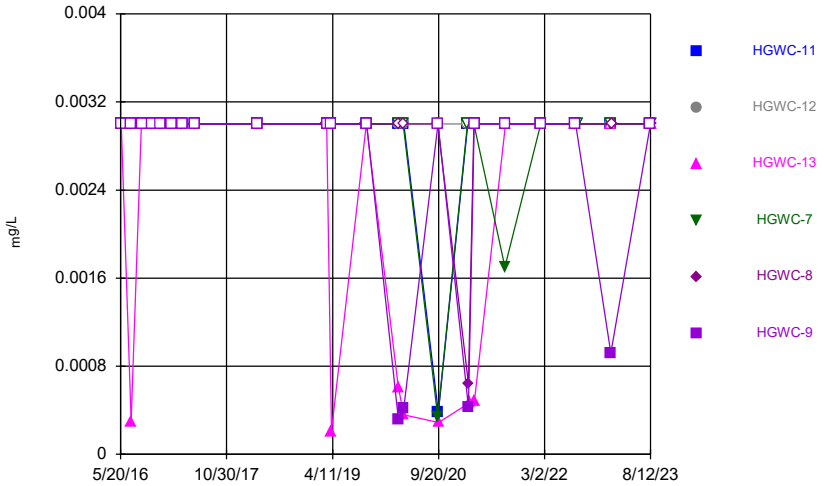

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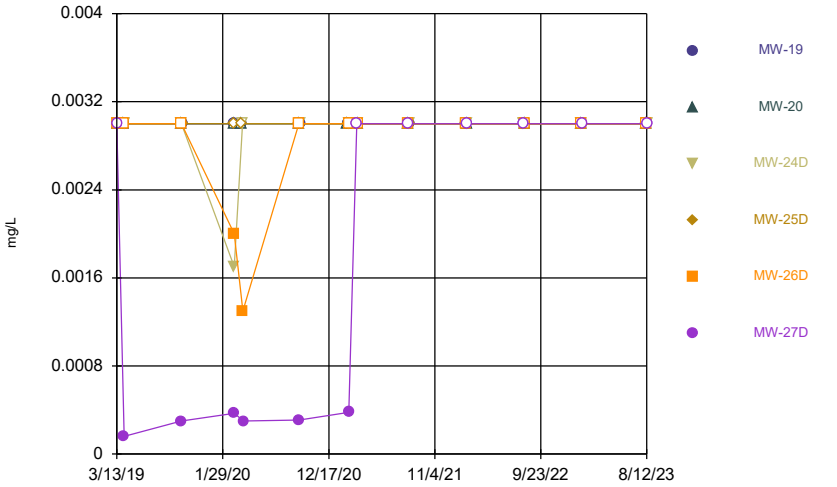

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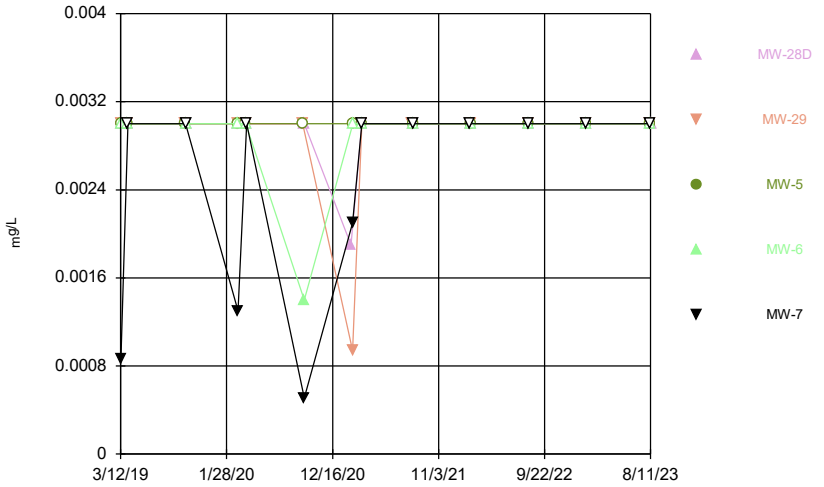

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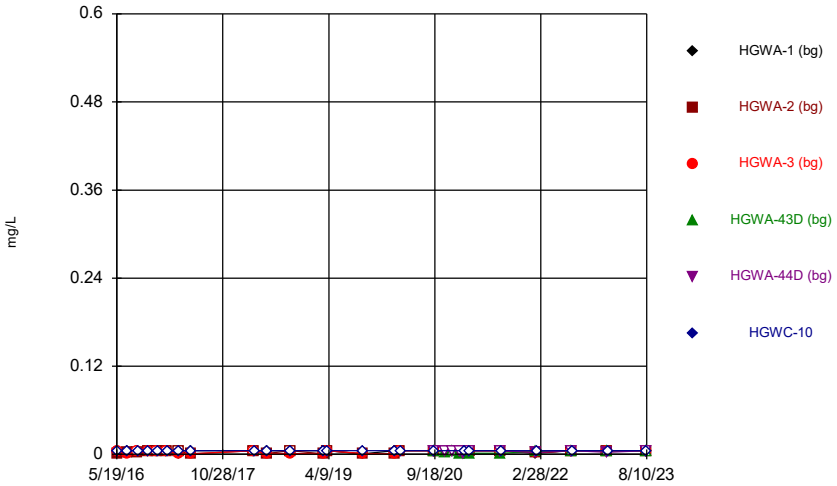

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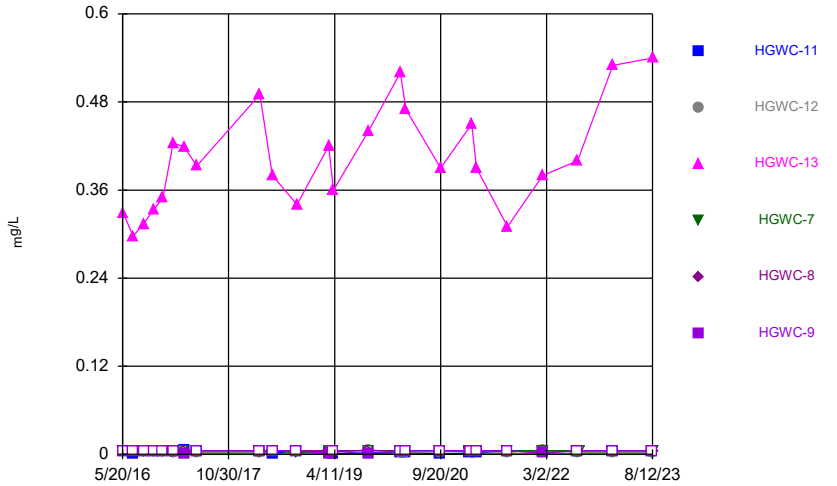

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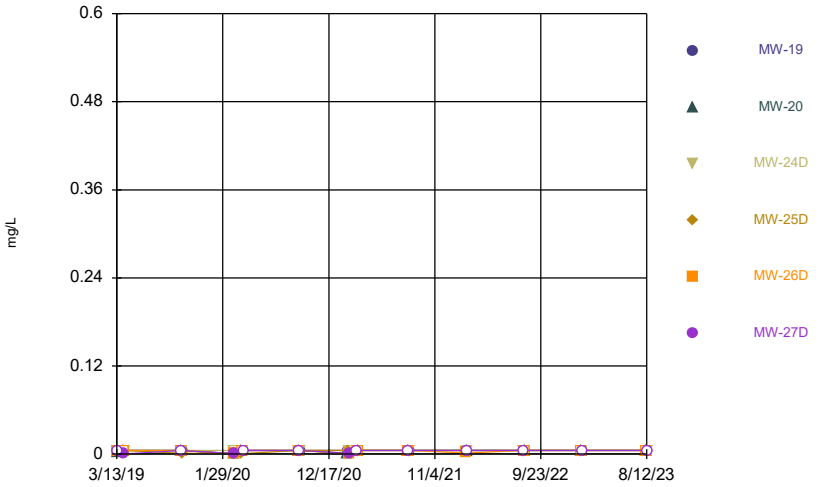

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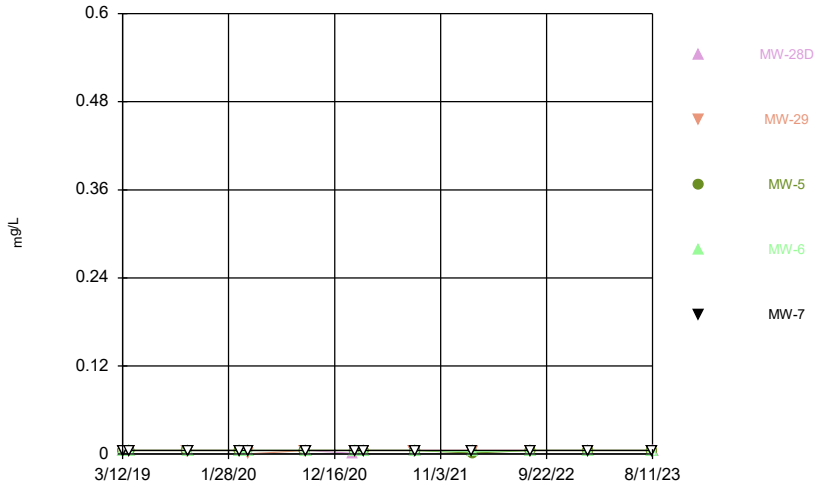

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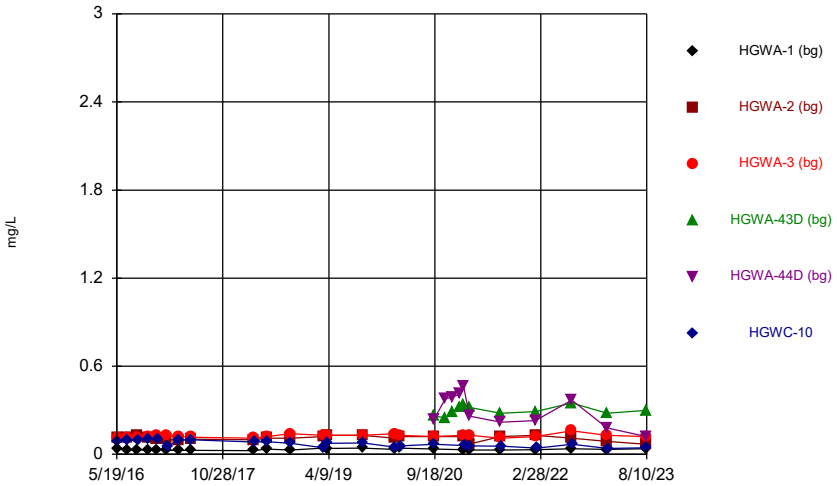

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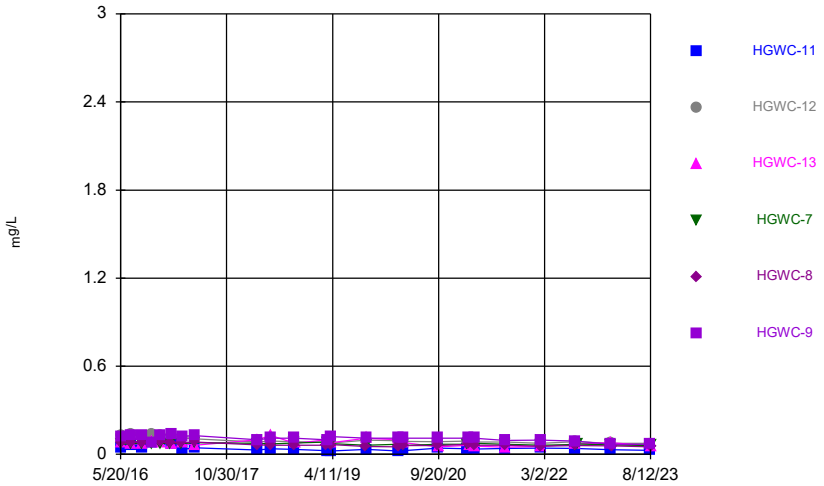

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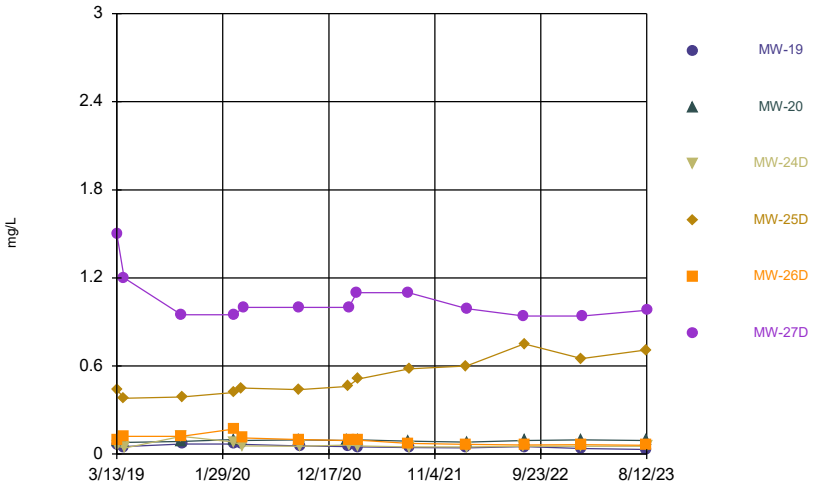

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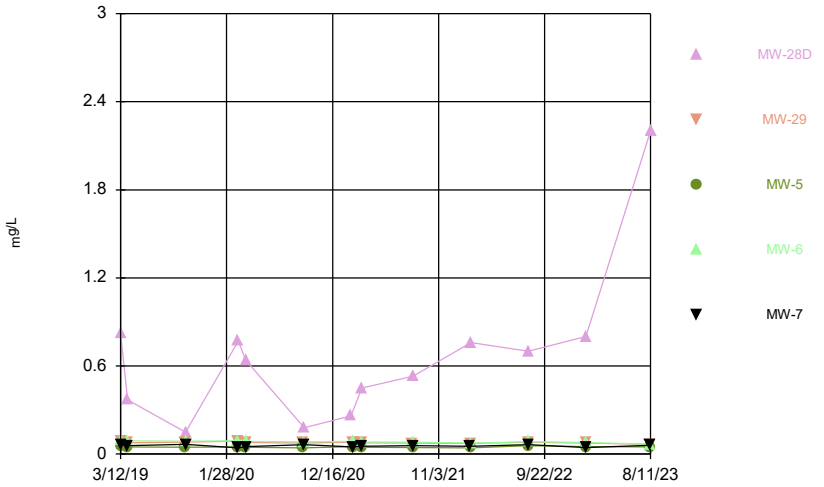

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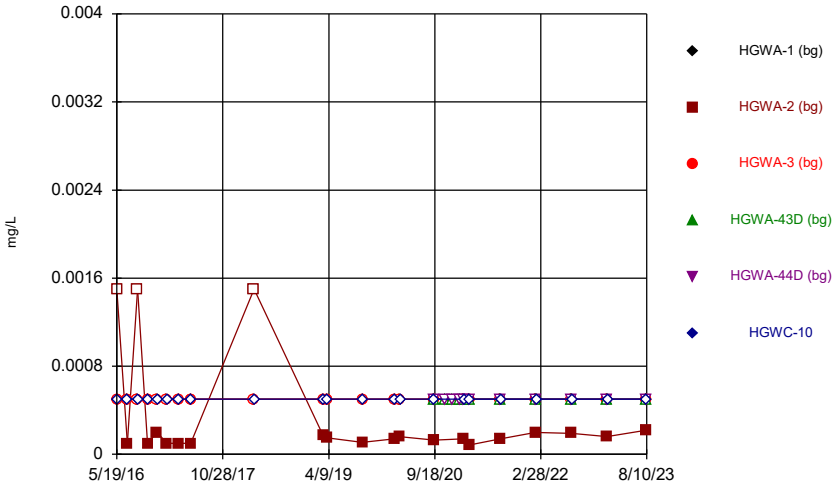

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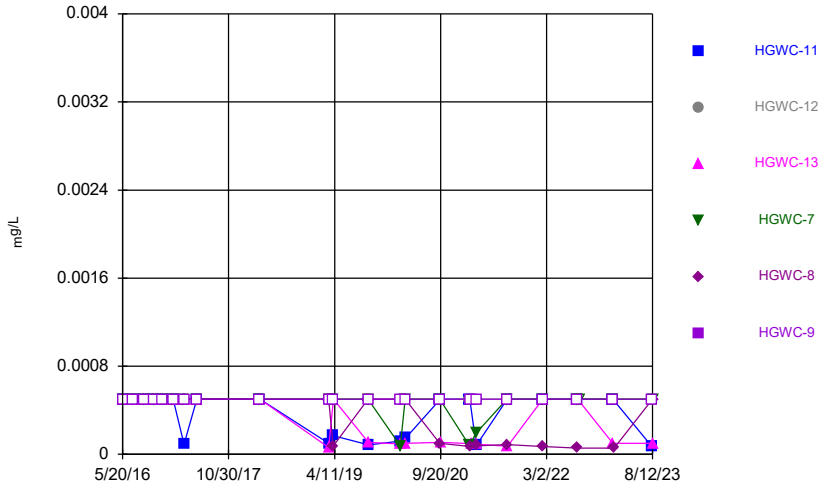

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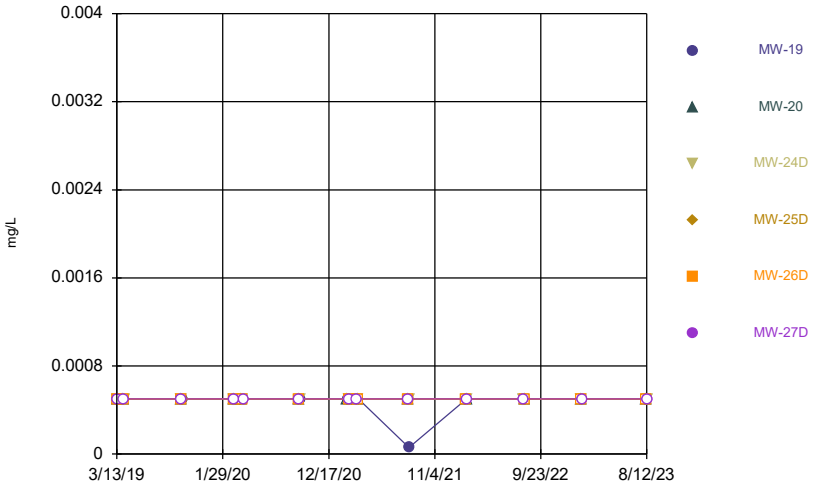

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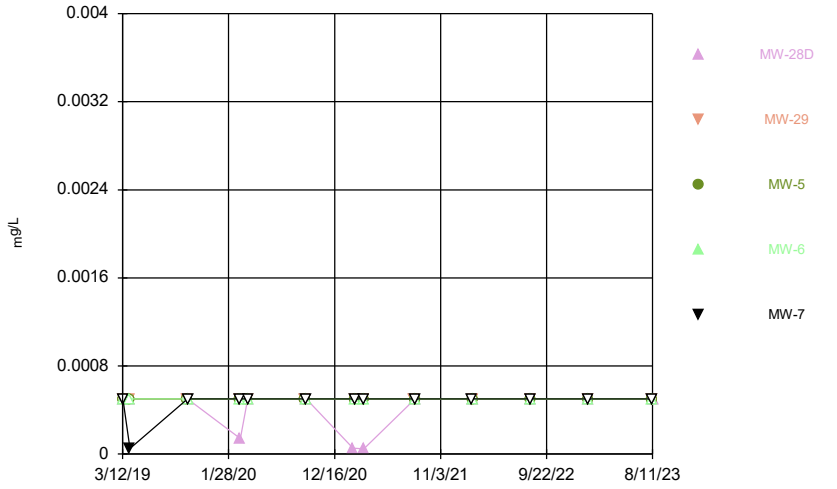

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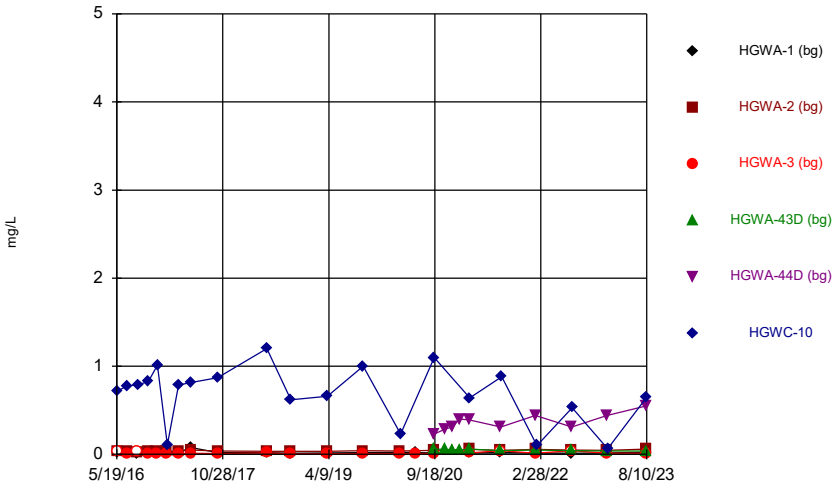

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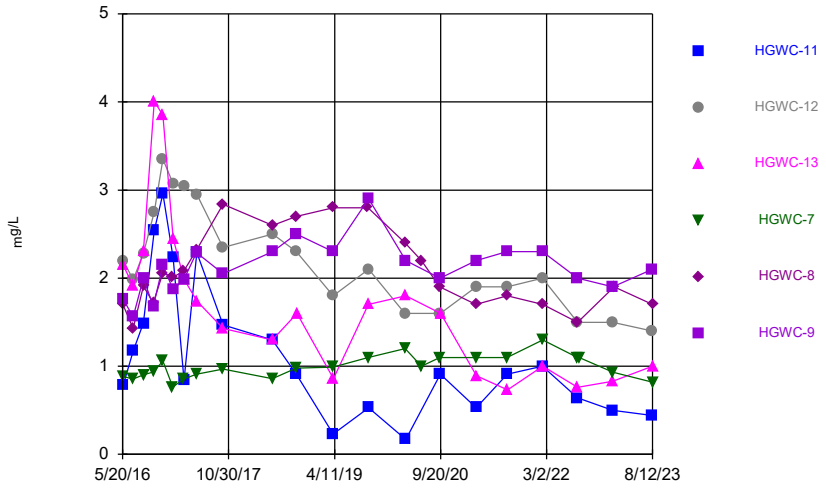

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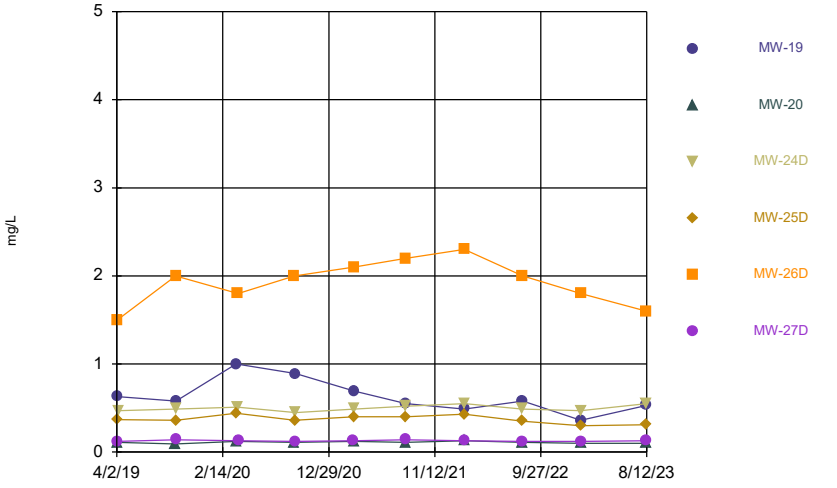

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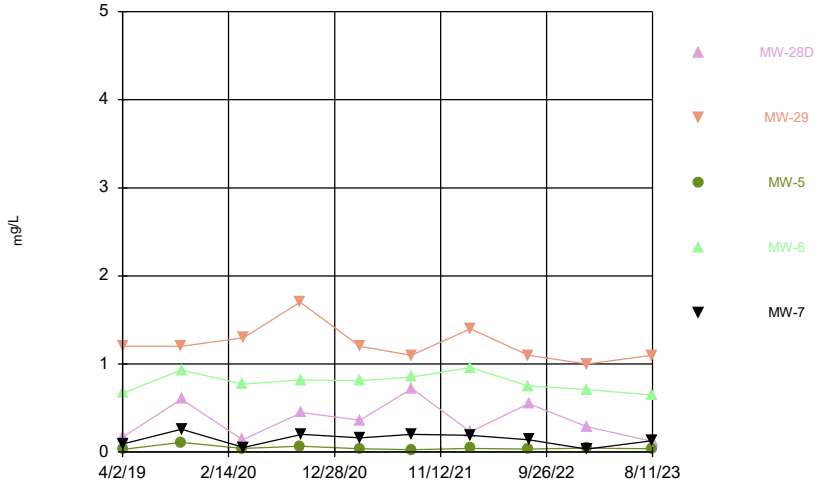

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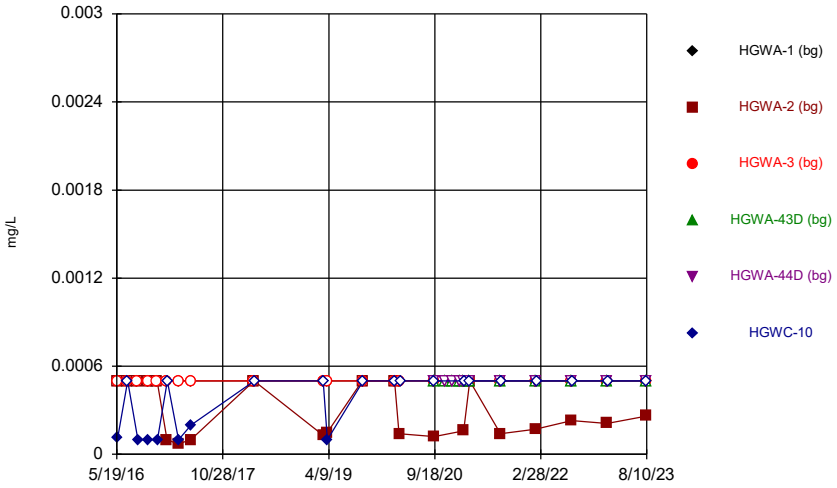

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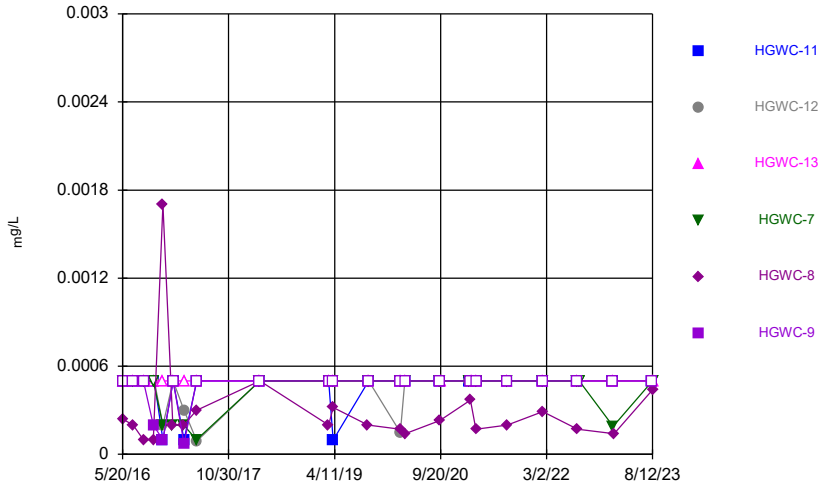

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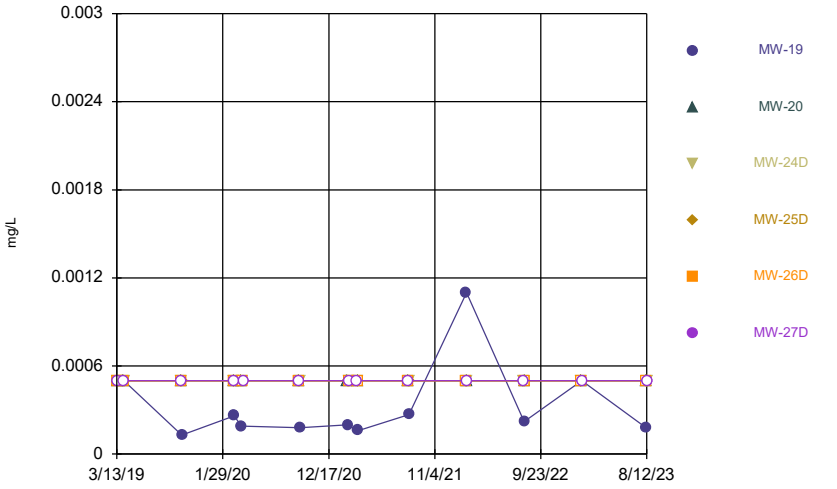

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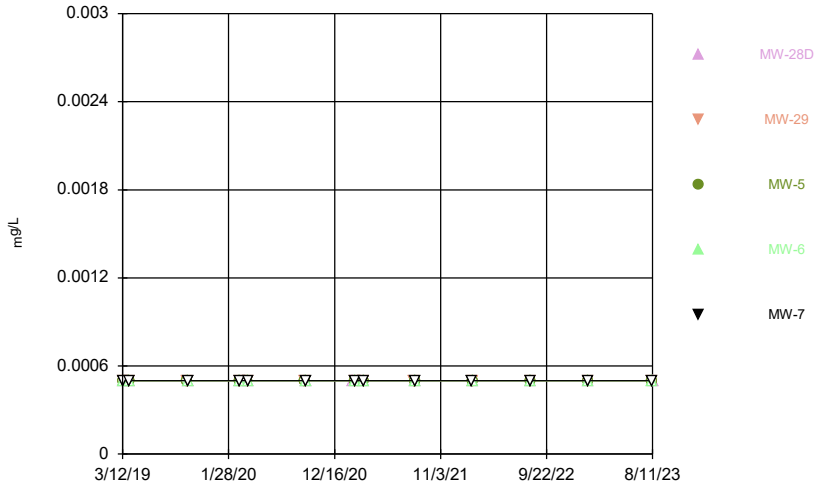

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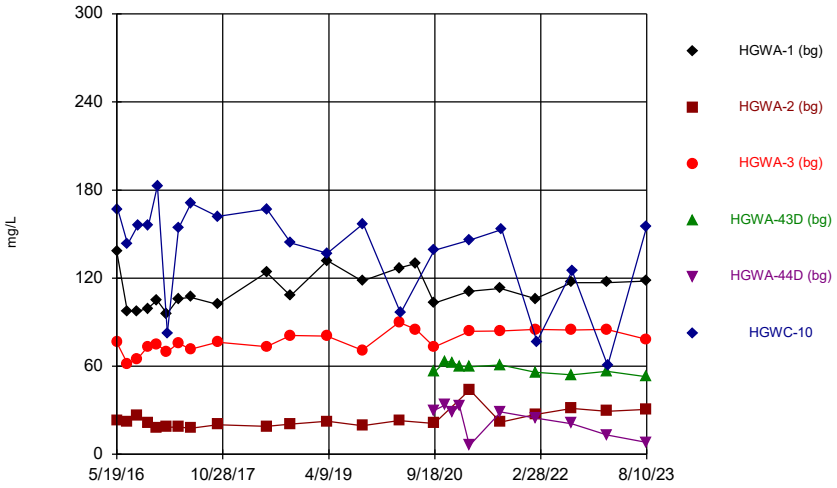

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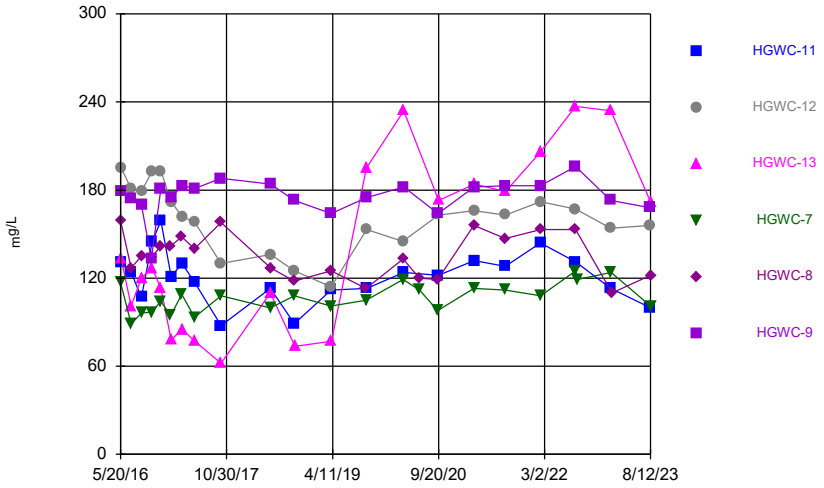

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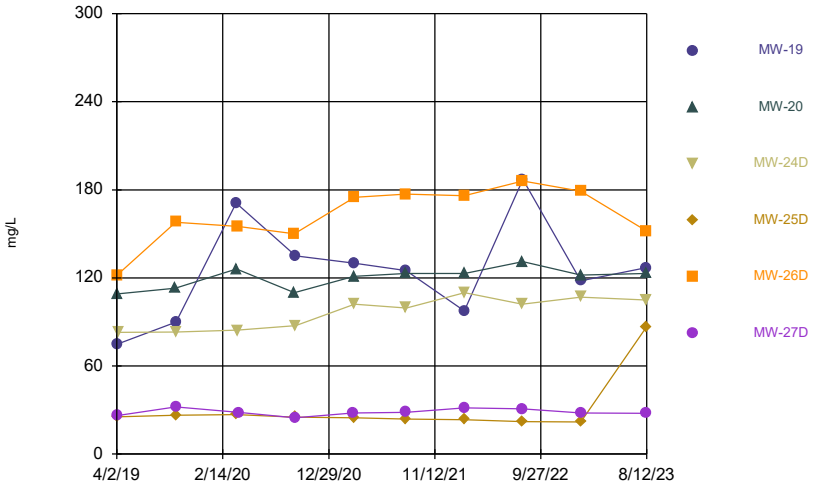

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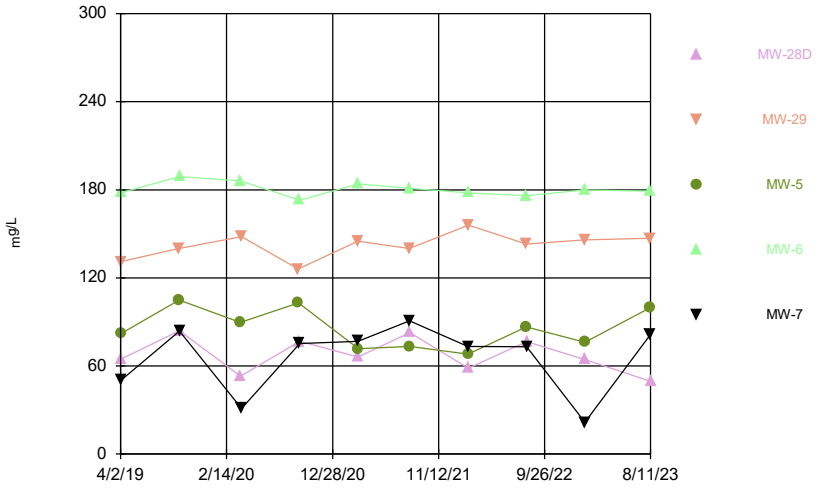

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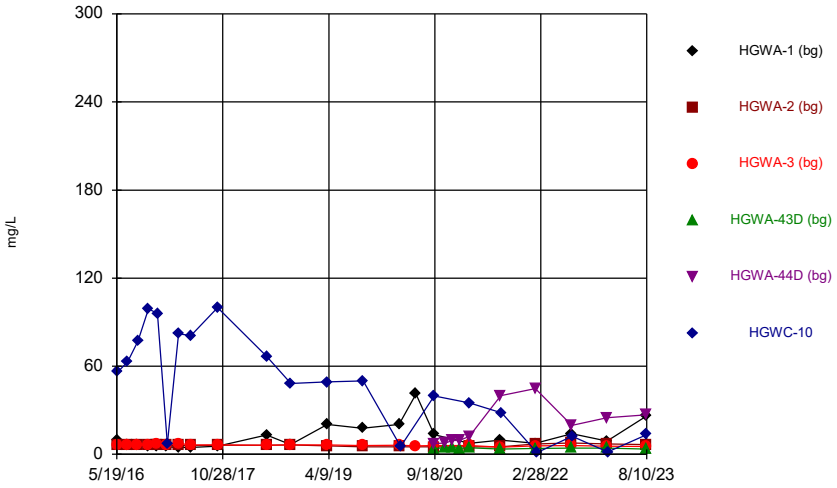

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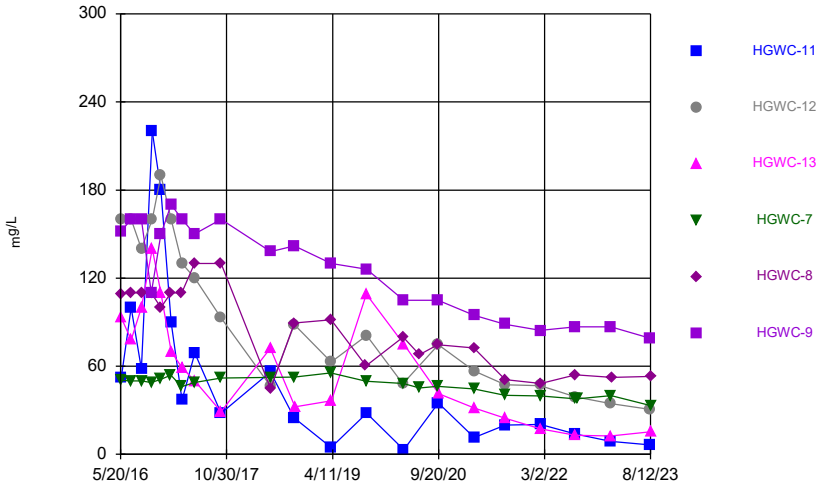

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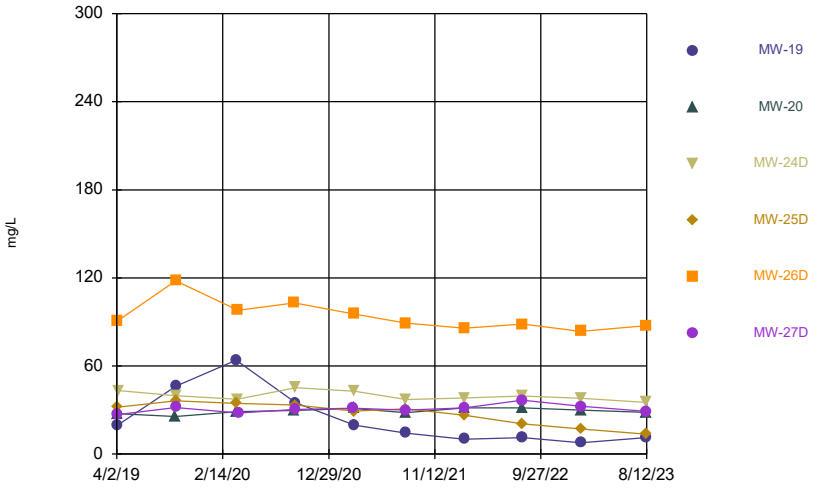

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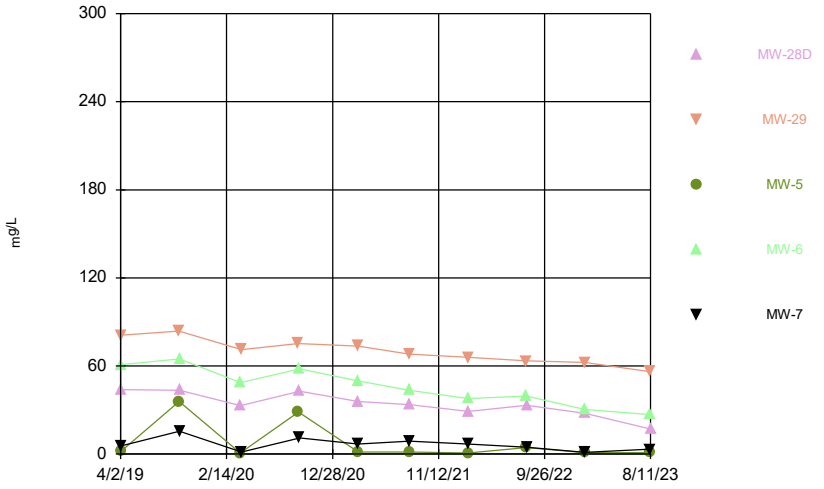
Sanitas™ v.10.0.13 . UG

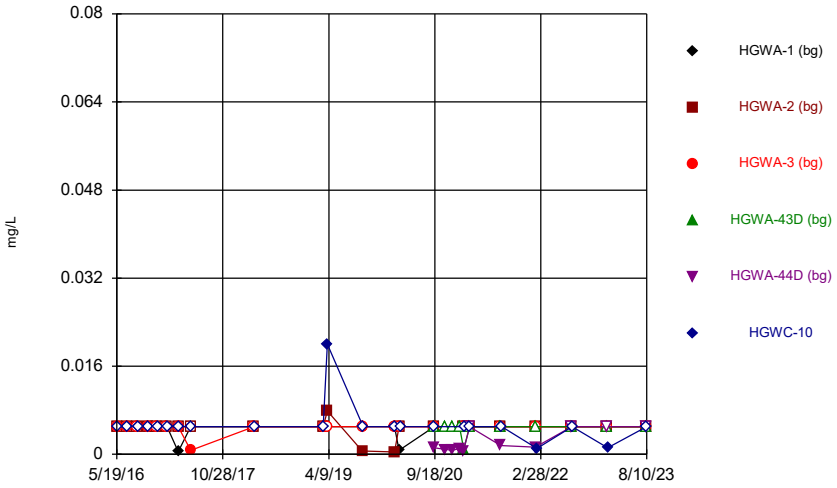
Time Series



Constituent: Chloride Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

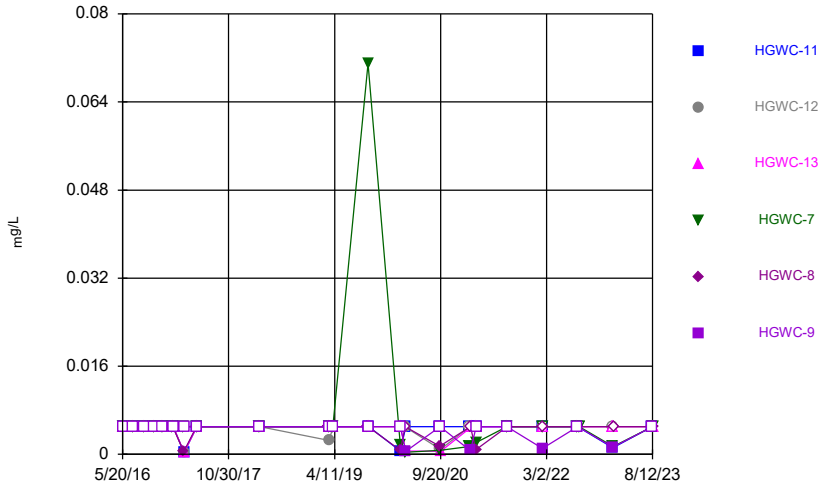
Time Series



Constituent: Chromium Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

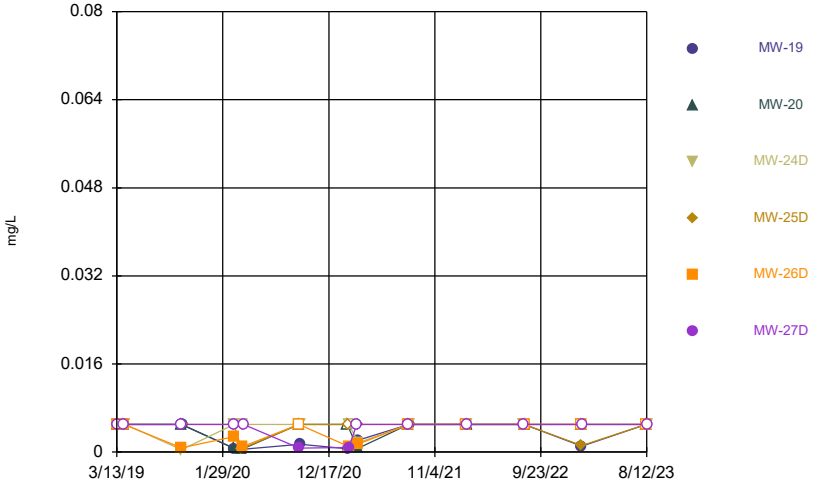
Time Series



Constituent: Chromium Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

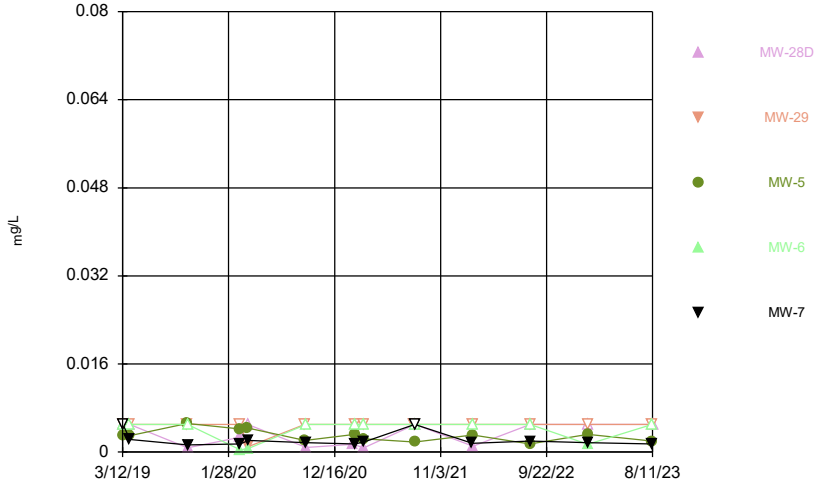
Time Series



Constituent: Chromium Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Time Series



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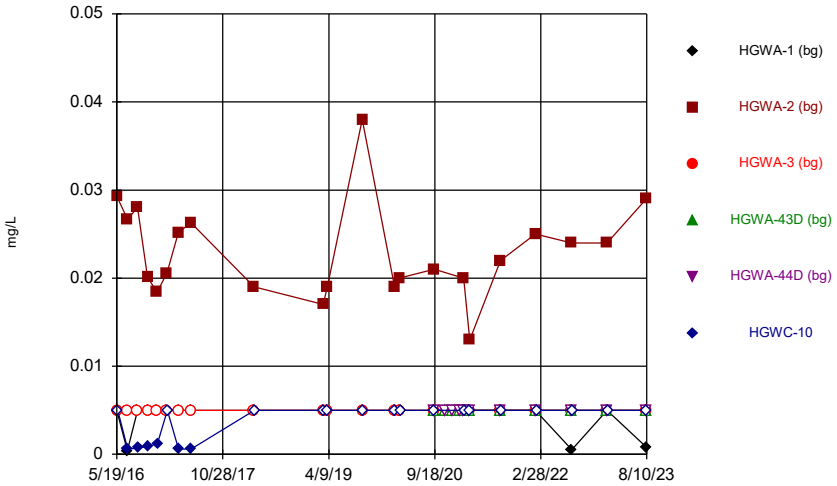
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

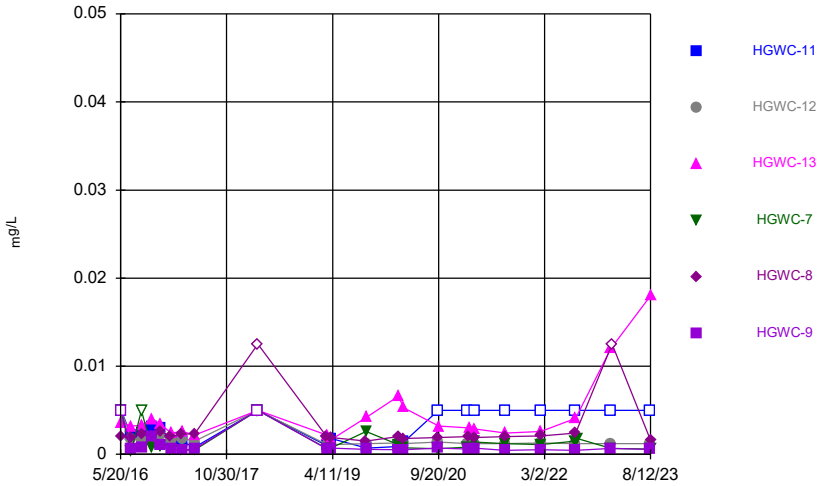
Time Series



Constituent: Cobalt Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

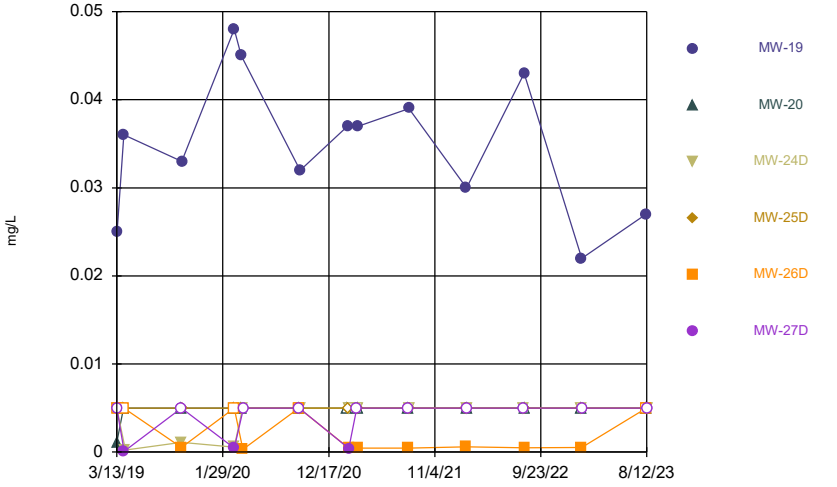
Time Series



Constituent: Cobalt Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

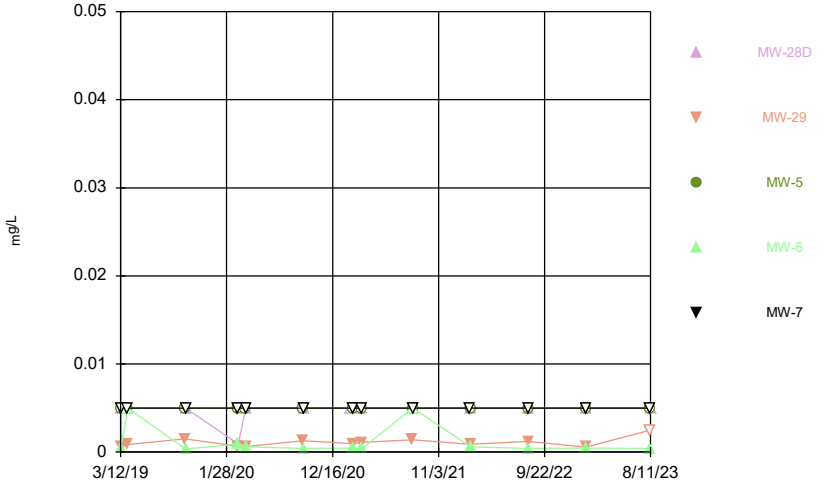
Time Series



Constituent: Cobalt Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

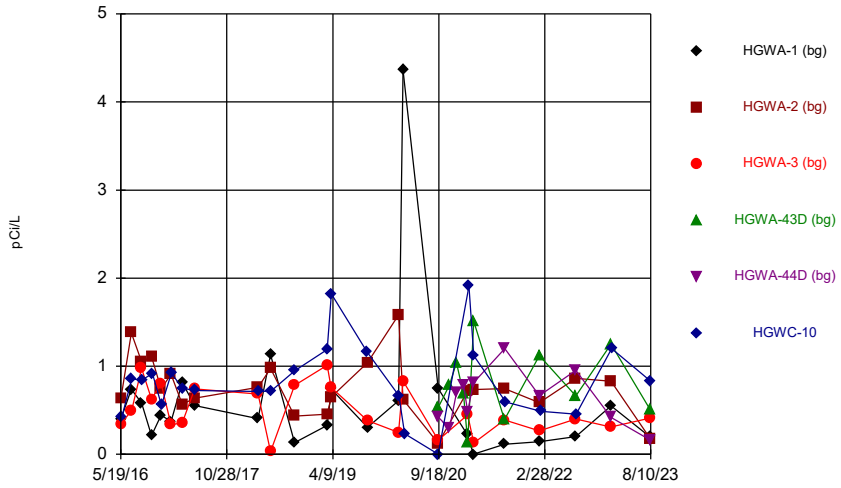
Time Series



Constituent: Cobalt Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

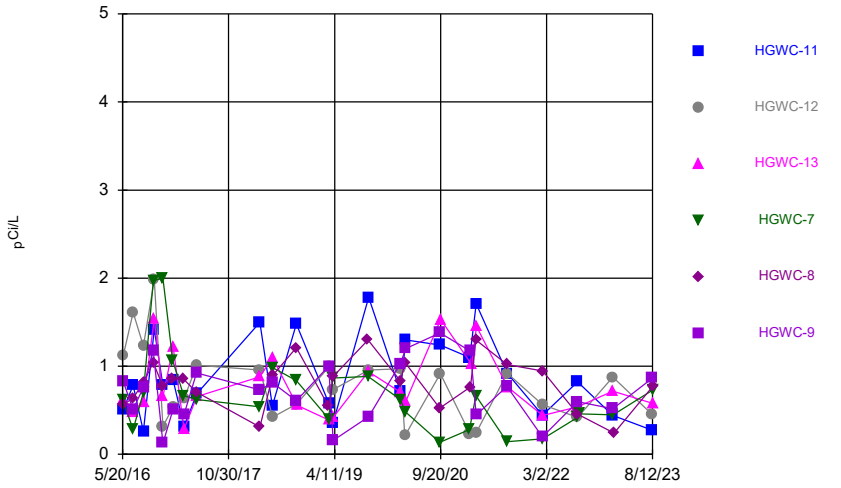
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

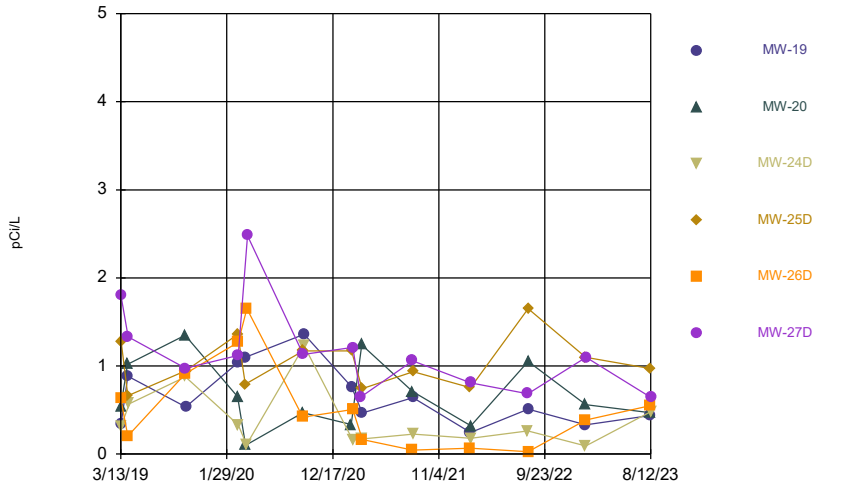
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

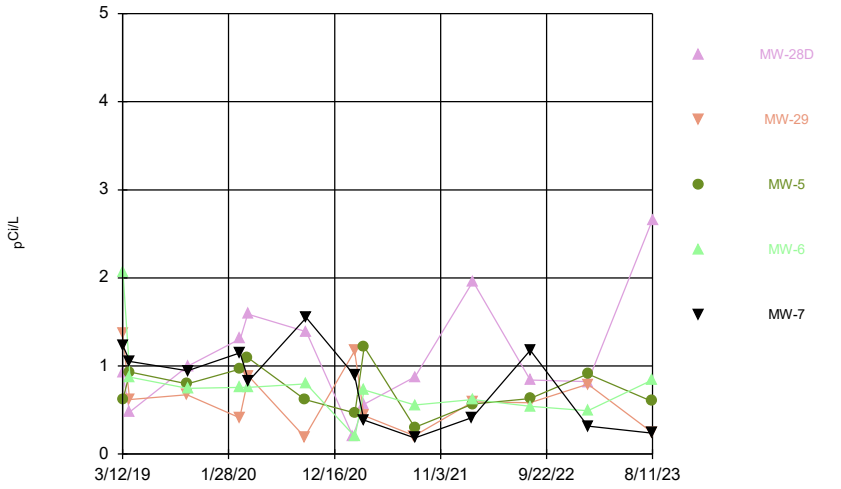
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

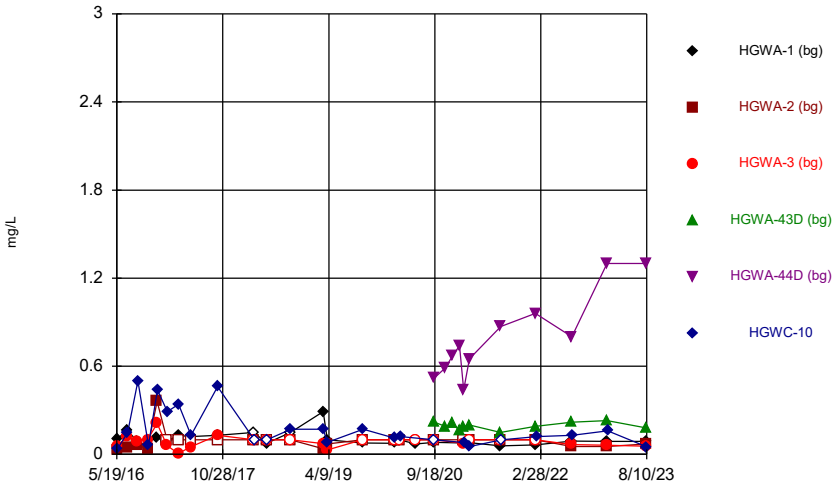
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

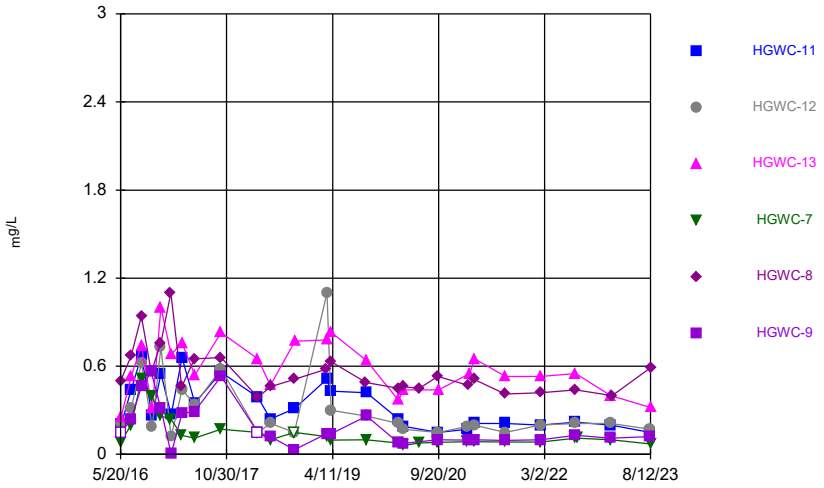
Time Series



Constituent: Fluoride Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

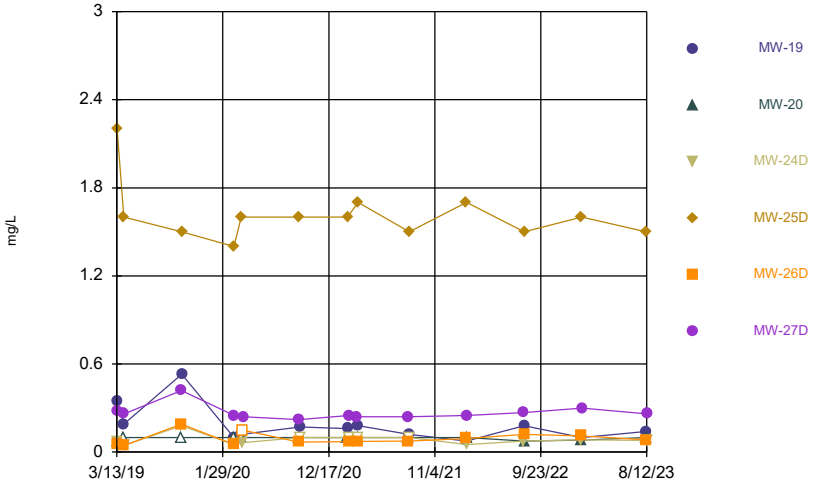
Time Series



Constituent: Fluoride Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

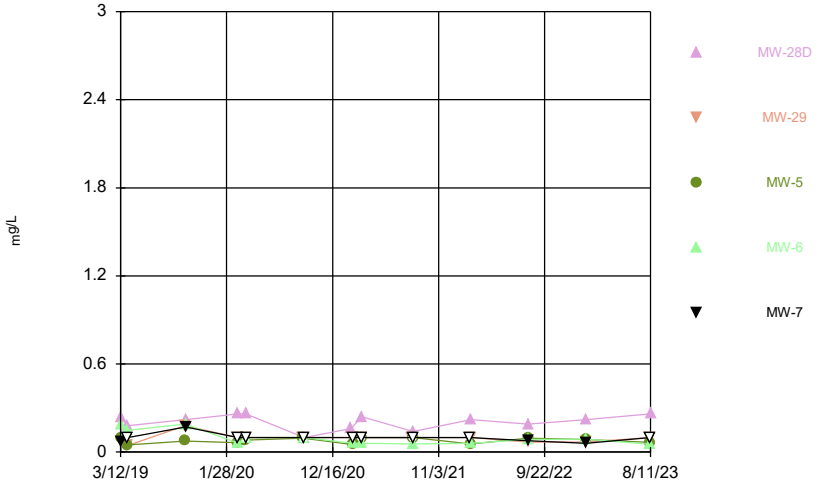
Time Series



Constituent: Fluoride Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

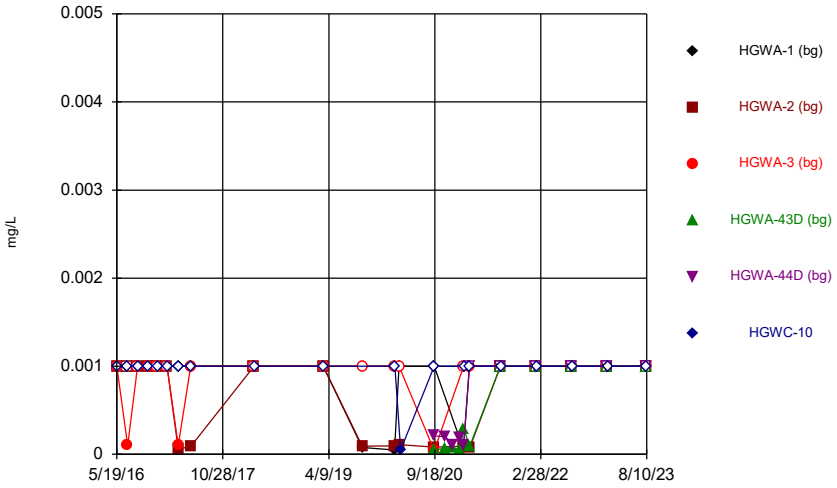
Time Series



Constituent: Fluoride Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

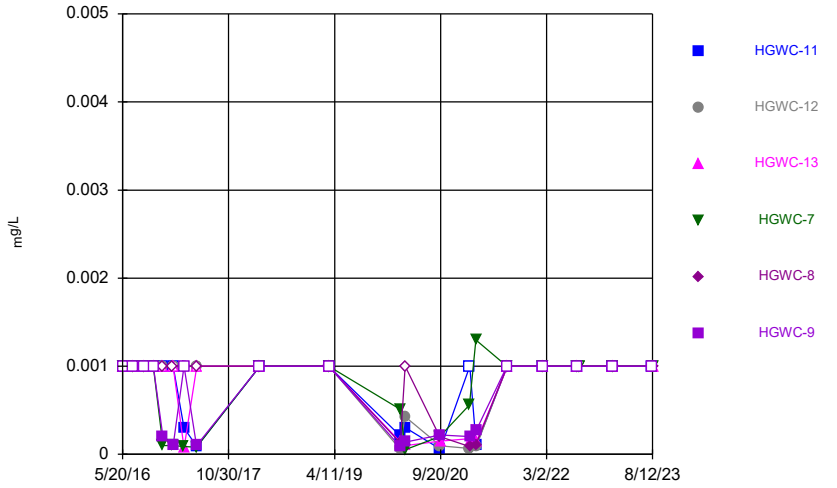
Time Series



Constituent: Lead Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

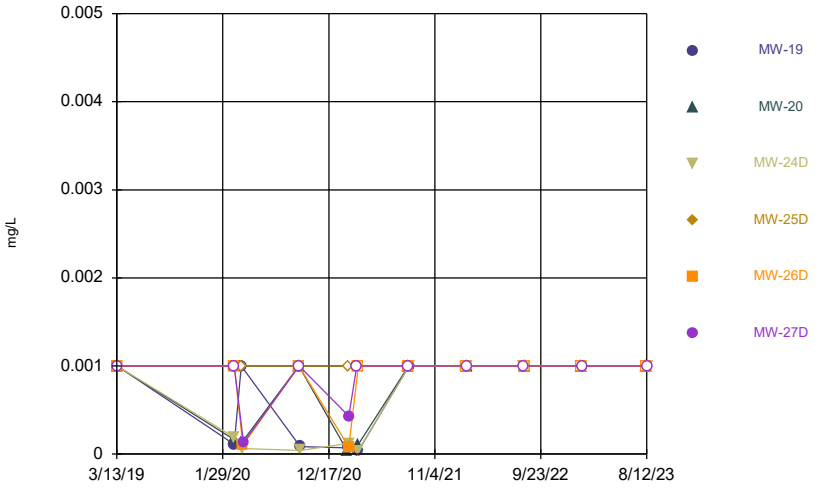
Time Series



Constituent: Lead Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

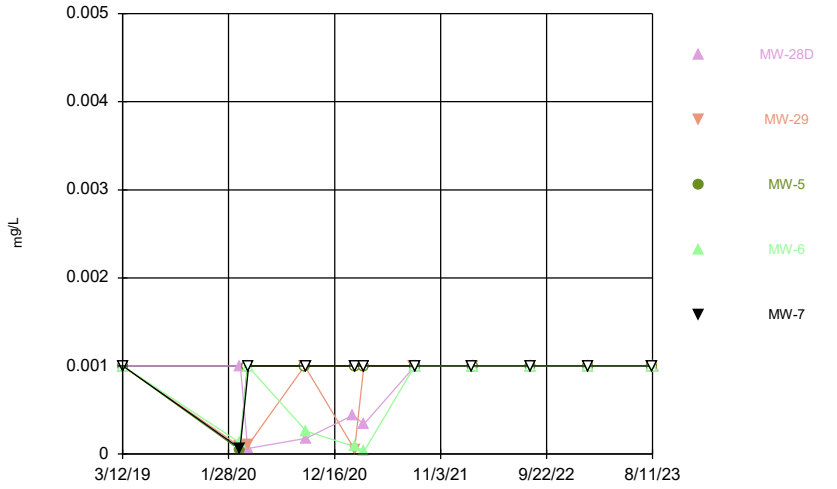
Time Series



Constituent: Lead Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

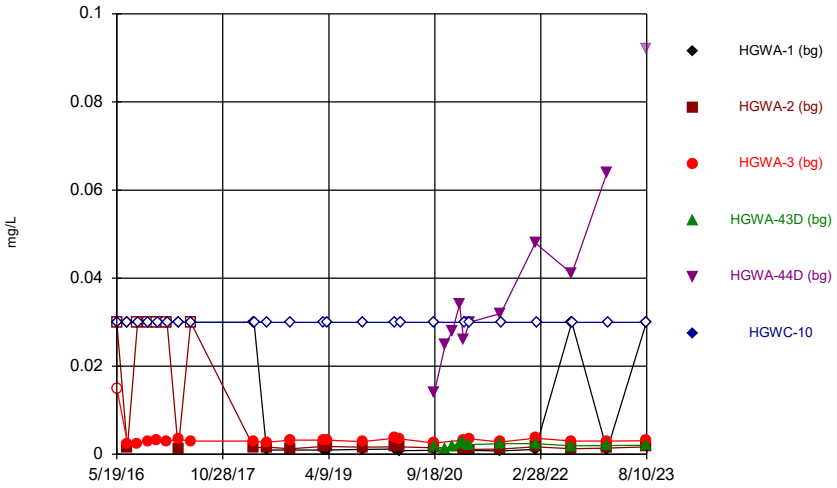
Time Series



Constituent: Lead Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

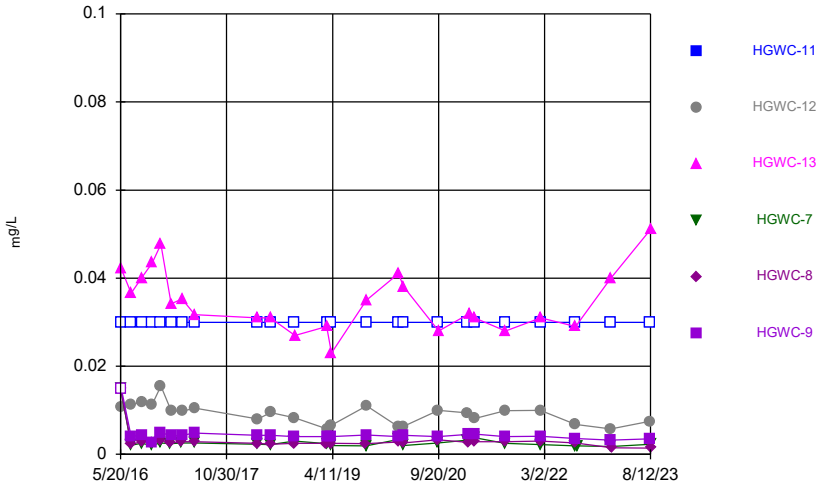
Time Series



Constituent: Lithium Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

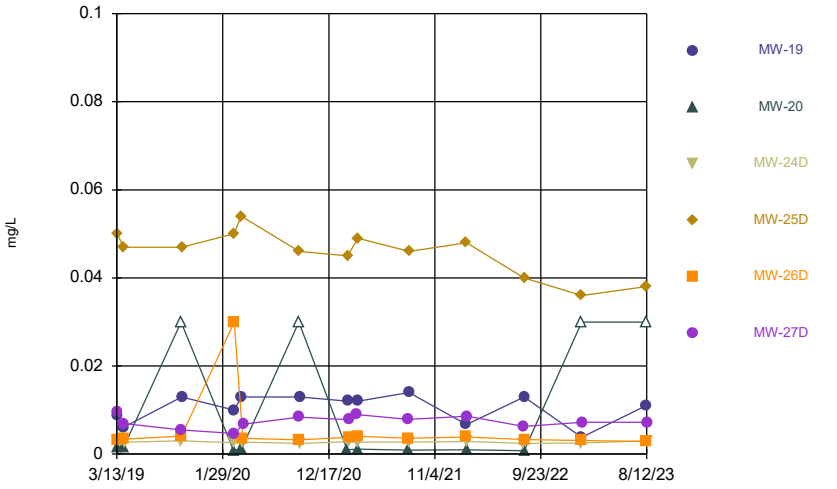
Time Series



Constituent: Lithium Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

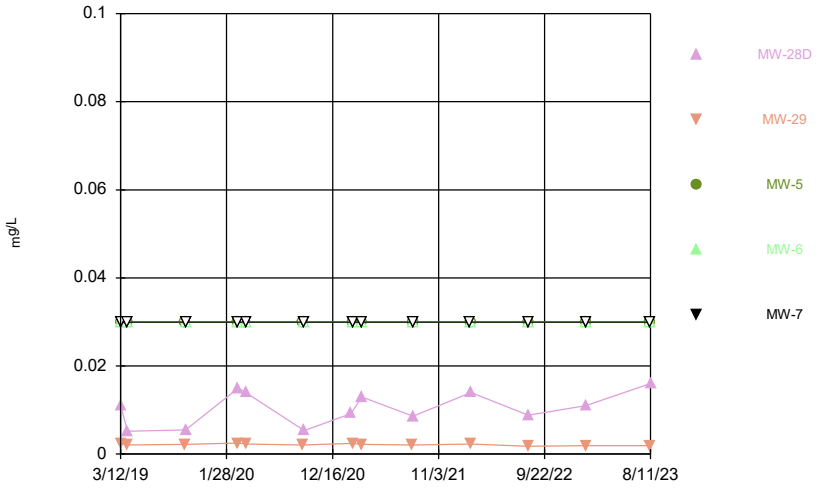
Time Series



Constituent: Lithium Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Time Series



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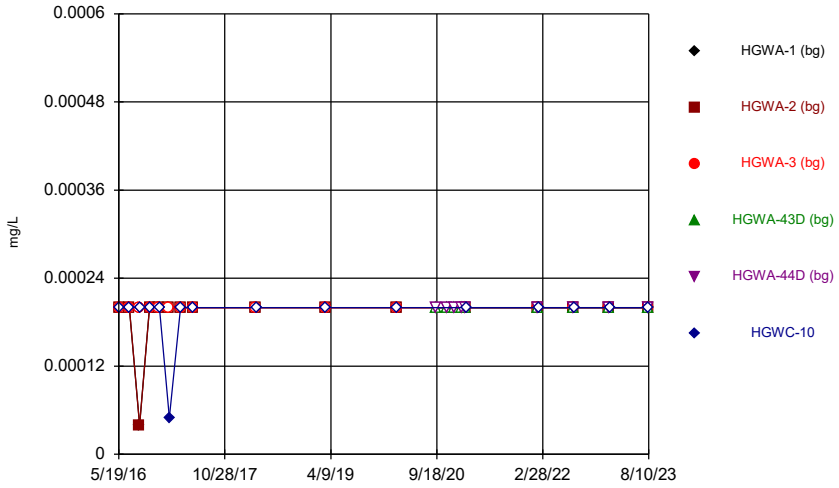
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

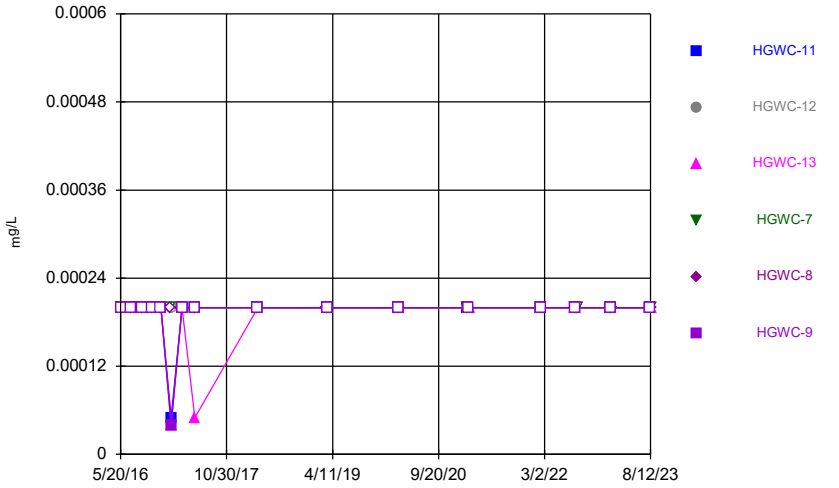
Time Series



Constituent: Mercury Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

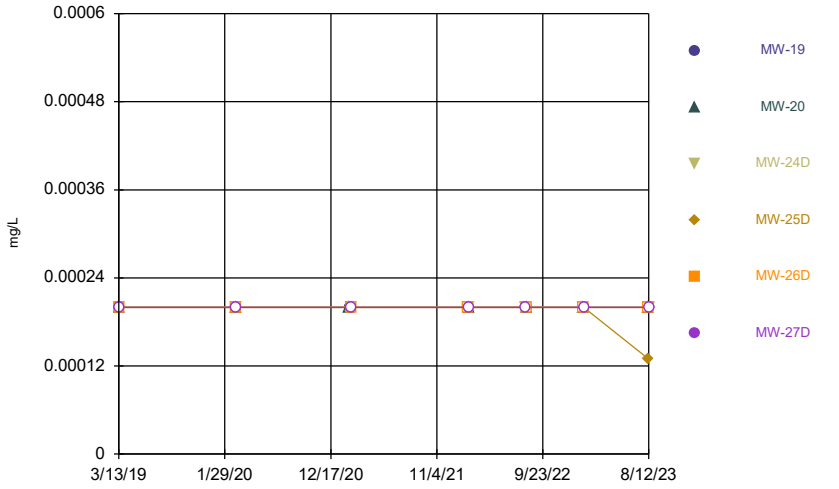
Time Series



Constituent: Mercury Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Time Series



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Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

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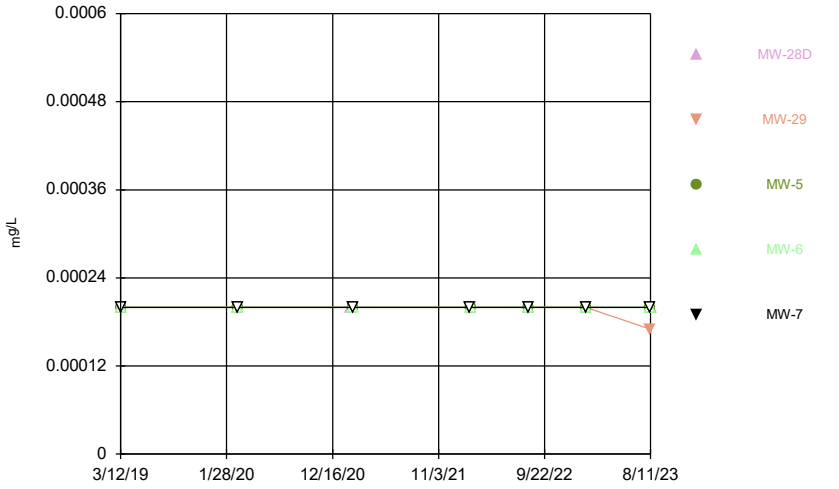

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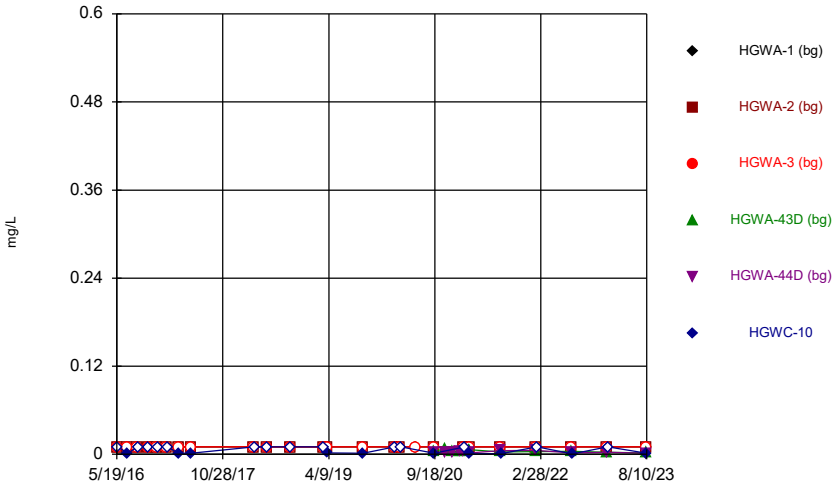
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

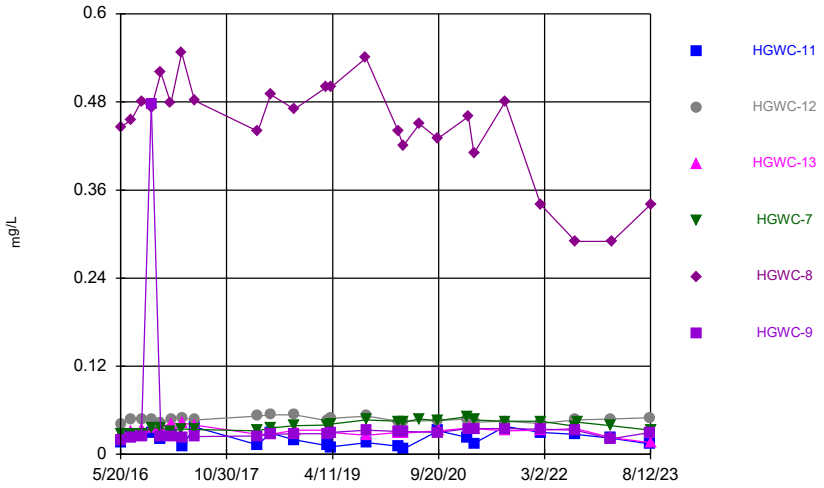
Time Series



Constituent: Molybdenum Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

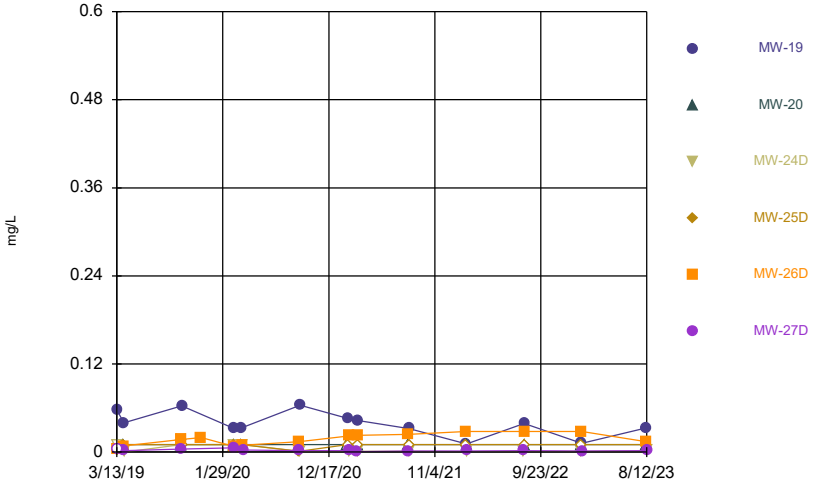
Time Series



Constituent: Molybdenum Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Time Series



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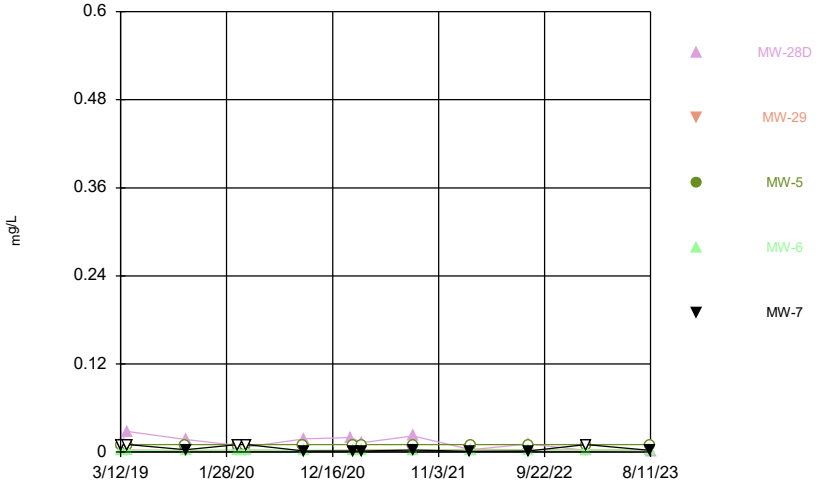
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Time Series



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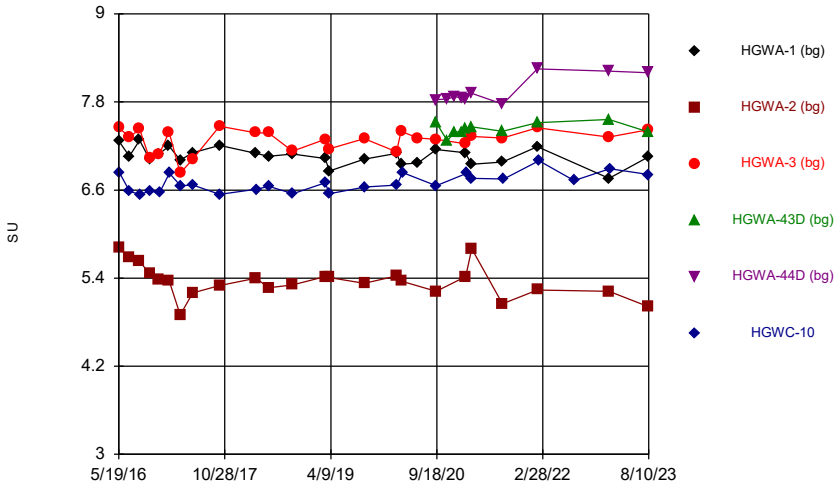
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

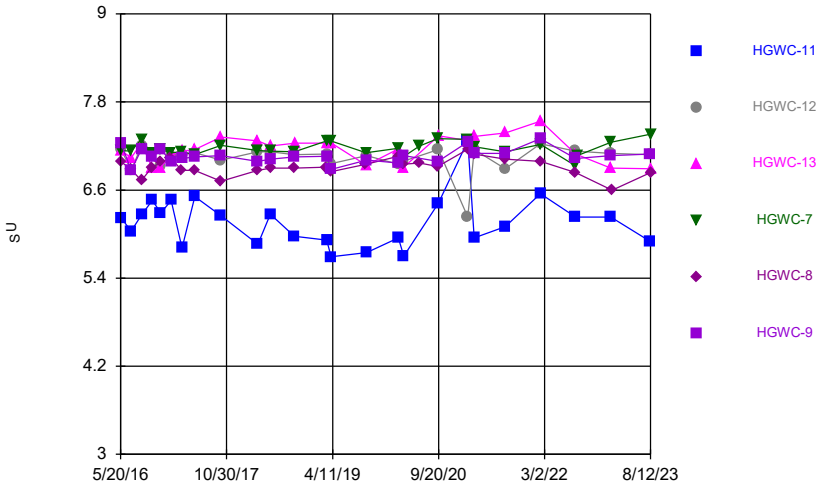
Time Series



Constituent: pH, Field Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

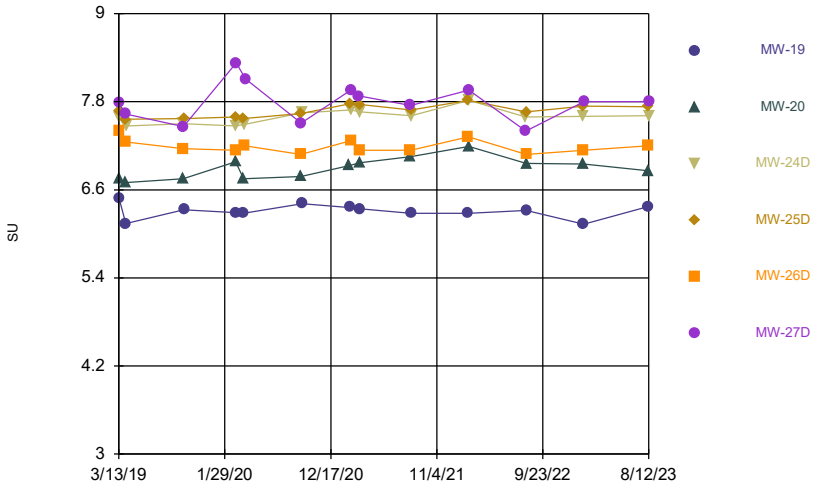
Time Series



Constituent: pH, Field Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

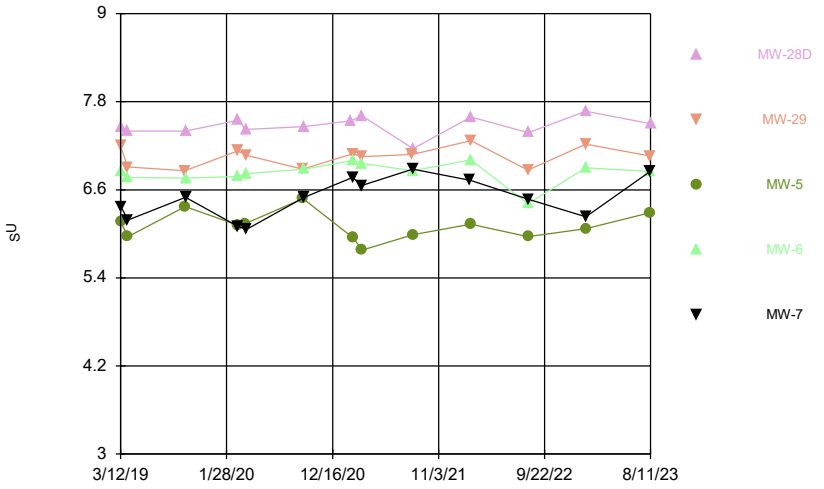
Time Series



Constituent: pH, Field Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

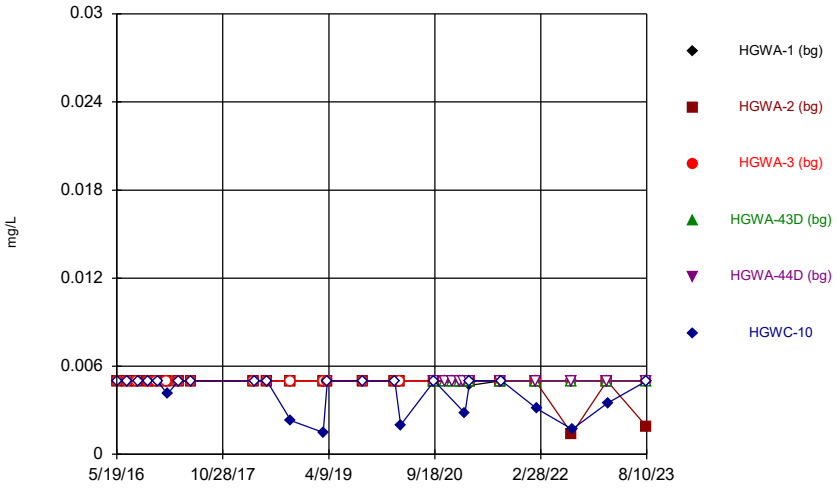
Time Series



Constituent: pH, Field Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

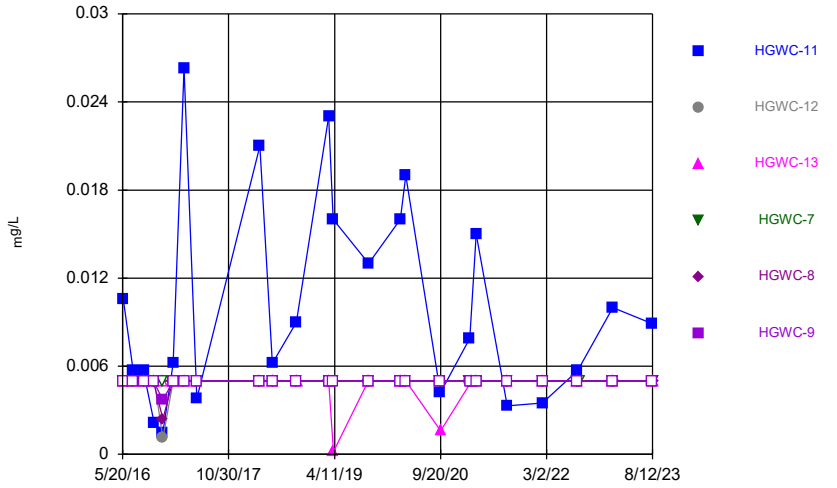
Time Series



Constituent: Selenium Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

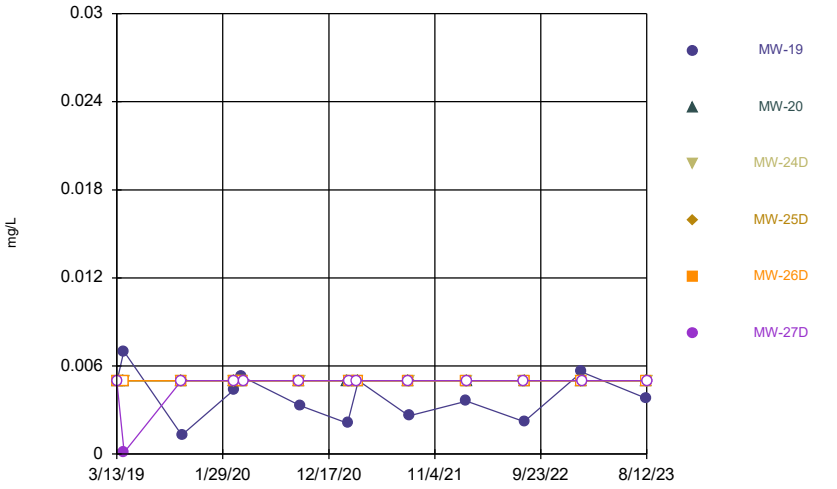
Time Series



Constituent: Selenium Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

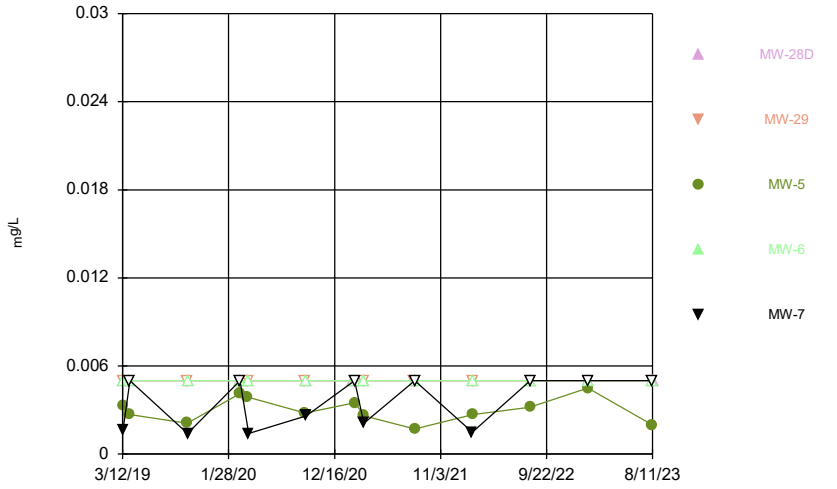
Time Series



Constituent: Selenium Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

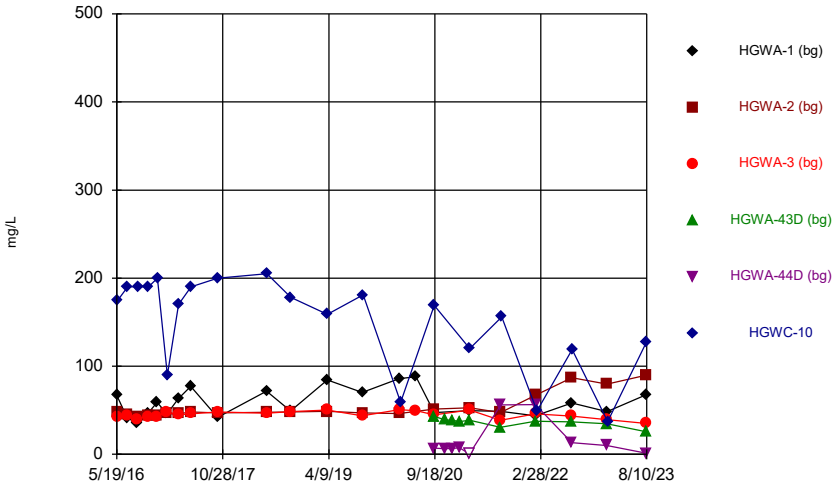
Time Series



Constituent: Selenium Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

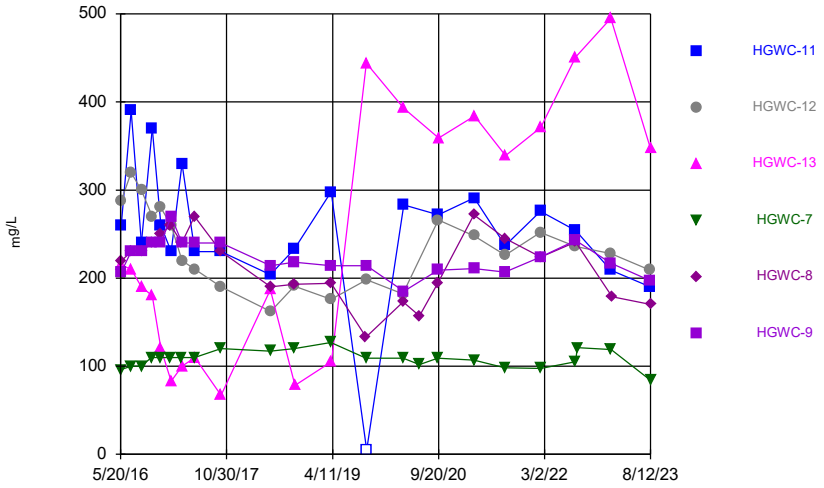
Time Series



Constituent: Sulfate Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

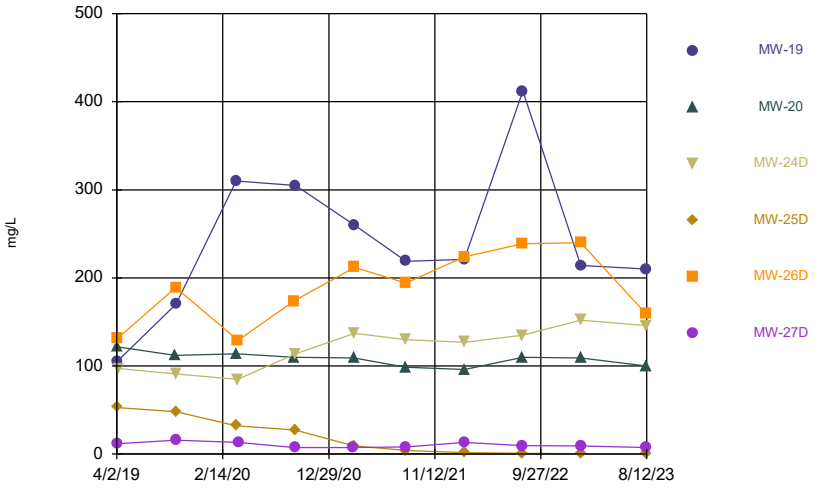
Time Series



Constituent: Sulfate Analysis Run 11/15/2023 12:55 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

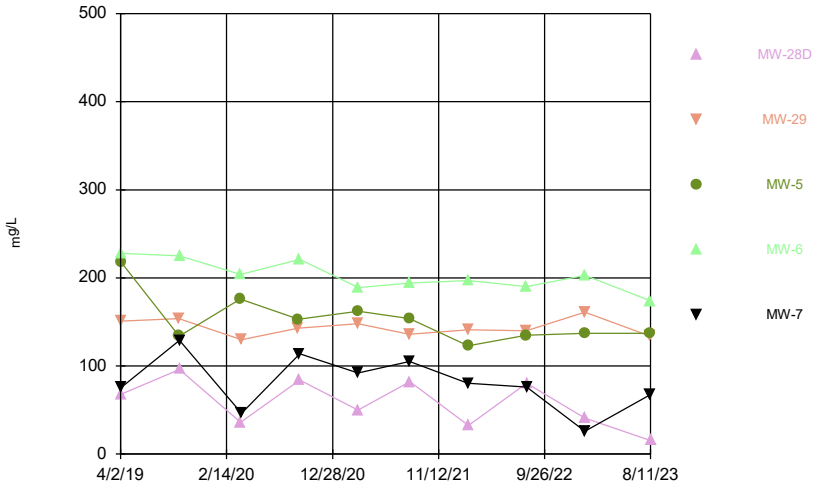
Time Series



Constituent: Sulfate Analysis Run 11/15/2023 12:56 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

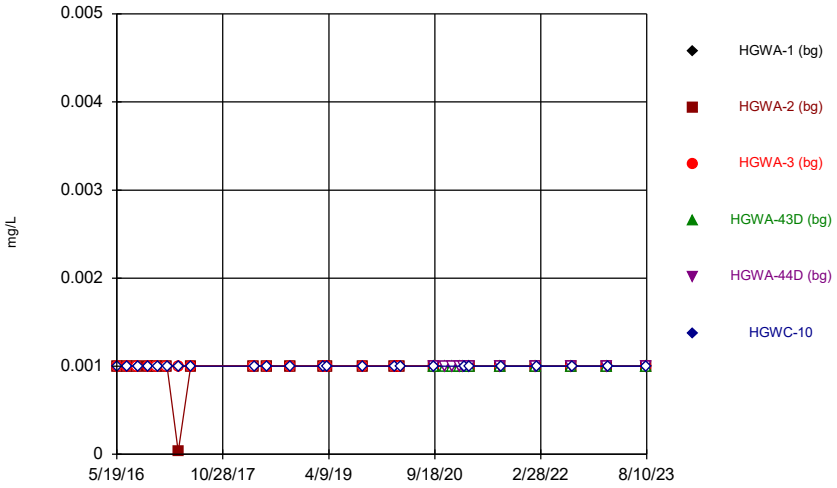
Time Series



Constituent: Sulfate Analysis Run 11/15/2023 12:56 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

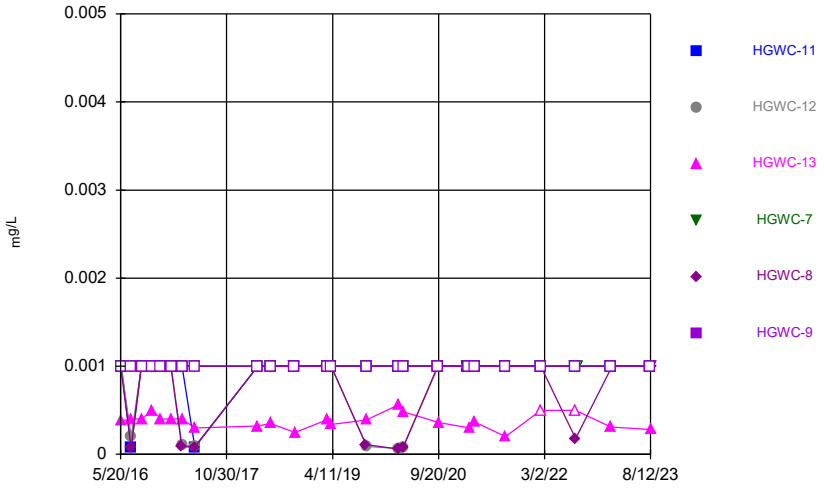
Time Series



Constituent: Thallium Analysis Run 11/15/2023 12:56 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

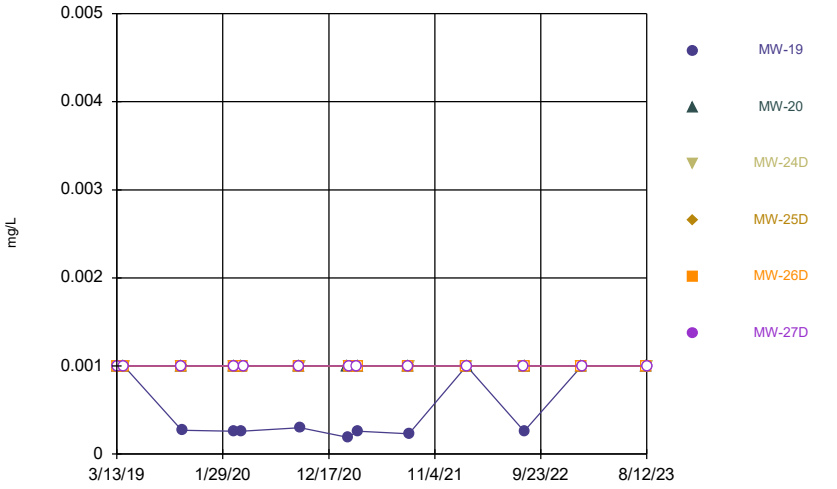
Time Series



Constituent: Thallium Analysis Run 11/15/2023 12:56 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

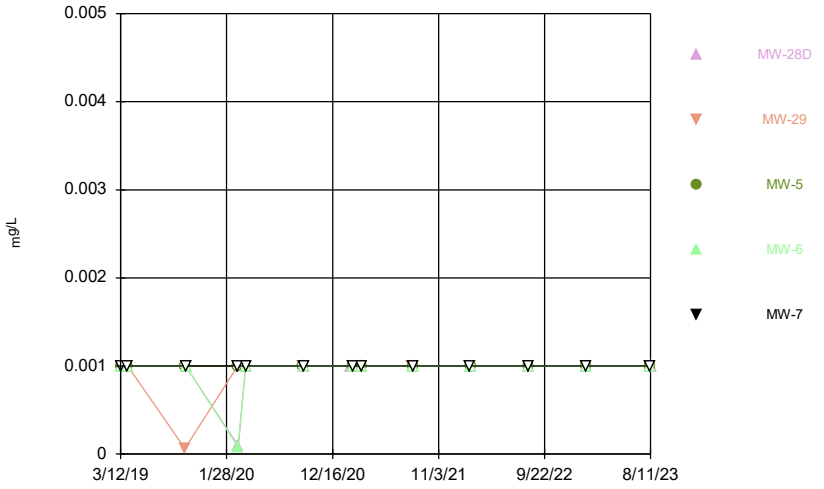
Time Series



Constituent: Thallium Analysis Run 11/15/2023 12:56 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

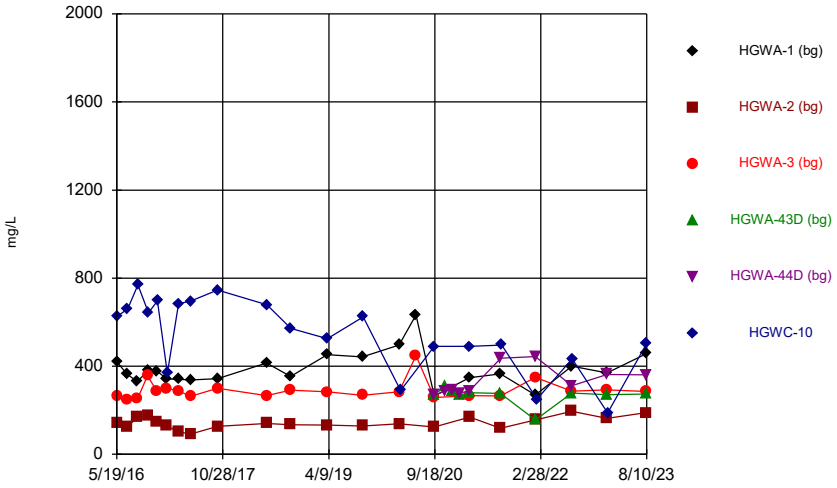
Time Series



Constituent: Thallium Analysis Run 11/15/2023 12:56 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

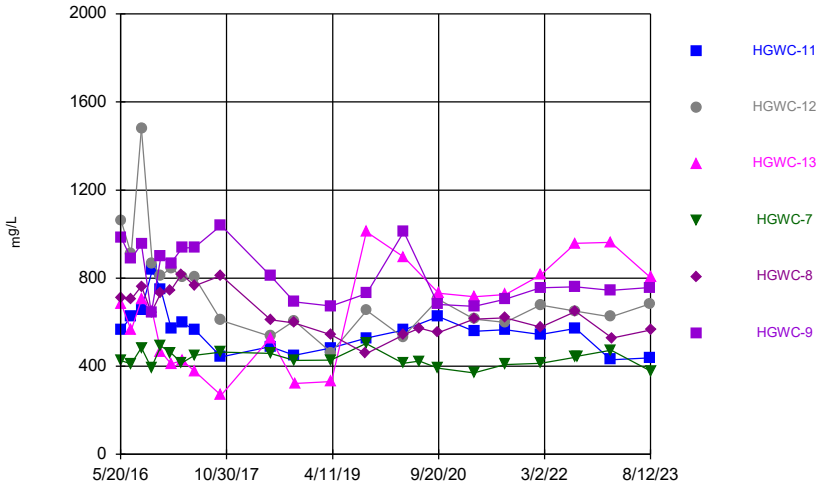
Time Series



Constituent: Total Dissolved Solids Analysis Run 11/15/2023 12:56 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

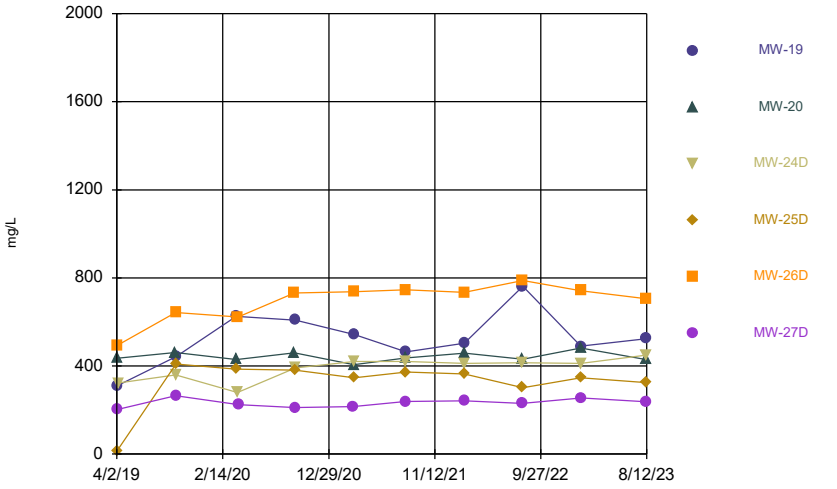
Time Series



Constituent: Total Dissolved Solids Analysis Run 11/15/2023 12:56 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

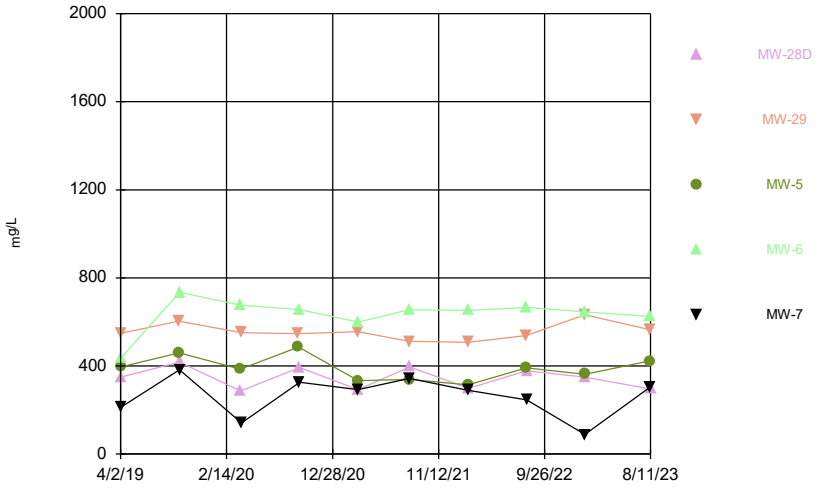
Time Series



Constituent: Total Dissolved Solids Analysis Run 11/15/2023 12:56 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Time Series



Constituent: Total Dissolved Solids Analysis Run 11/15/2023 12:56 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	<0.003	<0.003	<0.003			
5/23/2016						<0.003
7/11/2016	<0.003	<0.003				
7/12/2016			0.0003 (J)			<0.003
8/30/2016	<0.003	<0.003	<0.003			
9/1/2016						<0.003
10/19/2016	0.0014 (J)	<0.003	<0.003			
10/24/2016						<0.003
12/6/2016	<0.003	<0.003	<0.003			
12/7/2016						<0.003
1/24/2017	<0.003	<0.003	<0.003			
1/26/2017						<0.003
3/21/2017	<0.003	<0.003	<0.003			
3/22/2017						<0.003
5/22/2017	<0.003	<0.003	<0.003			
5/24/2017						<0.003
4/2/2018	<0.003	<0.003				
4/3/2018			<0.003			
4/4/2018						<0.003
3/12/2019	<0.003	<0.003	<0.003			
3/13/2019						<0.003
4/1/2019			<0.003			
4/2/2019	<0.003	<0.003				
4/3/2019						<0.003
9/23/2019	<0.003	<0.003	<0.003			
9/27/2019						<0.003
3/2/2020	<0.003	<0.003	<0.003			
3/3/2020						<0.003
3/25/2020	<0.003	<0.003	<0.003			
4/1/2020						<0.003
9/15/2020	<0.003	<0.003	<0.003			
9/16/2020				0.00051 (J)	0.00049 (J)	<0.003
11/10/2020				0.00043 (J)	<0.003	
12/15/2020				0.00031 (J)	0.00047 (J)	
1/19/2021				0.00029 (J)	0.00067 (JB)	
2/8/2021	<0.003					
2/9/2021		0.00062 (JB)	0.00031 (JB)	0.00037 (JB)	0.00042 (J)	
2/15/2021						0.00065 (J)
3/10/2021	<0.003				0.00037 (J)	
3/11/2021		<0.003	<0.003	0.00057 (J)		
3/12/2021						<0.003
8/11/2021	<0.003			<0.003		
8/12/2021		<0.003	<0.003			
8/13/2021					<0.003	
8/17/2021						<0.003
2/1/2022	<0.003	<0.003	<0.003	<0.003	0.0013 (J)	
2/9/2022						<0.003
8/2/2022	<0.003	<0.003	<0.003	<0.003	<0.003	
8/3/2022						0.0018 (J)
1/23/2023			<0.003			
1/24/2023	<0.003	<0.003		<0.003	<0.003	
1/27/2023						<0.003

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
8/8/2023	<0.003	<0.003	<0.003	<0.003	<0.003	
8/10/2023						<0.003

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				<0.003	<0.003	
5/23/2016	<0.003	<0.003	<0.003			<0.003
7/12/2016	<0.003	<0.003	0.0003 (J)	<0.003	<0.003	<0.003
9/1/2016	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
10/20/2016				<0.003	<0.003	<0.003
10/24/2016	<0.003	<0.003	<0.003			
12/6/2016				<0.003	<0.003	<0.003
12/7/2016	<0.003	<0.003	<0.003			
1/25/2017				<0.003	<0.003	
1/26/2017	<0.003	<0.003	<0.003			<0.003
3/21/2017				<0.003	<0.003	
3/22/2017	<0.003	<0.003	<0.003			<0.003
5/23/2017				<0.003	<0.003	<0.003
5/24/2017	<0.003	<0.003	<0.003			
4/3/2018				<0.003	<0.003	<0.003
4/4/2018	<0.003	<0.003	<0.003			
3/12/2019					<0.003	
3/13/2019	<0.003		<0.003	<0.003		<0.003
3/14/2019		<0.003				
4/2/2019				<0.003		
4/3/2019	<0.003	<0.003			<0.003	<0.003
4/5/2019			0.00021 (J)			
9/24/2019					<0.003	
9/25/2019				<0.003		
9/26/2019			<0.003			
9/27/2019	<0.003	<0.003				<0.003
3/3/2020	<0.003	<0.003			<0.003	
3/4/2020			0.00061 (J)	<0.003		0.00032 (J)
3/26/2020		<0.003				
3/27/2020				<0.003	<0.003	
3/30/2020			0.00036 (J)			
3/31/2020	<0.003					0.00042 (J)
9/16/2020				0.00034 (J)	<0.003	
9/17/2020						<0.003
9/18/2020	0.00038 (J)	<0.003				
9/21/2020			0.00029 (J)			
2/10/2021				<0.003		
2/12/2021	<0.003	<0.003				
2/16/2021					0.00064 (J)	0.00043 (J)
2/22/2021			0.00047 (J)			
3/15/2021				<0.003	<0.003	
3/16/2021	<0.003	<0.003				<0.003
3/17/2021			0.00049 (J)			
8/16/2021				0.0017 (J)		
8/17/2021						<0.003
8/18/2021	<0.003	<0.003			<0.003	
8/19/2021			<0.003			
2/9/2022	<0.003	<0.003				<0.003
2/10/2022			<0.003	<0.003	<0.003	
8/3/2022	<0.003	<0.003	<0.003	<0.003	<0.003	
8/4/2022						<0.003
8/11/2022				<0.003		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
1/26/2023	<0.003	<0.003	<0.003			0.00092 (J)
1/27/2023				<0.003		
2/1/2023					<0.003	
8/10/2023	<0.003	<0.003				
8/11/2023						<0.003
8/12/2023			<0.003	<0.003	<0.003	

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		<0.003	<0.003		<0.003	<0.003
3/14/2019	<0.003			<0.003		
4/2/2019		<0.003				
4/3/2019	<0.003			<0.003	<0.003	
4/4/2019						0.00016 (J)
4/8/2019			<0.003			
9/25/2019		<0.003				
9/26/2019			<0.003		<0.003	0.0003 (J)
9/27/2019	<0.003			<0.003		
3/2/2020		<0.003				
3/3/2020				<0.003		
3/4/2020	<0.003		0.0017 (J)		0.002 (J)	0.00037 (J)
3/26/2020	<0.003			<0.003		
3/27/2020		<0.003				
3/30/2020			<0.003			
3/31/2020					0.0013 (J)	
4/2/2020						0.0003 (J)
9/17/2020		<0.003			<0.003	
9/18/2020				<0.003		0.00031 (J)
9/21/2020	<0.003		<0.003			
2/11/2021		<0.003				
2/12/2021	<0.003			<0.003		
2/16/2021			<0.003		<0.003	0.00038 (J)
3/12/2021						<0.003
3/15/2021		<0.003				
3/16/2021				<0.003		
3/17/2021	<0.003		<0.003		<0.003	
8/17/2021		<0.003			<0.003	<0.003
8/18/2021	<0.003					
8/19/2021			<0.003	<0.003		
2/9/2022	<0.003			<0.003	<0.003	
2/10/2022		<0.003	<0.003			<0.003
8/3/2022			<0.003			<0.003
8/4/2022	<0.003	<0.003		<0.003	<0.003	
1/26/2023	<0.003	<0.003	<0.003	<0.003	<0.003	
1/27/2023						<0.003
8/10/2023	<0.003	<0.003		<0.003		
8/11/2023					<0.003	
8/12/2023			<0.003			<0.003

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	<0.003	<0.003			
3/13/2019			<0.003	<0.003	0.00086 (J)
4/2/2019	<0.003	<0.003			
4/3/2019			<0.003	<0.003	<0.003
9/24/2019		<0.003			
9/25/2019			<0.003		
9/26/2019	<0.003			<0.003	<0.003
3/2/2020		<0.003	<0.003		
3/3/2020				<0.003	0.0013 (J)
3/4/2020	<0.003				
3/26/2020			<0.003		
3/27/2020	<0.003			<0.003	
3/30/2020		<0.003			<0.003
9/16/2020		<0.003			
9/17/2020			<0.003		
9/21/2020	<0.003			0.0014 (J)	0.00051 (J)
2/10/2021	0.0019 (J)				
2/15/2021		0.00094 (J)			0.0021 (J)
2/16/2021			<0.003	<0.003	
3/15/2021	<0.003	<0.003			<0.003
3/16/2021			<0.003	<0.003	
8/16/2021		<0.003			
8/17/2021			<0.003	<0.003	<0.003
8/18/2021	<0.003				
2/8/2022					<0.003
2/9/2022			<0.003	<0.003	
2/10/2022	<0.003	<0.003			
8/3/2022		<0.003	<0.003	<0.003	
8/4/2022	<0.003				<0.003
1/26/2023	<0.003	<0.003	<0.003	<0.003	<0.003
8/10/2023		<0.003	<0.003	<0.003	<0.003
8/11/2023	<0.003				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	<0.005	0.00127 (J)	<0.005			
5/23/2016						<0.005
7/11/2016	<0.005	0.002 (J)				
7/12/2016			0.0008 (J)			<0.005
8/30/2016	<0.005	0.0017 (J)	<0.005			
9/1/2016						<0.005
10/19/2016	<0.005	<0.005	<0.005			
10/24/2016						<0.005
12/6/2016	<0.005	<0.005	<0.005			
12/7/2016						<0.005
1/24/2017	<0.005	<0.005	<0.005			
1/26/2017						<0.005
3/21/2017	0.0005 (J)	<0.005	0.0007 (J)			
3/22/2017						<0.005
5/22/2017	<0.005	0.0006 (J)	0.0006 (J)			
5/24/2017						<0.005
4/2/2018	<0.005	<0.005				
4/3/2018			<0.005			
4/4/2018						<0.005
6/4/2018	<0.005	0.00088 (J)	0.0008 (J)			
6/5/2018						<0.005
10/1/2018	<0.005	<0.005	0.0011 (J)			
10/2/2018						<0.005
3/12/2019	<0.005	0.00069 (J)	0.00063 (J)			
3/13/2019						<0.005
4/1/2019			<0.005			
4/2/2019	<0.005	<0.005				
4/3/2019						<0.005
9/23/2019	0.00046 (J)	0.00067 (J)	0.0011 (J)			
9/27/2019						<0.005
3/2/2020	<0.005	0.00043 (J)	0.0004 (J)			
3/3/2020						<0.005
3/25/2020	<0.005	<0.005	<0.005			
4/1/2020						<0.005
9/15/2020	<0.005	<0.005	<0.005			
9/16/2020				<0.005	<0.005	<0.005
11/10/2020				0.0021 (J)	<0.005	
12/15/2020				<0.005	<0.005	
1/19/2021				0.0011 (J)	<0.005	
2/8/2021	<0.005					
2/9/2021		<0.005	<0.005	0.0017 (JB)	0.00083 (J)	
2/15/2021						<0.005
3/10/2021	<0.005				<0.005	
3/11/2021		<0.005	<0.005	0.0013 (J)		
3/12/2021						<0.005
8/11/2021	<0.005			0.0015 (J)		
8/12/2021		<0.005	<0.005			
8/13/2021					<0.005	
8/17/2021						<0.005
2/1/2022	0.0016 (J)	0.0023 (J)	0.0024 (J)	0.0036 (J)	0.0025 (J)	
2/9/2022						<0.005
8/2/2022	<0.005	<0.005	<0.005	<0.005	<0.005	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
8/3/2022						<0.005
1/23/2023			<0.005			
1/24/2023	<0.005	<0.005		<0.005	0.0027 (J)	
1/27/2023						<0.005
8/8/2023	<0.005	<0.005	<0.005	<0.005	<0.005	
8/10/2023						<0.005

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				<0.005	<0.005	
5/23/2016	<0.005	0.0046 (J)	0.329			<0.005
7/12/2016	0.0015 (J)	0.005	0.297	<0.005	<0.005	<0.005
9/1/2016	<0.005	0.0043 (J)	0.314	<0.005	<0.005	<0.005
10/20/2016				<0.005	<0.005	<0.005
10/24/2016	<0.005	0.0049 (J)	0.334			
12/6/2016				<0.005	<0.005	<0.005
12/7/2016	<0.005	0.0046 (J)	0.35			
1/25/2017				<0.005	<0.005	
1/26/2017	<0.005	<0.005	0.424			<0.005
3/21/2017				<0.005	<0.005	
3/22/2017	0.0053	0.0019 (J)	0.419			0.0008 (J)
5/23/2017				<0.005	<0.005	<0.005
5/24/2017	<0.005	0.0022 (J)	0.393			
4/3/2018				<0.005	<0.005	<0.005
4/4/2018	<0.005	<0.005	0.49			
6/5/2018	0.0012 (J)		0.38	<0.005		
6/6/2018		0.0048 (J)			<0.005	<0.005
10/2/2018				0.0019 (J)	<0.005	<0.005
10/3/2018	<0.005	0.0037 (J)				
10/5/2018			0.34			
3/12/2019					<0.005	
3/13/2019	0.0024 (J)		0.42	<0.005		0.00075 (J)
3/14/2019		0.0026 (J)				
4/2/2019				<0.005		
4/3/2019	0.00094 (J)	0.0022 (J)			<0.005	<0.005
4/5/2019			0.36			
9/24/2019					<0.005	
9/25/2019				<0.005		
9/26/2019			0.44			
9/27/2019	0.0018 (J)	0.0061				0.00037 (J)
3/3/2020	0.0022 (J)	0.0023 (J)			<0.005	
3/4/2020			0.52	<0.005		<0.005
3/26/2020		0.0028 (J)				
3/27/2020				<0.005	<0.005	
3/30/2020			0.47			
3/31/2020	0.0022 (J)					<0.005
9/16/2020				<0.005	<0.005	
9/17/2020						<0.005
9/18/2020	0.00081 (J)	0.0031 (J)				
9/21/2020			0.39			
2/10/2021				<0.005		
2/12/2021	0.002 (J)	0.0045 (J)				
2/16/2021					<0.005	<0.005
2/22/2021			0.45			
3/15/2021				<0.005	<0.005	
3/16/2021	0.0017 (J)	0.0038 (J)				<0.005
3/17/2021			0.39			
8/16/2021				<0.005		
8/17/2021						<0.005
8/18/2021	<0.005	0.0028 (J)			<0.005	
8/19/2021			0.31			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
2/9/2022	0.0047 (J)	0.0053				0.0021 (J)
2/10/2022			0.38	<0.005	0.002 (J)	
8/3/2022	<0.005	0.0023 (J)	0.4	<0.005	<0.005	
8/4/2022						<0.005
8/11/2022				<0.005		
1/26/2023	<0.005	0.0025 (J)	0.53			<0.005
1/27/2023				<0.005		
2/1/2023					<0.005	
8/10/2023	<0.005	<0.005				
8/11/2023						<0.005
8/12/2023			0.54	<0.005	<0.005	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		0.0023 (J)	<0.005		<0.005	<0.005
3/14/2019	<0.005			0.0019 (J)		
4/2/2019		<0.005				
4/3/2019	<0.005			<0.005	<0.005	
4/4/2019						0.0002 (J)
4/8/2019			<0.005			
9/25/2019		<0.005				
9/26/2019			<0.005		<0.005	<0.005
9/27/2019	<0.005			0.0011 (J)		
3/2/2020		0.00038 (J)				
3/3/2020				0.001 (J)		
3/4/2020	0.00045 (J)		<0.005		0.0006 (J)	0.00069 (J)
3/26/2020	<0.005			0.00075 (J)		
3/27/2020		<0.005				
3/30/2020			<0.005			
3/31/2020					<0.005	
4/2/2020						<0.005
9/17/2020		<0.005			<0.005	
9/18/2020				<0.005		<0.005
9/21/2020	<0.005		<0.005			
2/11/2021		0.00094 (J)				
2/12/2021	<0.005			<0.005		
2/16/2021			<0.005		0.0008 (J)	0.001 (J)
3/12/2021						<0.005
3/15/2021		<0.005				
3/16/2021				<0.005		
3/17/2021	<0.005		<0.005		<0.005	
8/17/2021		<0.005			<0.005	<0.005
8/18/2021	<0.005					
8/19/2021			<0.005	<0.005		
2/9/2022	<0.005			<0.005	0.0017 (J)	
2/10/2022		<0.005	<0.005			<0.005
8/3/2022			<0.005			<0.005
8/4/2022	<0.005	<0.005		<0.005	<0.005	
1/26/2023	<0.005	<0.005	<0.005	<0.005	<0.005	
1/27/2023						<0.005
8/10/2023	<0.005	<0.005		<0.005		
8/11/2023					<0.005	
8/12/2023			<0.005			<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	<0.005	<0.005			
3/13/2019			<0.005	<0.005	<0.005
4/2/2019	<0.005	<0.005			
4/3/2019			<0.005	<0.005	<0.005
9/24/2019		<0.005			
9/25/2019			<0.005		
9/26/2019	<0.005			<0.005	<0.005
3/2/2020		<0.005	<0.005		
3/3/2020				<0.005	<0.005
3/4/2020	<0.005				
3/26/2020			<0.005		
3/27/2020	<0.005			<0.005	
3/30/2020		0.00037 (J)			<0.005
9/16/2020		<0.005			
9/17/2020			<0.005		
9/21/2020	<0.005			<0.005	<0.005
2/10/2021	0.0011 (J)				
2/15/2021		<0.005			<0.005
2/16/2021			<0.005	<0.005	
3/15/2021	<0.005	<0.005			<0.005
3/16/2021			<0.005	<0.005	
8/16/2021		<0.005			
8/17/2021			<0.005	<0.005	<0.005
8/18/2021	<0.005				
2/8/2022					<0.005
2/9/2022			0.0013 (J)	0.0034 (J)	
2/10/2022	<0.005	<0.005			
8/3/2022		<0.005	<0.005	<0.005	
8/4/2022	<0.005				<0.005
1/26/2023	<0.005	<0.005	<0.005	<0.005	<0.005
8/10/2023		<0.005	<0.005	<0.005	<0.005
8/11/2023	<0.005				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Barium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	0.0346	0.114	0.111			
5/23/2016						0.0877
7/11/2016	0.0311	0.112				
7/12/2016			0.115			0.0926
8/30/2016	0.0293	0.131	0.113			
9/1/2016						0.0994
10/19/2016	0.0293	0.111	0.123			
10/24/2016						0.101
12/6/2016	0.0304	0.108	0.127			
12/7/2016						0.107
1/24/2017	0.028	0.102	0.126			
1/26/2017						0.0538
3/21/2017	0.0275	0.095	0.12			
3/22/2017						0.0962
5/22/2017	0.0281	0.103	0.117			
5/24/2017						0.0996
4/2/2018	0.026	0.099				
4/3/2018			0.11			
4/4/2018						0.084
6/4/2018	0.035	0.11	0.12			
6/5/2018						0.086
10/1/2018	0.029	0.11	0.14			
10/2/2018						0.076
3/12/2019	0.042	0.12	0.13			
3/13/2019						0.044
4/1/2019			0.13			
4/2/2019	0.04	0.13				
4/3/2019						0.076
9/23/2019	0.042	0.13	0.13			
9/27/2019						0.078
3/2/2020	0.034	0.11	0.14			
3/3/2020						0.048
3/25/2020	0.043	0.12	0.13			
4/1/2020						0.058
9/15/2020	0.035	0.12	0.12			
9/16/2020				0.26	0.24	0.068
11/10/2020				0.25	0.38	
12/15/2020				0.29	0.39	
1/19/2021				0.32	0.41	
2/8/2021	0.032					
2/9/2021		0.12	0.13	0.34	0.46	
2/15/2021						0.06
3/10/2021	0.03				0.26	
3/11/2021		0.07	0.13	0.32		
3/12/2021						0.058
8/11/2021	0.03			0.28		
8/12/2021		0.12	0.11			
8/13/2021					0.22	
8/17/2021						0.055
2/1/2022	0.031	0.13	0.12	0.29	0.23	
2/9/2022						0.042
8/2/2022	0.039	0.11	0.16	0.35	0.37	

Time Series

Constituent: Barium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
8/3/2022						0.069
1/23/2023			0.13			
1/24/2023	0.033	0.088		0.28	0.18	
1/27/2023						0.041
8/8/2023	0.039	0.068	0.12	0.3	0.12	
8/10/2023						0.045

Time Series

Constituent: Barium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				0.0687	0.0808	
5/23/2016	0.0466	0.133	0.0779			0.117
7/12/2016	0.0616	0.135	0.0697	0.0731	0.083	0.13
9/1/2016	0.0497	0.123	0.07	0.0747	0.0829	0.13
10/20/2016				0.072	0.0811	0.0806
10/24/2016	0.0794	0.135	0.0882			
12/6/2016				0.0752	0.0845	0.128
12/7/2016	0.1	0.13	0.0798			
1/25/2017				0.0747	0.078	
1/26/2017	0.0696	0.127	0.0738			0.142
3/21/2017				0.0722	0.0791	
3/22/2017	0.0346	0.112	0.0755			0.122
5/23/2017				0.0794	0.0846	0.127
5/24/2017	0.0437	0.106	0.0627			
4/3/2018				0.075	0.065	0.1
4/4/2018	0.029	0.083	0.099			
6/5/2018	0.039		0.13	0.071		
6/6/2018		0.09			0.063	0.11
10/2/2018				0.078	0.061	0.11
10/3/2018	0.033	0.087				
10/5/2018			0.076			
3/12/2019					0.062	
3/13/2019	0.024		0.1	0.083		0.1
3/14/2019		0.081				
4/2/2019				0.072		
4/3/2019	0.023	0.077			0.066	0.12
4/5/2019			0.079			
9/24/2019					0.053	
9/25/2019				0.061		
9/26/2019			0.11			
9/27/2019	0.033	0.096				0.11
3/3/2020	0.022	0.092			0.052	
3/4/2020			0.1	0.068		0.11
3/26/2020		0.089				
3/27/2020				0.059	0.059	
3/30/2020			0.08			
3/31/2020	0.026					0.11
9/16/2020				0.068	0.06	
9/17/2020						0.11
9/18/2020	0.043	0.086				
9/21/2020			0.052			
2/10/2021				0.069		
2/12/2021	0.039	0.09				
2/16/2021					0.069	0.11
2/22/2021			0.061			
3/15/2021				0.074	0.063	
3/16/2021	0.035	0.084				0.11
3/17/2021			0.056			
8/16/2021				0.068		
8/17/2021						0.095
8/18/2021	0.04	0.083			0.062	
8/19/2021			0.049			

Time Series

Constituent: Barium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
2/9/2022	0.042	0.075				0.096
2/10/2022			0.053	0.063	0.056	
8/3/2022	0.041	0.086	0.07	0.066	0.06	
8/4/2022						0.091
8/11/2022				0.071		
1/26/2023	0.031	0.076	0.079			0.069
1/27/2023				0.065		
2/1/2023					0.058	
8/10/2023	0.027	0.075				
8/11/2023						0.068
8/12/2023			0.057	0.06	0.052	

Time Series

Constituent: Barium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		0.087	0.053		0.099	1.5
3/14/2019	0.06			0.44		
4/2/2019		0.08				
4/3/2019	0.05			0.38	0.12	
4/4/2019						1.2
4/8/2019			0.043			
9/25/2019		0.085				
9/26/2019			0.12		0.12	0.95
9/27/2019	0.068			0.39		
3/2/2020		0.099				
3/3/2020				0.42		
3/4/2020	0.069		0.081		0.17	0.95
3/26/2020	0.067			0.45		
3/27/2020		0.093				
3/30/2020			0.056			
3/31/2020					0.11	
4/2/2020						1
9/17/2020		0.096			0.099	
9/18/2020				0.44		1
9/21/2020	0.056		0.053			
2/11/2021		0.093				
2/12/2021	0.051			0.46		
2/16/2021			0.062		0.093	1
3/12/2021						1.1
3/15/2021		0.096				
3/16/2021				0.51		
3/17/2021	0.049		0.055		0.094	
8/17/2021		0.089			0.072	1.1
8/18/2021	0.045					
8/19/2021			0.048	0.58		
2/9/2022	0.042			0.6	0.066	
2/10/2022		0.082	0.048			0.99
8/3/2022			0.053			0.94
8/4/2022	0.05	0.093		0.75	0.062	
1/26/2023	0.039	0.097	0.054	0.65	0.065	
1/27/2023						0.94
8/10/2023	0.032	0.093		0.71		
8/11/2023					0.059	
8/12/2023			0.053			0.98

Time Series

Constituent: Barium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	0.82	0.089			
3/13/2019			0.056	0.1	0.063
4/2/2019	0.37	0.078			
4/3/2019			0.049	0.09	0.058
9/24/2019		0.081			
9/25/2019			0.046		
9/26/2019	0.15			0.089	0.066
3/2/2020		0.088	0.049		
3/3/2020				0.09	0.043
3/4/2020	0.77				
3/26/2020			0.046		
3/27/2020	0.64			0.086	
3/30/2020		0.08			0.05
9/16/2020		0.076			
9/17/2020			0.043		
9/21/2020	0.18			0.083	0.065
2/10/2021	0.26				
2/15/2021		0.081			0.048
2/16/2021			0.05	0.085	
3/15/2021	0.45	0.078			0.053
3/16/2021			0.046	0.081	
8/16/2021		0.074			
8/17/2021			0.045	0.081	0.057
8/18/2021	0.53				
2/8/2022					0.053
2/9/2022			0.042	0.074	
2/10/2022	0.76	0.072			
8/3/2022		0.081	0.058	0.084	
8/4/2022	0.7				0.064
1/26/2023	0.8	0.076	0.05	0.079	0.044
8/10/2023		0.066	0.048	0.066	0.059
8/11/2023	2.2				

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	<0.0005	<0.003	<0.0005			
5/23/2016						<0.0005
7/11/2016	<0.0005	0.0001 (J)				
7/12/2016			<0.0005			<0.0005
8/30/2016	<0.0005	<0.003	<0.0005			
9/1/2016						<0.0005
10/19/2016	<0.0005	0.0001 (J)	<0.0005			
10/24/2016						<0.0005
12/6/2016	<0.0005	0.0002 (J)	<0.0005			
12/7/2016						<0.0005
1/24/2017	<0.0005	0.0001 (J)	<0.0005			
1/26/2017						<0.0005
3/21/2017	<0.0005	0.0001 (J)	<0.0005			
3/22/2017						<0.0005
5/22/2017	<0.0005	0.0001 (J)	<0.0005			
5/24/2017						<0.0005
4/2/2018	<0.0005	<0.003				
4/3/2018			<0.0005			
4/4/2018						<0.0005
3/12/2019	<0.0005	0.00017 (J)	<0.0005			
3/13/2019						<0.0005
4/1/2019			<0.0005			
4/2/2019	<0.0005	0.00015 (J)				
4/3/2019						<0.0005
9/23/2019	<0.0005	0.00011 (J)	<0.0005			
9/27/2019						<0.0005
3/2/2020	<0.0005	0.00014 (J)	<0.0005			
3/3/2020						<0.0005
3/25/2020	<0.0005	0.00016 (J)	<0.0005			
4/1/2020						<0.0005
9/15/2020	<0.0005	0.00013 (J)	<0.0005			
9/16/2020				<0.0005	<0.0005	<0.0005
11/10/2020				<0.0005	<0.0005	
12/15/2020				<0.0005	<0.0005	
1/19/2021				<0.0005	<0.0005	
2/8/2021	<0.0005					
2/9/2021		0.00014 (J)	<0.0005	<0.0005	<0.0005	
2/15/2021						<0.0005
3/10/2021	<0.0005				<0.0005	
3/11/2021		8.6E-05 (J)	<0.0005	<0.0005		
3/12/2021						<0.0005
8/11/2021	<0.0005			<0.0005		
8/12/2021		0.00014 (J)	<0.0005			
8/13/2021					<0.0005	
8/17/2021						<0.0005
2/1/2022	<0.0005	0.0002 (J)	<0.0005	<0.0005	<0.0005	
2/9/2022						<0.0005
8/2/2022	<0.0005	0.00019 (J)	<0.0005	<0.0005	<0.0005	
8/3/2022						<0.0005
1/23/2023			<0.0005			
1/24/2023	<0.0005	0.00016 (J)		<0.0005	<0.0005	
1/27/2023						<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
8/8/2023	<0.0005	0.00022 (J)	<0.0005	<0.0005	<0.0005	
8/10/2023						<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				<0.0005	<0.0005	
5/23/2016	<0.0005	<0.0005	<0.0005			<0.0005
7/12/2016	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
9/1/2016	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
10/20/2016				<0.0005	<0.0005	<0.0005
10/24/2016	<0.0005	<0.0005	<0.0005			
12/6/2016				<0.0005	<0.0005	<0.0005
12/7/2016	<0.0005	<0.0005	<0.0005			
1/25/2017				<0.0005	<0.0005	
1/26/2017	<0.0005	<0.0005	<0.0005			<0.0005
3/21/2017				<0.0005	<0.0005	
3/22/2017	9E-05 (J)	<0.0005	<0.0005			<0.0005
5/23/2017				<0.0005	<0.0005	<0.0005
5/24/2017	<0.0005	<0.0005	<0.0005			
4/3/2018				<0.0005	<0.0005	<0.0005
4/4/2018	<0.0005	<0.0005	<0.0005			
3/12/2019					<0.0005	
3/13/2019	0.0001 (J)		6.2E-05 (J)	<0.0005		<0.0005
3/14/2019		<0.0005				
4/2/2019				<0.0005		
4/3/2019	0.00017 (J)	<0.0005			7.4E-05 (J)	<0.0005
4/5/2019			<0.0005			
9/24/2019					<0.0005	
9/25/2019				<0.0005		
9/26/2019			0.00011 (J)			
9/27/2019	8.6E-05 (J)	<0.0005				<0.0005
3/3/2020	0.00012 (J)	<0.0005			<0.0005	
3/4/2020			9.3E-05 (J)	7.7E-05 (J)		<0.0005
3/26/2020		<0.0005				
3/27/2020				<0.0005	<0.0005	
3/30/2020			9.9E-05 (J)			
3/31/2020	0.00015 (J)					<0.0005
9/16/2020				<0.0005	0.0001 (J)	
9/17/2020						<0.0005
9/18/2020	<0.0005	<0.0005				
9/21/2020			0.00011 (J)			
2/10/2021				8.1E-05 (J)		
2/12/2021	<0.0005	<0.0005				
2/16/2021					7.1E-05 (J)	<0.0005
2/22/2021			9.7E-05 (J)			
3/15/2021				0.00019 (J)	7.8E-05 (J)	
3/16/2021	8.1E-05 (J)	<0.0005				<0.0005
3/17/2021			9E-05 (J)			
8/16/2021				<0.0005		
8/17/2021						<0.0005
8/18/2021	<0.0005	<0.0005			8.7E-05 (J)	
8/19/2021			7.3E-05 (J)			
2/9/2022	<0.0005	<0.0005				<0.0005
2/10/2022			<0.0005	<0.0005	7.1E-05 (J)	
8/3/2022	<0.0005	<0.0005	<0.0005	<0.0005	5.6E-05 (J)	
8/4/2022						<0.0005
8/11/2022				<0.0005		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
1/26/2023	<0.0005	<0.0005	9.9E-05 (J)			<0.0005
1/27/2023				<0.0005		
2/1/2023					5.6E-05 (J)	
8/10/2023	6.9E-05 (J)	<0.0005				
8/11/2023						<0.0005
8/12/2023			0.0001 (J)	<0.0005	<0.0005	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		<0.0005	<0.0005		<0.0005	<0.0005
3/14/2019	<0.0005			<0.0005		
4/2/2019		<0.0005				
4/3/2019	<0.0005			<0.0005	<0.0005	
4/4/2019						<0.0005
4/8/2019			<0.0005			
9/25/2019		<0.0005				
9/26/2019			<0.0005		<0.0005	<0.0005
9/27/2019	<0.0005			<0.0005		
3/2/2020		<0.0005				
3/3/2020				<0.0005		
3/4/2020	<0.0005		<0.0005		<0.0005	<0.0005
3/26/2020	<0.0005			<0.0005		
3/27/2020		<0.0005				
3/30/2020			<0.0005			
3/31/2020					<0.0005	
4/2/2020						<0.0005
9/17/2020		<0.0005			<0.0005	
9/18/2020				<0.0005		<0.0005
9/21/2020	<0.0005		<0.0005			
2/11/2021		<0.0005				
2/12/2021	<0.0005			<0.0005		
2/16/2021			<0.0005		<0.0005	<0.0005
3/12/2021						<0.0005
3/15/2021		<0.0005				
3/16/2021				<0.0005		
3/17/2021	<0.0005		<0.0005		<0.0005	
8/17/2021		<0.0005			<0.0005	<0.0005
8/18/2021	5.8E-05 (J)					
8/19/2021			<0.0005	<0.0005		
2/9/2022	<0.0005			<0.0005	<0.0005	
2/10/2022		<0.0005	<0.0005			<0.0005
8/3/2022			<0.0005			<0.0005
8/4/2022	<0.0005	<0.0005		<0.0005	<0.0005	
1/26/2023	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
1/27/2023						<0.0005
8/10/2023	<0.0005	<0.0005		<0.0005		
8/11/2023					<0.0005	
8/12/2023			<0.0005			<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	<0.0005	<0.0005			
3/13/2019			<0.0005	<0.0005	<0.0005
4/2/2019	<0.0005	<0.0005			
4/3/2019			<0.0005	<0.0005	5.1E-05 (J)
9/24/2019		<0.0005			
9/25/2019			<0.0005		
9/26/2019	<0.0005			<0.0005	<0.0005
3/2/2020		<0.0005	<0.0005		
3/3/2020				<0.0005	<0.0005
3/4/2020	0.00014 (J)				
3/26/2020			<0.0005		
3/27/2020	<0.0005			<0.0005	
3/30/2020		<0.0005			<0.0005
9/16/2020		<0.0005			
9/17/2020			<0.0005		
9/21/2020	<0.0005			<0.0005	<0.0005
2/10/2021	5.4E-05 (J)				
2/15/2021		<0.0005			<0.0005
2/16/2021			<0.0005	<0.0005	
3/15/2021	4.8E-05 (J)	<0.0005			<0.0005
3/16/2021			<0.0005	<0.0005	
8/16/2021		<0.0005			
8/17/2021			<0.0005	<0.0005	<0.0005
8/18/2021	<0.0005				
2/8/2022					<0.0005
2/9/2022			<0.0005	<0.0005	
2/10/2022	<0.0005	<0.0005			
8/3/2022		<0.0005	<0.0005	<0.0005	
8/4/2022	<0.0005				<0.0005
1/26/2023	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
8/10/2023		<0.0005	<0.0005	<0.0005	<0.0005
8/11/2023	<0.0005				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	0.0214 (J)	0.0321 (J)	<0.04			
5/23/2016						0.72
7/11/2016	0.0142 (J)	0.0337 (J)				
7/12/2016			0.0074 (J)			0.778
8/30/2016	0.0074 (J)	0.0173 (J)	<0.04			
9/1/2016						0.786
10/19/2016	0.0224 (J)	0.0341 (J)	0.0085 (J)			
10/24/2016						0.831
12/6/2016	0.0211 (J)	0.0326 (J)	0.0085 (J)			
12/7/2016						1.01
1/24/2017	0.0165 (J)	0.0365 (J)	0.01 (J)			
1/26/2017						0.108
3/21/2017	0.0187 (J)	0.0349 (J)	0.0079 (J)			
3/22/2017						0.788
5/22/2017	0.0782	0.0475	0.0131 (J)			
5/24/2017						0.814
10/3/2017	0.0198 (J)	0.0386 (J)	0.0097 (J)			0.871
6/4/2018	0.02 (J)	0.036 (J)	0.017 (J)			
6/5/2018						1.2
10/1/2018	0.013 (J)	0.035 (J)	0.0061 (J)			
10/2/2018						0.62
4/1/2019			0.0066 (J)			
4/2/2019	0.016 (J)	0.034 (J)				
4/3/2019						0.66
9/23/2019	0.021 (J)	0.04 (J)	0.0081 (J)			
9/27/2019						1
3/25/2020	0.025 (J)	0.039 (J)	0.0096 (J)			
4/1/2020						0.23
6/16/2020	0.021 (J)		0.01 (J)			
9/15/2020	0.017 (J)	0.044 (J)	0.0071 (J)			
9/16/2020				0.061 (J)	0.23	1.1
11/10/2020				0.057 (J)	0.29	
12/15/2020				0.052 (J)	0.31	
1/19/2021				0.049 (J)	0.4	
3/10/2021	0.015 (J)				0.39	
3/11/2021		0.056	0.015 (J)	0.06		
3/12/2021						0.64
8/11/2021	0.02 (J)			0.042		
8/12/2021		0.044	<0.04			
8/13/2021					0.31	
8/17/2021						0.88
2/1/2022	0.016 (J)	0.056	0.011 (J)	0.05	0.44	
2/9/2022						0.1
8/2/2022	0.012 (J)	0.047	<0.04	0.043	0.31	
8/3/2022						0.53
1/23/2023			0.012 (J)			
1/24/2023	0.015 (J)	0.046		0.037 (J)	0.44	
1/27/2023						0.065
8/8/2023	0.023 (J)	0.06	0.011 (J)	0.038 (J)	0.55	
8/10/2023						0.65

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				0.885	1.71	
5/23/2016	0.787	2.2	2.15			1.76
7/12/2016	1.17	1.98	1.91	0.857	1.43	1.56
9/1/2016	1.49	2.28	2.3	0.904	1.91	2
10/20/2016				0.936	1.72	1.68
10/24/2016	2.54	2.75	4.01			
12/6/2016				1.06	2.06	2.15
12/7/2016	2.96	3.35	3.85			
1/25/2017				0.764	2.01	
1/26/2017	2.23	3.07	2.45			1.87
3/21/2017				0.857	2.08	
3/22/2017	0.84	3.04	1.99			1.99
5/23/2017				0.91	2.32	2.29
5/24/2017	2.29	2.95	1.74			
10/3/2017	1.47	2.35	1.43	0.967	2.84	2.05
6/5/2018	1.3		1.3	0.86		
6/6/2018		2.5			2.6	2.3
10/2/2018				0.98	2.7	2.5
10/3/2018	0.91	2.3				
10/5/2018			1.6			
4/2/2019				0.99		
4/3/2019	0.23	1.8			2.8	2.3
4/5/2019			0.86 (J)			
9/24/2019					2.8	
9/25/2019				1.1		
9/26/2019			1.7			
9/27/2019	0.53	2.1				2.9
3/26/2020		1.6				
3/27/2020				1.2	2.4	
3/30/2020			1.8			
3/31/2020	0.17					2.2
6/16/2020					2.2	
6/17/2020				1		
9/16/2020				1.1	1.9	
9/17/2020						2
9/18/2020	0.91	1.6				
9/21/2020			1.6			
3/15/2021				1.1	1.7	
3/16/2021	0.53	1.9				2.2
3/17/2021			0.89			
8/16/2021				1.1		
8/17/2021						2.3
8/18/2021	0.91	1.9			1.8	
8/19/2021			0.73			
2/9/2022	1	2				2.3
2/10/2022			1	1.3	1.7	
8/3/2022	0.64	1.5	0.76	1.1	1.5	
8/4/2022						2
8/11/2022				1.1		
1/26/2023	0.5	1.5	0.83			1.9
1/27/2023				0.93		
2/1/2023					1.9	

Time Series

Constituent: Boron (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
8/10/2023	0.44	1.4				
8/11/2023						2.1
8/12/2023			1	0.82	1.7	

Time Series

Constituent: Boron (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
4/2/2019		0.11				
4/3/2019	0.63			0.37	1.5	
4/4/2019						0.12 (J)
4/8/2019			0.47 (J)			
9/25/2019		0.091				
9/26/2019			0.49		2	0.14
9/27/2019	0.58			0.36		
3/26/2020	1			0.44		
3/27/2020		0.12				
3/30/2020			0.51			
3/31/2020					1.8	
4/2/2020						0.13
9/17/2020		0.11			2	
9/18/2020				0.36		0.12
9/21/2020	0.89		0.45			
3/12/2021						0.13
3/15/2021		0.12				
3/16/2021				0.4		
3/17/2021	0.69		0.49		2.1	
8/17/2021		0.11			2.2	0.14
8/18/2021	0.55					
8/19/2021			0.52	0.4		
2/9/2022	0.49			0.43	2.3	
2/10/2022		0.13	0.55			0.13
8/3/2022			0.49			0.12
8/4/2022	0.58	0.11		0.35	2	
1/26/2023	0.36	0.099	0.47	0.3	1.8	
1/27/2023						0.12
8/10/2023	0.53	0.1		0.31		
8/11/2023					1.6	
8/12/2023			0.55			0.13

Time Series

Constituent: Boron (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
4/2/2019	0.17	1.2			
4/3/2019			0.03 (J)	0.67	0.094
9/24/2019		1.2			
9/25/2019			0.11		
9/26/2019	0.6			0.93	0.26
3/26/2020			0.041 (J)		
3/27/2020	0.14			0.77	
3/30/2020		1.3			0.051 (J)
9/16/2020		1.7			
9/17/2020			0.067 (J)		
9/21/2020	0.45			0.82	0.2
3/15/2021	0.36	1.2			0.16
3/16/2021			0.037 (J)	0.81	
8/16/2021		1.1			
8/17/2021			0.026 (J)	0.85	0.2
8/18/2021	0.72				
2/8/2022					0.19
2/9/2022			0.042	0.96	
2/10/2022	0.23	1.4			
8/3/2022		1.1	0.034 (J)	0.75	
8/4/2022	0.55				0.14
1/26/2023	0.29	1	0.044	0.71	0.033 (J)
8/10/2023		1.1	0.037 (J)	0.65	0.13
8/11/2023	0.12				

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	<0.0005	<0.0005	<0.0005			
5/23/2016						0.000115 (J)
7/11/2016	<0.0005	<0.0005				
7/12/2016			<0.0005			<0.0005
8/30/2016	<0.0005	<0.0005	<0.0005			
9/1/2016						0.0001 (J)
10/19/2016	<0.0005	<0.0005	<0.0005			
10/24/2016						0.0001 (J)
12/6/2016	<0.0005	<0.0005	<0.0005			
12/7/2016						0.0001 (J)
1/24/2017	<0.0005	0.0001 (J)	<0.0005			
1/26/2017						<0.0005
3/21/2017	<0.0005	7E-05 (J)	<0.0005			
3/22/2017						0.0001 (J)
5/22/2017	<0.0005	0.0001 (J)	<0.0005			
5/24/2017						0.0002 (J)
4/2/2018	<0.0005	<0.0005				
4/3/2018			<0.0005			
4/4/2018						<0.0005
3/12/2019	<0.0005	0.00013 (J)	<0.0005			
3/13/2019						<0.0005
4/1/2019			<0.0005			
4/2/2019	<0.0005	0.00015 (J)				
4/3/2019						0.0001 (J)
9/23/2019	<0.0005	<0.0005	<0.0005			
9/27/2019						<0.0005
3/2/2020	<0.0005	<0.0005	<0.0005			
3/3/2020						<0.0005
3/25/2020	<0.0005	0.00014 (J)	<0.0005			
4/1/2020						<0.0005
9/15/2020	<0.0005	0.00012 (J)	<0.0005			
9/16/2020				<0.0005	<0.0005	<0.0005
11/10/2020				<0.0005	<0.0005	
12/15/2020				<0.0005	<0.0005	
1/19/2021				<0.0005	<0.0005	
2/8/2021	<0.0005					
2/9/2021		0.00016 (J)	<0.0005	<0.0005	<0.0005	
2/15/2021						<0.0005
3/10/2021	<0.0005				<0.0005	
3/11/2021		<0.0005	<0.0005	<0.0005		
3/12/2021						<0.0005
8/11/2021	<0.0005			<0.0005		
8/12/2021		0.00014 (J)	<0.0005			
8/13/2021					<0.0005	
8/17/2021						<0.0005
2/1/2022	<0.0005	0.00017 (J)	<0.0005	<0.0005	<0.0005	
2/9/2022						<0.0005
8/2/2022	<0.0005	0.00023 (J)	<0.0005	<0.0005	<0.0005	
8/3/2022						<0.0005
1/23/2023			<0.0005			
1/24/2023	<0.0005	0.00021 (J)		<0.0005	<0.0005	
1/27/2023						<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
8/8/2023	<0.0005	0.00026 (J)	<0.0005	<0.0005	<0.0005	
8/10/2023						<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				<0.0005	0.00024 (J)	
5/23/2016	<0.0005	<0.0005	<0.0005			<0.0005
7/12/2016	<0.0005	<0.0005	<0.0005	<0.0005	0.0002 (J)	<0.0005
9/1/2016	<0.0005	<0.0005	<0.0005	<0.0005	0.0001 (J)	<0.0005
10/20/2016				<0.0005	0.0001 (J)	0.0002 (J)
10/24/2016	<0.0005	<0.0005	<0.0005			
12/6/2016				0.0002 (J)	0.0017	0.0001 (J)
12/7/2016	0.0001 (J)	0.0002 (J)	<0.0005			
1/25/2017				0.0002 (J)	0.0002 (J)	
1/26/2017	<0.0005	<0.0005	<0.0005			<0.0005
3/21/2017				0.0002 (J)	0.0002 (J)	
3/22/2017	0.0001 (J)	0.0003 (J)	<0.0005			7E-05 (J)
5/23/2017				0.0001 (J)	0.0003 (J)	<0.0005
5/24/2017	<0.0005	9E-05 (J)	<0.0005			
4/3/2018				<0.0005	<0.001	<0.0005
4/4/2018	<0.0005	<0.0005	<0.0005			
3/12/2019					0.0002 (J)	
3/13/2019	<0.0005		<0.0005	<0.0005		<0.0005
3/14/2019		<0.0005				
4/2/2019				<0.0005		
4/3/2019	9.6E-05 (J)	<0.0005			0.00032 (J)	<0.0005
4/5/2019			<0.0005			
9/24/2019					0.0002 (J)	
9/25/2019				<0.0005		
9/26/2019			<0.0005			
9/27/2019	<0.0005	<0.0005				<0.0005
3/3/2020	<0.0005	0.00015 (J)			0.00017 (J)	
3/4/2020			<0.0005	<0.0005		<0.0005
3/26/2020		<0.0005				
3/27/2020				<0.0005	0.00014 (J)	
3/30/2020			<0.0005			
3/31/2020	<0.0005					<0.0005
9/16/2020				<0.0005	0.00023 (J)	
9/17/2020						<0.0005
9/18/2020	<0.0005	<0.0005				
9/21/2020			<0.0005			
2/10/2021				<0.0005		
2/12/2021	<0.0005	<0.0005				
2/16/2021					0.00037 (J)	<0.0005
2/22/2021			<0.0005			
3/15/2021				<0.0005	0.00017 (J)	
3/16/2021	<0.0005	<0.0005				<0.0005
3/17/2021			<0.0005			
8/16/2021				<0.0005		
8/17/2021						<0.0005
8/18/2021	<0.0005	<0.0005			0.0002 (J)	
8/19/2021			<0.0005			
2/9/2022	<0.0005	<0.0005				<0.0005
2/10/2022			<0.0005	<0.0005	0.00029 (J)	
8/3/2022	<0.0005	<0.0005	<0.0005	<0.0005	0.00017 (J)	
8/4/2022						<0.0005
8/11/2022				<0.0005		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
1/26/2023	<0.0005	<0.0005	<0.0005			<0.0005
1/27/2023				0.00019 (J)		
2/1/2023					0.00014 (J)	
8/10/2023	<0.0005	<0.0005				
8/11/2023						<0.0005
8/12/2023			<0.0005	<0.0005	0.00044 (J)	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		<0.0005	<0.0005		<0.0005	<0.0005
3/14/2019	<0.0005			<0.0005		
4/2/2019		<0.0005				
4/3/2019	<0.0005			<0.0005	<0.0005	
4/4/2019						<0.0005
4/8/2019			<0.0005			
9/25/2019		<0.0005				
9/26/2019			<0.0005		<0.0005	<0.0005
9/27/2019	0.00013 (J)			<0.0005		
3/2/2020		<0.0005				
3/3/2020				<0.0005		
3/4/2020	0.00026 (J)		<0.0005		<0.0005	<0.0005
3/26/2020	0.00019 (J)			<0.0005		
3/27/2020		<0.0005				
3/30/2020			<0.0005			
3/31/2020					<0.0005	
4/2/2020						<0.0005
9/17/2020		<0.0005			<0.0005	
9/18/2020				<0.0005		<0.0005
9/21/2020	0.00018 (J)		<0.0005			
2/11/2021		<0.0005				
2/12/2021	0.0002 (J)			<0.0005		
2/16/2021			<0.0005		<0.0005	<0.0005
3/12/2021						<0.0005
3/15/2021		<0.0005				
3/16/2021				<0.0005		
3/17/2021	0.00016 (J)		<0.0005		<0.0005	
8/17/2021		<0.0005			<0.0005	<0.0005
8/18/2021	0.00027 (J)					
8/19/2021			<0.0005	<0.0005		
2/9/2022	0.0011			<0.0005	<0.0005	
2/10/2022		<0.0005	<0.0005			<0.0005
8/3/2022			<0.0005			<0.0005
8/4/2022	0.00022 (J)	<0.0005		<0.0005	<0.0005	
1/26/2023	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
1/27/2023						<0.0005
8/10/2023	0.00018 (J)	<0.0005		<0.0005		
8/11/2023					<0.0005	
8/12/2023			<0.0005			<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	<0.0005	<0.0005			
3/13/2019			<0.0005	<0.0005	<0.0005
4/2/2019	<0.0005	<0.0005			
4/3/2019			<0.0005	<0.0005	<0.0005
9/24/2019		<0.0005			
9/25/2019			<0.0005		
9/26/2019	<0.0005			<0.0005	<0.0005
3/2/2020		<0.0005	<0.0005		
3/3/2020				<0.0005	<0.0005
3/4/2020	<0.0005				
3/26/2020			<0.0005		
3/27/2020	<0.0005			<0.0005	
3/30/2020		<0.0005			<0.0005
9/16/2020		<0.0005			
9/17/2020			<0.0005		
9/21/2020	<0.0005			<0.0005	<0.0005
2/10/2021	<0.0005				
2/15/2021		<0.0005			<0.0005
2/16/2021			<0.0005	<0.0005	
3/15/2021	<0.0005	<0.0005			<0.0005
3/16/2021			<0.0005	<0.0005	
8/16/2021		<0.0005			
8/17/2021			<0.0005	<0.0005	<0.0005
8/18/2021	<0.0005				
2/8/2022					<0.0005
2/9/2022			<0.0005	<0.0005	
2/10/2022	<0.0005	<0.0005			
8/3/2022		<0.0005	<0.0005	<0.0005	
8/4/2022	<0.0005				<0.0005
1/26/2023	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
8/10/2023		<0.0005	<0.0005	<0.0005	<0.0005
8/11/2023	<0.0005				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	138	22.9	76.2			
5/23/2016						167
7/11/2016	97.2	22.3				
7/12/2016			61.5			143
8/30/2016	97.5	26.4	65.1			
9/1/2016						156
10/19/2016	99.2	21.7	73.2			
10/24/2016						156
12/6/2016	105	18.2	74.9			
12/7/2016						183
1/24/2017	95.7	18.5	69.6			
1/26/2017						82.6
3/21/2017	106	18.6	75.7			
3/22/2017						154
5/22/2017	107	17.8	71.5			
5/24/2017						171
10/3/2017	102	20.2	76.3			162
6/4/2018	124	19.1	73.4			
6/5/2018						167
10/1/2018	108	20.5 (J)	80.9			
10/2/2018						144
4/1/2019			80.5			
4/2/2019	132	22.5 (J)				
4/3/2019						137
9/23/2019	118	19.5	71			
9/27/2019						157
3/25/2020	127	23	89.8			
4/1/2020						96.2
6/16/2020	130		85.1			
9/15/2020	103	21.1	73.1			
9/16/2020				56	30	139
11/10/2020				63.3	33.6	
12/15/2020				62.6	28.7	
1/19/2021				60.1	33	
3/10/2021	111				5.9	
3/11/2021		43.8	83.8	59.6		
3/12/2021						146 (M1)
8/11/2021	113			61		
8/12/2021		21.9	84			
8/13/2021					28.9	
8/17/2021						153
2/1/2022	106	27.2	85.1	55.9	24.8	
2/9/2022						76.8
8/2/2022	117	31.2	84.6	54.1	20.9	
8/3/2022						125
1/23/2023			85			
1/24/2023	117	29.4		56.6	13.2	
1/27/2023						60.4
8/8/2023	118	30.7	78.3	52.8	8.1	
8/10/2023						155

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				117	159	
5/23/2016	131	195	133			179
7/12/2016	124	181	101	88.8	127	174
9/1/2016	107	179	120	96.3	135	170
10/20/2016				96.9	134	133
10/24/2016	145	193	127			
12/6/2016				104	142	181
12/7/2016	159	193	113			
1/25/2017				94.5	142	
1/26/2017	121	172	77.9			175
3/21/2017				109	148	
3/22/2017	130	162	85.1			183
5/23/2017				93.3	140	181
5/24/2017	117	158	77.1			
10/3/2017	87.7	130	62	108	158	188
6/5/2018	113		110	99.8		
6/6/2018		136			127	184
10/2/2018				108	118	173
10/3/2018	89	125				
10/5/2018			73.6			
4/2/2019				101		
4/3/2019	112	114			125	164
4/5/2019			77.1			
9/24/2019					113	
9/25/2019				105		
9/26/2019			195			
9/27/2019	113	153				175
3/26/2020		145				
3/27/2020				119	133	
3/30/2020			234			
3/31/2020	124					182
6/16/2020					120	
6/17/2020				112		
9/16/2020				98	119	
9/17/2020						164
9/18/2020	122	163				
9/21/2020			173			
3/15/2021				113	156	
3/16/2021	132	166				182
3/17/2021			184			
8/16/2021				112		
8/17/2021						183
8/18/2021	128	163			147	
8/19/2021			179			
2/9/2022	144	172				183
2/10/2022			206	108	153	
8/3/2022	131	167	237	125	153	
8/4/2022						196
8/11/2022				119		
1/26/2023	113	154	234			173
1/27/2023				124		
2/1/2023					110	

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
8/10/2023	100	156				
8/11/2023						168
8/12/2023			172	101	122	

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
4/2/2019		109				
4/3/2019	74.9			25.4	122	
4/4/2019						26.3
4/8/2019			83			
9/25/2019		113				
9/26/2019			83.1		158	32.1
9/27/2019	90			26.4		
3/26/2020	171			27		
3/27/2020		126				
3/30/2020			84.4			
3/31/2020					155	
4/2/2020						28.4
9/17/2020		110			150	
9/18/2020				25.1		24.8
9/21/2020	135		87.6			
3/12/2021						28
3/15/2021		121				
3/16/2021				24.8		
3/17/2021	130		102		175	
8/17/2021		123			177	28.5
8/18/2021	125					
8/19/2021			99.5	23.8		
2/9/2022	97.6			23.5	176	
2/10/2022		123	110			31.4
8/3/2022			102			30.8
8/4/2022	187	131		22	186	
1/26/2023	118	122	107	21.8	179	
1/27/2023						28.1
8/10/2023	127	123		86.1		
8/11/2023					152	
8/12/2023			105			27.8

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
4/2/2019	64.6	131			
4/3/2019			82	178	50.2
9/24/2019		140			
9/25/2019			105		
9/26/2019	84			189	83.9
3/26/2020			89.6		
3/27/2020	53			186	
3/30/2020		148			31.1
9/16/2020		126			
9/17/2020			103		
9/21/2020	76.8			173	75.3
3/15/2021	66.1	145			76.9
3/16/2021			71.8	184	
8/16/2021		140			
8/17/2021			73.3	181	90.7
8/18/2021	82.8				
2/8/2022					73.3
2/9/2022			68.1	178	
2/10/2022	58.5	156			
8/3/2022		143	86.6	176	
8/4/2022	76.7				73.1
1/26/2023	64.4	146	76.1	180	21.6
8/10/2023		147	99.7	179	81.2
8/11/2023	49.6				

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	9.94	6.14	5.93			
5/23/2016						56.1
7/11/2016	6.3	5.9				
7/12/2016			6.2			63
8/30/2016	6	6.2	6.4			
9/1/2016						77
10/19/2016	5.8	6.1	6.5			
10/24/2016						99
12/6/2016	5.4	6	7.2			
12/7/2016						96
1/24/2017	5.2	6.1	6.4			
1/26/2017						7
3/21/2017	4.6	5.9	7.5			
3/22/2017						82
5/22/2017	4.6	5.9	6.5			
5/24/2017						81
10/3/2017	5.6	6.3	6.5			100
6/4/2018	13.1	6.1	6.3			
6/5/2018						66.6
10/1/2018	6.6	6.4	6.4			
10/2/2018						48.3
4/1/2019			6.5			
4/2/2019	20.3	5.8				
4/3/2019						49.3
9/23/2019	17.7	5.1	5.9			
9/27/2019						49.9
3/25/2020	20.4	5.2	6.1			
4/1/2020						5.4
6/16/2020	41.1		5.8			
9/15/2020	13.4	5	6			
9/16/2020				4.1	7.2	39.7
11/10/2020				4.4	7.8	
12/15/2020				4.7	9.4	
1/19/2021				4.1	9.5	
3/10/2021	7.4				12.3	
3/11/2021		5.1	5.9	4.5		
3/12/2021						35
8/11/2021	9.6			3.5		
8/12/2021		5.2	4.8			
8/13/2021					39.9	
8/17/2021						28.3
2/1/2022	7.5	7	5.7	4.1	44.8	
2/9/2022						1.2
8/2/2022	14.1	7.8	5.9	4.3	19.8	
8/3/2022						12.3
1/23/2023			5.6			
1/24/2023	9	7.1		4.3	24.9	
1/27/2023						1.6
8/8/2023	26	6.6	5.3	3.5	27	
8/10/2023						13.4

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				50.4	109	
5/23/2016	51.9	160	93.2			152
7/12/2016	100	160	78	50	110	160
9/1/2016	58	140	100	50	110	160
10/20/2016				49	110	110
10/24/2016	220	160	140			
12/6/2016				51	100	150
12/7/2016	180	190	110			
1/25/2017				54	110	
1/26/2017	90	160	70			170
3/21/2017				46	110	
3/22/2017	37	130	59			160
5/23/2017				49	130	150
5/24/2017	69	120	50			
10/3/2017	28	93	29	52	130	160
6/5/2018	56.1		72.3	52.3		
6/6/2018		46.4			44.8	138
10/2/2018				52.6	89.4	142
10/3/2018	24.8	88.4				
10/5/2018			32.3			
4/2/2019				55.5		
4/3/2019	4.6	62.8			91.6	130
4/5/2019			36.4			
9/24/2019					60.2	
9/25/2019				49.8		
9/26/2019			109			
9/27/2019	27.9	81				126
3/26/2020		48				
3/27/2020				48.3	79.8	
3/30/2020			75.1			
3/31/2020	3.2					105
6/16/2020					67.9	
6/17/2020				45.2		
9/16/2020				46.4	74.6	
9/17/2020						105
9/18/2020	34.9	74.6				
9/21/2020			41.2			
3/15/2021				44.5	72.4	
3/16/2021	11.5	56.8				94.7
3/17/2021			31.4			
8/16/2021				40.3		
8/17/2021						88.6
8/18/2021	19.9	47.3			50.9	
8/19/2021			24.4			
2/9/2022	20.4	46.8				84.4
2/10/2022			17.4	39.8	48.2	
8/3/2022	13.8	39.2	13	37.9	54.1	
8/4/2022						86.8
8/11/2022				37.7		
1/26/2023	8.8	34.6	12.5			86.9
1/27/2023				40		
2/1/2023					52.4	

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
8/10/2023	6.5	30.6				
8/11/2023						78.9
8/12/2023			15.3	33.3	53.1	

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
4/2/2019		27.5				
4/3/2019	19.5			32	90.6	
4/4/2019						26.9
4/8/2019			43.3			
9/25/2019		25.7				
9/26/2019			39.7		118	31.8
9/27/2019	46.2			36.2		
3/26/2020	64			34.6		
3/27/2020		28.8				
3/30/2020			37.4			
3/31/2020					98	
4/2/2020						27.9
9/17/2020		29.7			103	
9/18/2020				33.4		30.4
9/21/2020	35		45.2			
3/12/2021						31.3
3/15/2021		31.1				
3/16/2021				29.2		
3/17/2021	19.8		42.9		95.3	
8/17/2021		28.3			89.2	30
8/18/2021	14.3					
8/19/2021			37.2	30.8		
2/9/2022	10.2			26.5	85.7	
2/10/2022		31.4	38.2			31.4
8/3/2022			39.6			36.7
8/4/2022	11.3	31.4		20.5	88.5	
1/26/2023	7.7	30	38	17.2	83.6	
1/27/2023						32.5
8/10/2023	11.2	28.4		13.6		
8/11/2023					87.6	
8/12/2023			35.1			29

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
4/2/2019	44	80.9			
4/3/2019			1.8	60.9	5.6
9/24/2019		83.8			
9/25/2019			35.9		
9/26/2019	43.5			64.9	15.6
3/26/2020			0.73 (J)		
3/27/2020	33			48.6	
3/30/2020		71.2			1.5
9/16/2020		75.3			
9/17/2020			28.7		
9/21/2020	42.9			58.1	11.1
3/15/2021	35.8	73.6			6.8
3/16/2021			1.4	49.8	
8/16/2021		68			
8/17/2021			1.4	43.5	8.9
8/18/2021	33.7				
2/8/2022					6.9
2/9/2022			0.74 (J)	37.9	
2/10/2022	29	66			
8/3/2022		63.5	4.4	39.6	
8/4/2022	33.3				4.7
1/26/2023	27.7	62.4	0.86 (J)	30.5	1.2
8/10/2023		56.1	0.86 (J)	26.9	3.3
8/11/2023	17				

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	<0.005	<0.005	<0.005			
5/23/2016						<0.005
7/11/2016	<0.005	<0.005				
7/12/2016			<0.005			<0.005
8/30/2016	<0.005	<0.005	<0.005			
9/1/2016						<0.005
10/19/2016	<0.005	<0.005	<0.005			
10/24/2016						<0.005
12/6/2016	<0.005	<0.005	<0.005			
12/7/2016						<0.005
1/24/2017	<0.005	<0.005	<0.005			
1/26/2017						<0.005
3/21/2017	0.0005 (J)	<0.005	<0.005			
3/22/2017						<0.005
5/22/2017	<0.005	<0.005	0.0007 (J)			
5/24/2017						<0.005
4/2/2018	<0.005	<0.005				
4/3/2018			<0.005			
4/4/2018						<0.005
3/12/2019	<0.005	<0.005	<0.005			
3/13/2019						<0.005
4/1/2019			<0.005			
4/2/2019	<0.005	0.0079 (J)				
4/3/2019						0.02
9/23/2019	<0.005	0.00058 (J)	<0.005			
9/27/2019						<0.005
3/2/2020	<0.005	0.00041 (J)	<0.005			
3/3/2020						<0.005
3/25/2020	0.00072 (J)	<0.005	<0.005			
4/1/2020						<0.005
9/15/2020	<0.005	<0.005	<0.005			
9/16/2020				<0.005	0.0012 (J)	<0.005
11/10/2020				<0.005	0.00089 (J)	
12/15/2020				<0.005	0.00072 (J)	
1/19/2021				<0.005	0.0011 (J)	
2/8/2021	<0.005					
2/9/2021		<0.005	<0.005	0.00095 (J)	0.00066 (J)	
2/15/2021						<0.005
3/10/2021	<0.005				<0.005	
3/11/2021		<0.005	<0.005	<0.005		
3/12/2021						<0.005
8/11/2021	<0.005			<0.005		
8/12/2021		<0.005	<0.005			
8/13/2021					0.0016 (J)	
8/17/2021						<0.005
2/1/2022	<0.005	<0.005	<0.005	<0.005	0.0013 (J)	
2/9/2022						0.0011 (J)
8/2/2022	<0.005	<0.005	<0.005	<0.005	<0.005	
8/3/2022						<0.005
1/23/2023			<0.005			
1/24/2023	<0.005	<0.005		<0.005	<0.005	
1/27/2023						0.0012 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
8/8/2023	<0.005	<0.005	<0.005	<0.005	<0.005	
8/10/2023						<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				<0.005	<0.005	
5/23/2016	<0.005	<0.005	<0.005			<0.005
7/12/2016	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
9/1/2016	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
10/20/2016				<0.005	<0.005	<0.005
10/24/2016	<0.005	<0.005	<0.005			
12/6/2016				<0.005	<0.005	<0.005
12/7/2016	<0.005	<0.005	<0.005			
1/25/2017				<0.005	<0.005	
1/26/2017	<0.005	<0.005	<0.005			<0.005
3/21/2017				<0.005	0.0005 (J)	
3/22/2017	0.0003 (J)	0.0004 (J)	0.0004 (J)			<0.005
5/23/2017				<0.005	<0.005	<0.005
5/24/2017	<0.005	<0.005	<0.005			
4/3/2018				<0.005	<0.005	<0.005
4/4/2018	<0.005	<0.005	<0.005			
3/12/2019					<0.005	
3/13/2019	<0.005		<0.005	<0.005		<0.005
3/14/2019		0.0025 (J)				
4/2/2019				<0.005		
4/3/2019	<0.005	<0.005			<0.005	<0.005
4/5/2019			<0.005			
9/24/2019					<0.005	
9/25/2019				0.071		
9/26/2019			<0.005			
9/27/2019	<0.005	<0.005				<0.005
3/3/2020	0.00061 (J)	<0.005			0.0007 (J)	
3/4/2020			<0.005	0.0016 (J)		<0.005
3/26/2020		<0.005				
3/27/2020				0.0004 (J)	<0.005	
3/30/2020			0.00059 (J)			
3/31/2020	<0.005					0.00052 (J)
9/16/2020				0.00074 (J)	0.0015 (J)	
9/17/2020						<0.005
9/18/2020	<0.005	0.00091 (J)				
9/21/2020			0.00056 (J)			
2/10/2021				0.0014 (J)		
2/12/2021	<0.005	<0.005				
2/16/2021					<0.005	0.00067 (J)
2/22/2021			<0.005			
3/15/2021				0.0021 (J)	0.00082 (J)	
3/16/2021	<0.005	<0.005				<0.005
3/17/2021			<0.005			
8/16/2021				<0.005		
8/17/2021						<0.005
8/18/2021	<0.005	<0.005			<0.005	
8/19/2021			<0.005			
2/9/2022	<0.005	<0.005				0.0011 (J)
2/10/2022			<0.005	<0.005	<0.005	
8/3/2022	<0.005	<0.005	<0.005	<0.005	<0.005	
8/4/2022						<0.005
8/11/2022				<0.005		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
1/26/2023	0.0012 (J)	<0.005	<0.005			0.0013 (J)
1/27/2023				0.0014 (J)		
2/1/2023					<0.005	
8/10/2023	<0.005	<0.005				
8/11/2023						<0.005
8/12/2023			<0.005	<0.005	<0.005	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		<0.005	<0.005		<0.005	<0.005
3/14/2019	<0.005			<0.005		
4/2/2019		<0.005				
4/3/2019	<0.005			<0.005	<0.005	
4/4/2019						<0.005
4/8/2019			<0.005			
9/25/2019		<0.005				
9/26/2019			0.00042 (J)		0.00076 (J)	<0.005
9/27/2019	<0.005			<0.005		
3/2/2020		0.00071 (J)				
3/3/2020				<0.005		
3/4/2020	0.00066 (J)		<0.005		0.0028 (J)	<0.005
3/26/2020	0.00047 (J)			0.00061 (J)		
3/27/2020		0.00051 (J)				
3/30/2020			<0.005			
3/31/2020					0.001 (J)	
4/2/2020						<0.005
9/17/2020		<0.005			<0.005	
9/18/2020				<0.005		0.0007 (J)
9/21/2020	0.0014 (J)		<0.005			
2/11/2021		<0.005				
2/12/2021	0.00059 (J)			<0.005		
2/16/2021			<0.005		0.001 (J)	0.00082 (J)
3/12/2021						<0.005
3/15/2021		0.00068 (J)				
3/16/2021				<0.005		
3/17/2021	0.0022 (J)		0.0017 (J)		0.0015 (J)	
8/17/2021		<0.005			<0.005	<0.005
8/18/2021	<0.005					
8/19/2021			<0.005	<0.005		
2/9/2022	<0.005			<0.005	<0.005	
2/10/2022		<0.005	<0.005			<0.005
8/3/2022			<0.005			<0.005
8/4/2022	<0.005	<0.005		<0.005	<0.005	
1/26/2023	0.0011 (J)	<0.005	<0.005	0.0012 (J)	<0.005	
1/27/2023						<0.005
8/10/2023	<0.005	<0.005		<0.005		
8/11/2023					<0.005	
8/12/2023			<0.005			<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	<0.005	<0.005			
3/13/2019			0.003 (J)	<0.005	<0.005
4/2/2019	<0.005	<0.005			
4/3/2019			0.003 (J)	<0.005	0.0023 (J)
9/24/2019		<0.005			
9/25/2019			0.0052 (J)		
9/26/2019	0.00081 (J)			<0.005	0.0013 (J)
3/2/2020		<0.005	0.0042 (J)		
3/3/2020				0.00044 (J)	0.0015 (J)
3/4/2020	0.0027 (J)				
3/26/2020			0.0044 (J)		
3/27/2020	<0.005			0.00059 (J)	
3/30/2020		0.001 (J)			0.0021 (J)
9/16/2020		<0.005			
9/17/2020			0.0021 (J)		
9/21/2020	0.00085 (J)			<0.005	0.0017 (J)
2/10/2021	0.0014 (J)				
2/15/2021		<0.005			0.0015 (J)
2/16/2021			0.0032 (J)	<0.005	
3/15/2021	0.00078 (J)	<0.005			0.0018 (J)
3/16/2021			0.0024 (J)	<0.005	
8/16/2021		<0.005			
8/17/2021			0.0018 (J)	<0.005	<0.005
8/18/2021	<0.005				
2/8/2022					0.0016 (J)
2/9/2022			0.0031 (J)	<0.005	
2/10/2022	0.0011 (J)	<0.005			
8/3/2022		<0.005	0.0015 (J)	<0.005	
8/4/2022	<0.005				0.002 (J)
1/26/2023	<0.005	<0.005	0.0032 (J)	0.0014 (J)	0.0017 (J)
8/10/2023		<0.005	0.002 (J)	<0.005	0.0015 (J)
8/11/2023	<0.005				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	<0.005	0.0293	<0.005			
5/23/2016						<0.005
7/11/2016	0.0004 (J)	0.0267				
7/12/2016			<0.005			0.0006 (J)
8/30/2016	<0.005	0.028	<0.005			
9/1/2016						0.0007 (J)
10/19/2016	<0.005	0.0201	<0.005			
10/24/2016						0.0009 (J)
12/6/2016	<0.005	0.0184	<0.005			
12/7/2016						0.0012 (J)
1/24/2017	<0.005	0.0206	<0.005			
1/26/2017						<0.005
3/21/2017	<0.005	0.0251	<0.005			
3/22/2017						0.0006 (J)
5/22/2017	<0.005	0.0263	<0.005			
5/24/2017						0.0006 (J)
4/2/2018	<0.005	0.019				
4/3/2018			<0.005			
4/4/2018						<0.005
3/12/2019	<0.005	0.017	<0.005			
3/13/2019						<0.005
4/1/2019			<0.005			
4/2/2019	<0.005	0.019				
4/3/2019						<0.005
9/23/2019	<0.005	0.038	<0.005			
9/27/2019						<0.005
3/2/2020	<0.005	0.019	<0.005			
3/3/2020						<0.005
3/25/2020	<0.005	0.02	<0.005			
4/1/2020						<0.005
9/15/2020	<0.005	0.021	<0.005			
9/16/2020				<0.005	<0.005	<0.005
11/10/2020				<0.005	<0.005	
12/15/2020				<0.005	<0.005	
1/19/2021				<0.005	<0.005	
2/8/2021	<0.005					
2/9/2021		0.02	<0.005	<0.005	<0.005	
2/15/2021						<0.005
3/10/2021	<0.005				<0.005	
3/11/2021		0.013	<0.005	<0.005		
3/12/2021						<0.005
8/11/2021	<0.005			<0.005		
8/12/2021		0.022	<0.005			
8/13/2021					<0.005	
8/17/2021						<0.005
2/1/2022	<0.005	0.025	<0.005	<0.005	<0.005	
2/9/2022						<0.005
8/2/2022	0.00054 (J)	0.024	<0.005	<0.005	<0.005	
8/3/2022						<0.005
1/23/2023			<0.005			
1/24/2023	<0.005	0.024		<0.005	<0.005	
1/27/2023						<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
8/8/2023	0.0008 (J)	0.029	<0.005	<0.005	<0.005	
8/10/2023						<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				<0.01	0.00207 (J)	
5/23/2016	<0.005	<0.01	0.00361 (J)			<0.01
7/12/2016	0.0021 (J)	0.0018 (J)	0.0032 (J)	0.0003 (J)	0.0019 (J)	0.0006 (J)
9/1/2016	0.0025 (J)	0.0016 (J)	0.0033 (J)	<0.01	0.0023 (J)	0.0007 (J)
10/20/2016				0.0008 (J)	0.002 (J)	0.002 (J)
10/24/2016	0.0032 (J)	0.0017 (J)	0.004 (J)			
12/6/2016				0.0009 (J)	0.0026 (J)	0.0011 (J)
12/7/2016	0.003 (J)	0.0021 (J)	0.0034 (J)			
1/25/2017				0.0005 (J)	0.002 (J)	
1/26/2017	0.0014 (J)	0.0016 (J)	0.0024 (J)			0.0006 (J)
3/21/2017				0.0005 (J)	0.0023 (J)	
3/22/2017	0.0014 (J)	0.0018 (J)	0.0026 (J)			0.0005 (J)
5/23/2017				0.0005 (J)	0.0023 (J)	0.0006 (J)
5/24/2017	0.0008 (J)	0.0015 (J)	0.0022 (J)			
4/3/2018				<0.01	<0.025	<0.01
4/4/2018	<0.005	<0.01	<0.01			
3/12/2019					0.002 (J)	
3/13/2019	0.00098 (J)		0.0022 (J)	0.00067 (J)		0.00065 (J)
3/14/2019		0.0011 (J)				
4/2/2019				0.00069 (J)		
4/3/2019	0.0018 (J)	0.0011 (J)			0.0019 (J)	0.00069 (J)
4/5/2019			0.0017 (J)			
9/24/2019					0.0015 (J)	
9/25/2019				0.0026 (J)		
9/26/2019			0.0042 (J)			
9/27/2019	0.00071 (J)	0.0012 (J)				0.00057 (J)
3/3/2020	0.00087 (J)	0.0013 (J)			0.002 (J)	
3/4/2020			0.0066	0.0011 (J)		0.00053 (J)
3/26/2020		0.0012 (J)				
3/27/2020				0.00074 (J)	0.0018 (J)	
3/30/2020			0.0053			
3/31/2020	0.0014 (J)					0.00051 (J)
9/16/2020				0.00065 (J)	0.0019 (J)	
9/17/2020						0.0007 (J)
9/18/2020	<0.005	0.0014 (J)				
9/21/2020			0.0032 (J)			
2/10/2021				0.00081 (J)		
2/12/2021	<0.005	0.0012 (J)				
2/16/2021					0.002 (J)	0.00061 (J)
2/22/2021			0.003 (J)			
3/15/2021				0.0014 (J)	0.0019 (J)	
3/16/2021	<0.005	0.0012 (J)				0.00069 (J)
3/17/2021			0.0029 (J)			
8/16/2021				0.0012 (J)		
8/17/2021						0.00045 (J)
8/18/2021	<0.005	0.0012 (J)			0.002 (J)	
8/19/2021			0.0024 (J)			
2/9/2022	<0.005	0.0013 (J)				0.00051 (J)
2/10/2022			0.0026 (J)	0.0011 (J)	0.0021 (J)	
8/3/2022	<0.005	0.0012 (J)	0.0041 (J)	0.0015 (J)	0.0024 (J)	
8/4/2022						0.00046 (J)
8/11/2022				0.0018 (J)		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
1/26/2023	<0.005	0.0012 (J)	0.012			0.00068 (J)
1/27/2023				0.00067 (J)		
2/1/2023					<0.025	
8/10/2023	<0.005	0.0012 (J)				
8/11/2023						0.00057 (J)
8/12/2023			0.018	0.00061 (J)	0.0016 (J)	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		0.0011 (J)	<0.005		<0.005	<0.005
3/14/2019	0.025			<0.005		
4/2/2019		<0.005				
4/3/2019	0.036			<0.005	<0.005	
4/4/2019						9.1E-05 (J)
4/8/2019			0.00025 (J)			
9/25/2019		<0.005				
9/26/2019			0.0011 (J)		0.00053 (J)	<0.005
9/27/2019	0.033			<0.005		
3/2/2020		<0.005				
3/3/2020				<0.005		
3/4/2020	0.048		0.00056 (J)		<0.005	0.00045 (J)
3/26/2020	0.045			<0.005		
3/27/2020		<0.005				
3/30/2020			<0.005			
3/31/2020					0.0003 (J)	
4/2/2020						<0.005
9/17/2020		<0.005			<0.005	
9/18/2020				<0.005		<0.005
9/21/2020	0.032		<0.005			
2/11/2021		<0.005				
2/12/2021	0.037			<0.005		
2/16/2021			<0.005		0.00045 (J)	0.0004 (J)
3/12/2021						<0.005
3/15/2021		<0.005				
3/16/2021				<0.005		
3/17/2021	0.037		<0.005		0.00044 (J)	
8/17/2021		<0.005			0.00045 (J)	<0.005
8/18/2021	0.039					
8/19/2021			<0.005	<0.005		
2/9/2022	0.03			<0.005	0.00059 (J)	
2/10/2022		<0.005	<0.005			<0.005
8/3/2022			<0.005			<0.005
8/4/2022	0.043	<0.005		<0.005	0.00048 (J)	
1/26/2023	0.022	<0.005	<0.005	<0.005	0.00051 (J)	
1/27/2023						<0.005
8/10/2023	0.027	<0.005		<0.005		
8/11/2023					<0.005	
8/12/2023			<0.005			<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	<0.005	0.00057 (J)			
3/13/2019			<0.005	0.00055 (J)	<0.005
4/2/2019	<0.005	0.00084 (J)			
4/3/2019			<0.005	<0.005	<0.005
9/24/2019		0.0015 (J)			
9/25/2019			<0.005		
9/26/2019	<0.005			0.00036 (J)	<0.005
3/2/2020		0.00067 (J)	<0.005		
3/3/2020				0.00094 (J)	<0.005
3/4/2020	0.00093 (J)				
3/26/2020			<0.005		
3/27/2020	<0.005			0.00059 (J)	
3/30/2020		0.00063 (J)			<0.005
9/16/2020		0.0013 (J)			
9/17/2020			<0.005		
9/21/2020	<0.005			0.00041 (J)	<0.005
2/10/2021	<0.005				
2/15/2021		0.00097 (J)			<0.005
2/16/2021			<0.005	0.00045 (J)	
3/15/2021	<0.005	0.0011 (J)			<0.005
3/16/2021			<0.005	0.00042 (J)	
8/16/2021		0.0014 (J)			
8/17/2021			<0.005	<0.005	<0.005
8/18/2021	<0.005				
2/8/2022					<0.005
2/9/2022			<0.005	0.00059 (J)	
2/10/2022	<0.005	0.00089 (J)			
8/3/2022		0.0012 (J)	<0.005	0.00041 (J)	
8/4/2022	<0.005				<0.005
1/26/2023	<0.005	0.00056 (J)	<0.005	0.00044 (J)	<0.005
8/10/2023		<0.005	<0.005	0.00041 (J)	<0.005
8/11/2023	<0.005				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	0.397 (U)	0.627 (U)	0.342 (U)			
5/23/2016						0.419 (U)
7/11/2016	0.738 (U)	1.38				
7/12/2016			0.499 (U)			0.855
8/30/2016	0.581 (U)	1.05 (U)	0.976 (U)			
9/1/2016						0.844 (U)
10/19/2016	0.213 (U)	1.11 (U)	0.626 (U)			
10/24/2016						0.917 (U)
12/6/2016	0.444 (U)	0.741 (U)	0.805 (U)			
12/7/2016						0.558 (U)
1/24/2017	0.373 (U)	0.908 (U)	0.336 (U)			
1/26/2017						0.922 (U)
3/21/2017	0.816 (U)	0.567 (U)	0.358 (U)			
3/22/2017						0.751 (U)
5/22/2017	0.554 (U)	0.638 (U)	0.744 (U)			
5/24/2017						0.725 (U)
4/2/2018	0.405 (U)	0.761 (U)				
4/3/2018			0.684 (U)			
4/4/2018						0.715 (U)
6/4/2018	1.13 (U)	0.975 (U)	0.0291 (U)			
6/5/2018						0.718 (U)
10/1/2018	0.132 (U)	0.434 (U)	0.781 (U)			
10/2/2018						0.948
3/12/2019	0.327 (U)	0.454 (U)	1.01 (U)			
3/13/2019						1.19 (U)
4/1/2019			0.76 (U)			
4/2/2019	0.739 (U)	0.651 (U)				
4/3/2019						1.82 (U)
9/27/2019						1.16 (U)
9/30/2019	0.306 (U)	1.04 (U)	0.384 (U)			
3/2/2020	0.61 (U)	1.58	0.249 (U)			
3/3/2020						0.667 (U)
3/25/2020	4.36	0.621 (U)	0.833 (U)			
4/1/2020						0.235 (U)
9/15/2020	0.748 (U)	0.124 (U)	0.161 (U)			
9/16/2020				0.531 (U)	0.422 (U)	0 (U)
11/10/2020				0.788 (U)	0.293 (U)	
12/15/2020				1.04 (U)	0.7 (U)	
1/19/2021				0.685 (U)	0.79 (U)	
2/8/2021	0.223 (U)					
2/9/2021		0.721 (U)	0.447 (U)	0.138 (U)	0.486 (U)	
2/15/2021						1.91
3/10/2021	0 (U)				0.811 (U)	
3/11/2021		0.737 (U)	0.128 (U)	1.51 (U)		
3/12/2021						1.12 (U)
8/11/2021	0.115 (U)			0.394 (U)		
8/12/2021		0.746 (U)	0.389 (U)			
8/13/2021					1.2	
8/17/2021						0.595 (U)
2/1/2022	0.143 (U)	0.588 (U)	0.266 (U)	1.12	0.665 (U)	
2/9/2022						0.49 (U)
8/2/2022	0.203 (U)	0.861 (U)	0.4 (U)	0.662 (U)	0.952 (U)	

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
8/3/2022						0.454 (U)
1/23/2023			0.311 (U)			
1/24/2023	0.549 (U)	0.829 (U)		1.25	0.421 (U)	
1/27/2023						1.2
8/8/2023	0.195 (U)	0.175 (U)	0.411 (U)	0.503 (U)	0.163 (U)	
8/10/2023						0.831 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				0.62 (U)	0.56 (U)	
5/23/2016	0.509 (U)	1.12	0.625 (U)			0.826 (U)
7/12/2016	0.784 (U)	1.61	0.478 (U)	0.283 (U)	0.636 (U)	0.511 (U)
9/1/2016	0.261 (U)	1.23	0.595 (U)	0.703 (U)	0.818 (U)	0.762 (U)
10/20/2016				1.97	1.04 (U)	1.17
10/24/2016	1.42	1.98	1.54			
12/6/2016				2	0.771 (U)	0.126 (U)
12/7/2016	0.781 (U)	0.319 (U)	0.657 (U)			
1/25/2017				1.06 (U)	0.859 (U)	
1/26/2017	0.842 (U)	0.54 (U)	1.22			0.515 (U)
3/21/2017				0.668 (U)	0.851 (U)	
3/22/2017	0.318 (U)	0.635 (U)	0.285 (U)			0.451 (U)
5/23/2017				0.621 (U)	0.705 (U)	0.924 (U)
5/24/2017	0.687 (U)	1.01	0.655 (U)			
4/3/2018				0.538 (U)	0.311 (U)	0.732 (U)
4/4/2018	1.5	0.956	0.882 (U)			
6/5/2018	0.549 (U)		1.1 (U)	0.985 (U)		
6/6/2018		0.424 (U)			0.896 (U)	0.813 (U)
10/2/2018				0.837 (U)	1.21	0.61 (U)
10/3/2018	1.48	0.57 (U)				
10/5/2018			0.558 (U)			
3/12/2019					0.544 (U)	
3/13/2019	0.584 (U)		0.39 (U)	0.403 (U)		1 (U)
3/14/2019		0.992 (U)				
4/2/2019				0.865 (U)		
4/3/2019	0.36 (U)	0.734 (U)			0.885 (U)	0.156 (U)
4/5/2019			0.422 (U)			
9/24/2019					1.3	
9/25/2019				0.884 (U)		
9/26/2019			0.939 (U)			
9/27/2019	1.78	0.958 (U)				0.428 (U)
3/3/2020	0.716 (U)	0.971 (U)			0.835 (U)	
3/4/2020			0.708 (U)	0.624 (U)		1.03
3/26/2020		0.209 (U)				
3/27/2020				0.485 (U)	1.04 (U)	
3/30/2020			0.602 (U)			
3/31/2020	1.3 (U)					1.2 (U)
9/16/2020				0.135 (U)	0.526 (U)	
9/17/2020						1.38 (U)
9/18/2020	1.24 (U)	0.916 (U)				
9/21/2020			1.53			
2/10/2021				0.281 (U)		
2/12/2021	1.1	0.236 (U)				
2/16/2021					0.764 (U)	1.17 (U)
2/22/2021			1.02			
3/15/2021				0.666 (U)	1.3 (U)	
3/16/2021	1.71	0.245 (U)				0.446 (U)
3/17/2021			1.45 (U)			
8/16/2021				0.143 (U)		
8/17/2021						0.771 (U)
8/18/2021	0.919 (U)	0.919 (U)			1.02 (U)	
8/19/2021			0.764 (U)			

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
2/9/2022	0.444 (U)	0.564 (U)				0.198 (U)
2/10/2022			0.442 (U)	0.175 (U)	0.945 (U)	
8/3/2022	0.823 (U)	0.418 (U)	0.54 (U)	0.42 (U)	0.455 (U)	
8/4/2022						0.597 (U)
8/11/2022				0.461 (U)		
1/26/2023	0.441 (U)	0.877	0.719			0.516 (U)
1/27/2023				0.45 (U)		
2/1/2023					0.241 (U)	
8/10/2023	0.273 (U)	0.453 (U)				
8/11/2023						0.867 (U)
8/12/2023			0.58 (U)	0.729 (U)	0.767 (U)	

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		0.538 (U)	0.311 (U)		0.627 (U)	1.81
3/14/2019	0.347 (U)			1.28 (U)		
4/2/2019		1.02 (U)				
4/3/2019	0.884 (U)			0.662 (U)	0.205 (U)	
4/4/2019						1.33
4/8/2019			0.573 (U)			
9/25/2019		1.35 (U)				
9/26/2019			0.878 (U)		0.912 (U)	0.974 (U)
9/27/2019	0.534 (U)			0.945 (U)		
3/2/2020		0.653 (U)				
3/3/2020				1.36		
3/4/2020	1.04		0.333 (U)		1.27 (U)	1.12
3/26/2020	1.1 (U)			0.793 (U)		
3/27/2020		0.1 (U)				
3/30/2020			0.107 (U)			
3/31/2020					1.65	
4/2/2020						2.48
9/17/2020		0.469 (U)			0.42 (U)	
9/18/2020				1.17 (U)		1.13 (U)
9/21/2020	1.36 (U)		1.23 (U)			
2/11/2021		0.334 (U)				
2/12/2021	0.764 (U)			1.17		
2/16/2021			0.156 (U)		0.505 (U)	1.21
3/12/2021						0.649 (U)
3/15/2021		1.24 (U)				
3/16/2021				0.742 (U)		
3/17/2021	0.466 (U)		0.174 (U)		0.165 (U)	
8/17/2021		0.709 (U)			0.0468 (U)	1.06 (U)
8/18/2021	0.642 (U)					
8/19/2021			0.227 (U)	0.935 (U)		
2/9/2022	0.245 (U)			0.754 (U)	0.0677 (U)	
2/10/2022		0.32 (U)	0.178 (U)			0.809 (U)
8/3/2022			0.263 (U)			0.685 (U)
8/4/2022	0.509 (U)	1.05 (U)		1.65	0.0273 (U)	
1/26/2023	0.333 (U)	0.561 (U)	0.0906 (U)	1.1	0.386 (U)	
1/27/2023						1.1
8/10/2023	0.437 (U)	0.469 (U)		0.972		
8/11/2023					0.55 (U)	
8/12/2023			0.481 (U)			0.645 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	0.926 (U)	1.37			
3/13/2019			0.621 (U)	2.07	1.23
4/2/2019	0.479 (U)	0.62 (U)			
4/3/2019			0.932 (U)	0.872 (U)	1.05 (U)
9/24/2019		0.675 (U)			
9/25/2019			0.798 (U)		
9/26/2019	0.997 (U)			0.745 (U)	0.947 (U)
3/2/2020		0.413 (U)	0.964 (U)		
3/3/2020				0.757 (U)	1.15
3/4/2020	1.31				
3/26/2020			1.1		
3/27/2020	1.59			0.758 (U)	
3/30/2020		0.885 (U)			0.83 (U)
9/16/2020		0.193 (U)			
9/17/2020			0.618 (U)		
9/21/2020	1.39 (U)			0.796 (U)	1.55 (U)
2/10/2021	0.201 (U)				
2/15/2021		1.17 (U)			0.892 (U)
2/16/2021			0.466 (U)	0.198 (U)	
3/15/2021	0.564 (U)	0.436 (U)			0.386 (U)
3/16/2021			1.22	0.727 (U)	
8/16/2021		0.208 (U)			
8/17/2021			0.304 (U)	0.557 (U)	0.183 (U)
8/18/2021	0.876 (U)				
2/8/2022					0.417 (U)
2/9/2022			0.567 (U)	0.619 (U)	
2/10/2022	1.96 (U)	0.594 (U)			
8/3/2022		0.581 (U)	0.63 (U)	0.543 (U)	
8/4/2022	0.84 (U)				1.18 (U)
1/26/2023	0.821	0.793 (U)	0.909	0.493 (U)	0.318 (U)
8/10/2023		0.244 (U)	0.599 (U)	0.839 (U)	0.239 (U)
8/11/2023	2.66				

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	0.105 (J)	0.0303 (J)	0.0513 (J)			
5/23/2016						0.0394 (J)
7/11/2016	0.16 (J)	0.05 (J)				
7/12/2016			0.12 (J)			0.15 (J)
8/30/2016	0.09 (J)	0.06 (J)	0.09 (J)			
9/1/2016						0.5
10/19/2016	0.1 (J)	0.04 (J)	0.1 (J)			
10/24/2016						0.06 (J)
12/6/2016	0.11 (J)	0.36	0.21 (J)			
12/7/2016						0.44
1/24/2017	0.09 (J)	<0.1	0.06 (J)			
1/26/2017						0.29 (J)
3/21/2017	0.13 (J)	<0.1	0.005 (J)			
3/22/2017						0.34
5/22/2017	0.12 (J)	<0.1	0.05 (J)			
5/24/2017						0.13 (J)
10/3/2017	0.13 (J)	<0.1	0.13 (J)			0.46
4/2/2018	<0.3	<0.1				
4/3/2018			<0.1			
4/4/2018						<0.1
6/4/2018	0.074 (J)	<0.1	<0.1			
6/5/2018						<0.1
10/1/2018	<0.3	<0.1	<0.1			
10/2/2018						0.17 (J)
3/12/2019	0.29 (J)	0.038 (J)	0.072 (J)			
3/13/2019						0.17 (J)
4/1/2019			0.029 (J)			
4/2/2019	0.1 (J)	0.071 (J)				
4/3/2019						0.082 (J)
9/23/2019	0.078 (J)	<0.1	<0.1			
9/27/2019						0.17 (J)
3/2/2020	0.076 (J)	<0.1	<0.1			
3/3/2020						0.11 (J)
3/25/2020	0.098 (J)	<0.1	<0.1			
4/1/2020						0.12 (J)
6/16/2020	0.071 (J)		<0.1			
9/15/2020	0.082 (J)	<0.1	<0.1			
9/16/2020				0.22	0.52	<0.1
11/10/2020				0.19	0.59	
12/15/2020				0.21	0.67	
1/19/2021				0.16	0.74	
2/8/2021	0.078 (J)					
2/9/2021		<0.1	0.074 (J)	0.19	0.44	
2/15/2021						0.08 (J)
3/10/2021	0.079 (J)				0.65	
3/11/2021		0.1	<0.1	0.2		
3/12/2021						0.054 (J)
8/11/2021	0.058 (J)			0.15		
8/12/2021		<0.1	<0.1			
8/13/2021					0.87	
8/17/2021						<0.1
2/1/2022	0.064 (J)	<0.1	<0.1	0.19	0.96	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
2/9/2022						0.12
8/2/2022	0.09 (J)	0.053 (J)	0.067 (J)	0.22	0.8	
8/3/2022						0.13
1/23/2023			0.061 (J)			
1/24/2023	0.089 (J)	0.053 (J)		0.23	1.3	
1/27/2023						0.16
8/8/2023	0.088 (J)	0.07 (J)	0.055 (J)	0.18	1.3	
8/10/2023						0.05 (J)

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				0.0828 (J)	0.499	
5/23/2016	0.203 (J)	0.212 (J)	0.2587 (J)			<0.3
7/12/2016	0.44	0.31	0.53	0.2 (J)	0.67	0.24 (J)
9/1/2016	0.67	0.62	0.74	0.51	0.94	0.46
10/20/2016				0.4	0.56	0.56
10/24/2016	0.26 (J)	0.19 (J)	0.31			
12/6/2016				0.26 (J)	0.76	0.31
12/7/2016	0.55	0.73	1			
1/25/2017				0.24 (J)	1.1	
1/26/2017	0.27 (J)	0.12 (J)	0.68			0.004 (J)
3/21/2017				0.13 (J)	0.46	
3/22/2017	0.66	0.44	0.76			0.28 (J)
5/23/2017				0.11 (J)	0.65	0.29 (J)
5/24/2017	0.35	0.34	0.54			
10/3/2017	0.56	0.58	0.83	0.17 (J)	0.66	0.53
4/3/2018				<0.3	0.39	<0.3
4/4/2018	0.39	<0.3	0.65			
6/5/2018	0.24 (J)		0.47	0.099 (J)		
6/6/2018		0.21 (J)			0.46	0.12 (J)
10/2/2018				<0.3	0.51	0.031 (J)
10/3/2018	0.31	0.15 (J)				
10/5/2018			0.77			
3/12/2019					0.58	
3/13/2019	0.51		0.78	0.12 (J)		0.14 (J)
3/14/2019		1.1				
4/2/2019				0.097 (J)		
4/3/2019	0.43	0.3 (J)			0.63	0.14 (J)
4/5/2019			0.83			
9/24/2019					0.49	
9/25/2019				0.1 (J)		
9/26/2019			0.64			
9/27/2019	0.42	0.26 (J)				0.26 (J)
3/3/2020	0.24 (J)	0.21 (J)			0.45	
3/4/2020			0.37	0.077 (J)		0.08 (J)
3/26/2020		0.17 (J)				
3/27/2020				0.059 (J)	0.46	
3/30/2020			0.44			
3/31/2020	0.19 (J)					0.074 (J)
6/16/2020					0.45	
6/17/2020				0.077 (J)		
9/16/2020				0.081 (J)	0.53	
9/17/2020						0.1
9/18/2020	0.15	0.15				
9/21/2020			0.44			
2/10/2021				0.085 (J)		
2/12/2021	0.17	0.19				
2/16/2021					0.47	0.096 (J)
2/22/2021			0.55			
3/15/2021				0.086 (J)	0.51	
3/16/2021	0.21	0.2				0.098 (J)
3/17/2021			0.65			
8/16/2021				0.084 (J)		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
8/17/2021						0.095 (J)
8/18/2021	0.21	0.15			0.41	
8/19/2021			0.53			
2/9/2022	0.2	0.2				0.1
2/10/2022			0.53	0.083 (J)	0.42	
8/3/2022	0.22	0.21	0.55	0.11	0.44	
8/4/2022						0.13
8/11/2022				0.11		
1/26/2023	0.2	0.21	0.4			0.11
1/27/2023				0.1		
2/1/2023					0.4	
8/10/2023	0.15	0.17				
8/11/2023						0.12
8/12/2023			0.32	0.071 (J)	0.59	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		0.072 (J)	0.074 (J)		0.052 (J)	0.28 (J)
3/14/2019	0.35			2.2		
4/2/2019		<0.1				
4/3/2019	0.19 (J)			1.6	0.044 (J)	
4/4/2019						0.26 (J)
4/8/2019			0.048 (J)			
9/25/2019		<0.1				
9/26/2019			0.18 (J)		0.19 (J)	0.42
9/27/2019	0.53			1.5		
3/2/2020		<0.1				
3/3/2020				1.4		
3/4/2020	0.096 (J)		0.051 (J)		0.052 (J)	0.25 (J)
3/26/2020	0.12 (J)			1.6		
3/27/2020		<0.1				
3/30/2020			0.064 (J)			
3/31/2020					<0.3	
4/2/2020						0.24 (J)
9/17/2020		<0.1			0.069 (J)	
9/18/2020				1.6		0.22
9/21/2020	0.17		<0.1			
2/11/2021		<0.1				
2/12/2021	0.16			1.6		
2/16/2021			<0.1		0.071 (J)	0.25
3/12/2021						0.24
3/15/2021		<0.1				
3/16/2021				1.7		
3/17/2021	0.18		<0.1		0.072 (J)	
8/17/2021		<0.1			0.075 (J)	0.24
8/18/2021	0.12					
8/19/2021			<0.1	1.5		
2/9/2022	0.076 (J)			1.7	0.092 (J)	
2/10/2022		<0.1	0.051 (J)			0.25
8/3/2022			0.075 (J)			0.27
8/4/2022	0.18	0.074 (J)		1.5	0.12	
1/26/2023	0.098 (J)	0.081 (J)	0.083 (J)	1.6	0.11	
1/27/2023						0.3
8/10/2023	0.14	<0.1		1.5		
8/11/2023					0.083 (J)	
8/12/2023			0.08 (J)			0.26

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	0.24 (J)	0.07 (J)			
3/13/2019			0.1 (J)	0.19 (J)	0.069 (J)
4/2/2019	0.18 (J)	0.045 (J)			
4/3/2019			0.049 (J)	0.15 (J)	<0.1
9/24/2019		0.18 (J)			
9/25/2019			0.076 (J)		
9/26/2019	0.22 (J)			0.19 (J)	0.17 (J)
3/2/2020		<0.1	0.065 (J)		
3/3/2020				0.062 (J)	<0.1
3/4/2020	0.26 (J)				
3/26/2020			0.082 (J)		
3/27/2020	0.26 (J)			<0.1	
3/30/2020		<0.1			<0.1
9/16/2020		<0.1			
9/17/2020			0.094 (J)		
9/21/2020	0.1			<0.1	<0.1
2/10/2021	0.16				
2/15/2021		<0.1			<0.1
2/16/2021			0.051 (J)	0.059 (J)	
3/15/2021	0.24	<0.1			<0.1
3/16/2021			<0.1	0.06 (J)	
8/16/2021		<0.1			
8/17/2021			<0.1	0.055 (J)	<0.1
8/18/2021	0.14				
2/8/2022					<0.1
2/9/2022			0.056 (J)	0.059 (J)	
2/10/2022	0.22	<0.1			
8/3/2022		0.069 (J)	0.094 (J)	0.085 (J)	
8/4/2022	0.19				0.078 (J)
1/26/2023	0.22	0.068 (J)	0.087 (J)	0.088 (J)	0.06 (J)
8/10/2023		<0.1	0.066 (J)	0.053 (J)	<0.1
8/11/2023	0.26				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	<0.001	<0.001	<0.001			
5/23/2016						<0.001
7/11/2016	<0.001	<0.001				
7/12/2016			0.0001 (J)			<0.001
8/30/2016	<0.001	<0.001	<0.001			
9/1/2016						<0.001
10/19/2016	<0.001	<0.001	<0.001			
10/24/2016						<0.001
12/6/2016	<0.001	<0.001	<0.001			
12/7/2016						<0.001
1/24/2017	<0.001	<0.001	<0.001			
1/26/2017						<0.001
3/21/2017	<0.001	6E-05 (J)	0.0001 (J)			
3/22/2017						<0.001
5/22/2017	<0.001	9E-05 (J)	<0.001			
5/24/2017						<0.001
4/2/2018	<0.001	<0.001				
4/3/2018			<0.001			
4/4/2018						<0.001
3/12/2019	<0.001	<0.001	<0.001			
3/13/2019						<0.001
9/23/2019	7.8E-05 (J)	9.2E-05 (J)	<0.001			
3/2/2020	4.8E-05 (J)	9.5E-05 (J)	<0.001			
3/3/2020						<0.001
3/25/2020	<0.001	0.00011 (J)	<0.001			
4/1/2020						5E-05 (J)
9/15/2020	<0.001	8E-05 (J)	4.2E-05 (J)			
9/16/2020				5E-05 (J)	0.00021 (J)	<0.001
11/10/2020				6.9E-05 (J)	0.0002 (J)	
12/15/2020				8.2E-05 (J)	0.00011 (J)	
1/19/2021				4.4E-05 (J)	0.00019 (J)	
2/8/2021	5.8E-05 (J)					
2/9/2021		9.4E-05 (J)	<0.001	0.00029 (J)	0.0001 (J)	
2/15/2021						<0.001
3/10/2021	<0.001				<0.001	
3/11/2021		7.6E-05 (J)	<0.001	9.4E-05 (J)		
3/12/2021						<0.001
8/11/2021	<0.001			<0.001		
8/12/2021		<0.001	<0.001			
8/13/2021					<0.001	
8/17/2021						<0.001
2/1/2022	<0.001	<0.001	<0.001	<0.001	<0.001	
2/9/2022						<0.001
8/2/2022	<0.001	<0.001	<0.001	<0.001	<0.001	
8/3/2022						<0.001
1/23/2023			<0.001			
1/24/2023	<0.001	<0.001		<0.001	<0.001	
1/27/2023						<0.001
8/8/2023	<0.001	<0.001	<0.001	<0.001	<0.001	
8/10/2023						<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				<0.001	<0.001	
5/23/2016	<0.001	<0.001	<0.001			<0.001
7/12/2016	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
9/1/2016	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
10/20/2016				<0.001	<0.001	<0.001
10/24/2016	<0.001	<0.001	<0.001			
12/6/2016				0.0001 (J)	<0.001	0.0002 (J)
12/7/2016	<0.001	<0.001	<0.001			
1/25/2017				0.0001 (J)	<0.001	
1/26/2017	<0.001	<0.001	<0.001			0.0001 (J)
3/21/2017				9E-05 (J)	<0.001	
3/22/2017	0.0003 (J)	<0.001	7E-05 (J)			<0.001
5/23/2017				8E-05 (J)	<0.001	0.0001 (J)
5/24/2017	9E-05 (J)	<0.001	<0.001			
4/3/2018				<0.001	<0.001	<0.001
4/4/2018	<0.001	<0.001	<0.001			
3/12/2019					<0.001	
3/13/2019	<0.001		<0.001	<0.001		<0.001
3/14/2019		<0.001				
3/3/2020	0.00021 (J)	5.6E-05 (J)			0.00013 (J)	
3/4/2020			0.00014 (J)	0.00051 (J)		8.4E-05 (J)
3/26/2020		0.00043 (J)				
3/27/2020				5.4E-05 (J)	<0.001	
3/30/2020			0.0001 (J)			
3/31/2020	0.0003 (J)					0.00014 (J)
9/16/2020				0.0002 (J)	0.0002 (J)	
9/17/2020						0.00022 (J)
9/18/2020	6E-05 (J)	9.6E-05 (J)				
9/21/2020			0.00015 (J)			
2/10/2021				0.00056 (J)		
2/12/2021	<0.001	6.7E-05 (J)				
2/16/2021					8.6E-05 (J)	0.0002 (J)
2/22/2021			0.00018 (J)			
3/15/2021				0.0013	0.00011 (J)	
3/16/2021	9.9E-05 (J)	8.9E-05 (J)				0.00027 (J)
3/17/2021			0.00015 (J)			
8/16/2021				<0.001		
8/17/2021						<0.001
8/18/2021	<0.001	<0.001			<0.001	
8/19/2021			<0.001			
2/9/2022	<0.001	<0.001				<0.001
2/10/2022			<0.001	<0.001	<0.001	
8/3/2022	<0.001	<0.001	<0.001	<0.001	<0.001	
8/4/2022						<0.001
8/11/2022				<0.001		
1/26/2023	<0.001	<0.001	<0.001			<0.001
1/27/2023				<0.001		
2/1/2023					<0.001	
8/10/2023	<0.001	<0.001				
8/11/2023						<0.001
8/12/2023			<0.001	<0.001	<0.001	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		<0.001	<0.001		<0.001	<0.001
3/14/2019	<0.001			<0.001		
3/2/2020		0.00017 (J)				
3/3/2020				<0.001		
3/4/2020	0.00011 (J)		0.00019 (J)		<0.001	<0.001
3/26/2020	<0.001			<0.001		
3/27/2020		0.00013 (J)				
3/30/2020			6.4E-05 (J)			
3/31/2020					0.0001 (J)	
4/2/2020						0.00013 (J)
9/17/2020		<0.001			<0.001	
9/18/2020				<0.001		<0.001
9/21/2020	8.5E-05 (J)		4.2E-05 (J)			
2/11/2021		3.9E-05 (J)				
2/12/2021	7.1E-05 (J)			<0.001		
2/16/2021			0.00012 (J)		8E-05 (J)	0.00043 (J)
3/12/2021						<0.001
3/15/2021		0.0001 (J)				
3/16/2021				<0.001		
3/17/2021	3.8E-05 (J)		4E-05 (J)		<0.001	
8/17/2021		<0.001			<0.001	<0.001
8/18/2021	<0.001					
8/19/2021			<0.001	<0.001		
2/9/2022	<0.001			<0.001	<0.001	
2/10/2022		<0.001	<0.001			<0.001
8/3/2022			<0.001			<0.001
8/4/2022	<0.001	<0.001		<0.001	<0.001	
1/26/2023	<0.001	<0.001	<0.001	<0.001	<0.001	
1/27/2023						<0.001
8/10/2023	<0.001	<0.001		<0.001		
8/11/2023					<0.001	
8/12/2023			<0.001			<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	<0.001	<0.001			
3/13/2019			<0.001	<0.001	<0.001
3/2/2020		9E-05 (J)	4.7E-05 (J)		
3/3/2020				0.00013 (J)	6.2E-05 (J)
3/4/2020	0.001 (J)				
3/26/2020			<0.001		
3/27/2020	6.2E-05 (J)			<0.001	
3/30/2020		0.00011 (J)			<0.001
9/16/2020		<0.001			
9/17/2020			<0.001		
9/21/2020	0.00018 (J)			0.00026 (J)	<0.001
2/10/2021	0.00044 (J)				
2/15/2021		5.2E-05 (J)			<0.001
2/16/2021			<0.001	8.4E-05 (J)	
3/15/2021	0.00034 (J)	<0.001			<0.001
3/16/2021			<0.001	3.6E-05 (J)	
8/16/2021		<0.001			
8/17/2021			<0.001	<0.001	<0.001
8/18/2021	<0.001				
2/8/2022					<0.001
2/9/2022			<0.001	<0.001	
2/10/2022	<0.001	<0.001			
8/3/2022		<0.001	<0.001	<0.001	
8/4/2022	<0.001				<0.001
1/26/2023	<0.001	<0.001	<0.001	<0.001	<0.001
8/10/2023		<0.001	<0.001	<0.001	<0.001
8/11/2023	<0.001				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	<0.03	<0.03	<0.03			
5/23/2016						<0.03
7/11/2016	<0.03	0.0014 (J)				
7/12/2016			0.0024 (J)			<0.03
8/30/2016	<0.03	<0.03	0.0025 (J)			
9/1/2016						<0.03
10/19/2016	<0.03	<0.03	0.003 (J)			
10/24/2016						<0.03
12/6/2016	<0.03	<0.03	0.0033 (J)			
12/7/2016						<0.03
1/24/2017	<0.03	<0.03	0.003 (J)			
1/26/2017						<0.03
3/21/2017	<0.03	0.0012 (J)	0.0034 (J)			
3/22/2017						<0.03
5/22/2017	<0.03	<0.03	0.003 (J)			
5/24/2017						<0.03
4/2/2018	<0.03	0.0015 (J)				
4/3/2018			0.003 (J)			
4/4/2018						<0.03
6/4/2018	0.001 (J)	0.0016 (J)	0.0027 (J)			
6/5/2018						<0.03
10/1/2018	0.00099 (J)	0.0013 (J)	0.0032 (J)			
10/2/2018						<0.03
3/12/2019	0.001 (J)	0.0018 (J)	0.0032 (J)			
3/13/2019						<0.03
4/1/2019			0.0032 (J)			
4/2/2019	0.001 (J)	0.0018 (J)				
4/3/2019						<0.03
9/23/2019	0.0011 (J)	0.0016 (J)	0.0029 (J)			
9/27/2019						<0.03
3/2/2020	0.0012 (J)	0.0017 (J)	0.0037 (J)			
3/3/2020						<0.03
3/25/2020	0.00083 (J)	0.0017 (J)	0.0035 (J)			
4/1/2020						<0.03
9/15/2020	0.00087 (J)	0.0015 (J)	0.0026 (J)			
9/16/2020				0.0018 (J)	0.014 (J)	<0.03
11/10/2020				0.0013 (J)	0.025 (J)	
12/15/2020				0.0019 (J)	0.028 (J)	
1/19/2021				0.0025 (J)	0.034	
2/8/2021	0.00086 (J)					
2/9/2021		0.0012 (J)	0.0032 (J)	0.0026 (J)	0.026 (J)	
2/15/2021						<0.03
3/10/2021	0.0009 (J)				0.03	
3/11/2021		0.0011 (J)	0.0035 (J)	0.0022 (J)		
3/12/2021						<0.03
8/11/2021	0.00078 (J)			0.0024 (J)		
8/12/2021		0.0012 (J)	0.0028 (J)			
8/13/2021					0.032	
8/17/2021						<0.03
2/1/2022	0.0011 (J)	0.0017 (J)	0.0037 (J)	0.0024 (J)	0.048	
2/9/2022						<0.03
8/2/2022	<0.03	0.0013 (J)	0.003 (J)	0.0019 (J)	0.041	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
8/3/2022						<0.03
1/23/2023			0.003 (J)			
1/24/2023	0.00092 (J)	0.0014 (J)		0.002 (J)	0.064	
1/27/2023						<0.03
8/8/2023	<0.03	0.0017 (J)	0.0031 (J)	0.0021 (J)	0.092 (o)	
8/10/2023						<0.03

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				<0.03	<0.03	
5/23/2016	<0.03	0.0107 (J)	0.0422 (J)			<0.03
7/12/2016	<0.03	0.0113 (J)	0.0366 (J)	0.0021 (J)	0.0023 (J)	0.004 (J)
9/1/2016	<0.03	0.0118 (J)	0.04 (J)	0.0025 (J)	0.0029 (J)	0.0044 (J)
10/20/2016				0.0021 (J)	0.0027 (J)	0.0027 (J)
10/24/2016	<0.03	0.0114 (J)	0.0435 (J)			
12/6/2016				0.0026 (J)	0.0032 (J)	0.005 (J)
12/7/2016	<0.03	0.0155 (J)	0.0477 (J)			
1/25/2017				0.0024 (J)	0.0026 (J)	
1/26/2017	<0.03	0.0099 (J)	0.0342 (J)			0.0042 (J)
3/21/2017				0.0026 (J)	0.0029 (J)	
3/22/2017	<0.03	0.0098 (J)	0.0353 (J)			0.0043 (J)
5/23/2017				0.0026 (J)	0.0029 (J)	0.0048 (J)
5/24/2017	<0.03	0.0105 (J)	0.0317 (J)			
4/3/2018				0.0023 (J)	0.0025 (J)	0.0043 (J)
4/4/2018	<0.03	0.008 (J)	0.031 (J)			
6/5/2018	<0.03		0.031 (J)	0.0022 (J)		
6/6/2018		0.0095 (J)			0.0023 (J)	0.0043 (J)
10/2/2018				0.003 (J)	0.0025 (J)	0.004 (J)
10/3/2018	<0.03	0.0083 (J)				
10/5/2018			0.027 (J)			
3/12/2019					0.0025 (J)	
3/13/2019	<0.03		0.029 (J)	0.0024 (J)		0.004 (J)
3/14/2019		0.0058 (J)				
4/2/2019				0.002 (J)		
4/3/2019	<0.03	0.0066 (J)			0.0025 (J)	0.004 (J)
4/5/2019			0.023 (J)			
9/24/2019					0.0024 (J)	
9/25/2019				0.0019 (J)		
9/26/2019			0.035			
9/27/2019	<0.03	0.011 (J)				0.0044 (J)
3/3/2020	<0.03	0.0063 (J)			0.0028 (J)	
3/4/2020			0.041	0.0034 (J)		0.004 (J)
3/26/2020		0.0063 (J)				
3/27/2020				0.002 (J)	0.0026 (J)	
3/30/2020			0.038			
3/31/2020	<0.03					0.0043 (J)
9/16/2020				0.0026 (J)	0.0033 (J)	
9/17/2020						0.004 (J)
9/18/2020	<0.03	0.01 (J)				
9/21/2020			0.028 (J)			
2/10/2021				0.0032 (J)		
2/12/2021	<0.03	0.0094 (J)				
2/16/2021					0.0027 (J)	0.0045 (J)
2/22/2021			0.032			
3/15/2021				0.0038 (J)	0.0029 (J)	
3/16/2021	<0.03	0.0081 (J)				0.0046 (J)
3/17/2021			0.031			
8/16/2021				0.0025 (J)		
8/17/2021						0.004 (J)
8/18/2021	<0.03	0.0099 (J)			0.0029 (J)	
8/19/2021			0.028 (J)			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
2/9/2022	<0.03	0.01 (J)				0.0041 (J)
2/10/2022			0.031	0.0022 (J)	0.003 (J)	
8/3/2022	<0.03	0.0068 (J)	0.029 (J)	0.0019 (J)	0.0026 (J)	
8/4/2022						0.0036 (J)
8/11/2022				0.0019 (J)		
1/26/2023	<0.03	0.0058 (J)	0.04			0.0032 (J)
1/27/2023				0.0018 (J)		
2/1/2023					0.0015 (J)	
8/10/2023	<0.03	0.0075 (J)				
8/11/2023						0.0035 (J)
8/12/2023			0.051	0.0023 (J)	0.0014 (J)	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		0.0016 (J)	0.0029 (J)		0.0033 (J)	0.0097 (J)
3/14/2019	0.0089 (J)			0.05		
4/2/2019		0.0015 (J)				
4/3/2019	0.0061 (J)			0.047 (J)	0.0034 (J)	
4/4/2019						0.0069 (J)
4/8/2019			0.0027 (J)			
9/25/2019		<0.03				
9/26/2019			0.003 (J)		0.0041 (J)	0.0055 (J)
9/27/2019	0.013 (J)			0.047		
3/2/2020		0.00082 (J)				
3/3/2020				0.05		
3/4/2020	0.01 (J)		0.0026 (J)		0.03 (J)	0.0047 (J)
3/26/2020	0.013 (J)			0.054		
3/27/2020		0.0012 (J)				
3/30/2020			0.0027 (J)			
3/31/2020					0.0036 (J)	
4/2/2020						0.0068 (J)
9/17/2020		<0.03			0.0032 (J)	
9/18/2020				0.046		0.0084 (J)
9/21/2020	0.013 (J)		0.0024 (J)			
2/11/2021		0.001 (J)				
2/12/2021	0.012 (J)			0.045		
2/16/2021			0.0028 (J)		0.0038 (J)	0.0078 (J)
3/12/2021						0.009 (J)
3/15/2021		0.0011 (J)				
3/16/2021				0.049		
3/17/2021	0.012 (J)		0.0027 (J)		0.004 (J)	
8/17/2021		0.00091 (J)			0.0036 (J)	0.0079 (J)
8/18/2021	0.014 (J)					
8/19/2021			0.0027 (J)	0.046		
2/9/2022	0.0067 (J)			0.048	0.0039 (J)	
2/10/2022		0.00099 (J)	0.0029 (J)			0.0086 (J)
8/3/2022			0.0024 (J)			0.0063 (J)
8/4/2022	0.013 (J)	0.00075 (J)		0.04	0.0033 (J)	
1/26/2023	0.0038 (J)	<0.03	0.0025 (J)	0.036	0.0031 (J)	
1/27/2023						0.0072 (J)
8/10/2023	0.011 (J)	<0.03		0.038		
8/11/2023					0.0029 (J)	
8/12/2023			0.003 (J)			0.0072 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	0.011 (J)	0.0024 (J)			
3/13/2019			<0.03	<0.03	<0.03
4/2/2019	0.0052 (J)	0.0021 (J)			
4/3/2019			<0.03	<0.03	<0.03
9/24/2019		0.0022 (J)			
9/25/2019			<0.03		
9/26/2019	0.0055 (J)			<0.03	<0.03
3/2/2020		0.0025 (J)	<0.03		
3/3/2020				<0.03	<0.03
3/4/2020	0.015 (J)				
3/26/2020			<0.03		
3/27/2020	0.014 (J)			<0.03	
3/30/2020		0.0023 (J)			<0.03
9/16/2020		0.0021 (J)			
9/17/2020			<0.03		
9/21/2020	0.0053 (J)			<0.03	<0.03
2/10/2021	0.0092 (J)				
2/15/2021		0.0024 (J)			<0.03
2/16/2021			<0.03	<0.03	
3/15/2021	0.013 (J)	0.0022 (J)			<0.03
3/16/2021			<0.03	<0.03	
8/16/2021		0.0021 (J)			
8/17/2021			<0.03	<0.03	<0.03
8/18/2021	0.0086 (J)				
2/8/2022					<0.03
2/9/2022			<0.03	<0.03	
2/10/2022	0.014 (J)	0.0023 (J)			
8/3/2022		0.0018 (J)	<0.03	<0.03	
8/4/2022	0.0088 (J)				<0.03
1/26/2023	0.011 (J)	0.0019 (J)	<0.03	<0.03	<0.03
8/10/2023		0.0019 (J)	<0.03	<0.03	<0.03
8/11/2023	0.016 (J)				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	<0.0002	<0.0002	<0.0002			
5/23/2016						<0.0002
7/11/2016	<0.0002	<0.0002				
7/12/2016			<0.0002			<0.0002
8/30/2016	4E-05 (J)	4E-05 (J)	<0.0002			
9/1/2016						<0.0002
10/19/2016	<0.0002	<0.0002	<0.0002			
10/24/2016						<0.0002
12/6/2016	<0.0002	<0.0002	<0.0002			
12/7/2016						<0.0002
1/24/2017	<0.0002	<0.0002	<0.0002			
1/26/2017						5E-05 (J)
3/21/2017	<0.0002	<0.0002	<0.0002			
3/22/2017						<0.0002
5/22/2017	<0.0002	<0.0002	<0.0002			
5/24/2017						<0.0002
4/2/2018	<0.0002	<0.0002				
4/3/2018			<0.0002			
4/4/2018						<0.0002
3/12/2019	<0.0002	<0.0002	<0.0002			
3/13/2019						<0.0002
3/2/2020	<0.0002	<0.0002	<0.0002			
3/3/2020						<0.0002
9/16/2020				<0.0002	<0.0002	
11/10/2020				<0.0002	<0.0002	
12/15/2020				<0.0002	<0.0002	
1/19/2021				<0.0002	<0.0002	
2/8/2021	<0.0002					
2/9/2021		<0.0002	<0.0002	<0.0002	<0.0002	
2/15/2021						<0.0002
2/1/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
2/9/2022						<0.0002
8/2/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
8/3/2022						<0.0002
1/23/2023			<0.0002			
1/24/2023	<0.0002	<0.0002		<0.0002	<0.0002	
1/27/2023						<0.0002
8/8/2023	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
8/10/2023						<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				<0.0002	<0.0002	
5/23/2016	<0.0002	<0.0002	<0.0002			<0.0002
7/12/2016	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
9/1/2016	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
10/20/2016				<0.0002	<0.0002	<0.0002
10/24/2016	<0.0002	<0.0002	<0.0002			
12/6/2016				<0.0002	<0.0002	<0.0002
12/7/2016	<0.0002	<0.0002	<0.0002			
1/25/2017				<0.0002	<0.0002	
1/26/2017	5E-05 (J)	<0.0002	4E-05 (J)			4E-05 (J)
3/21/2017				<0.0002	<0.0002	
3/22/2017	<0.0002	<0.0002	<0.0002			<0.0002
5/23/2017				<0.0002	<0.0002	<0.0002
5/24/2017	<0.0002	<0.0002	5E-05 (J)			
4/3/2018				<0.0002	<0.0002	<0.0002
4/4/2018	<0.0002	<0.0002	<0.0002			
3/12/2019					<0.0002	
3/13/2019	<0.0002		<0.0002	<0.0002		<0.0002
3/14/2019		<0.0002				
3/3/2020	<0.0002	<0.0002			<0.0002	
3/4/2020			<0.0002	<0.0002		<0.0002
2/10/2021				<0.0002		
2/12/2021	<0.0002	<0.0002				
2/16/2021					<0.0002	<0.0002
2/22/2021			<0.0002			
2/9/2022	<0.0002	<0.0002				<0.0002
2/10/2022			<0.0002	<0.0002	<0.0002	
8/3/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
8/4/2022						<0.0002
8/11/2022				<0.0002		
1/26/2023	<0.0002	<0.0002	<0.0002			<0.0002
1/27/2023				<0.0002		
2/1/2023					<0.0002	
8/10/2023	<0.0002	<0.0002				
8/11/2023						<0.0002
8/12/2023			<0.0002	<0.0002	<0.0002	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		<0.0002	<0.0002		<0.0002	<0.0002
3/14/2019	<0.0002			<0.0002		
3/2/2020		<0.0002				
3/3/2020				<0.0002		
3/4/2020	<0.0002		<0.0002		<0.0002	<0.0002
2/11/2021		<0.0002				
2/12/2021	<0.0002			<0.0002		
2/16/2021			<0.0002		<0.0002	<0.0002
2/9/2022	<0.0002			<0.0002	<0.0002	
2/10/2022		<0.0002	<0.0002			<0.0002
8/3/2022			<0.0002			<0.0002
8/4/2022	<0.0002	<0.0002		<0.0002	<0.0002	
1/26/2023	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
1/27/2023						<0.0002
8/10/2023	<0.0002	<0.0002		0.00013 (J)		
8/11/2023					<0.0002	
8/12/2023			<0.0002			<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	<0.0002	<0.0002			
3/13/2019			<0.0002	<0.0002	<0.0002
3/2/2020		<0.0002	<0.0002		
3/3/2020				<0.0002	<0.0002
3/4/2020	<0.0002				
2/10/2021	<0.0002				
2/15/2021		<0.0002			<0.0002
2/16/2021			<0.0002	<0.0002	
2/8/2022					<0.0002
2/9/2022			<0.0002	<0.0002	
2/10/2022	<0.0002	<0.0002			
8/3/2022		<0.0002	<0.0002	<0.0002	
8/4/2022	<0.0002				<0.0002
1/26/2023	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/10/2023		0.00017 (J)	<0.0002	<0.0002	<0.0002
8/11/2023	<0.0002				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	<0.01	<0.01	<0.01			
5/23/2016						<0.01
7/11/2016	<0.01	<0.01				
7/12/2016			<0.01			0.0013 (J)
8/30/2016	<0.01	<0.01	<0.01			
9/1/2016						<0.01
10/19/2016	<0.01	<0.01	<0.01			
10/24/2016						<0.01
12/6/2016	<0.01	<0.01	<0.01			
12/7/2016						<0.01
1/24/2017	<0.01	<0.01	<0.01			
1/26/2017						<0.01
3/21/2017	<0.01	<0.01	<0.01			
3/22/2017						0.0013 (J)
5/22/2017	<0.01	<0.01	<0.01			
5/24/2017						0.0014 (J)
4/2/2018	<0.01	<0.01				
4/3/2018			<0.01			
4/4/2018						<0.01
6/4/2018	<0.01	<0.01	<0.01			
6/5/2018						<0.01
10/1/2018	<0.01	<0.01	<0.01			
10/2/2018						<0.01
3/12/2019	<0.01	<0.01	<0.01			
3/13/2019						<0.01
4/1/2019			<0.01			
4/2/2019	<0.01	<0.01				
4/3/2019						0.0021 (J)
9/23/2019	<0.01	<0.01	<0.01			
9/27/2019						0.0014 (J)
3/2/2020	<0.01	<0.01	<0.01			
3/3/2020						<0.01
3/25/2020	<0.01	<0.01	<0.01			
4/1/2020						<0.01
6/16/2020	<0.01		<0.01			
9/15/2020	<0.01	<0.01	<0.01			
9/16/2020				0.0044 (J)	0.0019 (J)	0.0014 (J)
11/10/2020				0.0072 (J)	0.0018 (J)	
12/15/2020				0.0044 (J)	0.0019 (J)	
1/19/2021				0.0038 (J)	0.0035 (J)	
2/8/2021	<0.01					
2/9/2021		<0.01	<0.01	0.0045 (J)	0.0038 (J)	
2/15/2021						<0.01
3/10/2021	<0.01				0.0019 (J)	
3/11/2021		<0.01	<0.01	0.0064 (J)		
3/12/2021						0.0007 (J)
8/11/2021	<0.01			0.0034 (J)		
8/12/2021		<0.01	<0.01			
8/13/2021					0.0051 (J)	
8/17/2021						0.0012 (J)
2/1/2022	<0.01	<0.01	<0.01	0.0036 (J)	0.0055 (J)	
2/9/2022						<0.01

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
8/2/2022	<0.01	<0.01	<0.01	0.0042 (J)	0.002 (J)	
8/3/2022						0.00079 (J)
1/23/2023			<0.01			
1/24/2023	<0.01	<0.01		0.0027 (J)	0.0026 (J)	
1/27/2023						<0.01
8/8/2023	<0.01	<0.01	<0.01	0.0019 (J)	0.0013 (J)	
8/10/2023						0.0014 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				0.028	0.446	
5/23/2016	0.0164	0.0413 (J)	0.027			0.0187
7/12/2016	0.0251	0.0484	0.0316	0.0273	0.455	0.0229
9/1/2016	0.0259	0.0474	0.0336	0.0274	0.481	0.0239
10/20/2016				0.036	0.472	0.477
10/24/2016	0.0293	0.047	0.0352			
12/6/2016				0.0365	0.52	0.0236
12/7/2016	0.0209	0.0432	0.0383			
1/25/2017				0.0317	0.478	
1/26/2017	0.0277	0.0484	0.041			0.0234
3/21/2017				0.0346	0.547	
3/22/2017	0.011	0.0494	0.0426			0.0219
5/23/2017				0.0336	0.482	0.0242
5/24/2017	0.0373	0.047	0.04			
4/3/2018				0.032	0.44	0.025
4/4/2018	0.013	0.052	0.027			
6/5/2018	0.029		0.027	0.036		
6/6/2018		0.054			0.49	0.027
10/2/2018				0.039	0.47	0.028
10/3/2018	0.02	0.054				
10/5/2018			0.033			
3/12/2019					0.5	
3/13/2019	0.012		0.033	0.04		0.028
3/14/2019		0.046				
4/2/2019				0.041		
4/3/2019	0.01	0.049			0.5	0.03
4/5/2019			0.03			
9/24/2019					0.54	
9/25/2019				0.047		
9/26/2019			0.026			
9/27/2019	0.016	0.052				0.033
3/3/2020	0.011	0.045			0.44	
3/4/2020			0.03	0.045		0.031
3/26/2020		0.045				
3/27/2020				0.044	0.42	
3/30/2020			0.029			
3/31/2020	0.0074 (J)					0.031
6/16/2020					0.45	
6/17/2020				0.048		
9/16/2020				0.046	0.43	
9/17/2020						0.03
9/18/2020	0.032	0.046				
9/21/2020			0.032			
2/10/2021				0.051		
2/12/2021	0.023	0.048				
2/16/2021					0.46	0.035
2/22/2021			0.036			
3/15/2021				0.047	0.41	
3/16/2021	0.015	0.044				0.035
3/17/2021			0.035			
8/16/2021				0.045		
8/17/2021						0.035

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
8/18/2021	0.038	0.045			0.48	
8/19/2021			0.032			
2/9/2022	0.03	0.042				0.034
2/10/2022			0.033	0.045	0.34	
8/3/2022	0.027	0.047	0.035	0.038	0.29	
8/4/2022						0.033
8/11/2022				0.044		
1/26/2023	0.022	0.048	0.023			0.021
1/27/2023				0.039		
2/1/2023					0.29	
8/10/2023	0.014	0.05				
8/11/2023						0.03
8/12/2023			0.016	0.033	0.34	

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		<0.01	<0.01		<0.01	<0.01
3/14/2019	0.057			0.0022 (J)		
4/2/2019		<0.01				
4/3/2019	0.04			<0.01	0.0083 (J)	
4/4/2019						0.0018 (J)
4/8/2019			0.00027 (J)			
9/25/2019		<0.01				
9/26/2019			<0.01		0.017	0.0042 (J)
9/27/2019	0.063			<0.01		
11/25/2019					0.02	
3/2/2020		<0.01				
3/3/2020				<0.01		
3/4/2020	0.032		<0.01		0.0074 (J)	0.0058 (J)
3/26/2020	0.033			<0.01		
3/27/2020		<0.01				
3/30/2020			<0.01			
3/31/2020					0.0093 (J)	
4/2/2020						0.003 (J)
9/17/2020		<0.01			0.014	
9/18/2020				0.00094 (J)		0.0018 (J)
9/21/2020	0.064		0.00099 (J)			
2/11/2021		<0.01				
2/12/2021	0.046			<0.01		
2/16/2021			0.00096 (J)		0.022	0.0019 (J)
3/12/2021						0.0008 (J)
3/15/2021		<0.01				
3/16/2021				<0.01		
3/17/2021	0.043		0.001 (J)		0.023	
8/17/2021		<0.01			0.024	0.0016 (J)
8/18/2021	0.032					
8/19/2021			0.00087 (J)	<0.01		
2/9/2022	0.011			<0.01	0.028	
2/10/2022		<0.01	0.0008 (J)			0.0017 (J)
8/3/2022			0.00095 (J)			0.002 (J)
8/4/2022	0.039	<0.01		<0.01	0.028	
1/26/2023	0.012	<0.01	0.0012 (J)	<0.01	0.028	
1/27/2023						0.0014 (J)
8/10/2023	0.033	<0.01		<0.01		
8/11/2023					0.014	
8/12/2023			0.0019 (J)			0.0019 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	0.013	0.0038 (J)			
3/13/2019			<0.01	0.0021 (J)	<0.01
4/2/2019	0.028	0.0028 (J)			
4/3/2019			<0.01	0.0021 (J)	<0.01
9/24/2019		0.0021 (J)			
9/25/2019			<0.01		
9/26/2019	0.017			0.0026 (J)	0.0033 (J)
3/2/2020		0.0025 (J)	<0.01		
3/3/2020				0.0022 (J)	<0.01
3/4/2020	0.009 (J)				
3/26/2020			<0.01		
3/27/2020	0.0068 (J)			0.0026 (J)	
3/30/2020		0.0029 (J)			<0.01
9/16/2020		0.0021 (J)			
9/17/2020			<0.01		
9/21/2020	0.018			0.0025 (J)	0.0015 (J)
2/10/2021	0.02				
2/15/2021		0.0029 (J)			0.0015 (J)
2/16/2021			<0.01	0.0025 (J)	
3/15/2021	0.013	0.0031 (J)			0.0015 (J)
3/16/2021			<0.01	0.0023 (J)	
8/16/2021		0.0027 (J)			
8/17/2021			<0.01	0.0027 (J)	0.003 (J)
8/18/2021	0.022				
2/8/2022					0.0012 (J)
2/9/2022			<0.01	0.0026 (J)	
2/10/2022	0.0031 (J)	0.0036 (J)			
8/3/2022		0.0032 (J)	<0.01	0.0028 (J)	
8/4/2022	0.011				0.0014 (J)
1/26/2023	0.0025 (J)	0.0029 (J)	<0.01	0.0029 (J)	<0.01
8/10/2023		0.003 (J)	<0.01	0.0026 (J)	0.0022 (J)
8/11/2023	0.0011 (J)				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: pH, Field (SU) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	7.27	5.81	7.45			
5/23/2016						6.83
7/11/2016	7.06	5.68				
7/12/2016			7.32			6.58
8/30/2016	7.28	5.63	7.43			
9/1/2016						6.54
10/19/2016	7.02	5.46	7.03			
10/24/2016						6.59
12/6/2016	7.09	5.38	7.08			
12/7/2016						6.56
1/24/2017	7.2	5.37	7.39			
1/26/2017						6.83
3/21/2017	7.01	4.9	6.83			
3/22/2017						6.66
5/22/2017	7.11	5.2	7.02			
5/24/2017						6.67
10/3/2017	7.21	5.3	7.47			6.54
4/2/2018	7.1	5.4				
4/3/2018			7.38			
4/4/2018						6.61
6/4/2018	7.06	5.27	7.38			
6/5/2018						6.65
10/1/2018	7.09	5.31	7.13			
10/2/2018						6.55
3/12/2019	7.03	5.42	7.29			
3/13/2019						6.7
4/1/2019			7.16			
4/2/2019	6.86	5.41				
4/3/2019						6.55
9/23/2019	7.02	5.33	7.3			
9/27/2019						6.64
3/2/2020	7.1	5.43	7.12			
3/3/2020						6.67
3/25/2020	6.95	5.36	7.4			
4/1/2020						6.84
6/16/2020	6.97 (D)		7.31 (D)			
9/15/2020	7.15	5.22	7.29			
9/16/2020				7.52	7.83	6.66
11/10/2020				7.27	7.84	
12/15/2020				7.39	7.87	
1/19/2021				7.39	7.86	
2/8/2021	7.11					
2/9/2021		5.42	7.23	7.44	7.84	
2/15/2021						6.83
3/10/2021	6.95				7.92	
3/11/2021		5.8	7.33	7.46		
3/12/2021						6.76
8/11/2021	6.98			7.4		
8/12/2021		5.05	7.31			
8/13/2021					7.77	
8/17/2021						6.75
2/1/2022	7.19	5.24	7.45	7.52	8.25	

Time Series

Constituent: pH, Field (SU) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
2/9/2022						7
8/3/2022						6.73
1/23/2023			7.32			
1/24/2023	6.76	5.22		7.56	8.22	
1/27/2023						6.89
8/8/2023	7.05	5.01	7.42	7.39	8.2	
8/10/2023						6.81

Time Series

Constituent: pH, Field (SU) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				7.14	6.99	
5/23/2016	6.22	7.15	7.14			7.23
7/12/2016	6.04	6.87	7.04	7.13	6.88	6.87
9/1/2016	6.26	7.2	7.24	7.29	6.73	7.15
10/20/2016				7.1	6.9	7.05
10/24/2016	6.46	7.1	6.9			
12/6/2016				7.15	6.98	7.15
12/7/2016	6.29	6.92	6.91			
1/25/2017				7.11	7.04	
1/26/2017	6.46	7.05	7.08			6.99
3/21/2017				7.12	6.87	
3/22/2017	5.81	7.08	7.13			7.03
5/23/2017				7.08	6.87	7.05
5/24/2017	6.51	7.11	7.15			
10/3/2017	6.25	7.01	7.32	7.21	6.72	7.07
4/3/2018				7.14	6.87	6.99
4/4/2018	5.86	7.12	7.27			
6/5/2018	6.27		7.2	7.13		
6/6/2018		7.12			6.9	7.02
10/2/2018				7.12	6.9	7.05
10/3/2018	5.97	7.08				
10/5/2018			7.24			
3/12/2019					6.91	
3/13/2019	5.92		7.24	7.27		7.06
3/14/2019		7.09				
4/2/2019				7.27		
4/3/2019	5.69	6.96			6.85	6.88
4/5/2019			7.24			
9/24/2019					6.95	
9/25/2019				7.11		
9/26/2019			6.94			
9/27/2019	5.75	7.07				7.01
3/3/2020	5.95	6.95			7.06	
3/4/2020			7.16	7.17		6.97
3/26/2020		6.99				
3/27/2020				7.05	6.95	
3/30/2020			6.91			
3/31/2020	5.7					7.07
6/16/2020					6.97 (D)	
6/17/2020				7.2 (D)		
9/16/2020				7.3	6.92	
9/17/2020						6.99
9/18/2020	6.42	7.15				
9/21/2020			7.34			
2/10/2021				7.29		
2/12/2021	7.27	6.23				
2/16/2021					7.16	7.26
2/22/2021			7.27			
3/15/2021				7.19	7.09	
3/16/2021	5.95	7.15				7.1
3/17/2021			7.33			
8/16/2021				7.12		

Time Series

Constituent: pH, Field (SU) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
8/17/2021						7.1
8/18/2021	6.1	6.89			7.02	
8/19/2021			7.38			
2/9/2022	6.55	7.23				7.3
2/10/2022			7.54	7.22	6.99	
8/3/2022	6.23	7.13	7.09	6.93	6.84	
8/4/2022						7.03
8/11/2022				7.07		
1/26/2023	6.23	7.1	6.9			7.07
1/27/2023				7.25		
2/1/2023					6.6	
8/10/2023	5.9	7.08				
8/11/2023						7.09
8/12/2023			6.89	7.36	6.84	

Time Series

Constituent: pH, Field (SU) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		6.75	7.58		7.4	7.78
3/14/2019	6.48			7.67		
4/2/2019		6.7				
4/3/2019	6.14			7.56	7.25	
4/4/2019						7.63
4/8/2019			7.47			
9/25/2019		6.75				
9/26/2019			7.5		7.16	7.46
9/27/2019	6.33			7.57		
3/2/2020		6.98				
3/3/2020				7.59		
3/4/2020	6.29		7.47		7.14	8.33
3/26/2020	6.28			7.57		
3/27/2020		6.75				
3/30/2020			7.49			
3/31/2020					7.2	
4/2/2020						8.11
9/17/2020		6.78			7.08	
9/18/2020				7.64		7.51
9/21/2020	6.41		7.65			
2/11/2021		6.93				
2/12/2021	6.36			7.77		
2/16/2021			7.69		7.27	7.96
3/12/2021						7.88
3/15/2021		6.97				
3/16/2021				7.76		
3/17/2021	6.34		7.66		7.14	
8/17/2021		7.05			7.14	7.75
8/18/2021	6.28					
8/19/2021			7.61	7.69		
2/9/2022	6.28			7.82	7.32	
2/10/2022		7.19	7.82			7.96
8/3/2022			7.59			7.4
8/4/2022	6.32	6.96		7.66	7.08	
1/26/2023	6.13	6.95	7.6	7.74	7.14	
1/27/2023						7.8
8/10/2023	6.37	6.86		7.73		
8/11/2023					7.2	
8/12/2023			7.61			7.8

Time Series

Constituent: pH, Field (SU) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	7.46	7.2			
3/13/2019			6.16	6.86	6.37
4/2/2019	7.4	6.91			
4/3/2019			5.96	6.77	6.19
9/24/2019		6.86			
9/25/2019			6.37		
9/26/2019	7.4			6.76	6.5
3/2/2020		7.13	6.12		
3/3/2020				6.78	6.1
3/4/2020	7.55				
3/26/2020			6.14		
3/27/2020	7.42			6.82	
3/30/2020		7.07			6.06
9/16/2020		6.88			
9/17/2020			6.48		
9/21/2020	7.46			6.88	6.5
2/10/2021	7.54				
2/15/2021		7.09			6.77
2/16/2021			5.95	7	
3/15/2021	7.61	7.05			6.66
3/16/2021			5.78	6.96	
8/16/2021		7.08			
8/17/2021			5.99	6.86	6.88
8/18/2021	7.16				
2/8/2022					6.73
2/9/2022			6.13	7.01	
2/10/2022	7.59	7.27			
8/3/2022		6.87	5.96	6.41	
8/4/2022	7.38				6.47
1/26/2023	7.67	7.22	6.07	6.9	6.23
8/10/2023		7.06	6.29	6.85	6.85
8/11/2023	7.5				

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	<0.005	<0.005	<0.005			
5/23/2016						<0.005
7/11/2016	<0.005	<0.005				
7/12/2016			<0.005			<0.005
8/30/2016	<0.005	<0.005	<0.005			
9/1/2016						<0.005
10/19/2016	<0.005	<0.005	<0.005			
10/24/2016						<0.005
12/6/2016	<0.005	<0.005	<0.005			
12/7/2016						<0.005
1/24/2017	<0.005	<0.005	<0.005			
1/26/2017						0.0041 (J)
3/21/2017	<0.005	<0.005	<0.005			
3/22/2017						<0.005
5/22/2017	<0.005	<0.005	<0.005			
5/24/2017						<0.005
4/2/2018	<0.005	<0.005				
4/3/2018			<0.005			
4/4/2018						<0.005
6/4/2018	<0.005	<0.005	<0.005			
6/5/2018						<0.005
10/1/2018	<0.005	<0.005	<0.005			
10/2/2018						0.0023 (J)
3/12/2019	<0.005	<0.005	<0.005			
3/13/2019						0.0015 (J)
4/1/2019			<0.005			
4/2/2019	<0.005	<0.005				
4/3/2019						<0.005
9/23/2019	<0.005	<0.005	<0.005			
9/27/2019						<0.005
3/2/2020	<0.005	<0.005	<0.005			
3/3/2020						<0.005
3/25/2020	<0.005	<0.005	<0.005			
4/1/2020						0.002 (J)
9/15/2020	<0.005	<0.005	<0.005			
9/16/2020				<0.005	<0.005	<0.005
11/10/2020				<0.005	<0.005	
12/15/2020				<0.005	<0.005	
1/19/2021				<0.005	<0.005	
2/8/2021	<0.005					
2/9/2021		<0.005	<0.005	<0.005	<0.005	
2/15/2021						0.0028 (J)
3/10/2021	0.0047 (J)				<0.005	
3/11/2021		<0.005	<0.005	<0.005		
3/12/2021						<0.005
8/11/2021	<0.005			<0.005		
8/12/2021		<0.005	<0.005			
8/13/2021					<0.005	
8/17/2021						<0.005
2/1/2022	<0.005	<0.005	<0.005	<0.005	<0.005	
2/9/2022						0.0031 (J)
8/2/2022	<0.005	0.0014 (J)	<0.005	<0.005	<0.005	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
8/3/2022						0.0017 (J)
1/23/2023			<0.005			
1/24/2023	<0.005	<0.005		<0.005	<0.005	
1/27/2023						0.0035 (J)
8/8/2023	<0.005	0.0019 (J)	<0.005	<0.005	<0.005	
8/10/2023						<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				<0.005	<0.005	
5/23/2016	0.0106	<0.005	<0.005			<0.005
7/12/2016	0.0057 (J)	<0.005	<0.005	<0.005	<0.005	<0.005
9/1/2016	0.0057 (J)	<0.005	<0.005	<0.005	<0.005	<0.005
10/20/2016				<0.005	<0.005	<0.005
10/24/2016	0.0021 (J)	<0.005	<0.005			
12/6/2016				<0.005	0.0024 (J)	0.0037 (J)
12/7/2016	0.0015 (J)	0.0011 (J)	<0.005			
1/25/2017				<0.005	<0.005	
1/26/2017	0.0062 (J)	<0.005	<0.005			<0.005
3/21/2017				<0.005	<0.005	
3/22/2017	0.0263	<0.005	<0.005			<0.005
5/23/2017				<0.005	<0.005	<0.005
5/24/2017	0.0038 (J)	<0.005	<0.005			
4/3/2018				<0.005	<0.005	<0.005
4/4/2018	0.021	<0.005	<0.005			
6/5/2018	0.0062 (J)		<0.005	<0.005		
6/6/2018		<0.005			<0.005	<0.005
10/2/2018				<0.005	<0.005	<0.005
10/3/2018	0.009 (J)	<0.005				
10/5/2018			<0.005			
3/12/2019					<0.005	
3/13/2019	0.023		<0.005	<0.005		<0.005
3/14/2019		<0.005				
4/2/2019				<0.005		
4/3/2019	0.016	<0.005			<0.005	<0.005
4/5/2019			0.00018 (J)			
9/24/2019					<0.005	
9/25/2019				<0.005		
9/26/2019			<0.005			
9/27/2019	0.013	<0.005				<0.005
3/3/2020	0.016	<0.005			<0.005	
3/4/2020			<0.005	<0.005		<0.005
3/26/2020		<0.005				
3/27/2020				<0.005	<0.005	
3/30/2020			<0.005			
3/31/2020	0.019					<0.005
9/16/2020				<0.005	<0.005	
9/17/2020						<0.005
9/18/2020	0.0042 (J)	<0.005				
9/21/2020			0.0016 (J)			
2/10/2021				<0.005		
2/12/2021	0.0079 (J)	<0.005				
2/16/2021					<0.005	<0.005
2/22/2021			<0.005			
3/15/2021				<0.005	<0.005	
3/16/2021	0.015	<0.005				<0.005
3/17/2021			<0.005			
8/16/2021				<0.005		
8/17/2021						<0.005
8/18/2021	0.0033 (J)	<0.005			<0.005	
8/19/2021			<0.005			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
2/9/2022	0.0035 (J)	<0.005				<0.005
2/10/2022			<0.005	<0.005	<0.005	
8/3/2022	0.0057	<0.005	<0.005	<0.005	<0.005	
8/4/2022						<0.005
8/11/2022				<0.005		
1/26/2023	0.01	<0.005	<0.005			<0.005
1/27/2023				<0.005		
2/1/2023					<0.005	
8/10/2023	0.0089	<0.005				
8/11/2023						<0.005
8/12/2023			<0.005	<0.005	<0.005	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		<0.005	<0.005		<0.005	<0.005
3/14/2019	<0.005			<0.005		
4/2/2019		<0.005				
4/3/2019	0.007 (J)			<0.005	<0.005	
4/4/2019						0.00012 (J)
4/8/2019			<0.005			
9/25/2019		<0.005				
9/26/2019			<0.005		<0.005	<0.005
9/27/2019	0.0013 (J)			<0.005		
3/2/2020		<0.005				
3/3/2020				<0.005		
3/4/2020	0.0044 (J)		<0.005		<0.005	<0.005
3/26/2020	0.0053 (J)			<0.005		
3/27/2020		<0.005				
3/30/2020			<0.005			
3/31/2020					<0.005	
4/2/2020						<0.005
9/17/2020		<0.005			<0.005	
9/18/2020				<0.005		<0.005
9/21/2020	0.0033 (J)		<0.005			
2/11/2021		<0.005				
2/12/2021	0.0021 (J)			<0.005		
2/16/2021			<0.005		<0.005	<0.005
3/12/2021						<0.005
3/15/2021		<0.005				
3/16/2021				<0.005		
3/17/2021	<0.005		<0.005		<0.005	
8/17/2021		<0.005			<0.005	<0.005
8/18/2021	0.0026 (J)					
8/19/2021			<0.005	<0.005		
2/9/2022	0.0036 (J)			<0.005	<0.005	
2/10/2022		<0.005	<0.005			<0.005
8/3/2022			<0.005			<0.005
8/4/2022	0.0022 (J)	<0.005		<0.005	<0.005	
1/26/2023	0.0056	<0.005	<0.005	<0.005	<0.005	
1/27/2023						<0.005
8/10/2023	0.0038 (J)	<0.005		<0.005		
8/11/2023					<0.005	
8/12/2023			<0.005			<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	<0.005	<0.005			
3/13/2019			0.0033 (J)	<0.005	0.0016 (J)
4/2/2019	<0.005	<0.005			
4/3/2019			0.0027 (J)	<0.005	<0.005
9/24/2019		<0.005			
9/25/2019			0.0021 (J)		
9/26/2019	<0.005			<0.005	0.0014 (J)
3/2/2020		<0.005	0.0041 (J)		
3/3/2020				<0.005	<0.005
3/4/2020	<0.005				
3/26/2020			0.0039 (J)		
3/27/2020	<0.005			<0.005	
3/30/2020		<0.005			0.0014 (J)
9/16/2020		<0.005			
9/17/2020			0.0028 (J)		
9/21/2020	<0.005			<0.005	0.0026 (J)
2/10/2021	<0.005				
2/15/2021		<0.005			<0.005
2/16/2021			0.0035 (J)	<0.005	
3/15/2021	<0.005	<0.005			0.0021 (J)
3/16/2021			0.0026 (J)	<0.005	
8/16/2021		<0.005			
8/17/2021			0.0017 (J)	<0.005	<0.005
8/18/2021	<0.005				
2/8/2022					0.0015 (J)
2/9/2022			0.0027 (J)	<0.005	
2/10/2022	<0.005	<0.005			
8/3/2022		<0.005	0.0032 (J)	<0.005	
8/4/2022	<0.005				<0.005
1/26/2023	<0.005	<0.005	0.0045 (J)	<0.005	<0.005
8/10/2023		<0.005	0.002 (J)	<0.005	<0.005
8/11/2023	<0.005				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	66.9	48.6	42.3			
5/23/2016						175
7/11/2016	41	45				
7/12/2016			44			190
8/30/2016	36	42	40			
9/1/2016						190
10/19/2016	46	44	43			
10/24/2016						190
12/6/2016	59	44	43			
12/7/2016						200
1/24/2017	46	46	48			
1/26/2017						90
3/21/2017	63	46	45			
3/22/2017						170
5/22/2017	77	48	46			
5/24/2017						190
10/3/2017	42	47	48			200
6/4/2018	71.8	47.8	46.6			
6/5/2018						205
10/1/2018	49.1	48.1	48.6			
10/2/2018						178
4/1/2019			50.4			
4/2/2019	84.3	48.7				
4/3/2019						159
9/23/2019	70.2	47.2	43.9			
9/27/2019						181
3/25/2020	85.9	46.3	50.5			
4/1/2020						59
6/16/2020	88.2		49.5			
9/15/2020	47.3	51.5	44.7			
9/16/2020				43	6.9	169
11/10/2020				39	6.3	
12/15/2020				38.8	6.7	
1/19/2021				37.3	7.4	
3/10/2021	49.6				<1	
3/11/2021		52.9	50.4	38.6		
3/12/2021						120
8/11/2021	48.9			30.5		
8/12/2021		47.4	38.6			
8/13/2021					56.1	
8/17/2021						156
2/1/2022	43.7	67.1	46	37.5	56.3	
2/9/2022						49.2
8/2/2022	58.1	86.9	43.5	37	13.2	
8/3/2022						119
1/23/2023			39.5			
1/24/2023	48.3	79.7		34.7	10.1	
1/27/2023						37.3
8/8/2023	67.7	89.9	35	25.6	1.3	
8/10/2023						128

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				96	219	
5/23/2016	260	288	215			207
7/12/2016	390	320	210	100	230	230
9/1/2016	240	300	190	100	230	230
10/20/2016				110	240	240
10/24/2016	370	270	180			
12/6/2016				110	250	240
12/7/2016	260	280	120			
1/25/2017				110	260	
1/26/2017	230	260	83			270
3/21/2017				110	240	
3/22/2017	330	220	100			240
5/23/2017				110	270	240
5/24/2017	230	210	110			
10/3/2017	230	190	67	120	230	240
6/5/2018	204		187	117		
6/6/2018		162			190	214
10/2/2018				120	193	218
10/3/2018	233	191				
10/5/2018			78.3			
4/2/2019				127		
4/3/2019	298	176			194	214
4/5/2019			105			
9/24/2019					133	
9/25/2019				109		
9/26/2019			444			
9/27/2019	<10	198				214
3/26/2020		182				
3/27/2020				109	173	
3/30/2020			393			
3/31/2020	283					185
6/16/2020					157	
6/17/2020				102		
9/16/2020				109	194	
9/17/2020						209
9/18/2020	272	266				
9/21/2020			359			
3/15/2021				107	272	
3/16/2021	291	248				211
3/17/2021			384			
8/16/2021				98.1		
8/17/2021						207
8/18/2021	237	226			245	
8/19/2021			339			
2/9/2022	276	252				224
2/10/2022			371	97.5	224	
8/3/2022	254	236	451	105	241	
8/4/2022						243
8/11/2022				121		
1/26/2023	209	228	495			217
1/27/2023				119		
2/1/2023					179	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
8/10/2023	190	209				
8/11/2023						197
8/12/2023			347	84.2	170	

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
4/2/2019		122				
4/3/2019	105			53	131	
4/4/2019						11.8
4/8/2019			97.3			
9/25/2019		112				
9/26/2019			91		189	15.6
9/27/2019	170			48		
3/26/2020	310			32.3		
3/27/2020		114				
3/30/2020			84.9			
3/31/2020					129	
4/2/2020						13.3
9/17/2020		110			174	
9/18/2020				27.4		7.5
9/21/2020	305		114			
3/12/2021						7.4
3/15/2021		109				
3/16/2021				9.4		
3/17/2021	260		137		212	
8/17/2021		98.6			194	8.2
8/18/2021	219					
8/19/2021			130	4.1		
2/9/2022	221			1.7	224	
2/10/2022		95.9	127			13.2
8/3/2022			135			9.5
8/4/2022	412	110		0.97 (J)	239	
1/26/2023	214	109	152	0.59 (J)	240	
1/27/2023						9.1
8/10/2023	210	100		0.62 (J)		
8/11/2023					159	
8/12/2023			146			7.6

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
4/2/2019	67.7	151			
4/3/2019			218	228	75.3
9/24/2019		154			
9/25/2019			134		
9/26/2019	96.2			225	129
3/26/2020			176		
3/27/2020	36			204	
3/30/2020		130			46.2
9/16/2020		143			
9/17/2020			153		
9/21/2020	84.2			221	114
3/15/2021	50.1	148			92.1
3/16/2021			162	189	
8/16/2021		136			
8/17/2021			154	194	105
8/18/2021	82.1				
2/8/2022					80.4
2/9/2022			123	197	
2/10/2022	32.5	141			
8/3/2022		140	135	190	
8/4/2022	80.5				76
1/26/2023	40.8	161	137	203	26
8/10/2023		134	137	174	67.3
8/11/2023	15.4				

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	<0.001	<0.001	<0.001			
5/23/2016						<0.001
7/11/2016	<0.001	<0.001				
7/12/2016			<0.001			<0.001
8/30/2016	<0.001	<0.001	<0.001			
9/1/2016						<0.001
10/19/2016	<0.001	<0.001	<0.001			
10/24/2016						<0.001
12/6/2016	<0.001	<0.001	<0.001			
12/7/2016						<0.001
1/24/2017	<0.001	<0.001	<0.001			
1/26/2017						<0.001
3/21/2017	<0.001	3E-05 (J)	<0.001			
3/22/2017						<0.001
5/22/2017	<0.001	<0.001	<0.001			
5/24/2017						<0.001
4/2/2018	<0.001	<0.001				
4/3/2018			<0.001			
4/4/2018						<0.001
6/4/2018	<0.001	<0.001	<0.001			
6/5/2018						<0.001
10/1/2018	<0.001	<0.001	<0.001			
10/2/2018						<0.001
3/12/2019	<0.001	<0.001	<0.001			
3/13/2019						<0.001
4/1/2019			<0.001			
4/2/2019	<0.001	<0.001				
4/3/2019						<0.001
9/23/2019	<0.001	<0.001	<0.001			
9/27/2019						<0.001
3/2/2020	<0.001	<0.001	<0.001			
3/3/2020						<0.001
3/25/2020	<0.001	<0.001	<0.001			
4/1/2020						<0.001
9/15/2020	<0.001	<0.001	<0.001			
9/16/2020				<0.001	<0.001	<0.001
11/10/2020				<0.001	<0.001	
12/15/2020				<0.001	<0.001	
1/19/2021				<0.001	<0.001	
2/8/2021	<0.001					
2/9/2021		<0.001	<0.001	<0.001	<0.001	
2/15/2021						<0.001
3/10/2021	<0.001				<0.001	
3/11/2021		<0.001	<0.001	<0.001		
3/12/2021						<0.001
8/11/2021	<0.001			<0.001		
8/12/2021		<0.001	<0.001			
8/13/2021					<0.001	
8/17/2021						<0.001
2/1/2022	<0.001	<0.001	<0.001	<0.001	<0.001	
2/9/2022						<0.001
8/2/2022	<0.001	<0.001	<0.001	<0.001	<0.001	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
8/3/2022						<0.001
1/23/2023			<0.001			
1/24/2023	<0.001	<0.001		<0.001	<0.001	
1/27/2023						<0.001
8/8/2023	<0.001	<0.001	<0.001	<0.001	<0.001	
8/10/2023						<0.001

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				<0.001	<0.001	
5/23/2016	<0.001	<0.001	0.000378 (J)			<0.001
7/12/2016	8E-05 (J)	0.0002 (J)	0.0004 (J)	<0.001	7E-05 (J)	<0.001
9/1/2016	<0.001	<0.001	0.0004 (J)	<0.001	<0.001	<0.001
10/20/2016				<0.001	<0.001	<0.001
10/24/2016	<0.001	<0.001	0.0005 (J)			
12/6/2016				<0.001	<0.001	<0.001
12/7/2016	<0.001	<0.001	0.0004 (J)			
1/25/2017				<0.001	<0.001	
1/26/2017	<0.001	<0.001	0.0004 (J)			<0.001
3/21/2017				<0.001	9E-05 (J)	
3/22/2017	<0.001	0.0001 (J)	0.0004 (J)			<0.001
5/23/2017				<0.001	8E-05 (J)	<0.001
5/24/2017	8E-05 (J)	9E-05 (J)	0.0003 (J)			
4/3/2018				<0.001	<0.001	<0.001
4/4/2018	<0.001	<0.001	0.00032 (J)			
6/5/2018	<0.001		0.00035 (J)	<0.001		
6/6/2018		<0.001			<0.001	<0.001
10/2/2018				<0.001	<0.001	<0.001
10/3/2018	<0.001	<0.001				
10/5/2018			0.00025 (J)			
3/12/2019					<0.001	
3/13/2019	<0.001		0.00039 (J)	<0.001		<0.001
3/14/2019		<0.001				
4/2/2019				<0.001		
4/3/2019	<0.001	<0.001			<0.001	<0.001
4/5/2019			0.00034 (J)			
9/24/2019					0.00011 (J)	
9/25/2019				<0.001		
9/26/2019			0.00039 (J)			
9/27/2019	<0.001	8.8E-05 (J)				<0.001
3/3/2020	<0.001	6.6E-05 (J)			6.1E-05 (J)	
3/4/2020			0.00056 (J)	<0.001		<0.001
3/26/2020		8E-05 (J)				
3/27/2020				<0.001	7.7E-05 (J)	
3/30/2020			0.00048 (J)			
3/31/2020	<0.001					<0.001
9/16/2020				<0.001	<0.001	
9/17/2020						<0.001
9/18/2020	<0.001	<0.001				
9/21/2020			0.00036 (J)			
2/10/2021				<0.001		
2/12/2021	<0.001	<0.001				
2/16/2021					<0.001	<0.001
2/22/2021			0.0003 (J)			
3/15/2021				<0.001	<0.001	
3/16/2021	<0.001	<0.001				<0.001
3/17/2021			0.00037 (J)			
8/16/2021				<0.001		
8/17/2021						<0.001
8/18/2021	<0.001	<0.001			<0.001	
8/19/2021			0.0002 (J)			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
2/9/2022	<0.001	<0.001				<0.001
2/10/2022			<0.001	<0.001	<0.001	
8/3/2022	<0.001	<0.001	<0.001	<0.001	0.00018 (J)	
8/4/2022						<0.001
8/11/2022				<0.001		
1/26/2023	<0.001	<0.001	0.00031 (J)			<0.001
1/27/2023				<0.001		
2/1/2023					<0.001	
8/10/2023	<0.001	<0.001				
8/11/2023						<0.001
8/12/2023			0.00028 (J)	<0.001	<0.001	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
3/13/2019		<0.001	<0.001		<0.001	<0.001
3/14/2019	<0.001			<0.001		
4/2/2019		<0.001				
4/3/2019	<0.001			<0.001	<0.001	
4/4/2019						<0.001
4/8/2019			<0.001			
9/25/2019		<0.001				
9/26/2019			<0.001		<0.001	<0.001
9/27/2019	0.00027 (J)			<0.001		
3/2/2020		<0.001				
3/3/2020				<0.001		
3/4/2020	0.00026 (J)		<0.001		<0.001	<0.001
3/26/2020	0.00026 (J)			<0.001		
3/27/2020		<0.001				
3/30/2020			<0.001			
3/31/2020					<0.001	
4/2/2020						<0.001
9/17/2020		<0.001			<0.001	
9/18/2020				<0.001		<0.001
9/21/2020	0.0003 (J)		<0.001			
2/11/2021		<0.001				
2/12/2021	0.00019 (J)			<0.001		
2/16/2021			<0.001		<0.001	<0.001
3/12/2021						<0.001
3/15/2021		<0.001				
3/16/2021				<0.001		
3/17/2021	0.00026 (J)		<0.001		<0.001	
8/17/2021		<0.001			<0.001	<0.001
8/18/2021	0.00023 (J)					
8/19/2021			<0.001	<0.001		
2/9/2022	<0.001			<0.001	<0.001	
2/10/2022		<0.001	<0.001			<0.001
8/3/2022			<0.001			<0.001
8/4/2022	0.00026 (J)	<0.001		<0.001	<0.001	
1/26/2023	<0.001	<0.001	<0.001	<0.001	<0.001	
1/27/2023						<0.001
8/10/2023	<0.001	<0.001		<0.001		
8/11/2023					<0.001	
8/12/2023			<0.001			<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	<0.001	<0.001			
3/13/2019			<0.001	<0.001	<0.001
4/2/2019	<0.001	<0.001			
4/3/2019			<0.001	<0.001	<0.001
9/24/2019		6.4E-05 (J)			
9/25/2019			<0.001		
9/26/2019	<0.001			<0.001	<0.001
3/2/2020		<0.001	<0.001		
3/3/2020				8.2E-05 (J)	<0.001
3/4/2020	9.2E-05 (J)				
3/26/2020			<0.001		
3/27/2020	<0.001			<0.001	
3/30/2020		<0.001			<0.001
9/16/2020		<0.001			
9/17/2020			<0.001		
9/21/2020	<0.001			<0.001	<0.001
2/10/2021	<0.001				
2/15/2021		<0.001			<0.001
2/16/2021			<0.001	<0.001	
3/15/2021	<0.001	<0.001			<0.001
3/16/2021			<0.001	<0.001	
8/16/2021		<0.001			
8/17/2021			<0.001	<0.001	<0.001
8/18/2021	<0.001				
2/8/2022					<0.001
2/9/2022			<0.001	<0.001	
2/10/2022	<0.001	<0.001			
8/3/2022		<0.001	<0.001	<0.001	
8/4/2022	<0.001				<0.001
1/26/2023	<0.001	<0.001	<0.001	<0.001	<0.001
8/10/2023		<0.001	<0.001	<0.001	<0.001
8/11/2023	<0.001				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWC-10
5/19/2016	421	143	267			
5/23/2016						629
7/11/2016	363	125				
7/12/2016			249			661
8/30/2016	330	168	254			
9/1/2016						769
10/19/2016	380	176	357			
10/24/2016						643
12/6/2016	377	145	285			
12/7/2016						697
1/24/2017	342	129	300			
1/26/2017						368
3/21/2017	340	103	288			
3/22/2017						683
5/22/2017	338	92	263			
5/24/2017						696
10/3/2017	343	127	300			746
6/4/2018	415	140	266			
6/5/2018						679
10/1/2018	354	135	291			
10/2/2018						572
4/1/2019			284			
4/2/2019	452	133				
4/3/2019						525
9/23/2019	442	129	268			
9/27/2019						624
3/25/2020	496	138	284			
4/1/2020						290
6/16/2020	632		448			
9/15/2020	265	124	258			
9/16/2020				272	270	490
11/10/2020				307	287	
12/15/2020				289	295	
1/19/2021				270	278	
3/10/2021	348				289	
3/11/2021		169	267	279		
3/12/2021						490 (H1)
8/11/2021	366			277		
8/12/2021		118	265			
8/13/2021					436	
8/17/2021						496
2/1/2022	270	156	350	156	444	
2/9/2022						250
8/2/2022	400	196	287	278	311	
8/3/2022						433
1/23/2023			293			
1/24/2023	369	164		271	363	
1/27/2023						188
8/8/2023	457	189	285	274	361	
8/10/2023						504

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				427	711	
5/23/2016	564	1060	683			984
7/12/2016	627	909	563	410	704	887
9/1/2016	656	1480	702	484	763	956
10/20/2016				393	644	642
10/24/2016	836	868	647			
12/6/2016				492	733	899
12/7/2016	748	811	465			
1/25/2017				461	744	
1/26/2017	571	846	411			869
3/21/2017				415	818	
3/22/2017	597	804	427			936
5/23/2017				450	765	939
5/24/2017	566	803	377			
10/3/2017	443	608	268	464	812	1040
6/5/2018	489		528	459		
6/6/2018		535			611	810
10/2/2018				426	597	693
10/3/2018	449	607				
10/5/2018			322			
4/2/2019				428		
4/3/2019	483	462			543	673
4/5/2019			331			
9/24/2019					457	
9/25/2019				503		
9/26/2019			1010			
9/27/2019	528	653				730
3/26/2020		533				
3/27/2020				413	541	
3/30/2020			895			
3/31/2020	565					1010
6/16/2020					573	
6/17/2020				423		
9/16/2020				392	552	
9/17/2020						680
9/18/2020	626	704				
9/21/2020			732			
3/15/2021				370	614	
3/16/2021	558	614				672
3/17/2021			716			
8/16/2021				407		
8/17/2021						704
8/18/2021	566	600			620	
8/19/2021			726			
2/9/2022	544	678				756
2/10/2022			814	414	578	
8/3/2022	572	650	958	441	648	
8/4/2022						760
8/11/2022				445		
1/26/2023	429	624	962			745
1/27/2023				473		
2/1/2023					528	

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
8/10/2023	438	683				
8/11/2023						757
8/12/2023			803	378	564	

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D
4/2/2019		435				
4/3/2019	310			15 (J)	493	
4/4/2019						203
4/8/2019			323			
9/25/2019		461				
9/26/2019			360		643	265
9/27/2019	442			409		
3/26/2020	626			385		
3/27/2020		429				
3/30/2020			280			
3/31/2020					623	
4/2/2020						224
9/17/2020		460			732	
9/18/2020				382		211
9/21/2020	608		391			
3/12/2021						215
3/15/2021		406				
3/16/2021				347		
3/17/2021	543		420		738	
8/17/2021		437			746	239
8/18/2021	464					
8/19/2021			420	373		
2/9/2022	503			364	734	
2/10/2022		459	412			242
8/3/2022			415			230
8/4/2022	762	431		302	788	
1/26/2023	490	482	412	346	741	
1/27/2023						255
8/10/2023	524	429		325		
8/11/2023					706	
8/12/2023			449			238

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/15/2023 12:56 PM View: Constituents View

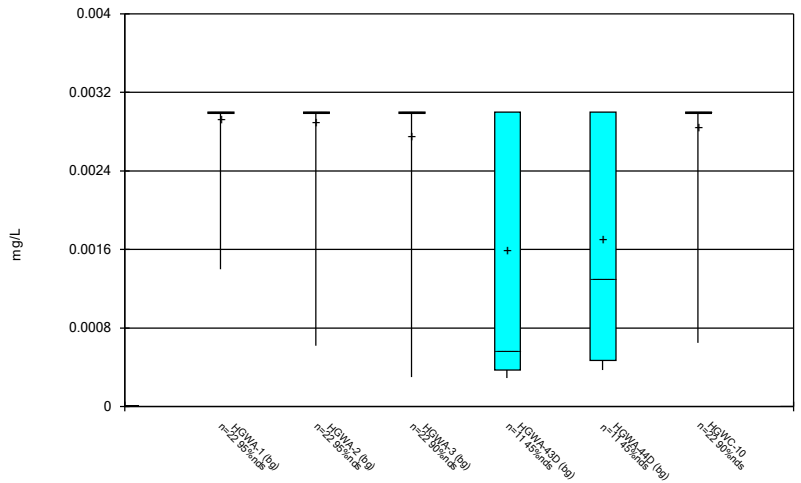
Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
4/2/2019	350	548			
4/3/2019			396	437	213
9/24/2019		603			
9/25/2019			460		
9/26/2019	418			735	383
3/26/2020			385		
3/27/2020	287			676	
3/30/2020		552			142
9/16/2020		547			
9/17/2020			486		
9/21/2020	393			656	326
3/15/2021	293	555			293
3/16/2021			333	600	
8/16/2021		512			
8/17/2021			339	656	344
8/18/2021	396				
2/8/2022					290
2/9/2022			314	652	
2/10/2022	299	508			
8/3/2022		538	391	666	
8/4/2022	378				246
1/26/2023	349	632	363	646	89
8/10/2023		564	423	626	305
8/11/2023	296				

FIGURE B.

Sanitas™ v.10.0.13 . UG

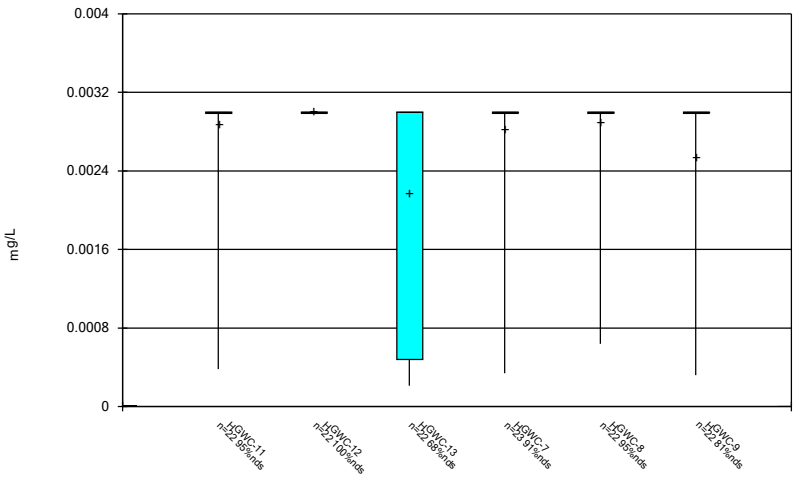
Box & Whiskers Plot



Constituent: Antimony Analysis Run 11/15/2023 12:57 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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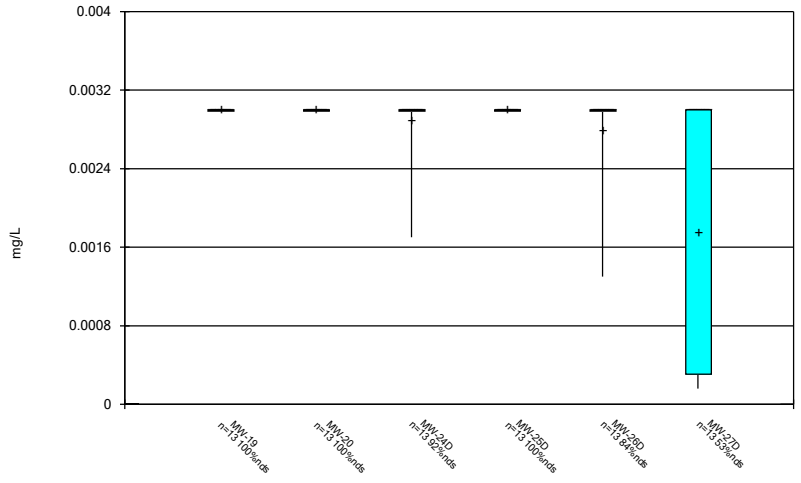
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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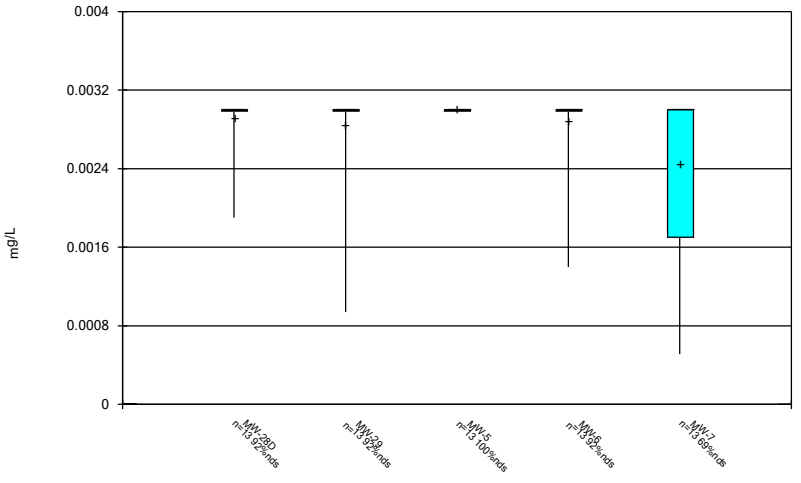
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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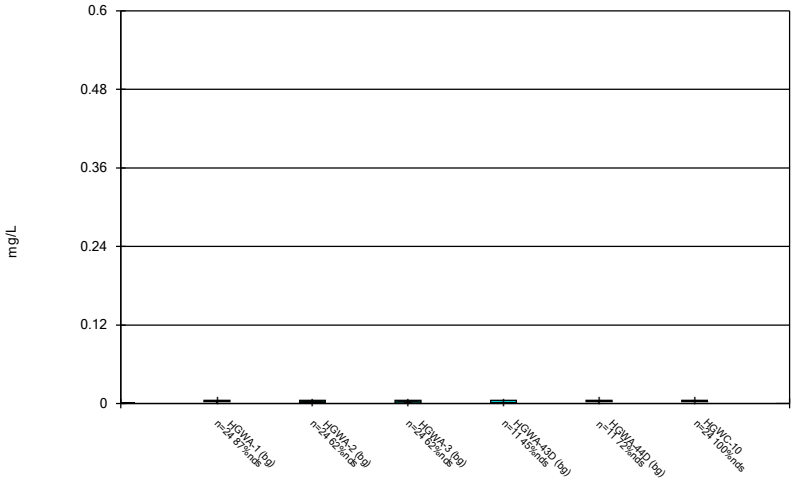
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

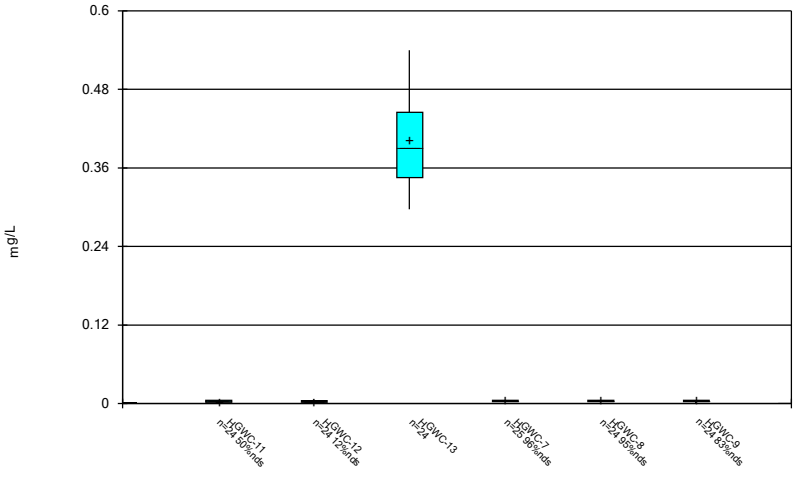
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 11/15/2023 12:57 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

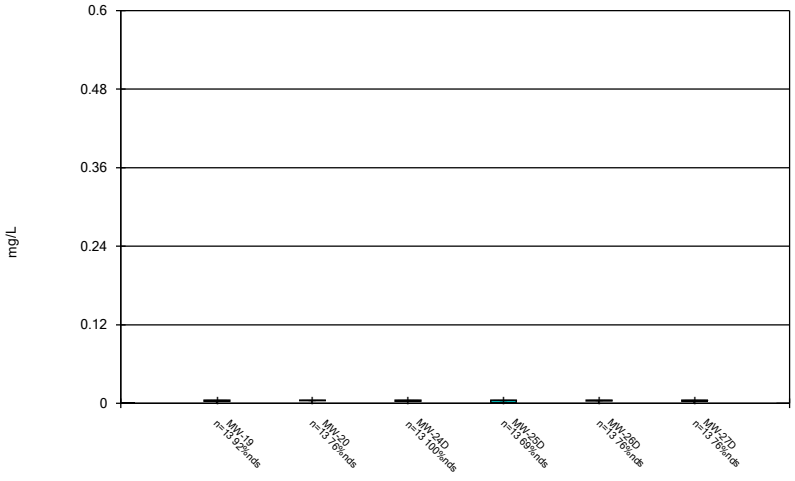
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 11/15/2023 12:57 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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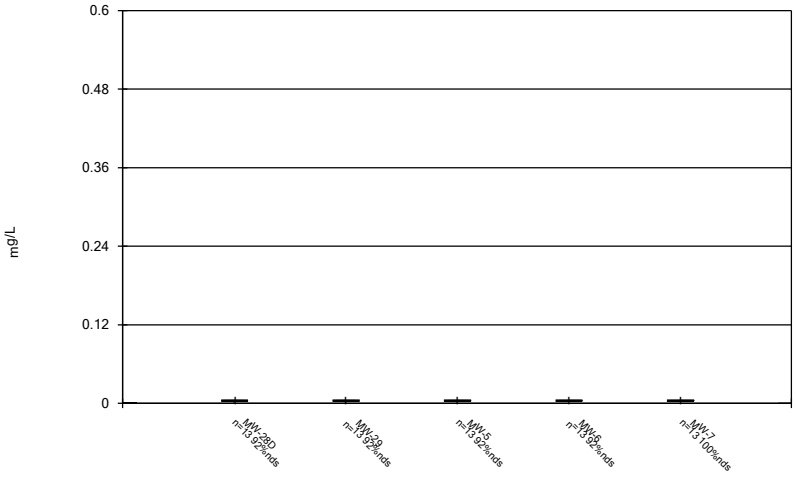
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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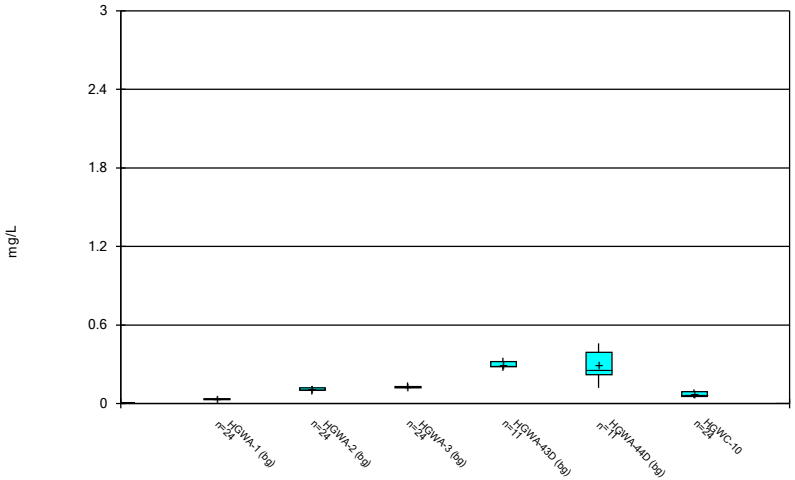
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

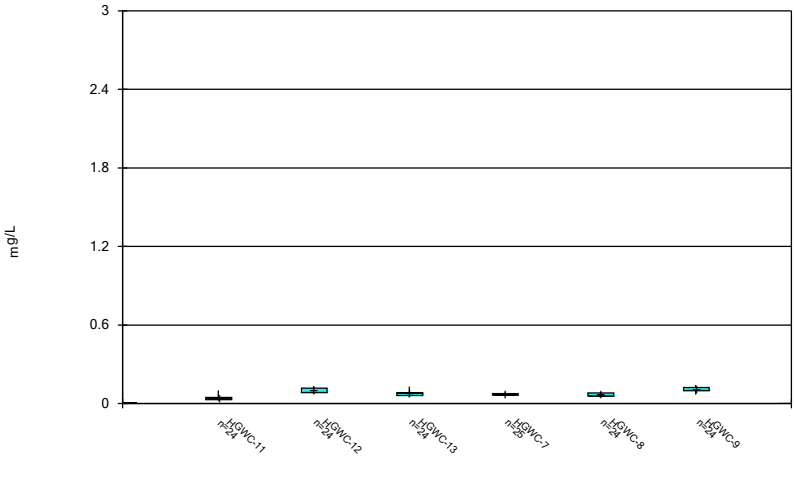
Box & Whiskers Plot



Constituent: Barium Analysis Run 11/15/2023 12:57 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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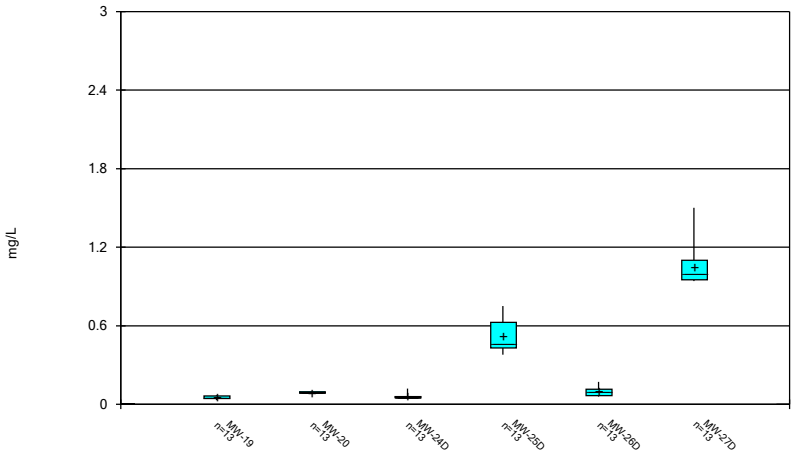
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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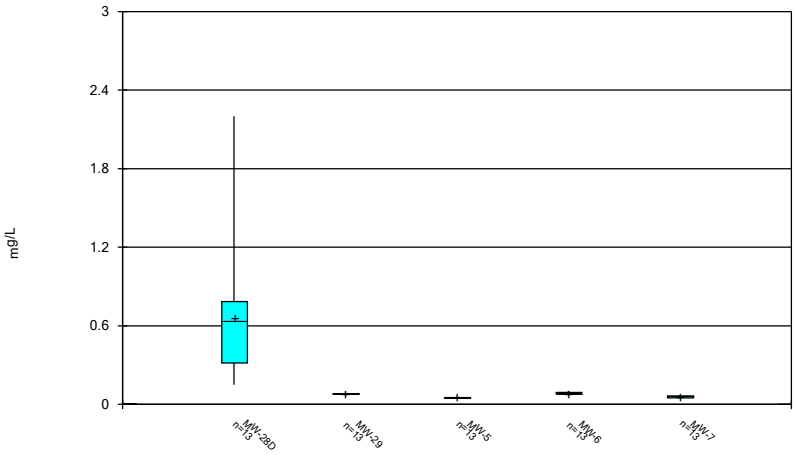
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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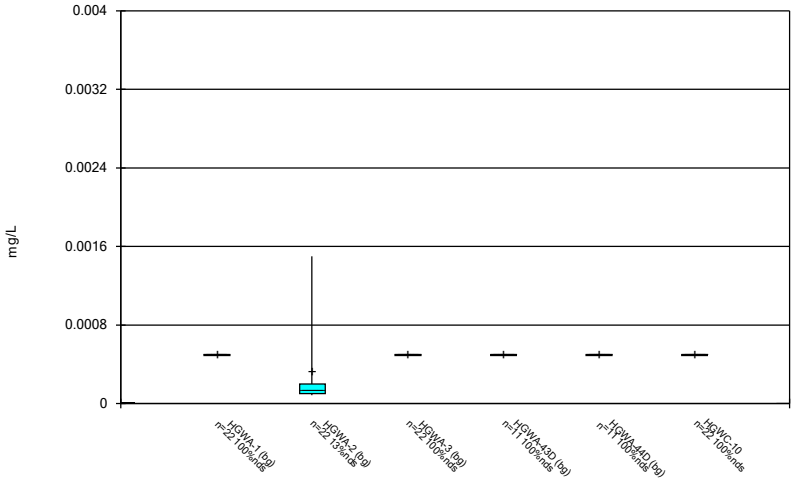
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

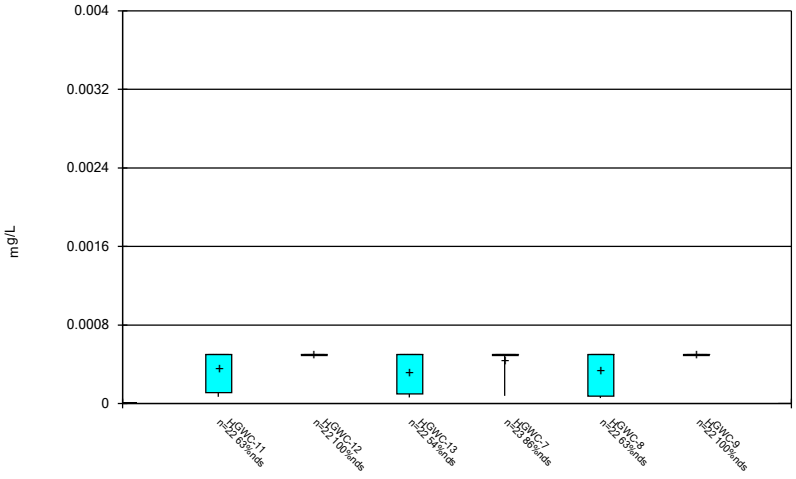
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 11/15/2023 12:57 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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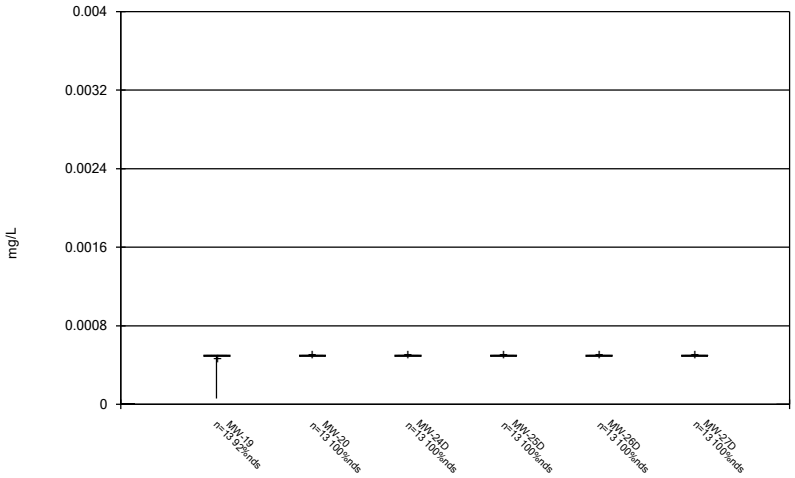
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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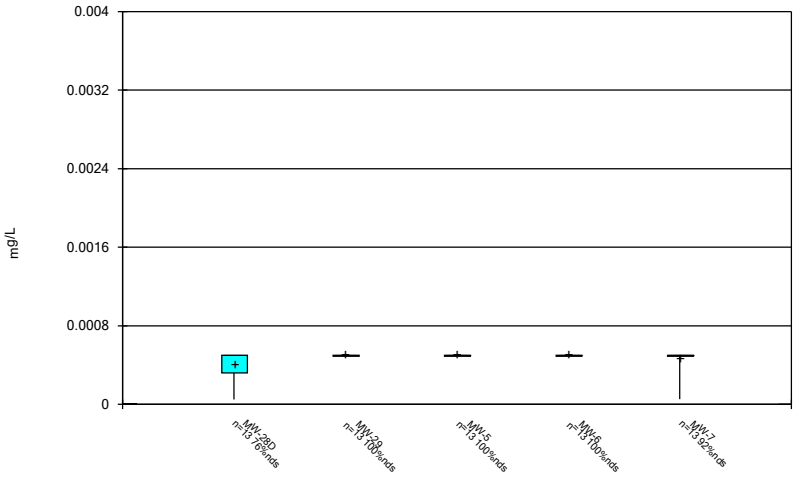
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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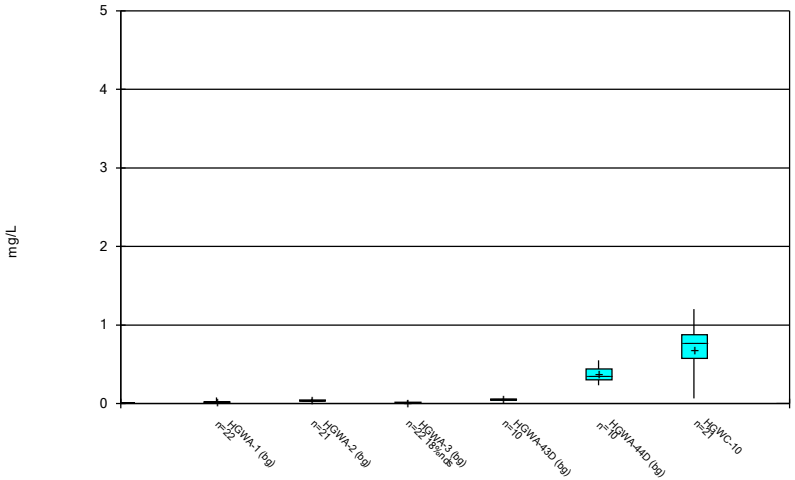
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

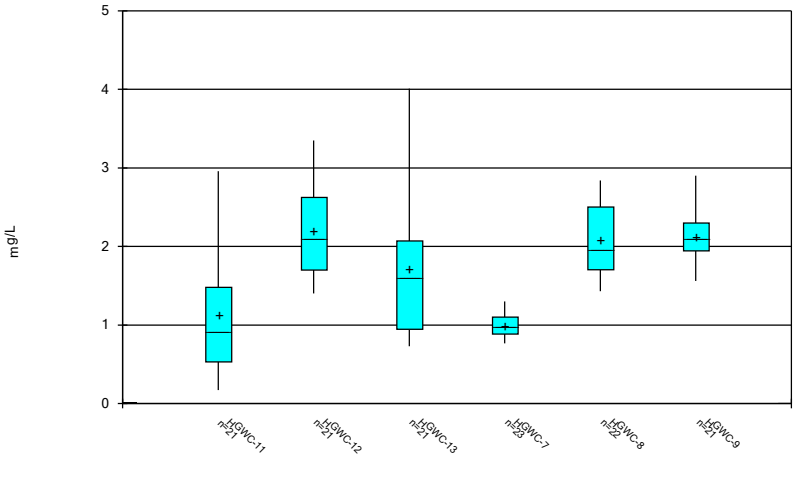
Box & Whiskers Plot



Constituent: Boron Analysis Run 11/15/2023 12:57 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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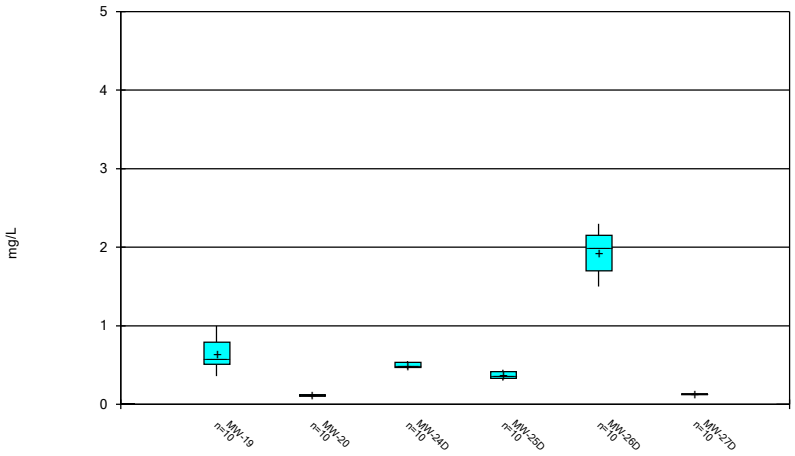
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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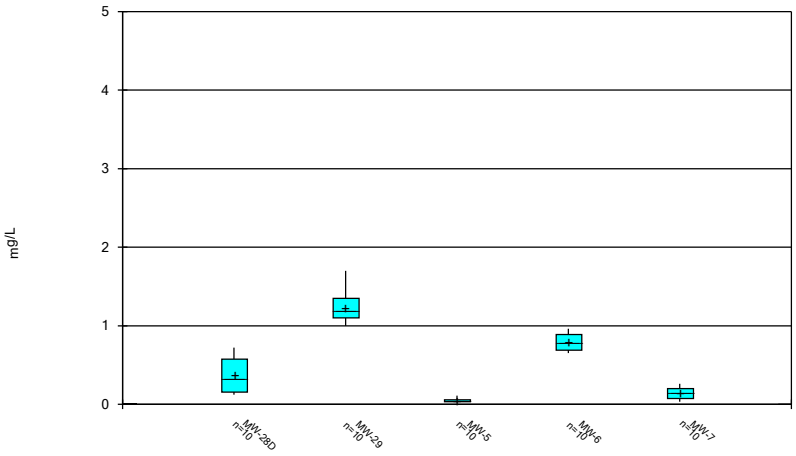
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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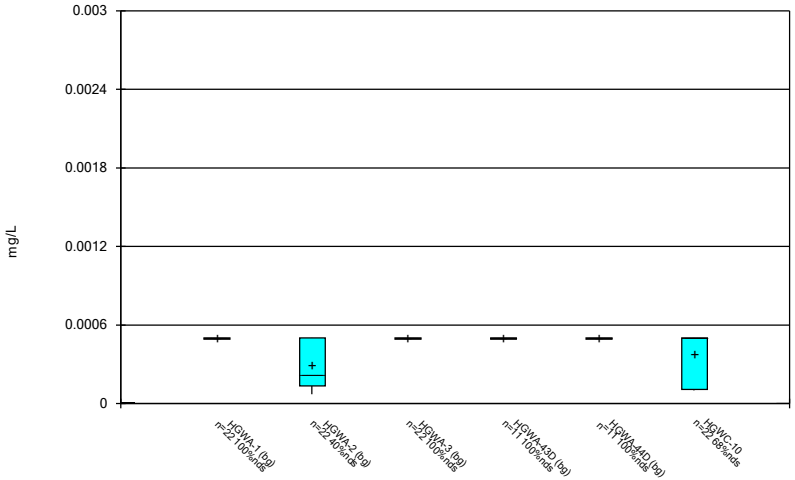
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

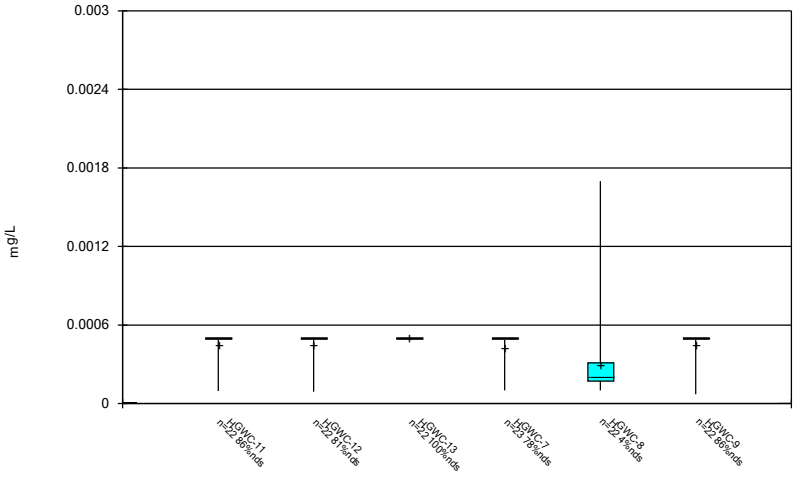
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 11/15/2023 12:57 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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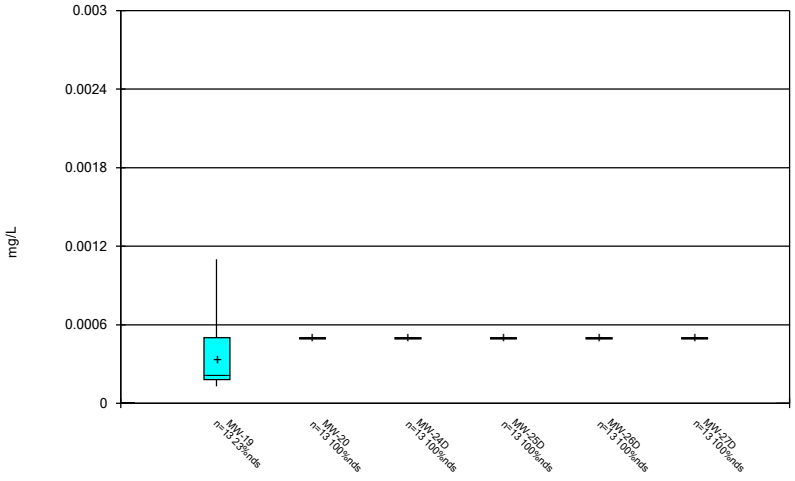
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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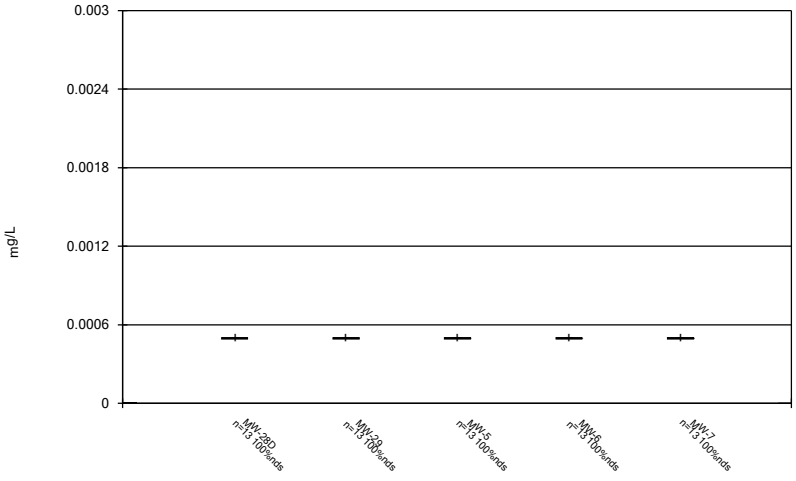
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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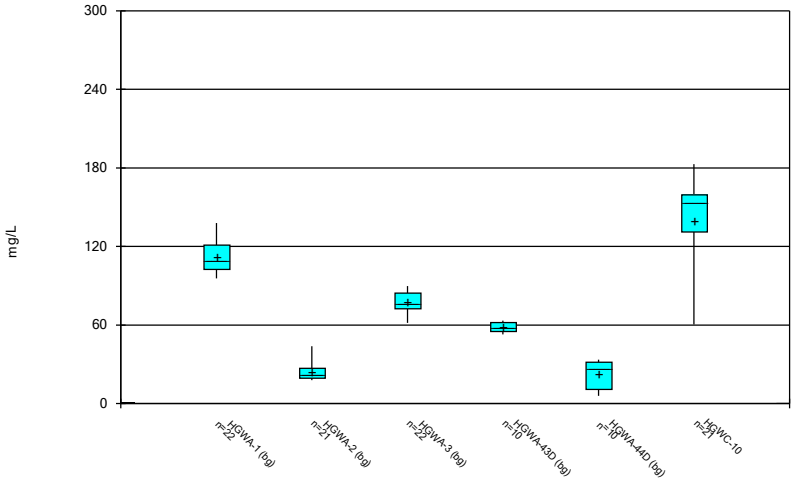
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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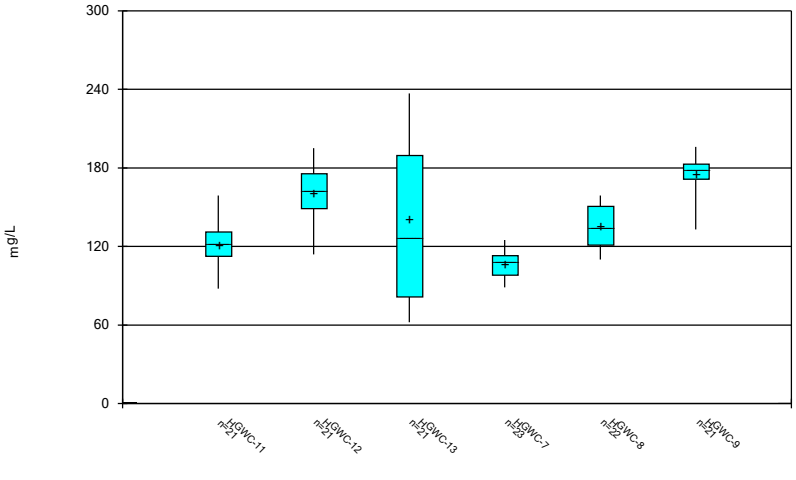
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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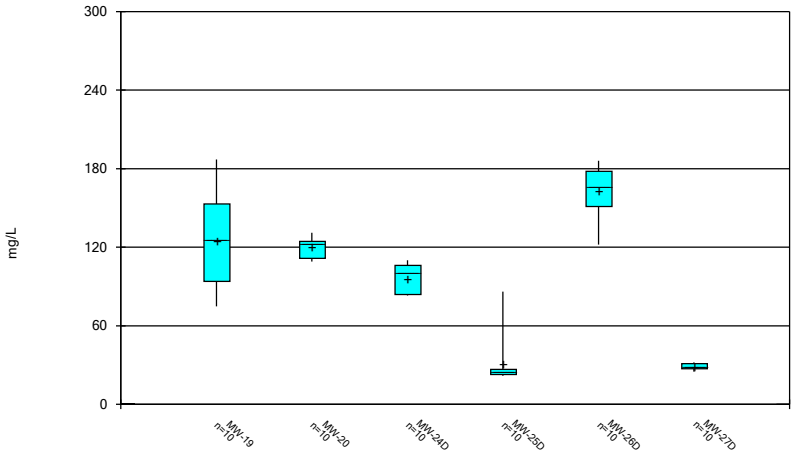
Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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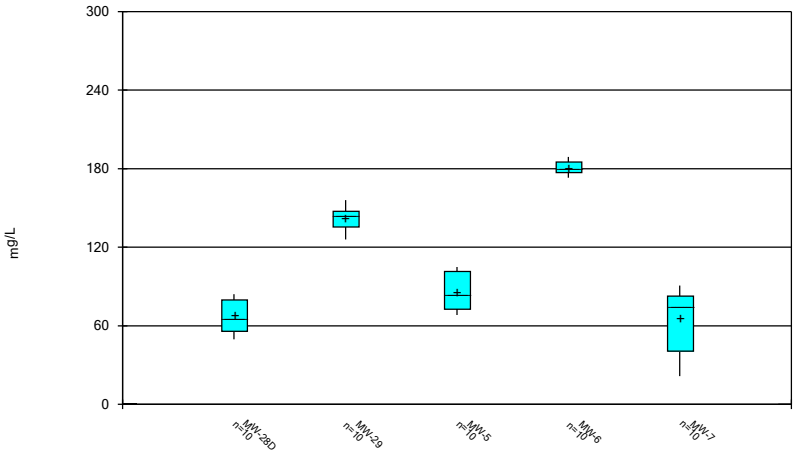
Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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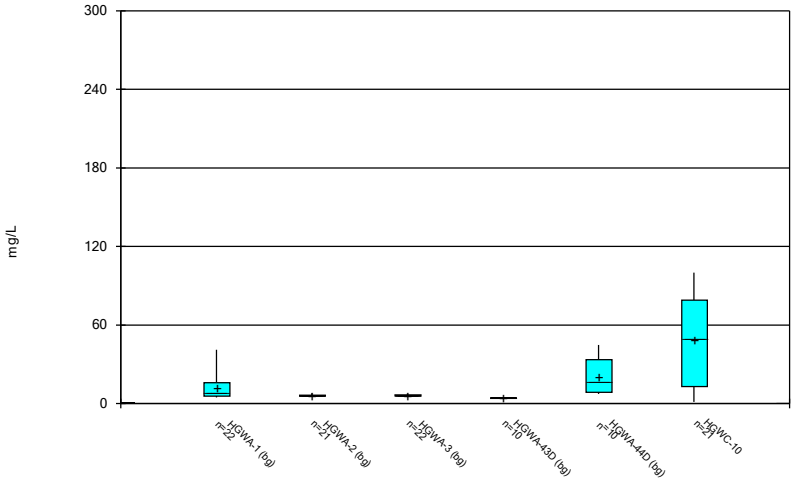
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

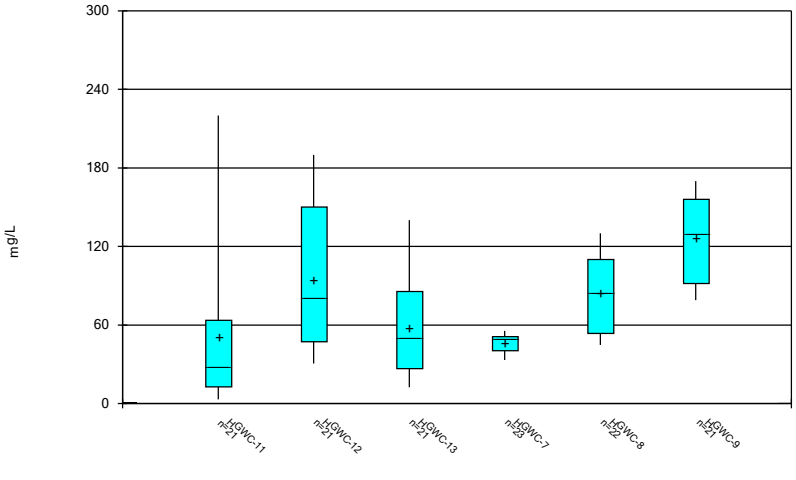
Box & Whiskers Plot



Constituent: Chloride Analysis Run 11/15/2023 12:58 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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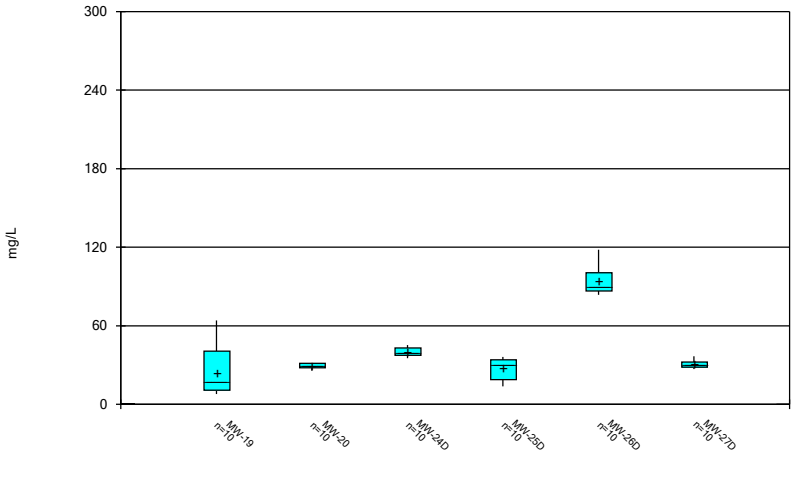
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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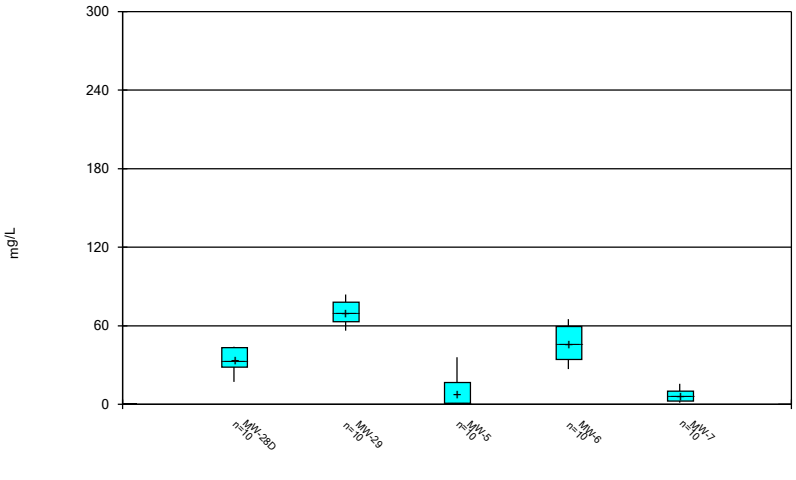
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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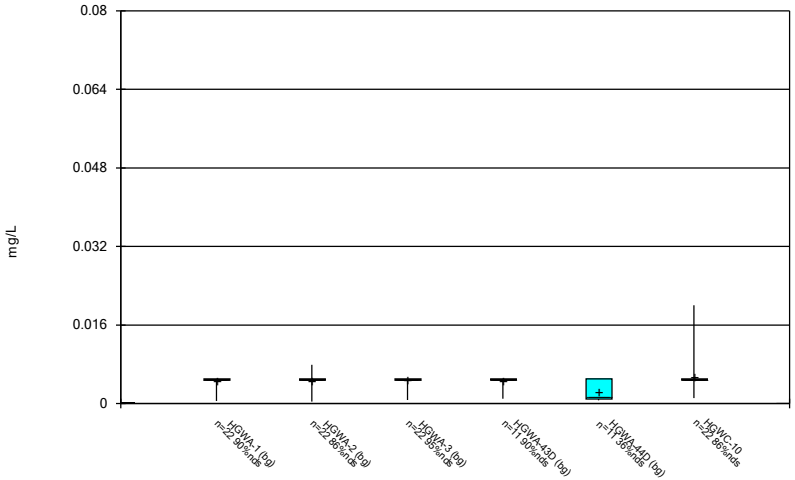
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

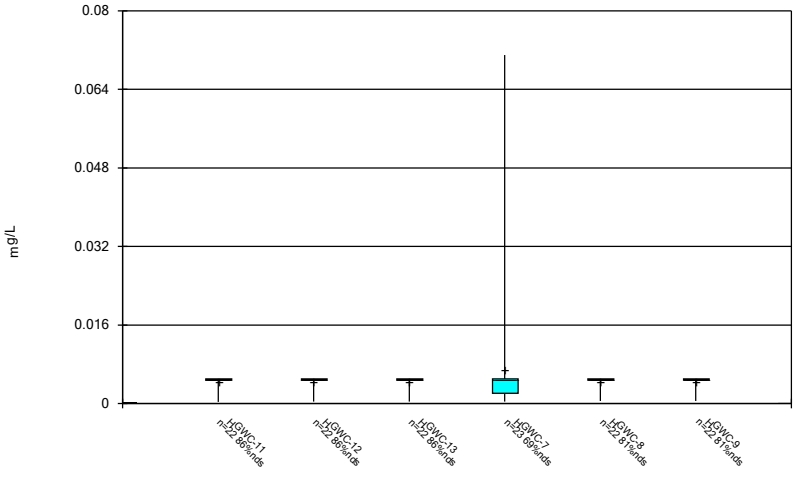
Box & Whiskers Plot



Constituent: Chromium Analysis Run 11/15/2023 12:58 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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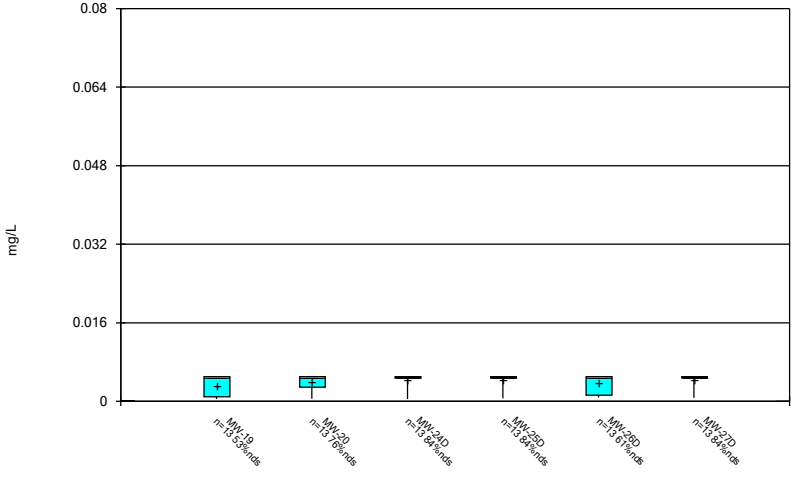
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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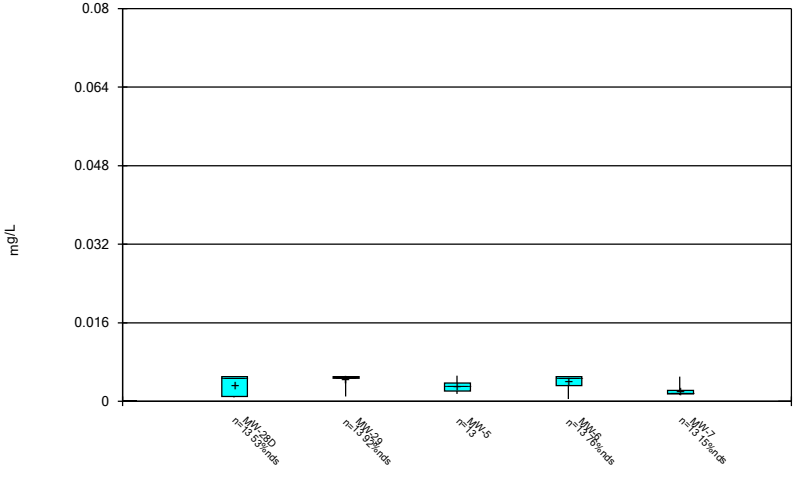
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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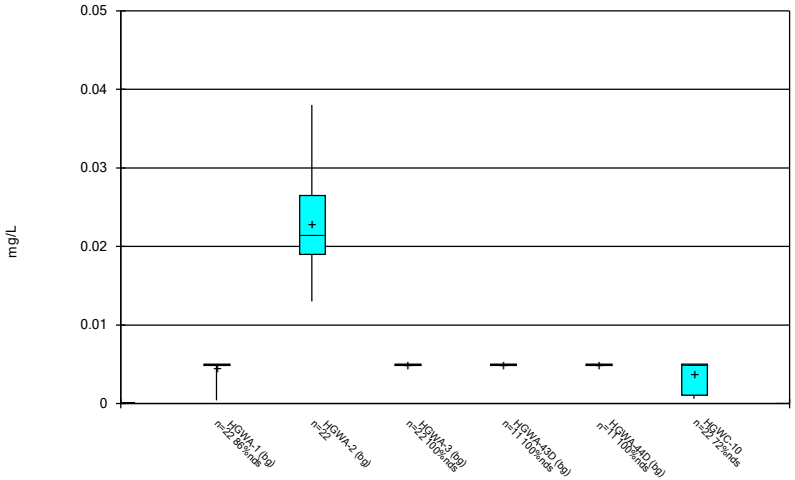
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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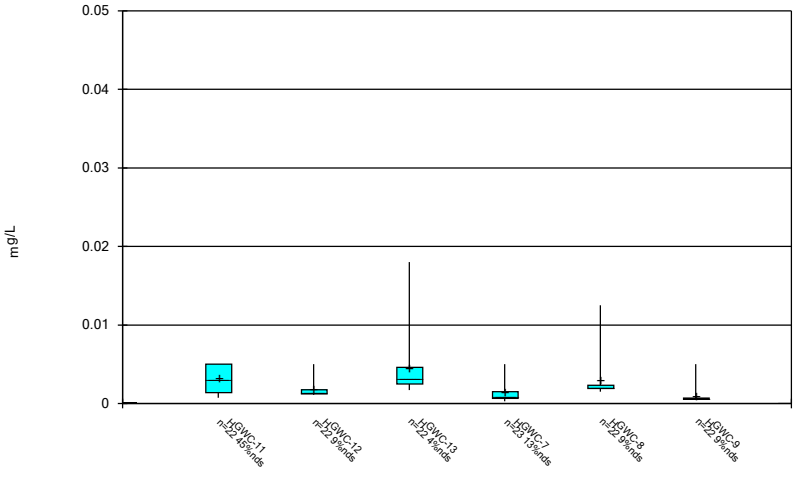
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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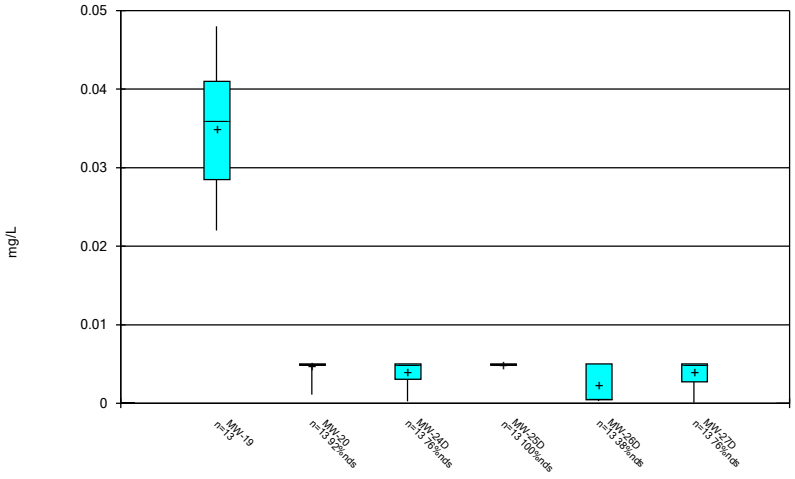
Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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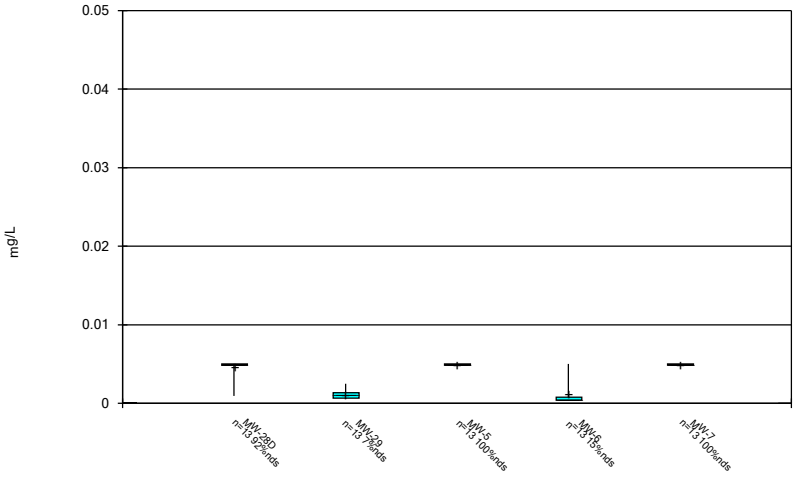
Sanitas™ v.10.0.13 . UG

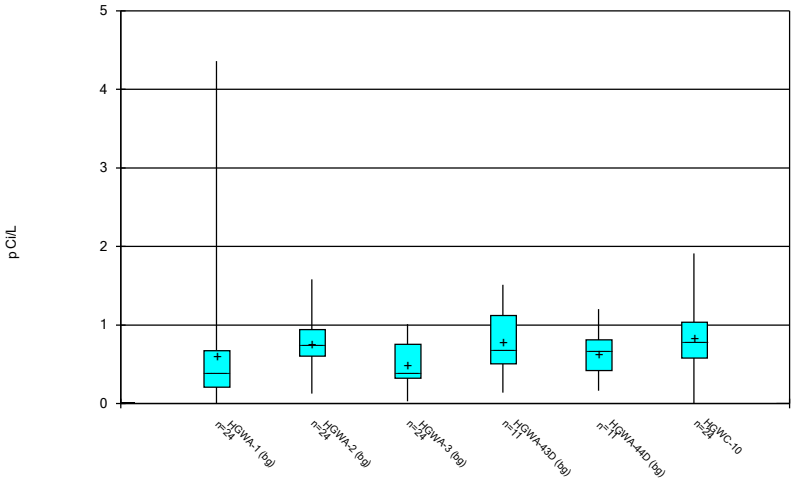
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 11/15/2023 12:58 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

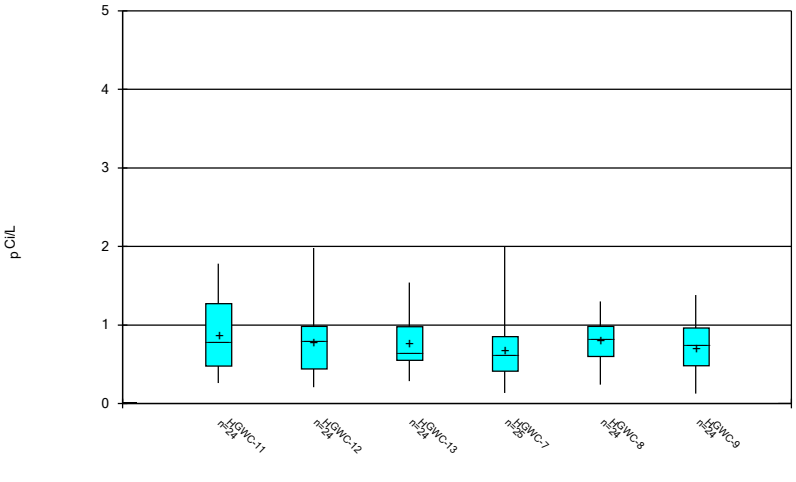
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 11/15/2023 12:58 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

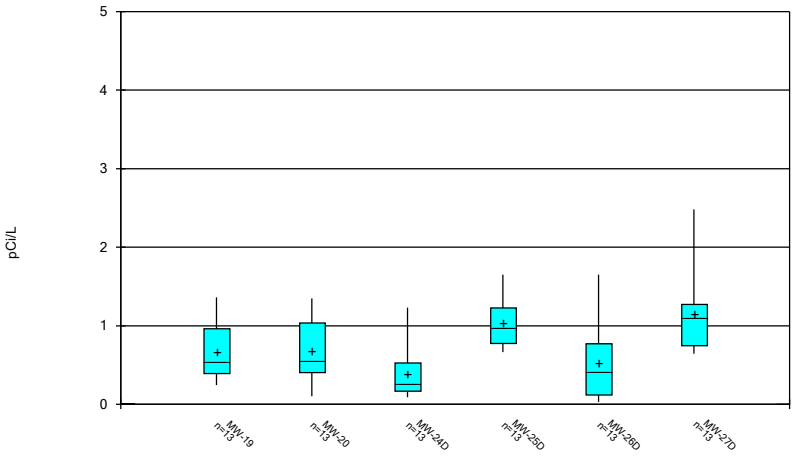
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 11/15/2023 12:58 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

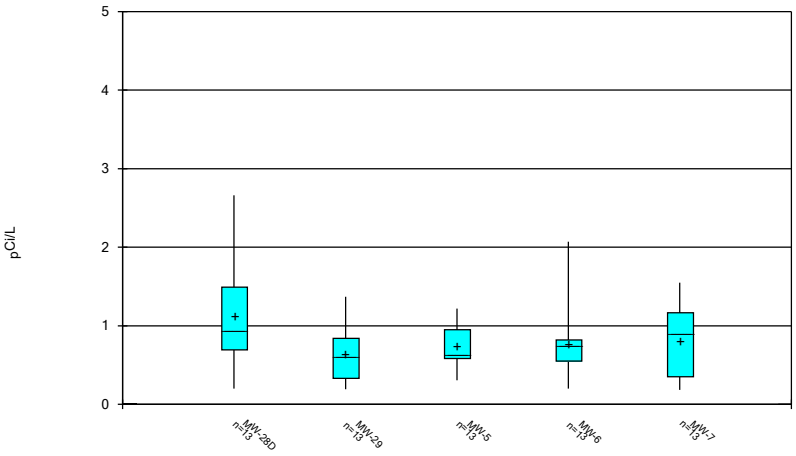
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 11/15/2023 12:58 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

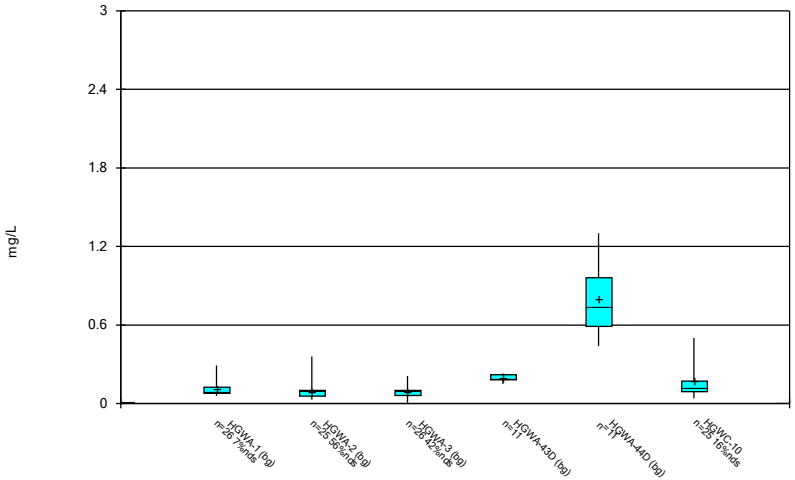
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 11/15/2023 12:58 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

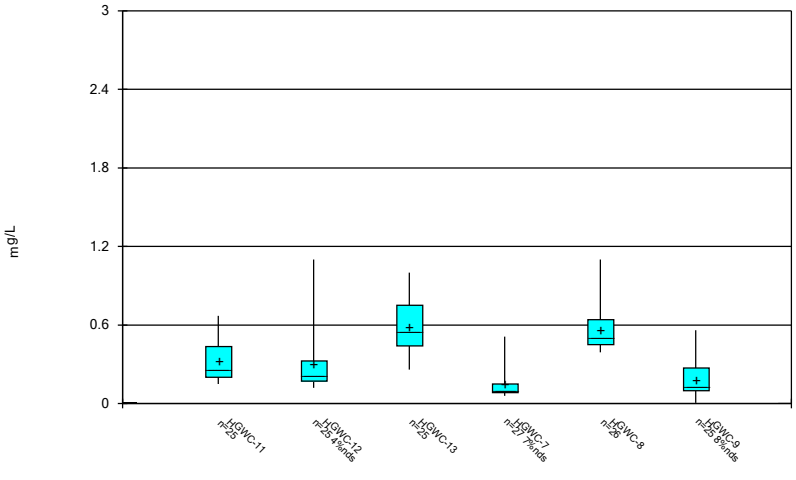
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 11/15/2023 12:58 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

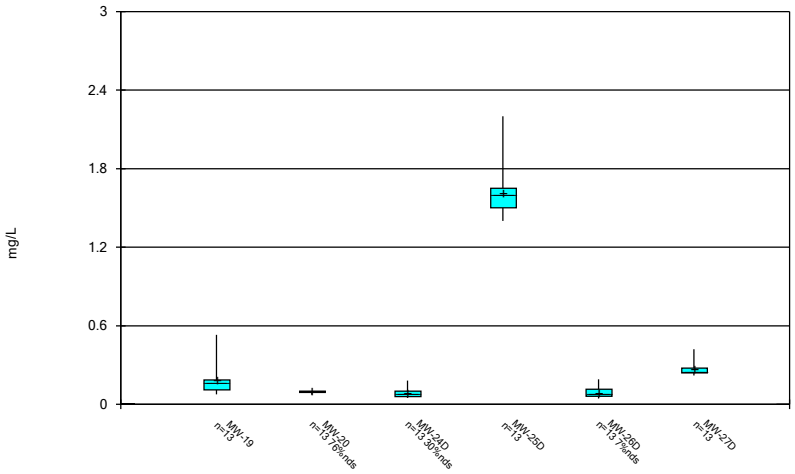
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 11/15/2023 12:58 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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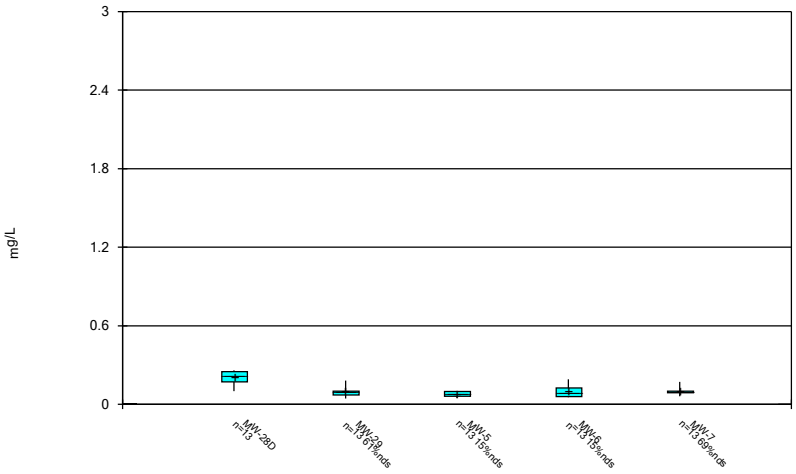
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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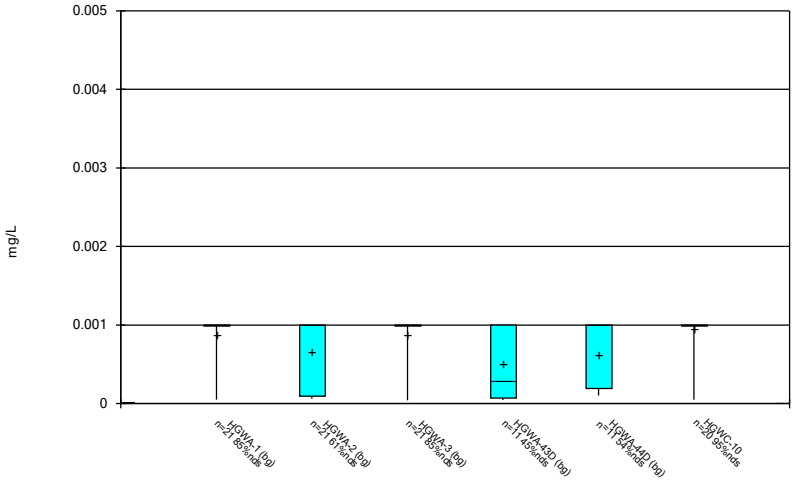
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

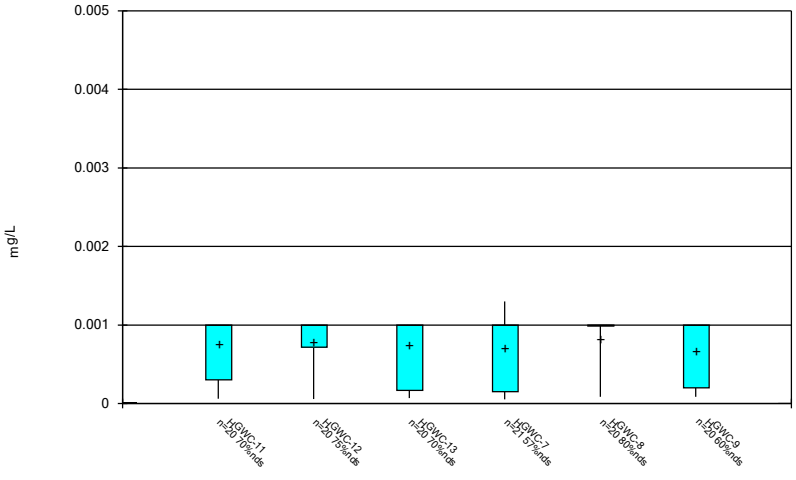
Box & Whiskers Plot



Constituent: Lead Analysis Run 11/15/2023 12:58 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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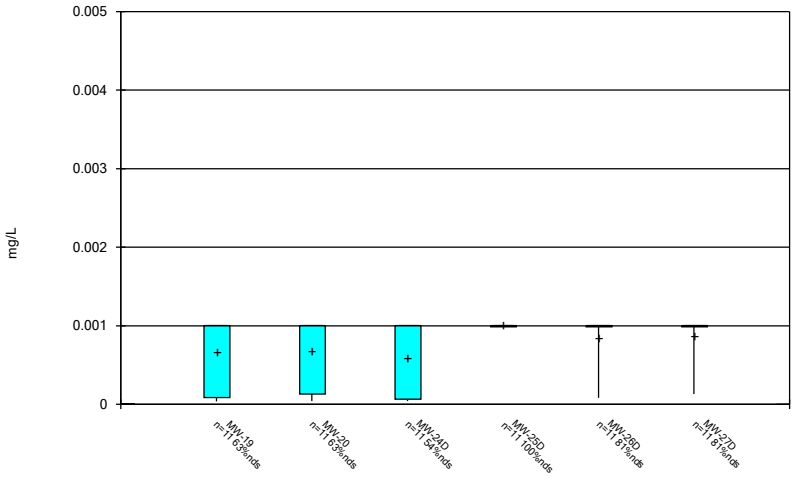
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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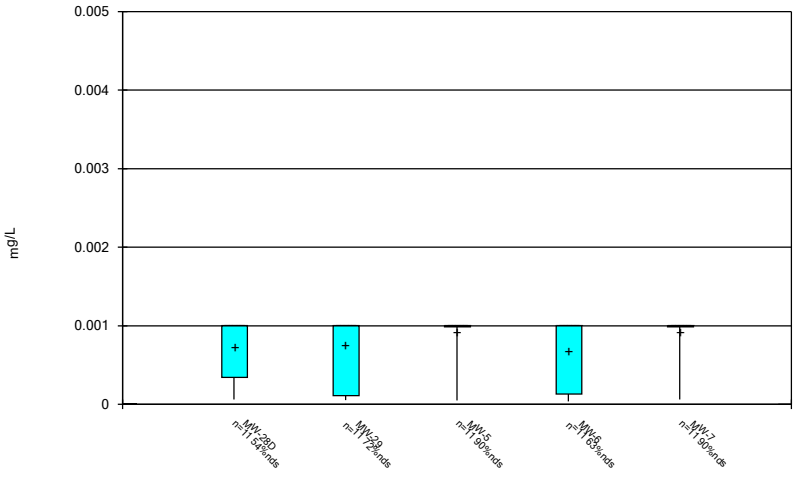
Box & Whiskers Plot



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Plant Hammond Client: Southern Company Data: Hammond AP-1

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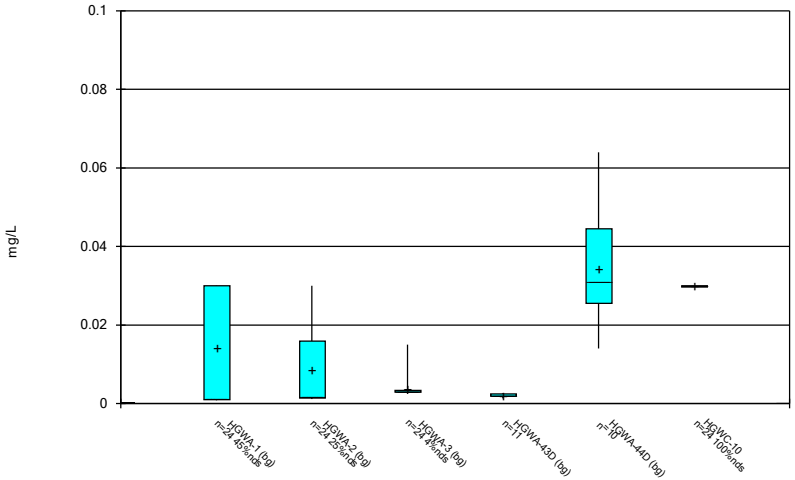
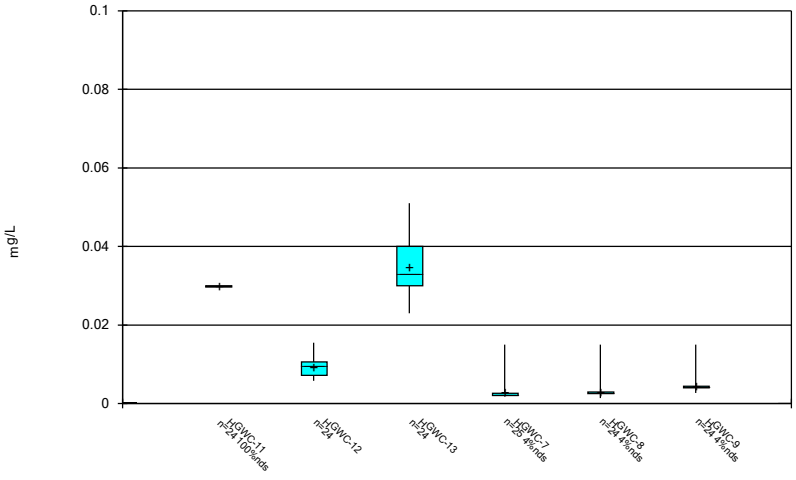
Box & Whiskers Plot



Constituent: Lithium Analysis Run 11/15/2023 12:58 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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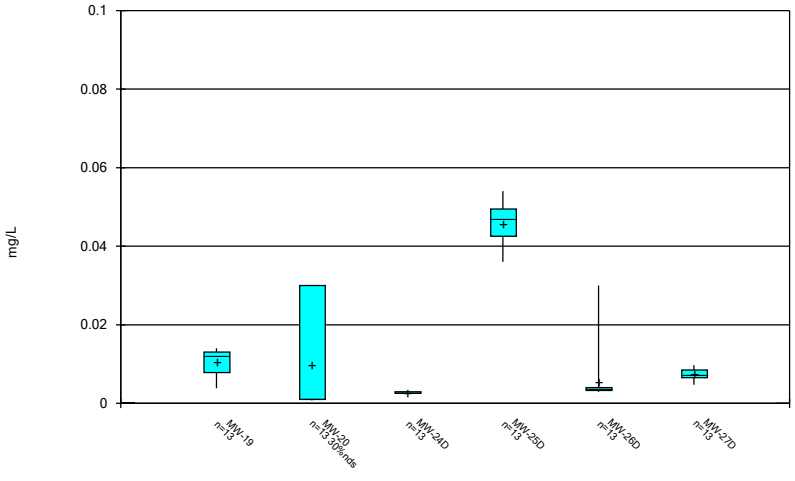
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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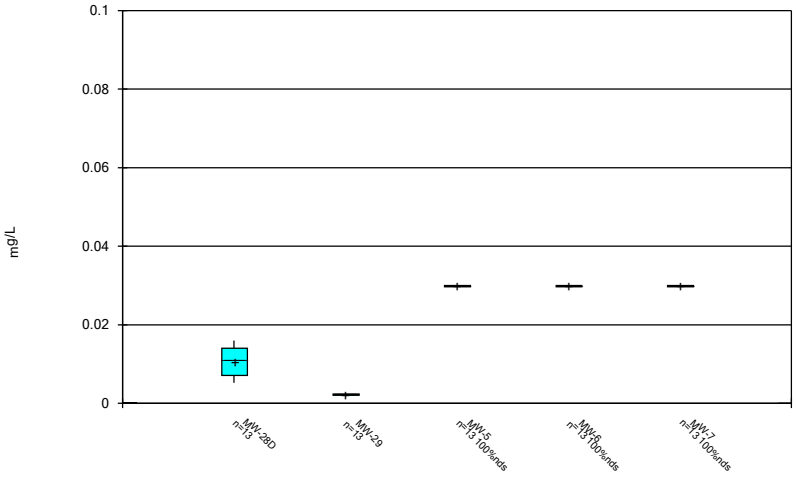
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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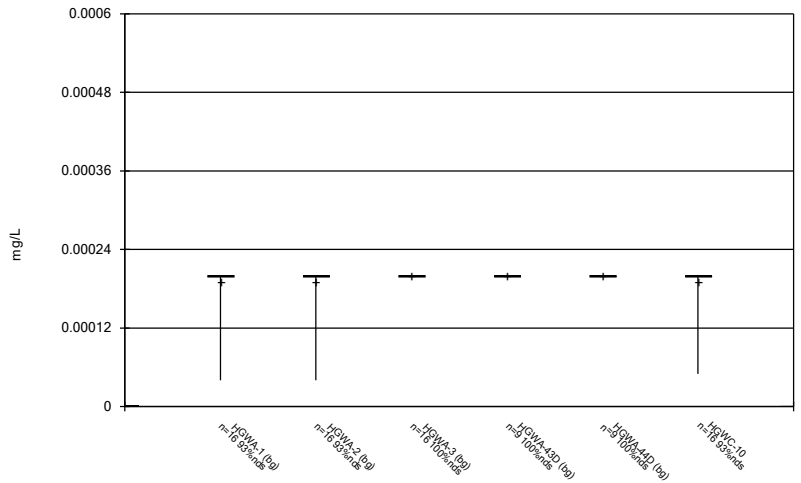
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

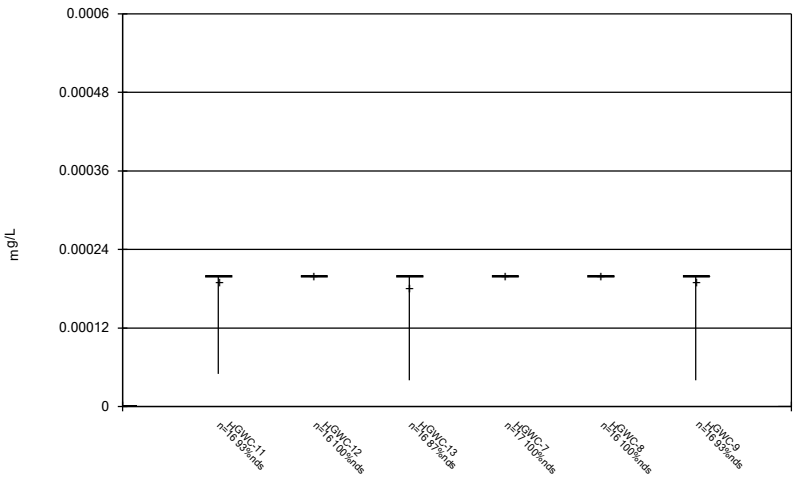
Box & Whiskers Plot



Constituent: Mercury Analysis Run 11/15/2023 12:58 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

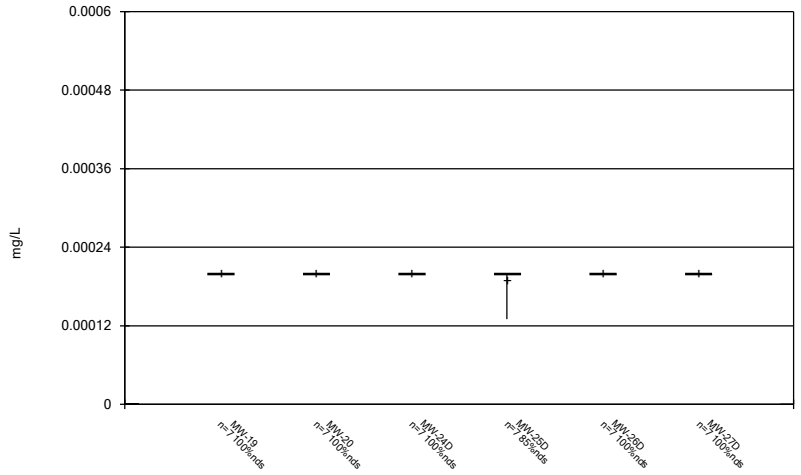
Box & Whiskers Plot



Constituent: Mercury Analysis Run 11/15/2023 12:58 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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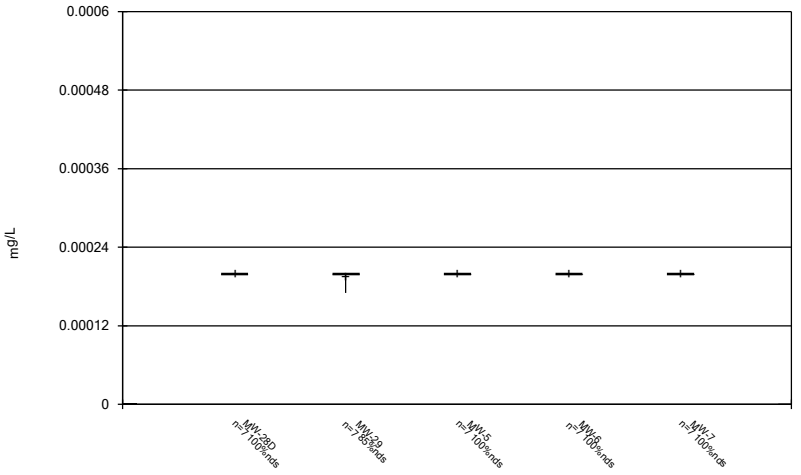
Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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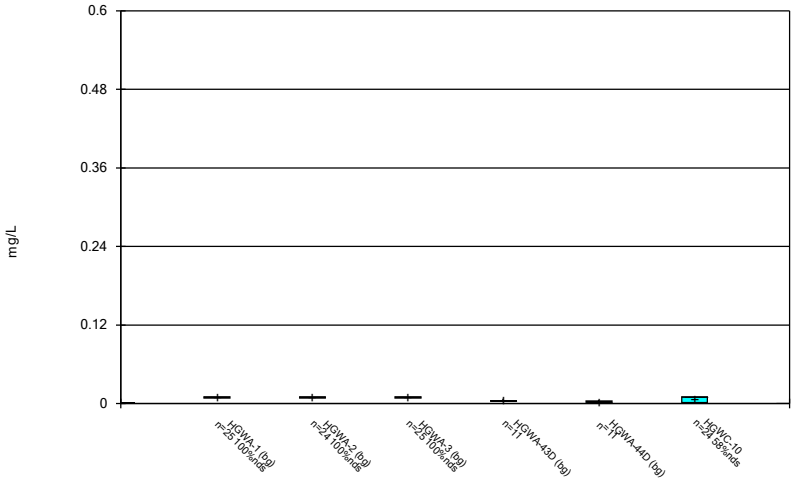
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

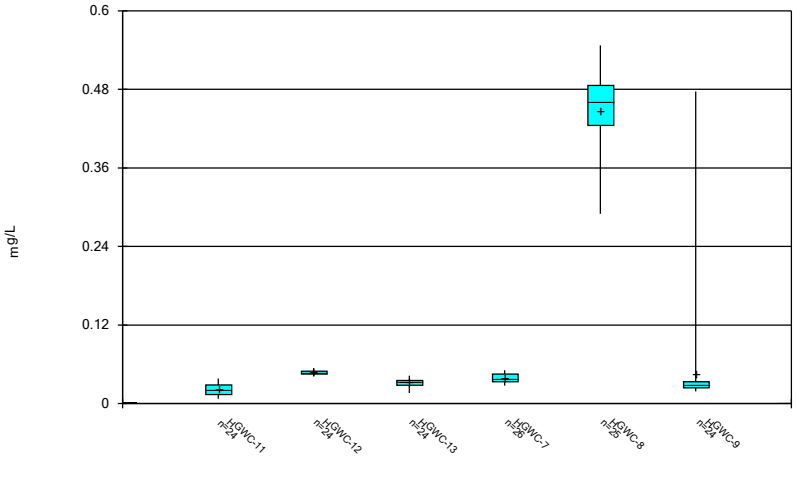
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 11/15/2023 12:58 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

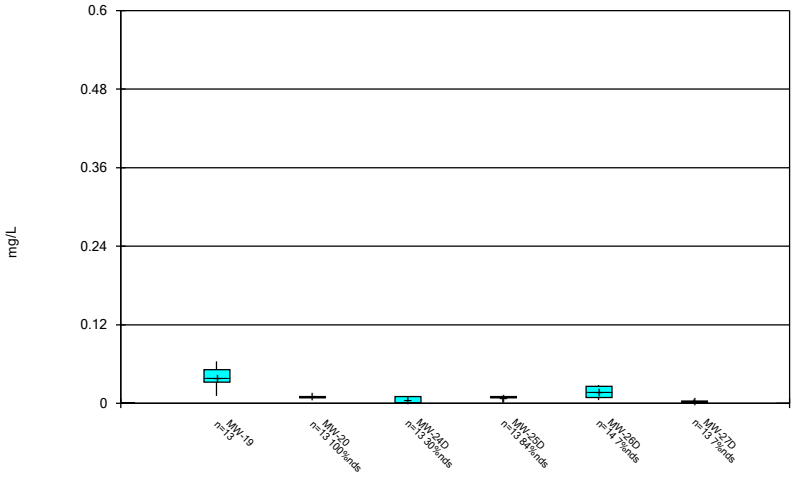
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 11/15/2023 12:58 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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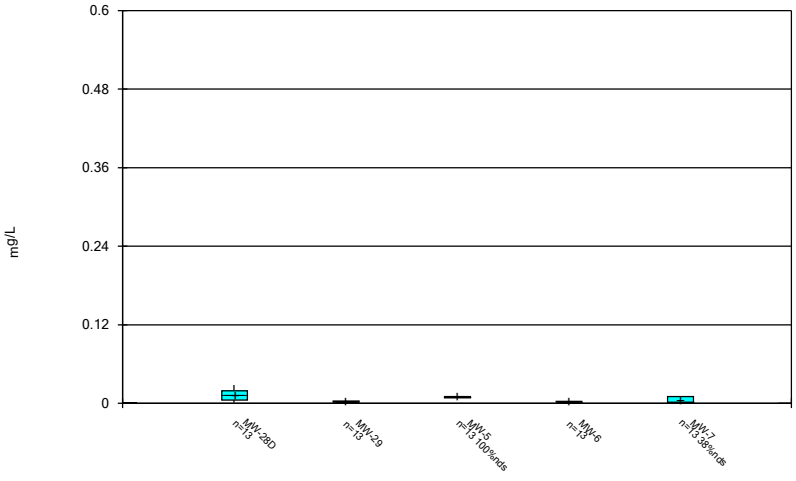
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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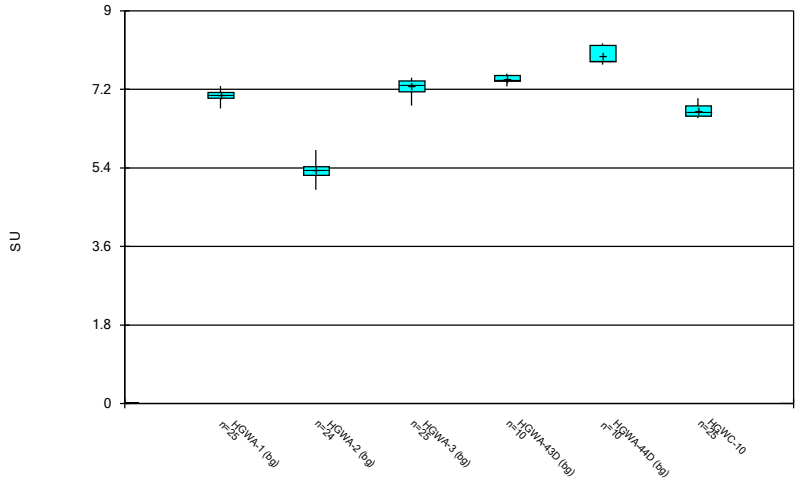
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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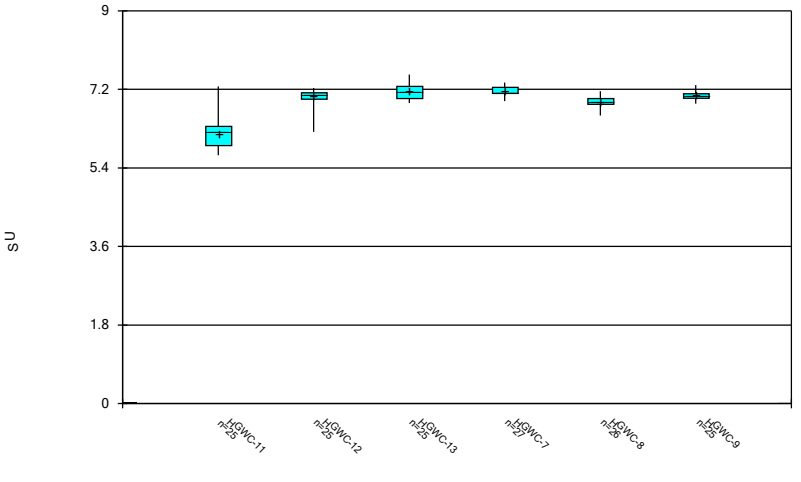
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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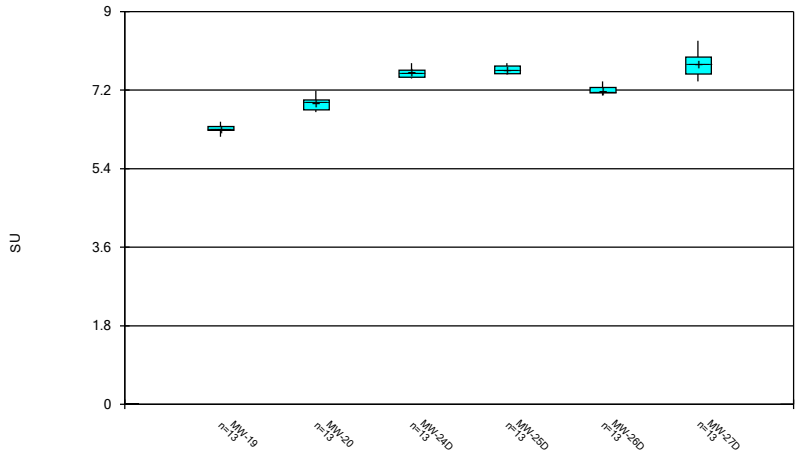
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

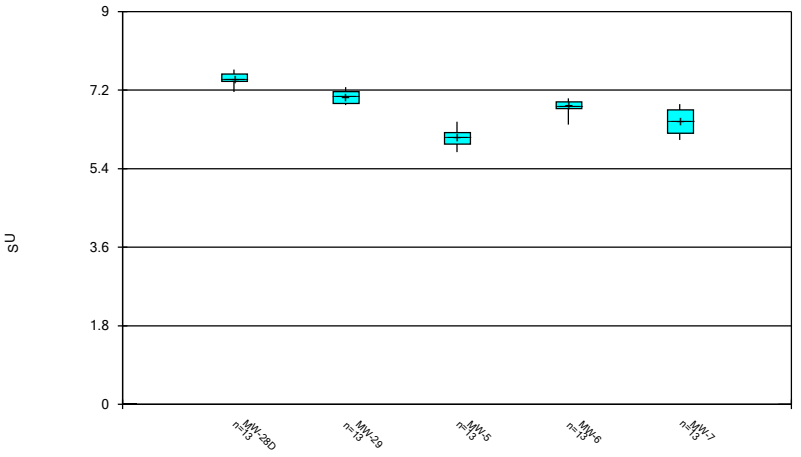
Box & Whiskers Plot



Constituent: pH, Field Analysis Run 11/15/2023 12:58 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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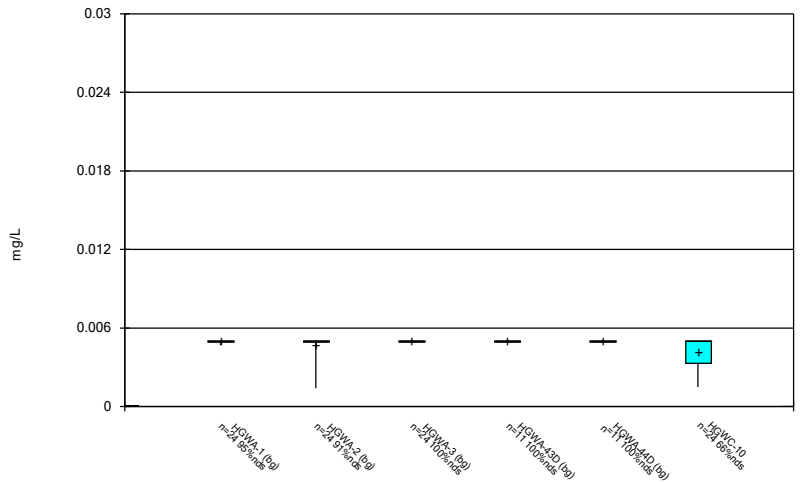
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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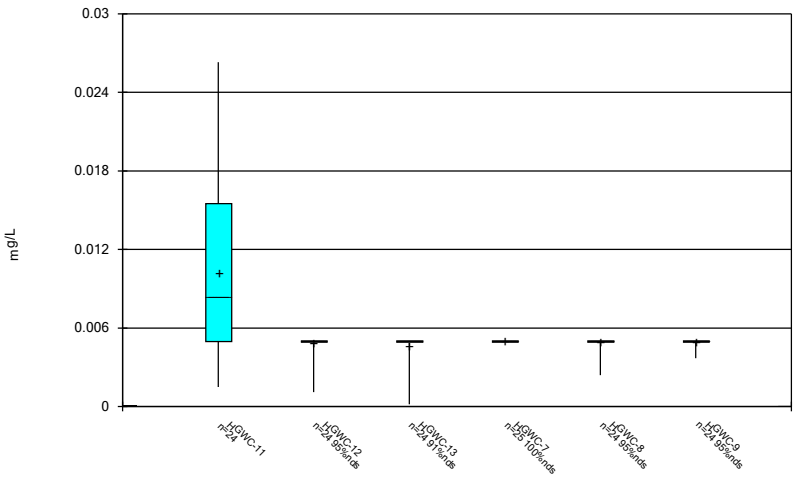
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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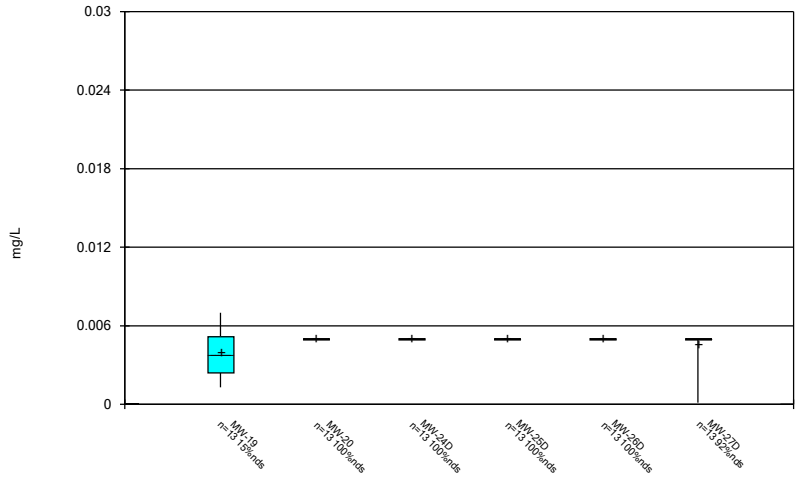
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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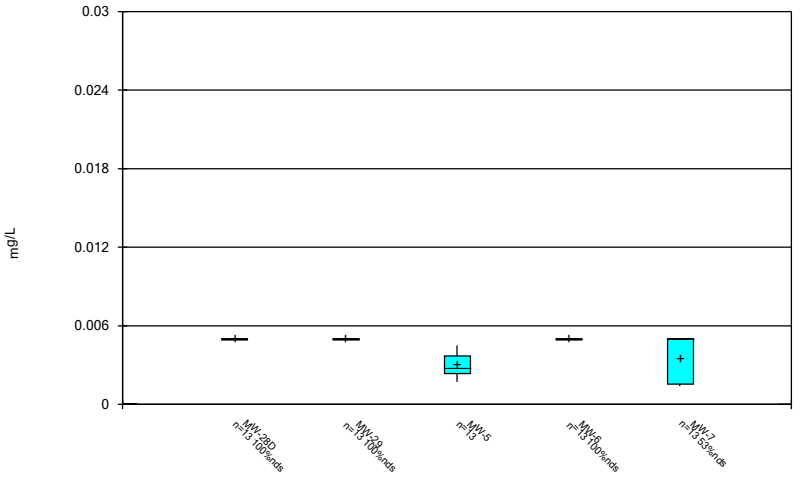
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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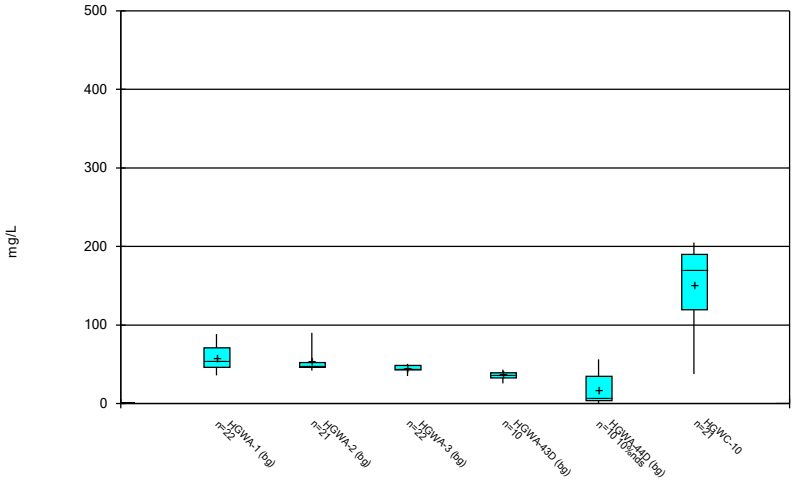
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

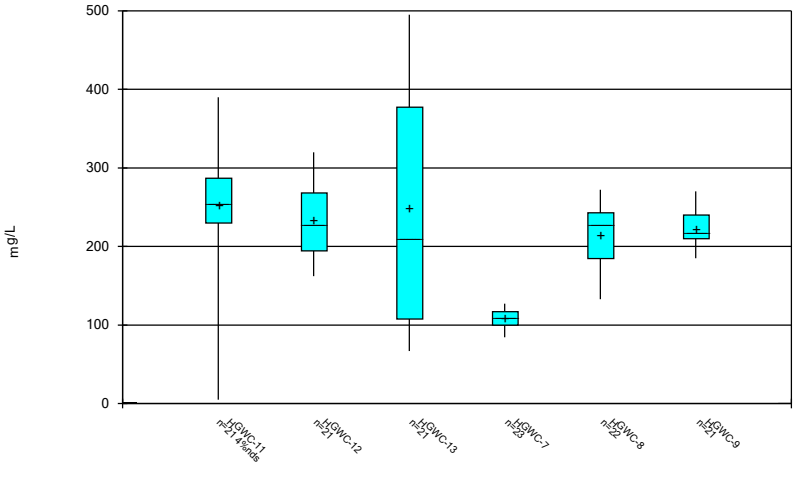
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 11/15/2023 12:58 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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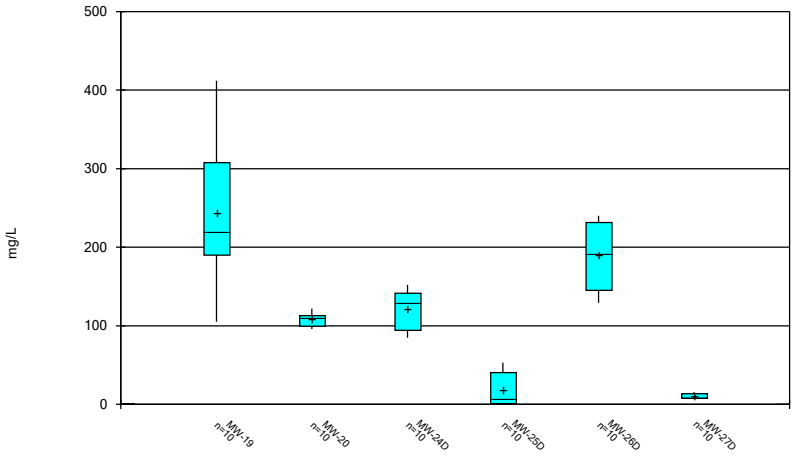
Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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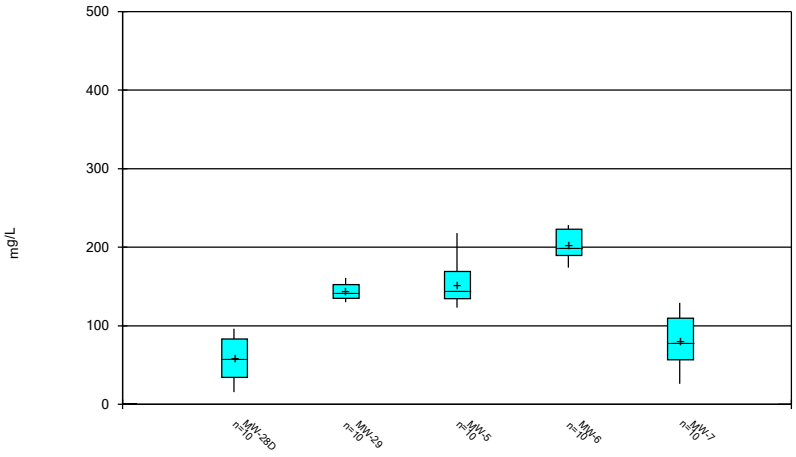
Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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Plant Hammond Client: Southern Company Data: Hammond AP-1

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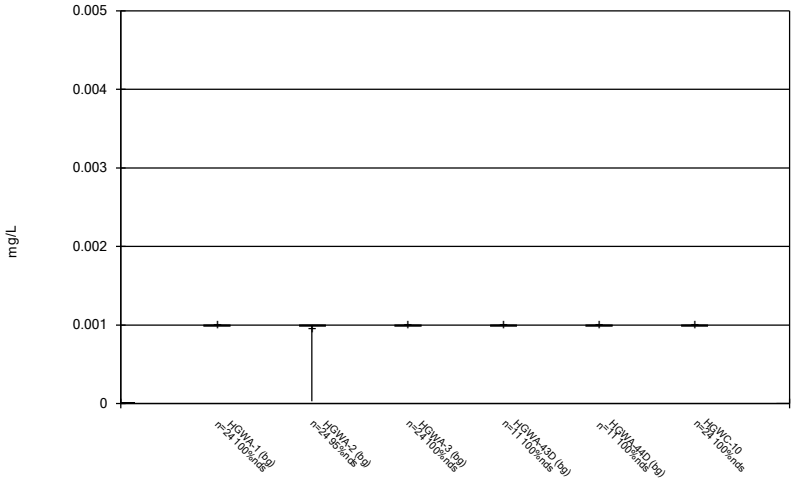
Box & Whiskers Plot



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Plant Hammond Client: Southern Company Data: Hammond AP-1

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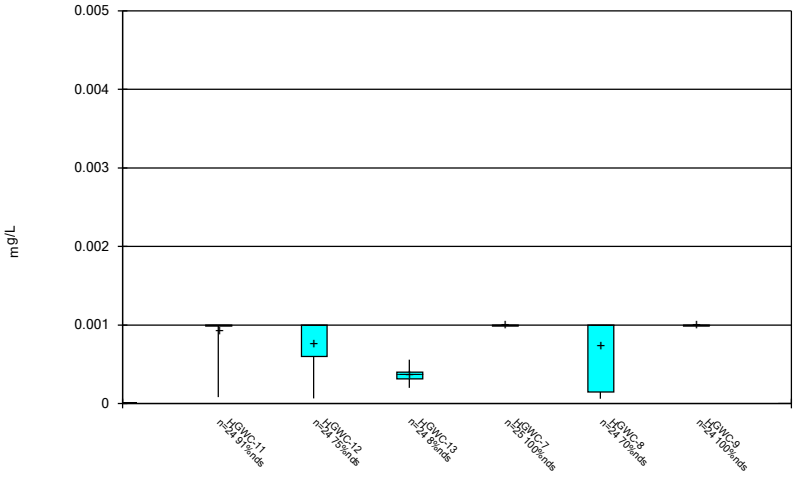
Box & Whiskers Plot



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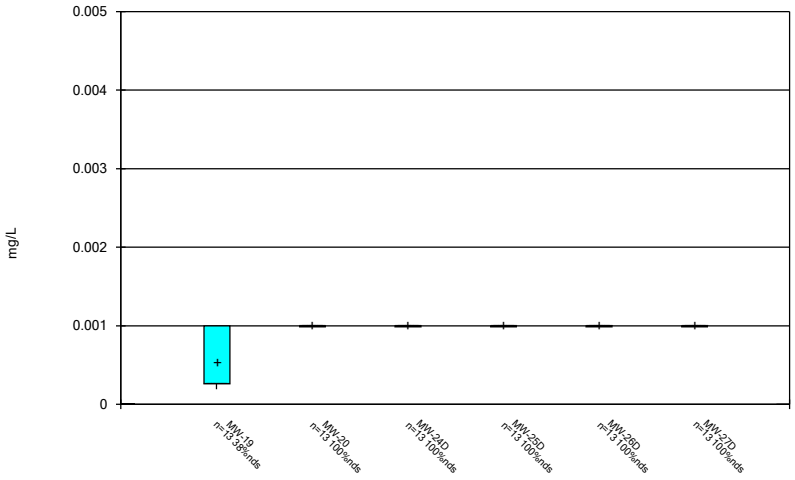
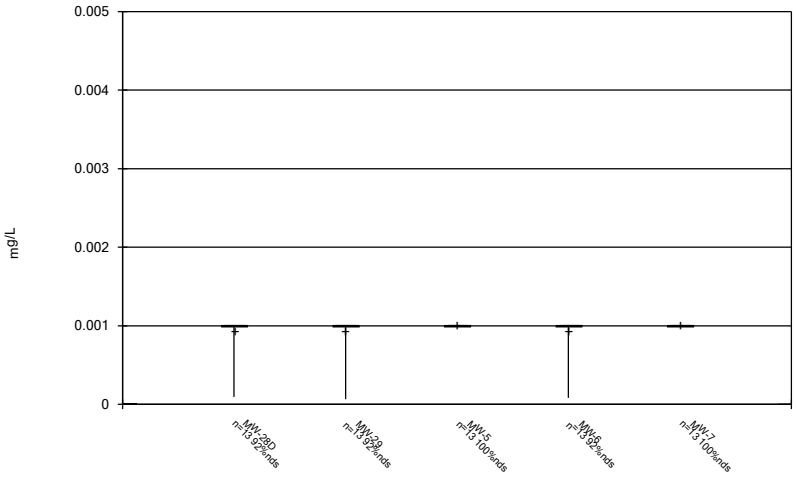
Box & Whiskers Plot



Constituent: Thallium Analysis Run 11/15/2023 12:58 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

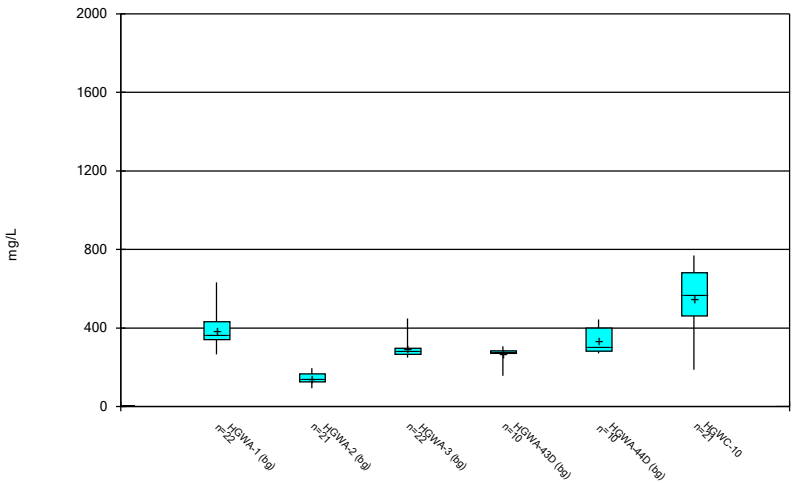
Box & Whiskers Plot



Constituent: Thallium Analysis Run 11/15/2023 12:58 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

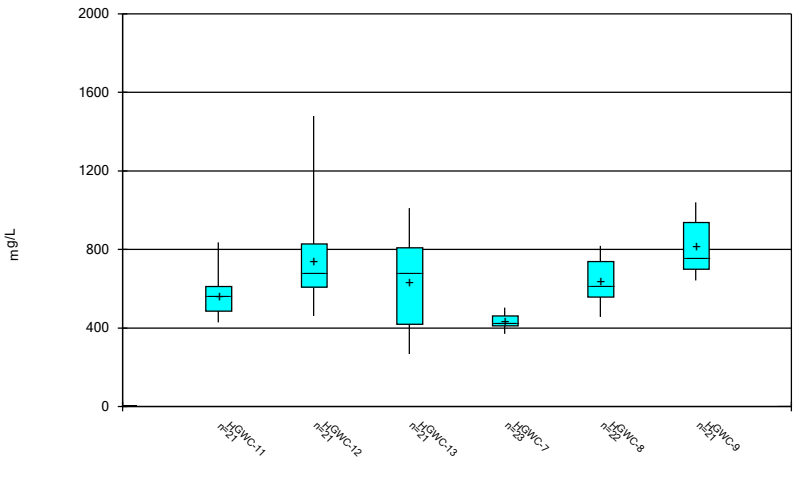
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 11/15/2023 12:58 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

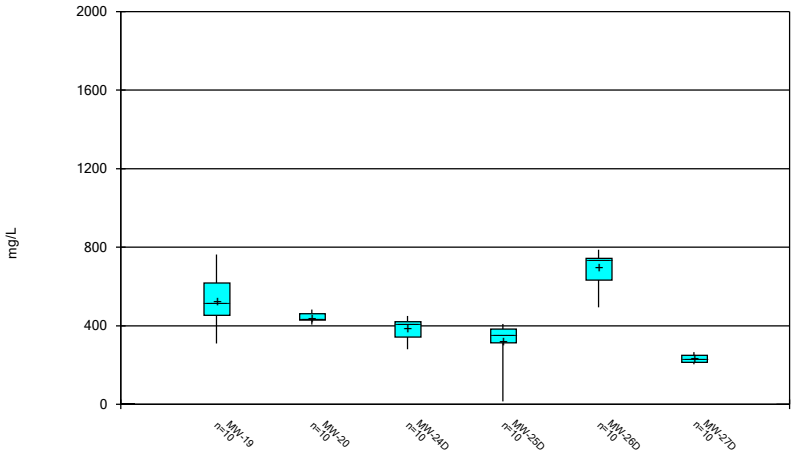
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 11/15/2023 12:58 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

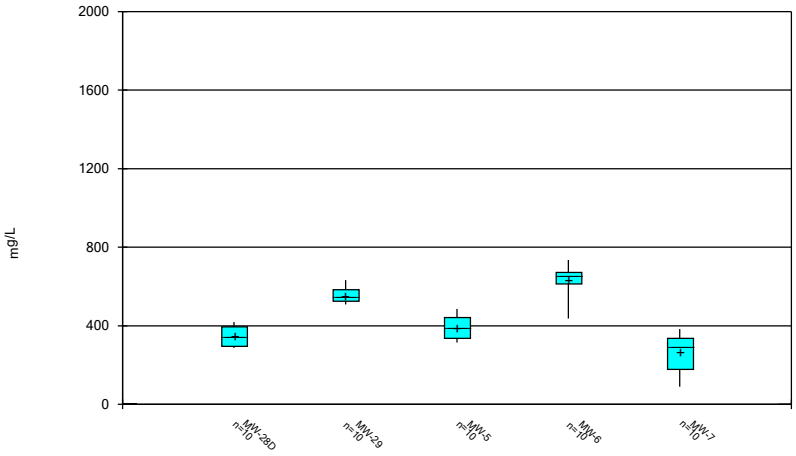
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 11/15/2023 12:58 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 11/15/2023 12:58 PM View: Constituents View
Plant Hammond Client: Southern Company Data: Hammond AP-1

FIGURE C.

Outlier Summary

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 10/25/2023, 12:14 PM

	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-1 Printed 10/17/2023, 12:59 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-10**	**0.55**	**n/a**	**8/10/2023**	**0.65**	**Yes**	**85**	**n/a**	**n/a**	**4.706**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-12**	**0.55**	**n/a**	**8/10/2023**	**1.4**	**Yes**	**85**	**n/a**	**n/a**	**4.706**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-13**	**0.55**	**n/a**	**8/12/2023**	**1**	**Yes**	**85**	**n/a**	**n/a**	**4.706**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-7**	**0.55**	**n/a**	**8/12/2023**	**0.82**	**Yes**	**85**	**n/a**	**n/a**	**4.706**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-8**	**0.55**	**n/a**	**8/12/2023**	**1.7**	**Yes**	**85**	**n/a**	**n/a**	**4.706**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-9**	**0.55**	**n/a**	**8/11/2023**	**2.1**	**Yes**	**85**	**n/a**	**n/a**	**4.706**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-10**	**138**	**n/a**	**8/10/2023**	**155**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-12**	**138**	**n/a**	**8/10/2023**	**156**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-13**	**138**	**n/a**	**8/12/2023**	**172**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-9**	**138**	**n/a**	**8/11/2023**	**168**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**HGWC-8**	**44.8**	**n/a**	**8/12/2023**	**53.1**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**HGWC-9**	**44.8**	**n/a**	**8/11/2023**	**78.9**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-10**	**89.9**	**n/a**	**8/10/2023**	**128**	**Yes**	**85**	**n/a**	**n/a**	**1.176**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-11**	**89.9**	**n/a**	**8/10/2023**	**190**	**Yes**	**85**	**n/a**	**n/a**	**1.176**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-12**	**89.9**	**n/a**	**8/10/2023**	**209**	**Yes**	**85**	**n/a**	**n/a**	**1.176**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-13**	**89.9**	**n/a**	**8/12/2023**	**347**	**Yes**	**85**	**n/a**	**n/a**	**1.176**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-8**	**89.9**	**n/a**	**8/12/2023**	**170**	**Yes**	**85**	**n/a**	**n/a**	**1.176**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-9**	**89.9**	**n/a**	**8/11/2023**	**197**	**Yes**	**85**	**n/a**	**n/a**	**1.176**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**HGWC-12**	**632**	**n/a**	**8/10/2023**	**683**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**HGWC-13**	**632**	**n/a**	**8/12/2023**	**803**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**HGWC-9**	**632**	**n/a**	**8/11/2023**	**757**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**

Appendix III Interwell Prediction Limits - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 10/17/2023, 12:59 PM

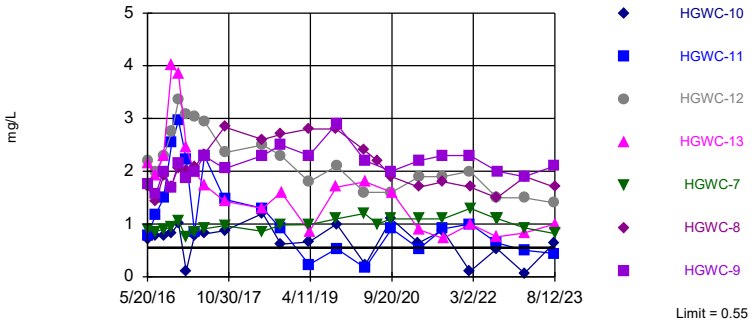
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**HGWC-10**	**0.55**	**n/a**	**8/10/2023**	**0.65**	**Yes**	**85**	**n/a**	**n/a**	**4.706**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	HGWC-11	0.55	n/a	8/10/2023	0.44	No	85	n/a	n/a	4.706	n/a	n/a	0.0002677	NP Inter (normality) 1 of 2
Boron (mg/L)	**HGWC-12**	**0.55**	**n/a**	**8/10/2023**	**1.4**	**Yes**	**85**	**n/a**	**n/a**	**4.706**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-13**	**0.55**	**n/a**	**8/12/2023**	**1**	**Yes**	**85**	**n/a**	**n/a**	**4.706**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-7**	**0.55**	**n/a**	**8/12/2023**	**0.82**	**Yes**	**85**	**n/a**	**n/a**	**4.706**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-8**	**0.55**	**n/a**	**8/12/2023**	**1.7**	**Yes**	**85**	**n/a**	**n/a**	**4.706**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-9**	**0.55**	**n/a**	**8/11/2023**	**2.1**	**Yes**	**85**	**n/a**	**n/a**	**4.706**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-10**	**138**	**n/a**	**8/10/2023**	**155**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	HGWC-11	138	n/a	8/10/2023	100	No	85	n/a	n/a	0	n/a	n/a	0.0002677	NP Inter (normality) 1 of 2
Calcium (mg/L)	**HGWC-12**	**138**	**n/a**	**8/10/2023**	**156**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-13**	**138**	**n/a**	**8/12/2023**	**172**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	HGWC-7	138	n/a	8/12/2023	101	No	85	n/a	n/a	0	n/a	n/a	0.0002677	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-8	138	n/a	8/12/2023	122	No	85	n/a	n/a	0	n/a	n/a	0.0002677	NP Inter (normality) 1 of 2
Calcium (mg/L)	**HGWC-9**	**138**	**n/a**	**8/11/2023**	**168**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	HGWC-10	44.8	n/a	8/10/2023	13.4	No	85	n/a	n/a	0	n/a	n/a	0.0002677	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-11	44.8	n/a	8/10/2023	6.5	No	85	n/a	n/a	0	n/a	n/a	0.0002677	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-12	44.8	n/a	8/10/2023	30.6	No	85	n/a	n/a	0	n/a	n/a	0.0002677	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-13	44.8	n/a	8/12/2023	15.3	No	85	n/a	n/a	0	n/a	n/a	0.0002677	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-7	44.8	n/a	8/12/2023	33.3	No	85	n/a	n/a	0	n/a	n/a	0.0002677	NP Inter (normality) 1 of 2
Chloride (mg/L)	**HGWC-8**	**44.8**	**n/a**	**8/12/2023**	**53.1**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**HGWC-9**	**44.8**	**n/a**	**8/11/2023**	**78.9**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Fluoride (mg/L)	HGWC-10	1.3	n/a	8/10/2023	0.05J	No	99	n/a	n/a	27.27	n/a	n/a	0.0001973	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-11	1.3	n/a	8/10/2023	0.15	No	99	n/a	n/a	27.27	n/a	n/a	0.0001973	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-12	1.3	n/a	8/10/2023	0.17	No	99	n/a	n/a	27.27	n/a	n/a	0.0001973	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-13	1.3	n/a	8/12/2023	0.32	No	99	n/a	n/a	27.27	n/a	n/a	0.0001973	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-7	1.3	n/a	8/12/2023	0.071J	No	99	n/a	n/a	27.27	n/a	n/a	0.0001973	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-8	1.3	n/a	8/12/2023	0.59	No	99	n/a	n/a	27.27	n/a	n/a	0.0001973	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-9	1.3	n/a	8/11/2023	0.12	No	99	n/a	n/a	27.27	n/a	n/a	0.0001973	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-10	8.25	4.9	8/10/2023	6.81	No	94	n/a	n/a	0	n/a	n/a	0.0004389	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-11	8.25	4.9	8/10/2023	5.9	No	94	n/a	n/a	0	n/a	n/a	0.0004389	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-12	8.25	4.9	8/10/2023	7.08	No	94	n/a	n/a	0	n/a	n/a	0.0004389	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-13	8.25	4.9	8/12/2023	6.89	No	94	n/a	n/a	0	n/a	n/a	0.0004389	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-7	8.25	4.9	8/12/2023	7.36	No	94	n/a	n/a	0	n/a	n/a	0.0004389	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-8	8.25	4.9	8/12/2023	6.84	No	94	n/a	n/a	0	n/a	n/a	0.0004389	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-9	8.25	4.9	8/11/2023	7.09	No	94	n/a	n/a	0	n/a	n/a	0.0004389	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**HGWC-10**	**89.9**	**n/a**	**8/10/2023**	**128**	**Yes**	**85**	**n/a**	**n/a**	**1.176**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-11**	**89.9**	**n/a**	**8/10/2023**	**190**	**Yes**	**85**	**n/a**	**n/a**	**1.176**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-12**	**89.9**	**n/a**	**8/10/2023**	**209**	**Yes**	**85**	**n/a**	**n/a**	**1.176**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-13**	**89.9**	**n/a**	**8/12/2023**	**347**	**Yes**	**85**	**n/a**	**n/a**	**1.176**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	HGWC-7	89.9	n/a	8/12/2023	84.2	No	85	n/a	n/a	1.176	n/a	n/a	0.0002677	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**HGWC-8**	**89.9**	**n/a**	**8/12/2023**	**170**	**Yes**	**85**	**n/a**	**n/a**	**1.176**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-9**	**89.9**	**n/a**	**8/11/2023**	**197**	**Yes**	**85**	**n/a**	**n/a**	**1.176**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	HGWC-10	632	n/a	8/10/2023	504	No	85	n/a	n/a	0	n/a	n/a	0.0002677	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-11	632	n/a	8/10/2023	438	No	85	n/a	n/a	0	n/a	n/a	0.0002677	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**HGWC-12**	**632**	**n/a**	**8/10/2023**	**683**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**HGWC-13**	**632**	**n/a**	**8/12/2023**	**803**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	HGWC-7	632	n/a	8/12/2023	378	No	85	n/a	n/a	0	n/a	n/a	0.0002677	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-8	632	n/a	8/12/2023	564	No	85	n/a	n/a	0	n/a	n/a	0.0002677	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**HGWC-9**	**632**	**n/a**	**8/11/2023**	**757**	**Yes**	**85**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002677**	**NP Inter (normality) 1 of 2**

Sanitas™ v.10.0.13 . UG

Exceeds Limit: HGWC-10, HGWC-12, HGWC-13, HGWC-7, HGWC-8, HGWC-9

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 85 background values. 4.706% NDs. Annual per-constituent alpha = 0.003742. Individual comparison alpha = 0.0002677 (1 of 2). Comparing 7 points to limit.

Constituent: Boron Analysis Run 10/17/2023 12:57 PM View: Appendix III

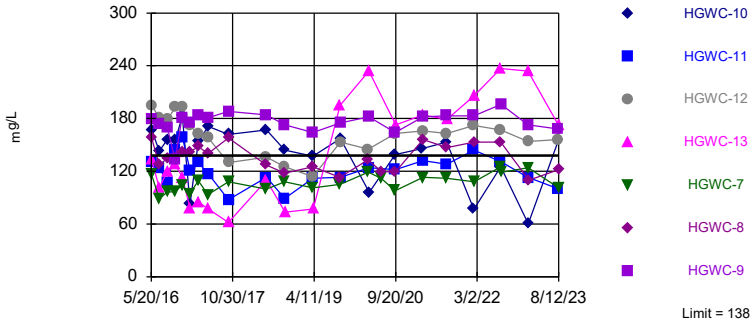
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Exceeds Limit: HGWC-10, HGWC-12, HGWC-13, HGWC-9

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 85 background values. Annual per-constituent alpha = 0.003742. Individual comparison alpha = 0.0002677 (1 of 2). Comparing 7 points to limit.

Constituent: Calcium Analysis Run 10/17/2023 12:57 PM View: Appendix III

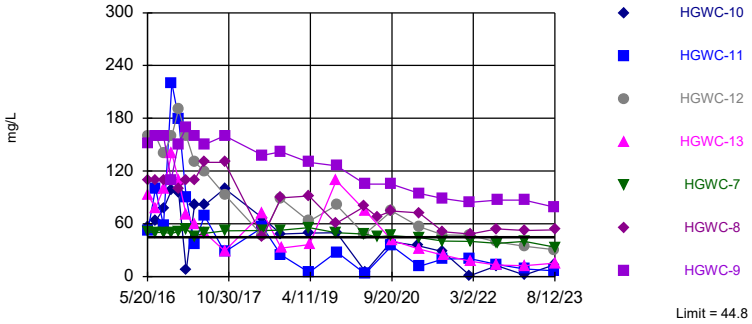
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Exceeds Limit: HGWC-8, HGWC-9

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 85 background values. Annual per-constituent alpha = 0.003742. Individual comparison alpha = 0.0002677 (1 of 2). Comparing 7 points to limit.

Constituent: Chloride Analysis Run 10/17/2023 12:57 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

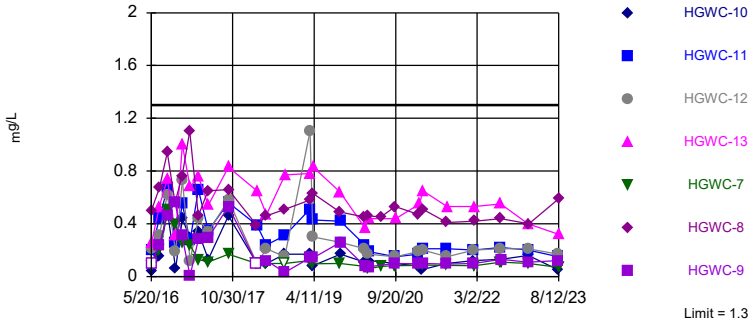
Sanitas™ v.10.0.13 . UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 99 background values. 27.27% NDs. Annual per-constituent alpha = 0.002759. Individual comparison alpha = 0.0001973 (1 of 2). Comparing 7 points to limit.

Constituent: Fluoride Analysis Run 10/17/2023 12:57 PM View: Appendix III

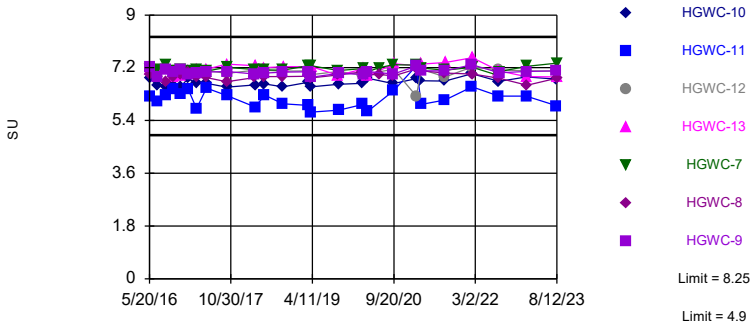
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Within Limits

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 94 background values. Annual per-constituent alpha = 0.006135. Individual comparison alpha = 0.0004389 (1 of 2). Comparing 7 points to limit.

Constituent: pH, Field Analysis Run 10/17/2023 12:57 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

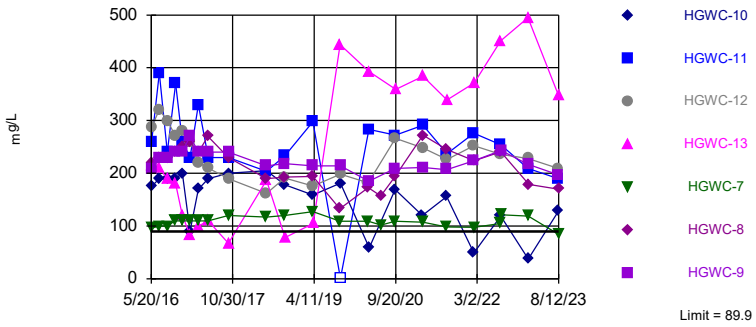
Sanitas™ v.10.0.13 . UG

Hollow symbols indicate censored values.

Exceeds Limit: HGWC-10, HGWC-11, HGWC-12, HGWC-13, HGWC-8, HGWC-9

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 85 background values. 1.176% NDs. Annual per-constituent alpha = 0.003742. Individual comparison alpha = 0.0002677 (1 of 2). Comparing 7 points to limit.

Constituent: Sulfate Analysis Run 10/17/2023 12:57 PM View: Appendix III

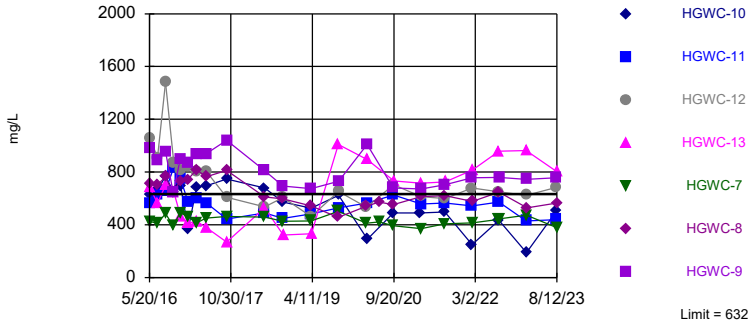
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Exceeds Limit: HGWC-12, HGWC-13, HGWC-9

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 85 background values. Annual per-constituent alpha = 0.003742. Individual comparison alpha = 0.0002677 (1 of 2). Comparing 7 points to limit.

Constituent: Total Dissolved Solids Analysis Run 10/17/2023 12:57 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/17/2023 12:59 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-7	HGWC-8	HGWC-11	HGWC-12	HGWC-10	HGWC-13
5/19/2016	0.0214 (J)	<0.04	0.0321 (J)						
5/20/2016				0.885	1.71				
5/23/2016						0.787	2.2	0.72	2.15
7/11/2016	0.0142 (J)		0.0337 (J)						
7/12/2016		0.0074 (J)		0.857	1.43	1.17	1.98	0.778	1.91
8/30/2016	0.0074 (J)	<0.04	0.0173 (J)						
9/1/2016				0.904	1.91	1.49	2.28	0.786	2.3
10/19/2016	0.0224 (J)	0.0085 (J)	0.0341 (J)						
10/20/2016				0.936	1.72				
10/24/2016						2.54	2.75	0.831	4.01
12/6/2016	0.0211 (J)	0.0085 (J)	0.0326 (J)	1.06	2.06				
12/7/2016						2.96	3.35	1.01	3.85
1/24/2017	0.0165 (J)	0.01 (J)	0.0365 (J)						
1/25/2017				0.764	2.01				
1/26/2017						2.23	3.07	0.108	2.45
3/21/2017	0.0187 (J)	0.0079 (J)	0.0349 (J)	0.857	2.08				
3/22/2017						0.84	3.04	0.788	1.99
5/22/2017	0.0782	0.0131 (J)	0.0475						
5/23/2017				0.91	2.32				
5/24/2017						2.29	2.95	0.814	1.74
10/3/2017	0.0198 (J)	0.0097 (J)	0.0386 (J)	0.967	2.84	1.47	2.35	0.871	1.43
6/4/2018	0.02 (J)	0.017 (J)	0.036 (J)						
6/5/2018				0.86		1.3		1.2	1.3
6/6/2018					2.6		2.5		
10/1/2018	0.013 (J)	0.0061 (J)	0.035 (J)						
10/2/2018				0.98	2.7			0.62	
10/3/2018						0.91	2.3		
10/5/2018									1.6
4/1/2019		0.0066 (J)							
4/2/2019	0.016 (J)		0.034 (J)	0.99					
4/3/2019					2.8	0.23	1.8	0.66	
4/5/2019									0.86 (J)
9/23/2019	0.021 (J)	0.0081 (J)	0.04 (J)						
9/24/2019					2.8				
9/25/2019				1.1					
9/26/2019									1.7
9/27/2019						0.53	2.1	1	
3/25/2020	0.025 (J)	0.0096 (J)	0.039 (J)						
3/26/2020							1.6		
3/27/2020				1.2	2.4				
3/30/2020									1.8
3/31/2020						0.17			
4/1/2020								0.23	
6/16/2020	0.021 (J)	0.01 (J)			2.2				
6/17/2020				1					
9/15/2020	0.017 (J)	0.0071 (J)	0.044 (J)						
9/16/2020				1.1	1.9			1.1	
9/17/2020									
9/18/2020						0.91	1.6		
9/21/2020									1.6
11/10/2020									
12/15/2020									

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/17/2023 12:59 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-7	HGWC-8	HGWC-11	HGWC-12	HGWC-10	HGWC-13
1/19/2021									
3/10/2021	0.015 (J)								
3/11/2021		0.015 (J)	0.056						
3/12/2021								0.64	
3/15/2021				1.1	1.7				
3/16/2021						0.53	1.9		
3/17/2021									0.89
8/11/2021	0.02 (J)								
8/12/2021		<0.04	0.044						
8/13/2021									
8/16/2021				1.1					
8/17/2021								0.88	
8/18/2021					1.8	0.91	1.9		
8/19/2021									0.73
2/1/2022	0.016 (J)	0.011 (J)	0.056						
2/9/2022						1	2	0.1	
2/10/2022				1.3	1.7				1
8/2/2022	0.012 (J)	<0.04	0.047						
8/3/2022				1.1	1.5	0.64	1.5	0.53	0.76
8/4/2022									
8/11/2022				1.1					
1/23/2023		0.012 (J)							
1/24/2023	0.015 (J)		0.046						
1/26/2023						0.5	1.5		0.83
1/27/2023				0.93				0.065	
2/1/2023					1.9				
8/8/2023	0.023 (J)	0.011 (J)	0.06						
8/10/2023						0.44	1.4	0.65	
8/11/2023									
8/12/2023				0.82	1.7				1

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/17/2023 12:59 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-9	HGWA-44D (bg)	HGWA-43D (bg)
5/19/2016			
5/20/2016			
5/23/2016	1.76		
7/11/2016			
7/12/2016	1.56		
8/30/2016			
9/1/2016	2		
10/19/2016			
10/20/2016	1.68		
10/24/2016			
12/6/2016	2.15		
12/7/2016			
1/24/2017			
1/25/2017			
1/26/2017	1.87		
3/21/2017			
3/22/2017	1.99		
5/22/2017			
5/23/2017	2.29		
5/24/2017			
10/3/2017	2.05		
6/4/2018			
6/5/2018			
6/6/2018	2.3		
10/1/2018			
10/2/2018	2.5		
10/3/2018			
10/5/2018			
4/1/2019			
4/2/2019			
4/3/2019	2.3		
4/5/2019			
9/23/2019			
9/24/2019			
9/25/2019			
9/26/2019			
9/27/2019	2.9		
3/25/2020			
3/26/2020			
3/27/2020			
3/30/2020			
3/31/2020	2.2		
4/1/2020			
6/16/2020			
6/17/2020			
9/15/2020			
9/16/2020		0.23	0.061 (J)
9/17/2020	2		
9/18/2020			
9/21/2020			
11/10/2020		0.29	0.057 (J)
12/15/2020		0.31	0.052 (J)

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/17/2023 12:59 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-9	HGWA-44D (bg)	HGWA-43D (bg)
1/19/2021		0.4	0.049 (J)
3/10/2021		0.39	
3/11/2021			0.06
3/12/2021			
3/15/2021			
3/16/2021	2.2		
3/17/2021			
8/11/2021			0.042
8/12/2021			
8/13/2021		0.31	
8/16/2021			
8/17/2021	2.3		
8/18/2021			
8/19/2021			
2/1/2022		0.44	0.05
2/9/2022	2.3		
2/10/2022			
8/2/2022		0.31	0.043
8/3/2022			
8/4/2022	2		
8/11/2022			
1/23/2023			
1/24/2023		0.44	0.037 (J)
1/26/2023	1.9		
1/27/2023			
2/1/2023			
8/8/2023		0.55	0.038 (J)
8/10/2023			
8/11/2023	2.1		
8/12/2023			

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/17/2023 12:59 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-7	HGWC-8	HGWC-11	HGWC-12	HGWC-10	HGWC-13
5/19/2016	138	76.2	22.9						
5/20/2016				117	159				
5/23/2016						131	195	167	133
7/11/2016	97.2		22.3						
7/12/2016		61.5		88.8	127	124	181	143	101
8/30/2016	97.5	65.1	26.4						
9/1/2016				96.3	135	107	179	156	120
10/19/2016	99.2	73.2	21.7						
10/20/2016				96.9	134				
10/24/2016						145	193	156	127
12/6/2016	105	74.9	18.2	104	142				
12/7/2016						159	193	183	113
1/24/2017	95.7	69.6	18.5						
1/25/2017				94.5	142				
1/26/2017						121	172	82.6	77.9
3/21/2017	106	75.7	18.6	109	148				
3/22/2017						130	162	154	85.1
5/22/2017	107	71.5	17.8						
5/23/2017				93.3	140				
5/24/2017						117	158	171	77.1
10/3/2017	102	76.3	20.2	108	158	87.7	130	162	62
6/4/2018	124	73.4	19.1						
6/5/2018				99.8		113		167	110
6/6/2018					127		136		
10/1/2018	108	80.9	20.5 (J)						
10/2/2018				108	118			144	
10/3/2018						89	125		
10/5/2018									73.6
4/1/2019		80.5							
4/2/2019	132		22.5 (J)	101					
4/3/2019					125	112	114	137	
4/5/2019									77.1
9/23/2019	118	71	19.5						
9/24/2019					113				
9/25/2019				105					
9/26/2019									195
9/27/2019						113	153	157	
3/25/2020	127	89.8	23						
3/26/2020							145		
3/27/2020				119	133				
3/30/2020									234
3/31/2020						124			
4/1/2020								96.2	
6/16/2020	130	85.1			120				
6/17/2020				112					
9/15/2020	103	73.1	21.1						
9/16/2020				98	119			139	
9/17/2020									
9/18/2020						122	163		
9/21/2020									173
11/10/2020									
12/15/2020									

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/17/2023 12:59 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-7	HGWC-8	HGWC-11	HGWC-12	HGWC-10	HGWC-13
1/19/2021									
3/10/2021	111								
3/11/2021		83.8	43.8						
3/12/2021								146 (M1)	
3/15/2021				113	156				
3/16/2021						132	166		
3/17/2021									184
8/11/2021	113								
8/12/2021		84	21.9						
8/13/2021									
8/16/2021				112					
8/17/2021								153	
8/18/2021					147	128	163		
8/19/2021									179
2/1/2022	106	85.1	27.2						
2/9/2022						144	172	76.8	
2/10/2022				108	153				206
8/2/2022	117	84.6	31.2						
8/3/2022				125	153	131	167	125	237
8/4/2022									
8/11/2022				119					
1/23/2023		85							
1/24/2023	117		29.4						
1/26/2023						113	154		234
1/27/2023				124				60.4	
2/1/2023					110				
8/8/2023	118	78.3	30.7						
8/10/2023						100	156	155	
8/11/2023									
8/12/2023				101	122				172

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/17/2023 12:59 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-9	HGWA-44D (bg)	HGWA-43D (bg)
5/19/2016			
5/20/2016			
5/23/2016	179		
7/11/2016			
7/12/2016	174		
8/30/2016			
9/1/2016	170		
10/19/2016			
10/20/2016	133		
10/24/2016			
12/6/2016	181		
12/7/2016			
1/24/2017			
1/25/2017			
1/26/2017	175		
3/21/2017			
3/22/2017	183		
5/22/2017			
5/23/2017	181		
5/24/2017			
10/3/2017	188		
6/4/2018			
6/5/2018			
6/6/2018	184		
10/1/2018			
10/2/2018	173		
10/3/2018			
10/5/2018			
4/1/2019			
4/2/2019			
4/3/2019	164		
4/5/2019			
9/23/2019			
9/24/2019			
9/25/2019			
9/26/2019			
9/27/2019	175		
3/25/2020			
3/26/2020			
3/27/2020			
3/30/2020			
3/31/2020	182		
4/1/2020			
6/16/2020			
6/17/2020			
9/15/2020			
9/16/2020		30	56
9/17/2020	164		
9/18/2020			
9/21/2020			
11/10/2020		33.6	63.3
12/15/2020		28.7	62.6

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/17/2023 12:59 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-9	HGWA-44D (bg)	HGWA-43D (bg)
1/19/2021		33	60.1
3/10/2021		5.9	
3/11/2021			59.6
3/12/2021			
3/15/2021			
3/16/2021	182		
3/17/2021			
8/11/2021			61
8/12/2021			
8/13/2021		28.9	
8/16/2021			
8/17/2021	183		
8/18/2021			
8/19/2021			
2/1/2022		24.8	55.9
2/9/2022	183		
2/10/2022			
8/2/2022		20.9	54.1
8/3/2022			
8/4/2022	196		
8/11/2022			
1/23/2023			
1/24/2023		13.2	56.6
1/26/2023	173		
1/27/2023			
2/1/2023			
8/8/2023		8.1	52.8
8/10/2023			
8/11/2023	168		
8/12/2023			

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/17/2023 12:59 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-7	HGWC-8	HGWC-11	HGWC-12	HGWC-10	HGWC-13
5/19/2016	9.94	5.93	6.14						
5/20/2016				50.4	109				
5/23/2016						51.9	160	56.1	93.2
7/11/2016	6.3		5.9						
7/12/2016		6.2		50	110	100	160	63	78
8/30/2016	6	6.4	6.2						
9/1/2016				50	110	58	140	77	100
10/19/2016	5.8	6.5	6.1						
10/20/2016				49	110				
10/24/2016						220	160	99	140
12/6/2016	5.4	7.2	6	51	100				
12/7/2016						180	190	96	110
1/24/2017	5.2	6.4	6.1						
1/25/2017				54	110				
1/26/2017						90	160	7	70
3/21/2017	4.6	7.5	5.9	46	110				
3/22/2017						37	130	82	59
5/22/2017	4.6	6.5	5.9						
5/23/2017				49	130				
5/24/2017						69	120	81	50
10/3/2017	5.6	6.5	6.3	52	130	28	93	100	29
6/4/2018	13.1	6.3	6.1						
6/5/2018				52.3		56.1		66.6	72.3
6/6/2018					44.8		46.4		
10/1/2018	6.6	6.4	6.4						
10/2/2018				52.6	89.4			48.3	
10/3/2018						24.8	88.4		
10/5/2018									32.3
4/1/2019		6.5							
4/2/2019	20.3		5.8	55.5					
4/3/2019					91.6	4.6	62.8	49.3	
4/5/2019									36.4
9/23/2019	17.7	5.9	5.1						
9/24/2019					60.2				
9/25/2019				49.8					
9/26/2019									109
9/27/2019						27.9	81	49.9	
3/25/2020	20.4	6.1	5.2						
3/26/2020							48		
3/27/2020				48.3	79.8				
3/30/2020									75.1
3/31/2020						3.2			
4/1/2020								5.4	
6/16/2020	41.1	5.8			67.9				
6/17/2020				45.2					
9/15/2020	13.4	6	5						
9/16/2020				46.4	74.6			39.7	
9/17/2020									
9/18/2020						34.9	74.6		
9/21/2020									41.2
11/10/2020									
12/15/2020									

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/17/2023 12:59 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-7	HGWC-8	HGWC-11	HGWC-12	HGWC-10	HGWC-13
1/19/2021									
3/10/2021	7.4								
3/11/2021		5.9	5.1						
3/12/2021								35	
3/15/2021				44.5	72.4				
3/16/2021						11.5	56.8		
3/17/2021									31.4
8/11/2021	9.6								
8/12/2021		4.8	5.2						
8/13/2021									
8/16/2021				40.3					
8/17/2021								28.3	
8/18/2021					50.9	19.9	47.3		
8/19/2021									24.4
2/1/2022	7.5	5.7	7						
2/9/2022						20.4	46.8	1.2	
2/10/2022				39.8	48.2				17.4
8/2/2022	14.1	5.9	7.8						
8/3/2022				37.9	54.1	13.8	39.2	12.3	13
8/4/2022									
8/11/2022				37.7					
1/23/2023		5.6							
1/24/2023	9		7.1						
1/26/2023						8.8	34.6		12.5
1/27/2023				40				1.6	
2/1/2023					52.4				
8/8/2023	26	5.3	6.6						
8/10/2023						6.5	30.6	13.4	
8/11/2023									
8/12/2023				33.3	53.1				15.3

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/17/2023 12:59 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-9	HGWA-44D (bg)	HGWA-43D (bg)
5/19/2016			
5/20/2016			
5/23/2016	152		
7/11/2016			
7/12/2016	160		
8/30/2016			
9/1/2016	160		
10/19/2016			
10/20/2016	110		
10/24/2016			
12/6/2016	150		
12/7/2016			
1/24/2017			
1/25/2017			
1/26/2017	170		
3/21/2017			
3/22/2017	160		
5/22/2017			
5/23/2017	150		
5/24/2017			
10/3/2017	160		
6/4/2018			
6/5/2018			
6/6/2018	138		
10/1/2018			
10/2/2018	142		
10/3/2018			
10/5/2018			
4/1/2019			
4/2/2019			
4/3/2019	130		
4/5/2019			
9/23/2019			
9/24/2019			
9/25/2019			
9/26/2019			
9/27/2019	126		
3/25/2020			
3/26/2020			
3/27/2020			
3/30/2020			
3/31/2020	105		
4/1/2020			
6/16/2020			
6/17/2020			
9/15/2020			
9/16/2020		7.2	4.1
9/17/2020	105		
9/18/2020			
9/21/2020			
11/10/2020		7.8	4.4
12/15/2020		9.4	4.7

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/17/2023 12:59 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-9	HGWA-44D (bg)	HGWA-43D (bg)
1/19/2021		9.5	4.1
3/10/2021		12.3	
3/11/2021			4.5
3/12/2021			
3/15/2021			
3/16/2021	94.7		
3/17/2021			
8/11/2021			3.5
8/12/2021			
8/13/2021		39.9	
8/16/2021			
8/17/2021	88.6		
8/18/2021			
8/19/2021			
2/1/2022		44.8	4.1
2/9/2022	84.4		
2/10/2022			
8/2/2022		19.8	4.3
8/3/2022			
8/4/2022	86.8		
8/11/2022			
1/23/2023			
1/24/2023		24.9	4.3
1/26/2023	86.9		
1/27/2023			
2/1/2023			
8/8/2023		27	3.5
8/10/2023			
8/11/2023	78.9		
8/12/2023			

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/17/2023 12:59 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-7	HGWC-8	HGWC-11	HGWC-13	HGWC-10	HGWC-9
5/19/2016	0.105 (J)	0.0513 (J)	0.0303 (J)						
5/20/2016				0.0828 (J)	0.499				
5/23/2016						0.203 (J)	0.2587 (J)	0.0394 (J)	<0.1
7/11/2016	0.16 (J)		0.05 (J)						
7/12/2016		0.12 (J)		0.2 (J)	0.67	0.44	0.53	0.15 (J)	0.24 (J)
8/30/2016	0.09 (J)	0.09 (J)	0.06 (J)						
9/1/2016				0.51	0.94	0.67	0.74	0.5	0.46
10/19/2016	0.1 (J)	0.1 (J)	0.04 (J)						
10/20/2016				0.4	0.56				0.56
10/24/2016						0.26 (J)	0.31	0.06 (J)	
12/6/2016	0.11 (J)	0.21 (J)	0.36	0.26 (J)	0.76				0.31
12/7/2016						0.55	1	0.44	
1/24/2017	0.09 (J)	0.06 (J)	<0.1						
1/25/2017				0.24 (J)	1.1				
1/26/2017						0.27 (J)	0.68	0.29 (J)	0.004 (J)
3/21/2017	0.13 (J)	0.005 (J)	<0.1	0.13 (J)	0.46				
3/22/2017						0.66	0.76	0.34	0.28 (J)
5/22/2017	0.12 (J)	0.05 (J)	<0.1						
5/23/2017				0.11 (J)	0.65				0.29 (J)
5/24/2017						0.35	0.54	0.13 (J)	
10/3/2017	0.13 (J)	0.13 (J)	<0.1	0.17 (J)	0.66	0.56	0.83	0.46	0.53
4/2/2018	<0.1		<0.1						
4/3/2018		<0.1		<0.1	0.39				<0.1
4/4/2018						0.39	0.65	<0.1	
6/4/2018	0.074 (J)	<0.1	<0.1						
6/5/2018				0.099 (J)		0.24 (J)	0.47	<0.1	
6/6/2018					0.46				0.12 (J)
10/1/2018	<0.1	<0.1	<0.1						
10/2/2018				<0.1	0.51			0.17 (J)	0.031 (J)
10/3/2018						0.31			
10/5/2018							0.77		
3/12/2019	0.29 (J)	0.072 (J)	0.038 (J)		0.58				
3/13/2019				0.12 (J)		0.51	0.78	0.17 (J)	0.14 (J)
3/14/2019									
4/1/2019		0.029 (J)							
4/2/2019	0.1 (J)		0.071 (J)	0.097 (J)					
4/3/2019					0.63	0.43		0.082 (J)	0.14 (J)
4/5/2019							0.83		
9/23/2019	0.078 (J)	<0.1	<0.1						
9/24/2019					0.49				
9/25/2019				0.1 (J)					
9/26/2019							0.64		
9/27/2019						0.42		0.17 (J)	0.26 (J)
3/2/2020	0.076 (J)	<0.1	<0.1						
3/3/2020					0.45	0.24 (J)		0.11 (J)	
3/4/2020				0.077 (J)			0.37		0.08 (J)
3/25/2020	0.098 (J)	<0.1	<0.1						
3/26/2020									
3/27/2020				0.059 (J)	0.46				
3/30/2020							0.44		
3/31/2020						0.19 (J)			0.074 (J)
4/1/2020								0.12 (J)	

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/17/2023 12:59 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-7	HGWC-8	HGWC-11	HGWC-13	HGWC-10	HGWC-9
6/16/2020	0.071 (J)	<0.1			0.45				
6/17/2020				0.077 (J)					
9/15/2020	0.082 (J)	<0.1	<0.1						
9/16/2020				0.081 (J)	0.53			<0.1	
9/17/2020									0.1
9/18/2020						0.15			
9/21/2020							0.44		
11/10/2020									
12/15/2020									
1/19/2021									
2/8/2021	0.078 (J)								
2/9/2021		0.074 (J)	<0.1						
2/10/2021				0.085 (J)					
2/12/2021						0.17			
2/15/2021								0.08 (J)	
2/16/2021					0.47				0.096 (J)
2/22/2021							0.55		
3/10/2021	0.079 (J)								
3/11/2021		<0.1	0.1						
3/12/2021								0.054 (J)	
3/15/2021				0.086 (J)	0.51				
3/16/2021						0.21			0.098 (J)
3/17/2021							0.65		
8/11/2021	0.058 (J)								
8/12/2021		<0.1	<0.1						
8/13/2021									
8/16/2021				0.084 (J)					
8/17/2021								<0.1	0.095 (J)
8/18/2021					0.41	0.21			
8/19/2021							0.53		
2/1/2022	0.064 (J)	<0.1	<0.1						
2/9/2022						0.2		0.12	0.1
2/10/2022				0.083 (J)	0.42		0.53		
8/2/2022	0.09 (J)	0.067 (J)	0.053 (J)						
8/3/2022				0.11	0.44	0.22	0.55	0.13	
8/4/2022									0.13
8/11/2022				0.11					
1/23/2023		0.061 (J)							
1/24/2023	0.089 (J)		0.053 (J)						
1/26/2023						0.2	0.4		0.11
1/27/2023				0.1				0.16	
2/1/2023					0.4				
8/8/2023	0.088 (J)	0.055 (J)	0.07 (J)						
8/10/2023						0.15		0.05 (J)	
8/11/2023									0.12
8/12/2023				0.071 (J)	0.59		0.32		

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/17/2023 12:59 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-12	HGWA-43D (bg)	HGWA-44D (bg)
5/19/2016			
5/20/2016			
5/23/2016	0.212 (J)		
7/11/2016			
7/12/2016	0.31		
8/30/2016			
9/1/2016	0.62		
10/19/2016			
10/20/2016			
10/24/2016	0.19 (J)		
12/6/2016			
12/7/2016	0.73		
1/24/2017			
1/25/2017			
1/26/2017	0.12 (J)		
3/21/2017			
3/22/2017	0.44		
5/22/2017			
5/23/2017			
5/24/2017	0.34		
10/3/2017	0.58		
4/2/2018			
4/3/2018			
4/4/2018	<0.1		
6/4/2018			
6/5/2018			
6/6/2018	0.21 (J)		
10/1/2018			
10/2/2018			
10/3/2018	0.15 (J)		
10/5/2018			
3/12/2019			
3/13/2019			
3/14/2019	1.1		
4/1/2019			
4/2/2019			
4/3/2019	0.3 (J)		
4/5/2019			
9/23/2019			
9/24/2019			
9/25/2019			
9/26/2019			
9/27/2019	0.26 (J)		
3/2/2020			
3/3/2020	0.21 (J)		
3/4/2020			
3/25/2020			
3/26/2020	0.17 (J)		
3/27/2020			
3/30/2020			
3/31/2020			
4/1/2020			

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/17/2023 12:59 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-12	HGWA-43D (bg)	HGWA-44D (bg)
6/16/2020			
6/17/2020			
9/15/2020			
9/16/2020		0.22	0.52
9/17/2020			
9/18/2020	0.15		
9/21/2020			
11/10/2020		0.19	0.59
12/15/2020		0.21	0.67
1/19/2021		0.16	0.74
2/8/2021			
2/9/2021		0.19	0.44
2/10/2021			
2/12/2021	0.19		
2/15/2021			
2/16/2021			
2/22/2021			
3/10/2021			0.65
3/11/2021		0.2	
3/12/2021			
3/15/2021			
3/16/2021	0.2		
3/17/2021			
8/11/2021		0.15	
8/12/2021			
8/13/2021			0.87
8/16/2021			
8/17/2021			
8/18/2021	0.15		
8/19/2021			
2/1/2022		0.19	0.96
2/9/2022	0.2		
2/10/2022			
8/2/2022		0.22	0.8
8/3/2022	0.21		
8/4/2022			
8/11/2022			
1/23/2023			
1/24/2023		0.23	1.3
1/26/2023	0.21		
1/27/2023			
2/1/2023			
8/8/2023		0.18	1.3
8/10/2023	0.17		
8/11/2023			
8/12/2023			

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 10/17/2023 12:59 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-7	HGWC-8	HGWC-12	HGWC-11	HGWC-10	HGWC-9
5/19/2016	7.27	7.45	5.81						
5/20/2016				7.14	6.99				
5/23/2016						7.15	6.22	6.83	7.23
7/11/2016	7.06		5.68						
7/12/2016		7.32		7.13	6.88	6.87	6.04	6.58	6.87
8/30/2016	7.28	7.43	5.63						
9/1/2016				7.29	6.73	7.2	6.26	6.54	7.15
10/19/2016	7.02	7.03	5.46						
10/20/2016				7.1	6.9				7.05
10/24/2016						7.1	6.46	6.59	
12/6/2016	7.09	7.08	5.38	7.15	6.98				7.15
12/7/2016						6.92	6.29	6.56	
1/24/2017	7.2	7.39	5.37						
1/25/2017				7.11	7.04				
1/26/2017						7.05	6.46	6.83	6.99
3/21/2017	7.01	6.83	4.9	7.12	6.87				
3/22/2017						7.08	5.81	6.66	7.03
5/22/2017	7.11	7.02	5.2						
5/23/2017				7.08	6.87				7.05
5/24/2017						7.11	6.51	6.67	
10/3/2017	7.21	7.47	5.3	7.21	6.72	7.01	6.25	6.54	7.07
4/2/2018	7.1		5.4						
4/3/2018		7.38		7.14	6.87				6.99
4/4/2018						7.12	5.86	6.61	
6/4/2018	7.06	7.38	5.27						
6/5/2018				7.13			6.27	6.65	
6/6/2018					6.9	7.12			7.02
10/1/2018	7.09	7.13	5.31						
10/2/2018				7.12	6.9			6.55	7.05
10/3/2018						7.08	5.97		
10/5/2018									
3/12/2019	7.03	7.29	5.42		6.91				
3/13/2019				7.27			5.92	6.7	7.06
3/14/2019						7.09			
4/1/2019		7.16							
4/2/2019	6.86		5.41	7.27					
4/3/2019					6.85	6.96	5.69	6.55	6.88
4/5/2019									
9/23/2019	7.02	7.3	5.33						
9/24/2019					6.95				
9/25/2019				7.11					
9/26/2019									
9/27/2019						7.07	5.75	6.64	7.01
3/2/2020	7.1	7.12	5.43						
3/3/2020					7.06	6.95	5.95	6.67	
3/4/2020				7.17					6.97
3/25/2020	6.95	7.4	5.36						
3/26/2020						6.99			
3/27/2020				7.05	6.95				
3/30/2020									
3/31/2020							5.7		7.07
4/1/2020								6.84	

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 10/17/2023 12:59 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-7	HGWC-8	HGWC-12	HGWC-11	HGWC-10	HGWC-9
6/16/2020	6.97 (D)	7.31 (D)			6.97 (D)				
6/17/2020				7.2 (D)					
9/15/2020	7.15	7.29	5.22						
9/16/2020				7.3	6.92			6.66	
9/17/2020									6.99
9/18/2020						7.15	6.42		
9/21/2020									
11/10/2020									
12/15/2020									
1/19/2021									
2/8/2021	7.11								
2/9/2021		7.23	5.42						
2/10/2021				7.29					
2/12/2021						6.23	7.27		
2/15/2021								6.83	
2/16/2021					7.16				7.26
2/22/2021									
3/10/2021	6.95								
3/11/2021		7.33	5.8						
3/12/2021								6.76	
3/15/2021				7.19	7.09				
3/16/2021						7.15	5.95		7.1
3/17/2021									
8/11/2021	6.98								
8/12/2021		7.31	5.05						
8/13/2021									
8/16/2021				7.12					
8/17/2021								6.75	7.1
8/18/2021					7.02	6.89	6.1		
8/19/2021									
2/1/2022	7.19	7.45	5.24						
2/9/2022						7.23	6.55	7	7.3
2/10/2022				7.22	6.99				
8/3/2022				6.93	6.84	7.13	6.23	6.73	
8/4/2022									7.03
8/11/2022				7.07					
1/23/2023		7.32							
1/24/2023	6.76		5.22						
1/26/2023						7.1	6.23		7.07
1/27/2023				7.25				6.89	
2/1/2023					6.6				
8/8/2023	7.05	7.42	5.01						
8/10/2023						7.08	5.9	6.81	
8/11/2023									7.09
8/12/2023				7.36	6.84				

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 10/17/2023 12:59 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-13	HGWA-43D (bg)	HGWA-44D (bg)
5/19/2016			
5/20/2016			
5/23/2016	7.14		
7/11/2016			
7/12/2016	7.04		
8/30/2016			
9/1/2016	7.24		
10/19/2016			
10/20/2016			
10/24/2016	6.9		
12/6/2016			
12/7/2016	6.91		
1/24/2017			
1/25/2017			
1/26/2017	7.08		
3/21/2017			
3/22/2017	7.13		
5/22/2017			
5/23/2017			
5/24/2017	7.15		
10/3/2017	7.32		
4/2/2018			
4/3/2018			
4/4/2018	7.27		
6/4/2018			
6/5/2018	7.2		
6/6/2018			
10/1/2018			
10/2/2018			
10/3/2018			
10/5/2018	7.24		
3/12/2019			
3/13/2019	7.24		
3/14/2019			
4/1/2019			
4/2/2019			
4/3/2019			
4/5/2019	7.24		
9/23/2019			
9/24/2019			
9/25/2019			
9/26/2019	6.94		
9/27/2019			
3/2/2020			
3/3/2020			
3/4/2020	7.16		
3/25/2020			
3/26/2020			
3/27/2020			
3/30/2020	6.91		
3/31/2020			
4/1/2020			

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 10/17/2023 12:59 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-13	HGWA-43D (bg)	HGWA-44D (bg)
6/16/2020			
6/17/2020			
9/15/2020			
9/16/2020		7.52	7.83
9/17/2020			
9/18/2020			
9/21/2020	7.34		
11/10/2020		7.27	7.84
12/15/2020		7.39	7.87
1/19/2021		7.39	7.86
2/8/2021			
2/9/2021		7.44	7.84
2/10/2021			
2/12/2021			
2/15/2021			
2/16/2021			
2/22/2021	7.27		
3/10/2021			7.92
3/11/2021		7.46	
3/12/2021			
3/15/2021			
3/16/2021			
3/17/2021	7.33		
8/11/2021		7.4	
8/12/2021			
8/13/2021			7.77
8/16/2021			
8/17/2021			
8/18/2021			
8/19/2021	7.38		
2/1/2022		7.52	8.25
2/9/2022			
2/10/2022	7.54		
8/3/2022	7.09		
8/4/2022			
8/11/2022			
1/23/2023			
1/24/2023		7.56	8.22
1/26/2023	6.9		
1/27/2023			
2/1/2023			
8/8/2023		7.39	8.2
8/10/2023			
8/11/2023			
8/12/2023	6.89		

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/17/2023 12:59 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-7	HGWC-8	HGWC-11	HGWC-12	HGWC-10	HGWC-13
5/19/2016	66.9	42.3	48.6						
5/20/2016				96	219				
5/23/2016						260	288	175	215
7/11/2016	41		45						
7/12/2016		44		100	230	390	320	190	210
8/30/2016	36	40	42						
9/1/2016				100	230	240	300	190	190
10/19/2016	46	43	44						
10/20/2016				110	240				
10/24/2016						370	270	190	180
12/6/2016	59	43	44	110	250				
12/7/2016						260	280	200	120
1/24/2017	46	48	46						
1/25/2017				110	260				
1/26/2017						230	260	90	83
3/21/2017	63	45	46	110	240				
3/22/2017						330	220	170	100
5/22/2017	77	46	48						
5/23/2017				110	270				
5/24/2017						230	210	190	110
10/3/2017	42	48	47	120	230	230	190	200	67
6/4/2018	71.8	46.6	47.8						
6/5/2018				117		204		205	187
6/6/2018					190		162		
10/1/2018	49.1	48.6	48.1						
10/2/2018				120	193			178	
10/3/2018						233	191		
10/5/2018									78.3
4/1/2019		50.4							
4/2/2019	84.3		48.7	127					
4/3/2019					194	298	176	159	
4/5/2019									105
9/23/2019	70.2	43.9	47.2						
9/24/2019					133				
9/25/2019				109					
9/26/2019									444
9/27/2019						<1	198	181	
3/25/2020	85.9	50.5	46.3						
3/26/2020							182		
3/27/2020				109	173				
3/30/2020									393
3/31/2020						283			
4/1/2020								59	
6/16/2020	88.2	49.5			157				
6/17/2020				102					
9/15/2020	47.3	44.7	51.5						
9/16/2020				109	194			169	
9/17/2020									
9/18/2020						272	266		
9/21/2020									359
11/10/2020									
12/15/2020									

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/17/2023 12:59 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-7	HGWC-8	HGWC-11	HGWC-12	HGWC-10	HGWC-13
1/19/2021									
3/10/2021	49.6								
3/11/2021		50.4	52.9						
3/12/2021								120	
3/15/2021				107	272				
3/16/2021						291	248		
3/17/2021									384
8/11/2021	48.9								
8/12/2021		38.6	47.4						
8/13/2021									
8/16/2021				98.1					
8/17/2021								156	
8/18/2021					245	237	226		
8/19/2021									339
2/1/2022	43.7	46	67.1						
2/9/2022						276	252	49.2	
2/10/2022				97.5	224				371
8/2/2022	58.1	43.5	86.9						
8/3/2022				105	241	254	236	119	451
8/4/2022									
8/11/2022				121					
1/23/2023		39.5							
1/24/2023	48.3		79.7						
1/26/2023						209	228		495
1/27/2023				119				37.3	
2/1/2023					179				
8/8/2023	67.7	35	89.9						
8/10/2023						190	209	128	
8/11/2023									
8/12/2023				84.2	170				347

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/17/2023 12:59 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-9	HGWA-44D (bg)	HGWA-43D (bg)
5/19/2016			
5/20/2016			
5/23/2016	207		
7/11/2016			
7/12/2016	230		
8/30/2016			
9/1/2016	230		
10/19/2016			
10/20/2016	240		
10/24/2016			
12/6/2016	240		
12/7/2016			
1/24/2017			
1/25/2017			
1/26/2017	270		
3/21/2017			
3/22/2017	240		
5/22/2017			
5/23/2017	240		
5/24/2017			
10/3/2017	240		
6/4/2018			
6/5/2018			
6/6/2018	214		
10/1/2018			
10/2/2018	218		
10/3/2018			
10/5/2018			
4/1/2019			
4/2/2019			
4/3/2019	214		
4/5/2019			
9/23/2019			
9/24/2019			
9/25/2019			
9/26/2019			
9/27/2019	214		
3/25/2020			
3/26/2020			
3/27/2020			
3/30/2020			
3/31/2020	185		
4/1/2020			
6/16/2020			
6/17/2020			
9/15/2020			
9/16/2020		6.9	43
9/17/2020	209		
9/18/2020			
9/21/2020			
11/10/2020		6.3	39
12/15/2020		6.7	38.8

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/17/2023 12:59 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-9	HGWA-44D (bg)	HGWA-43D (bg)
1/19/2021		7.4	37.3
3/10/2021		<1	
3/11/2021			38.6
3/12/2021			
3/15/2021			
3/16/2021	211		
3/17/2021			
8/11/2021			30.5
8/12/2021			
8/13/2021		56.1	
8/16/2021			
8/17/2021	207		
8/18/2021			
8/19/2021			
2/1/2022		56.3	37.5
2/9/2022	224		
2/10/2022			
8/2/2022		13.2	37
8/3/2022			
8/4/2022	243		
8/11/2022			
1/23/2023			
1/24/2023		10.1	34.7
1/26/2023	217		
1/27/2023			
2/1/2023			
8/8/2023		1.3	25.6
8/10/2023			
8/11/2023	197		
8/12/2023			

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/17/2023 12:59 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-7	HGWC-8	HGWC-11	HGWC-12	HGWC-10	HGWC-13
5/19/2016	421	267	143						
5/20/2016				427	711				
5/23/2016						564	1060	629	683
7/11/2016	363		125						
7/12/2016		249		410	704	627	909	661	563
8/30/2016	330	254	168						
9/1/2016				484	763	656	1480	769	702
10/19/2016	380	357	176						
10/20/2016				393	644				
10/24/2016						836	868	643	647
12/6/2016	377	285	145	492	733				
12/7/2016						748	811	697	465
1/24/2017	342	300	129						
1/25/2017				461	744				
1/26/2017						571	846	368	411
3/21/2017	340	288	103	415	818				
3/22/2017						597	804	683	427
5/22/2017	338	263	92						
5/23/2017				450	765				
5/24/2017						566	803	696	377
10/3/2017	343	300	127	464	812	443	608	746	268
6/4/2018	415	266	140						
6/5/2018				459		489		679	528
6/6/2018					611		535		
10/1/2018	354	291	135						
10/2/2018				426	597			572	
10/3/2018						449	607		
10/5/2018									322
4/1/2019		284							
4/2/2019	452		133	428					
4/3/2019					543	483	462	525	
4/5/2019									331
9/23/2019	442	268	129						
9/24/2019					457				
9/25/2019				503					
9/26/2019									1010
9/27/2019						528	653	624	
3/25/2020	496	284	138						
3/26/2020							533		
3/27/2020				413	541				
3/30/2020									895
3/31/2020						565			
4/1/2020								290	
6/16/2020	632	448			573				
6/17/2020				423					
9/15/2020	265	258	124						
9/16/2020				392	552			490	
9/17/2020									
9/18/2020						626	704		
9/21/2020									732
11/10/2020									
12/15/2020									

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/17/2023 12:59 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-7	HGWC-8	HGWC-11	HGWC-12	HGWC-10	HGWC-13
1/19/2021									
3/10/2021	348								
3/11/2021		267	169						
3/12/2021								490 (H1)	
3/15/2021				370	614				
3/16/2021						558	614		
3/17/2021									716
8/11/2021	366								
8/12/2021		265	118						
8/13/2021									
8/16/2021				407					
8/17/2021								496	
8/18/2021					620	566	600		
8/19/2021									726
2/1/2022	270	350	156						
2/9/2022						544	678	250	
2/10/2022				414	578				814
8/2/2022	400	287	196						
8/3/2022				441	648	572	650	433	958
8/4/2022									
8/11/2022				445					
1/23/2023		293							
1/24/2023	369		164						
1/26/2023						429	624		962
1/27/2023				473				188	
2/1/2023					528				
8/8/2023	457	285	189						
8/10/2023						438	683	504	
8/11/2023									
8/12/2023				378	564				803

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/17/2023 12:59 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-9	HGWA-44D (bg)	HGWA-43D (bg)
5/19/2016			
5/20/2016			
5/23/2016	984		
7/11/2016			
7/12/2016	887		
8/30/2016			
9/1/2016	956		
10/19/2016			
10/20/2016	642		
10/24/2016			
12/6/2016	899		
12/7/2016			
1/24/2017			
1/25/2017			
1/26/2017	869		
3/21/2017			
3/22/2017	936		
5/22/2017			
5/23/2017	939		
5/24/2017			
10/3/2017	1040		
6/4/2018			
6/5/2018			
6/6/2018	810		
10/1/2018			
10/2/2018	693		
10/3/2018			
10/5/2018			
4/1/2019			
4/2/2019			
4/3/2019	673		
4/5/2019			
9/23/2019			
9/24/2019			
9/25/2019			
9/26/2019			
9/27/2019	730		
3/25/2020			
3/26/2020			
3/27/2020			
3/30/2020			
3/31/2020	1010		
4/1/2020			
6/16/2020			
6/17/2020			
9/15/2020			
9/16/2020		270	272
9/17/2020	680		
9/18/2020			
9/21/2020			
11/10/2020		287	307
12/15/2020		295	289

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/17/2023 12:59 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-9	HGWA-44D (bg)	HGWA-43D (bg)
1/19/2021		278	270
3/10/2021		289	
3/11/2021			279
3/12/2021			
3/15/2021			
3/16/2021	672		
3/17/2021			
8/11/2021			277
8/12/2021			
8/13/2021		436	
8/16/2021			
8/17/2021	704		
8/18/2021			
8/19/2021			
2/1/2022		444	156
2/9/2022	756		
2/10/2022			
8/2/2022		311	278
8/3/2022			
8/4/2022	760		
8/11/2022			
1/23/2023			
1/24/2023		363	271
1/26/2023	745		
1/27/2023			
2/1/2023			
8/8/2023		361	274
8/10/2023			
8/11/2023	757		
8/12/2023			

FIGURE E.

Appendix III Trend Tests - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 10/17/2023, 1:02 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-12**	**-0.1831**	**-117**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-13**	**-0.2266**	**-130**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-7**	**0.03451**	**105**	**98**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**HGWA-3 (bg)**	**1.995**	**116**	**92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**HGWA-3 (bg)**	**-0.1444**	**-121**	**-92**	**Yes**	**22**	**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-8**	**-9.039**	**-126**	**-92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**HGWC-9**	**-11.9**	**-154**	**-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**
Sulfate (mg/L)	**HGWC-10**	**-10.13**	**-97**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**HGWC-12**	**-46.96**	**-98**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - All Results

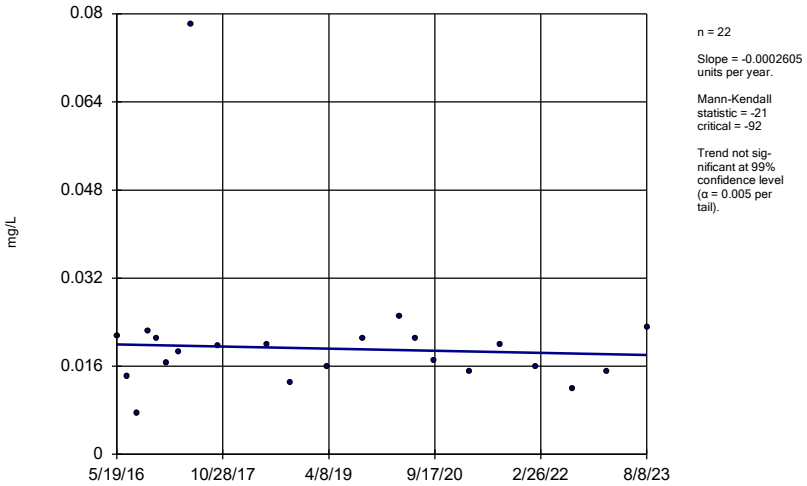
Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 10/17/2023, 1:02 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	HGWA-1 (bg)	-0.0002605	-21	-92	No	22	0	n/a	n/a	0.01	NP
Boron (mg/L)	**HGWA-2 (bg)**	**0.002577**	**142**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	HGWA-3 (bg)	0.0003424	32	92	No	22	18.18	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)	HGWA-44D (bg)	0.08822	29	30	No	10	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-10	-0.03144	-36	-87	No	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	**HGWC-12**	**-0.1831**	**-117**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-13**	**-0.2266**	**-130**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-7**	**0.03451**	**105**	**98**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	HGWC-8	-0.003765	-18	-92	No	22	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-9	0.05318	64	87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-1 (bg)	2.19	78	92	No	22	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
Calcium (mg/L)	**HGWA-3 (bg)**	**1.995**	**116**	**92**	**Yes**	**22**	**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
Calcium (mg/L)	HGWA-44D (bg)	-7.57	-27	-30	No	10	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-10	-4.775	-74	-87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-12	-3.992	-61	-87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-13	16.21	70	87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-9	0.5043	28	87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-1 (bg)	0.7747	82	92	No	22	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
Chloride (mg/L)	**HGWA-3 (bg)**	**-0.1444**	**-121**	**-92**	**Yes**	**22**	**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
Chloride (mg/L)	**HGWA-44D (bg)**	**7.347**	**33**	**30**	**Yes**	**10**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**HGWC-8**	**-9.039**	**-126**	**-92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**HGWC-9**	**-11.9**	**-154**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	HGWA-1 (bg)	1.304	38	92	No	22	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-3 (bg)	0.1933	13	92	No	22	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**
Sulfate (mg/L)	HGWA-44D (bg)	1.358	7	30	No	10	10	n/a	n/a	0.01	NP
Sulfate (mg/L)	**HGWC-10**	**-10.13**	**-97**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	HGWC-11	-9.651	-52	-87	No	21	4.762	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-12	-9.599	-68	-87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-13	40.99	68	87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-8	-5.775	-44	-92	No	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-9	-3.688	-59	-87	No	21	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-1 (bg)	4.498	33	92	No	22	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)	1.304	29	92	No	22	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)	**HGWC-12**	**-46.96**	**-98**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	HGWC-13	44.64	66	87	No	21	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-9	-28.95	-54	-87	No	21	0	n/a	n/a	0.01	NP

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWA-1 (bg)



n = 22

Slope = -0.0002605 units per year.

Mann-Kendall statistic = -21
critical = -92

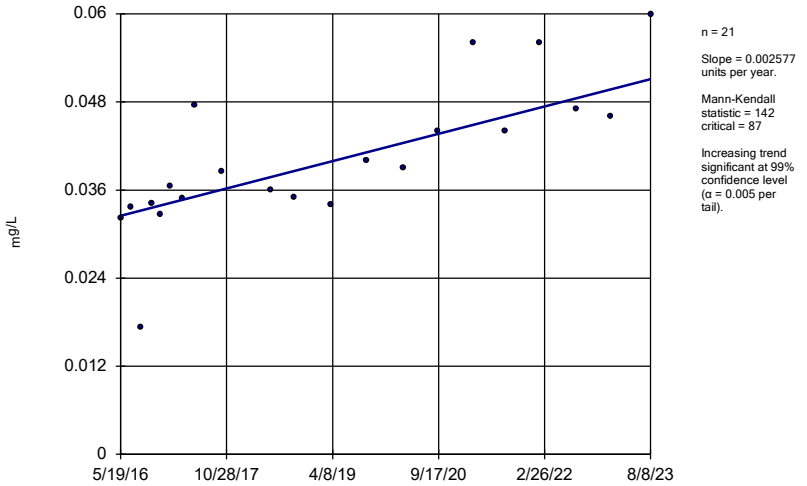
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWA-2 (bg)



n = 21

Slope = 0.002577 units per year.

Mann-Kendall statistic = 142
critical = 87

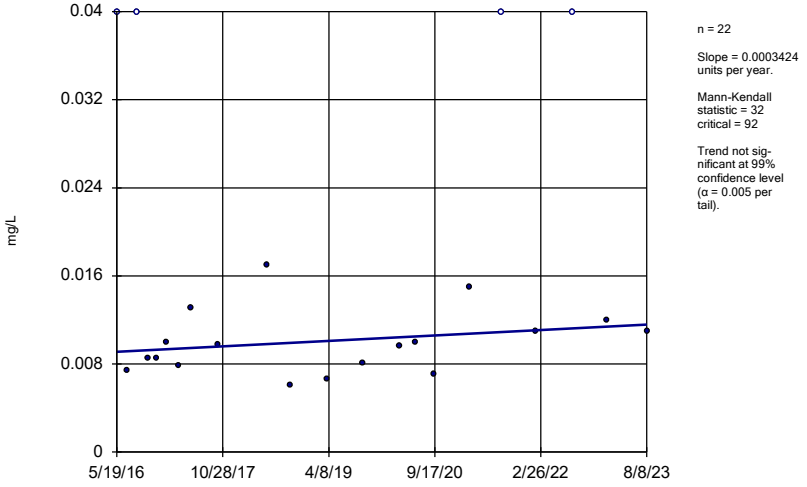
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWA-3 (bg)



n = 22

Slope = 0.0003424 units per year.

Mann-Kendall statistic = 32
critical = 92

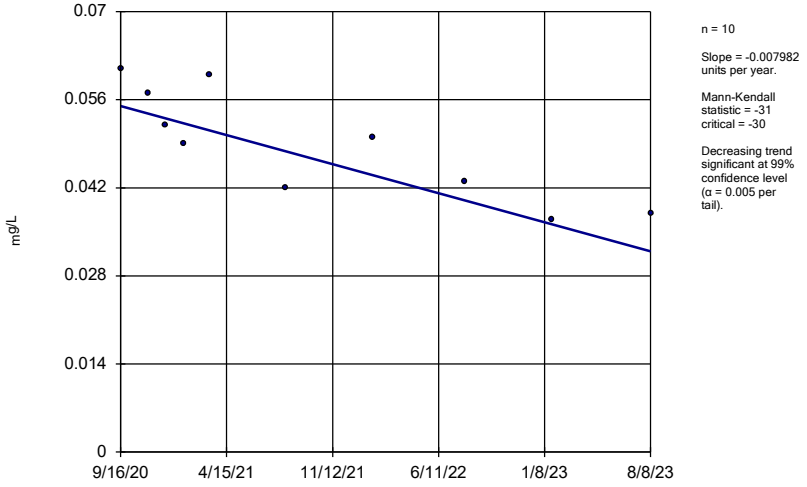
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWA-43D (bg)



n = 10

Slope = -0.007982 units per year.

Mann-Kendall statistic = -31
critical = -30

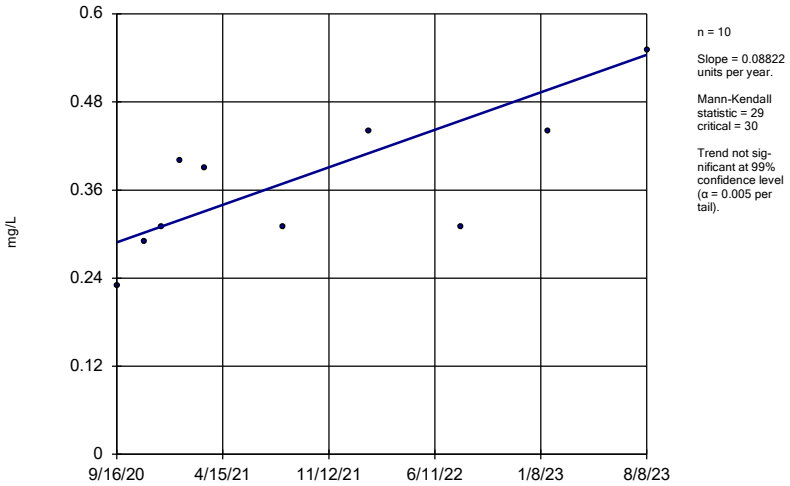
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWA-44D (bg)



n = 10

Slope = 0.08822 units per year.

Mann-Kendall statistic = 29
critical = 30

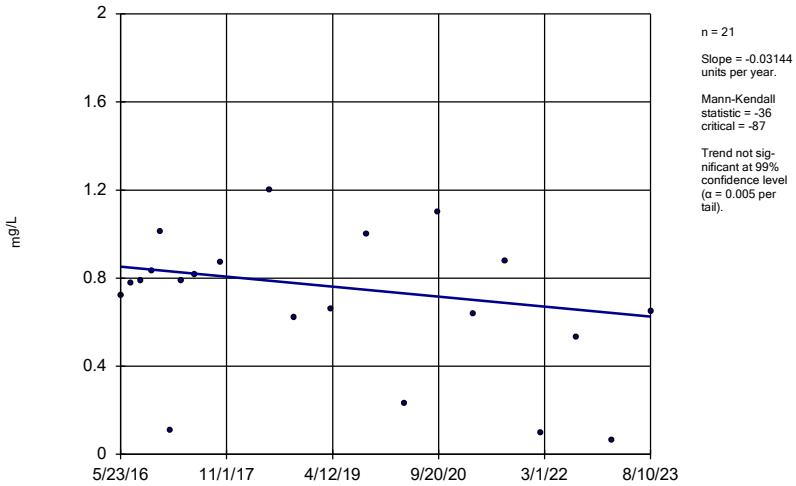
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWC-10



n = 21

Slope = -0.03144 units per year.

Mann-Kendall statistic = -36
critical = -87

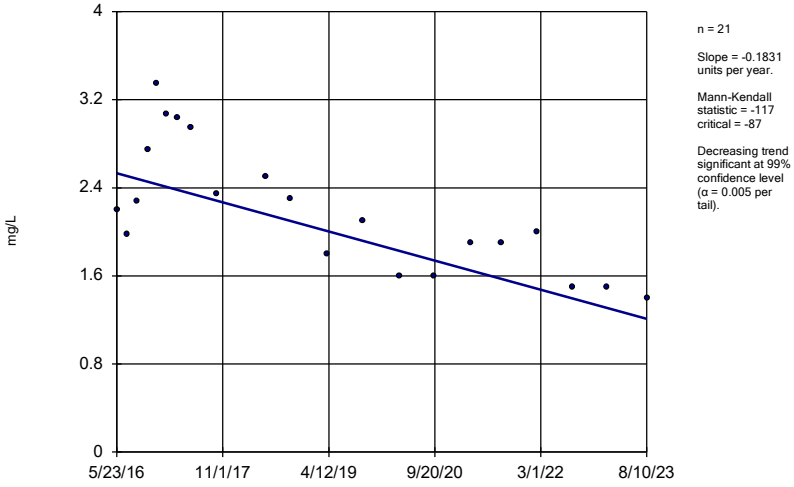
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWC-12



n = 21

Slope = -0.1831 units per year.

Mann-Kendall statistic = -117
critical = -87

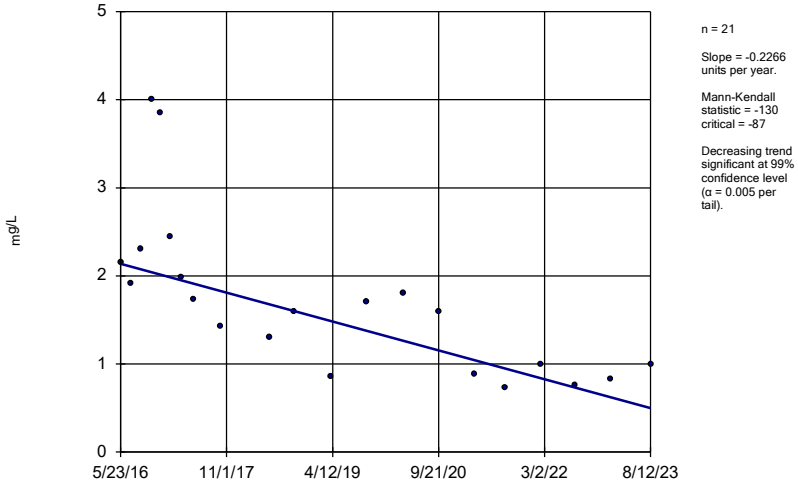
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWC-13



n = 21

Slope = -0.2266 units per year.

Mann-Kendall statistic = -130
critical = -87

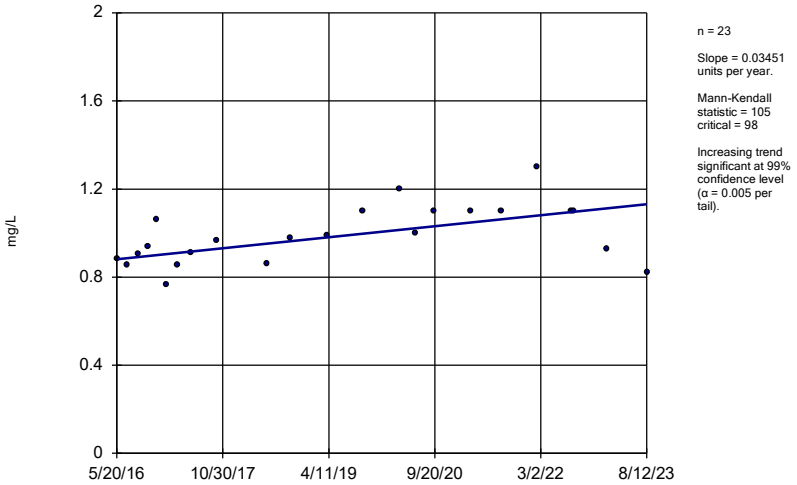
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWC-7



n = 23

Slope = 0.03451 units per year.

Mann-Kendall statistic = 105
critical = 98

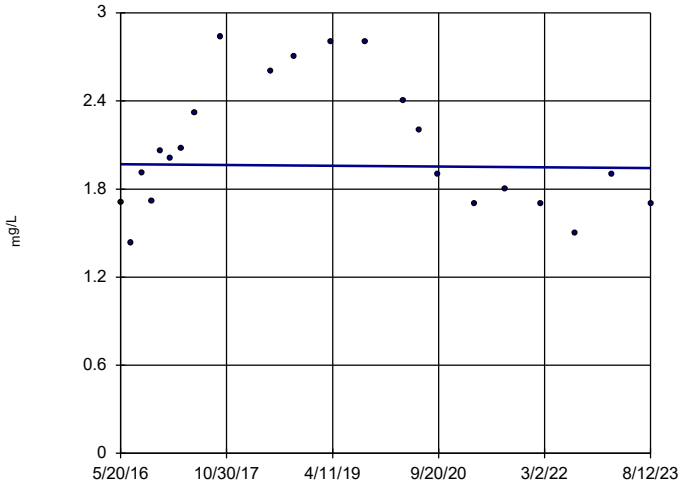
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWC-8



n = 22

Slope = -0.003765 units per year.

Mann-Kendall statistic = -18
critical = -92

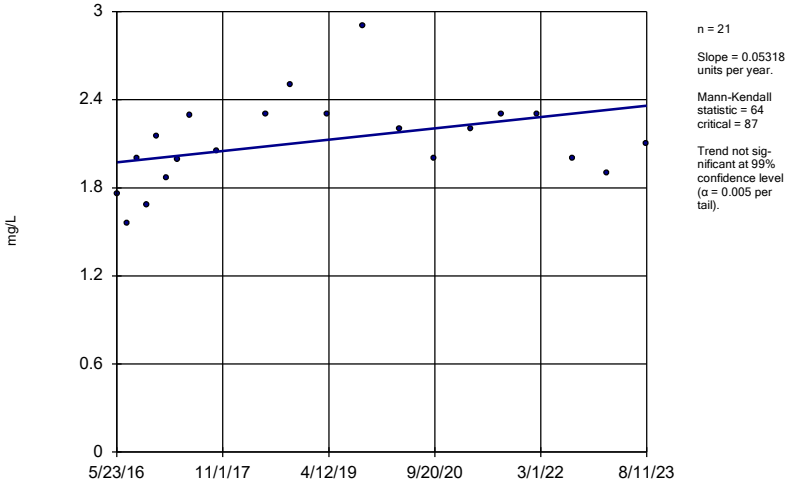
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWC-9



n = 21

Slope = 0.05318 units per year.

Mann-Kendall statistic = 64
critical = 87

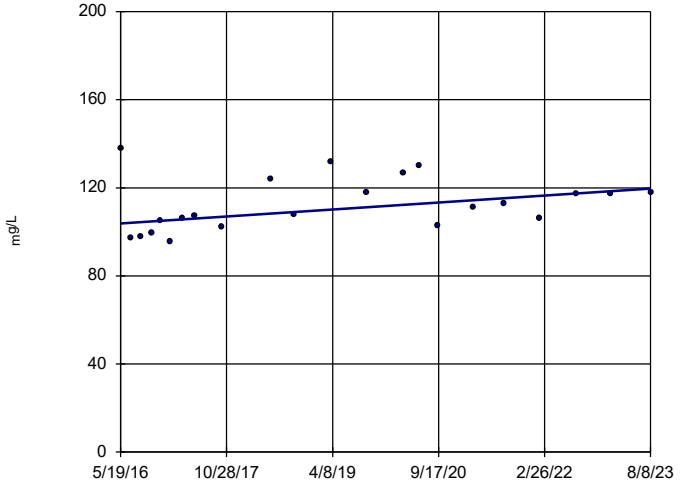
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWA-1 (bg)



n = 22

Slope = 2.19 units per year.

Mann-Kendall statistic = 78
critical = 92

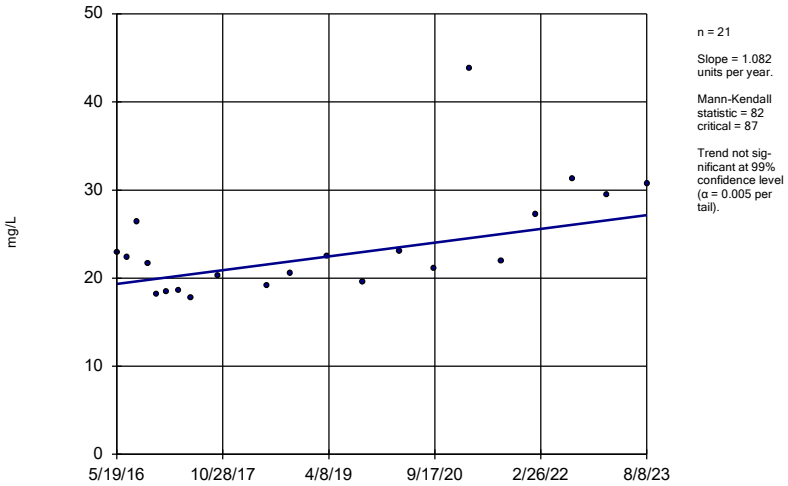
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWA-2 (bg)



n = 21

Slope = 1.082 units per year.

Mann-Kendall statistic = 82 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

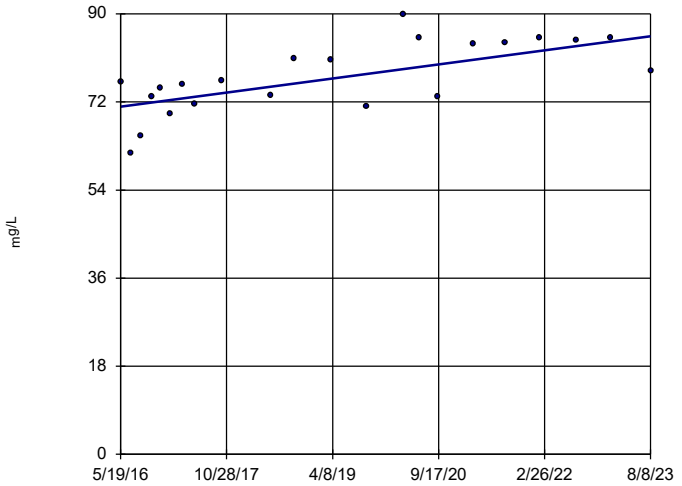
Constituent: Calcium Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWA-3 (bg)



n = 22

Slope = 1.995 units per year.

Mann-Kendall statistic = 116 critical = 92

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

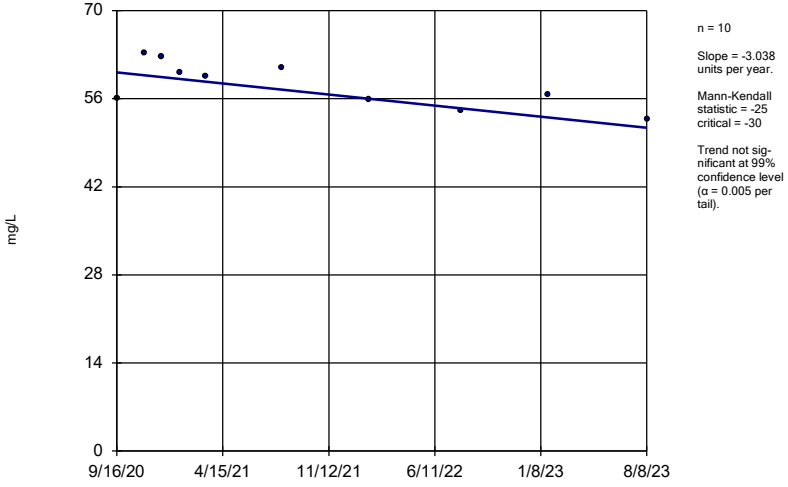
Constituent: Calcium Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWA-43D (bg)



n = 10

Slope = -3.038 units per year.

Mann-Kendall statistic = -25 critical = -30

Trend not significant at 99% confidence level (α = 0.005 per tail).

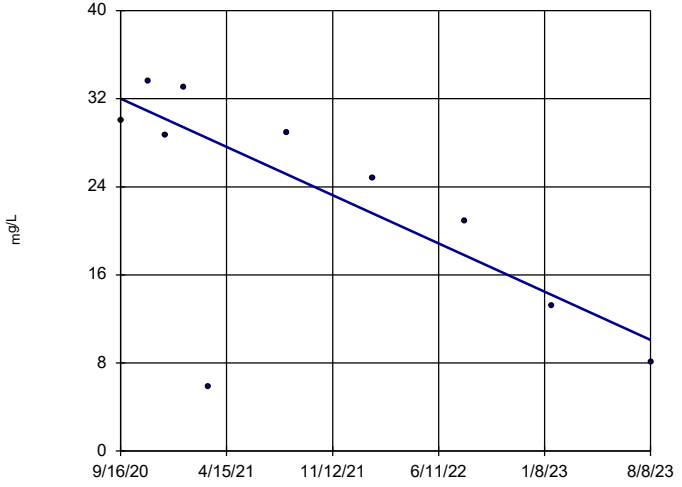
Constituent: Calcium Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWA-44D (bg)



n = 10

Slope = -7.57 units per year.

Mann-Kendall statistic = -27 critical = -30

Trend not significant at 99% confidence level (α = 0.005 per tail).

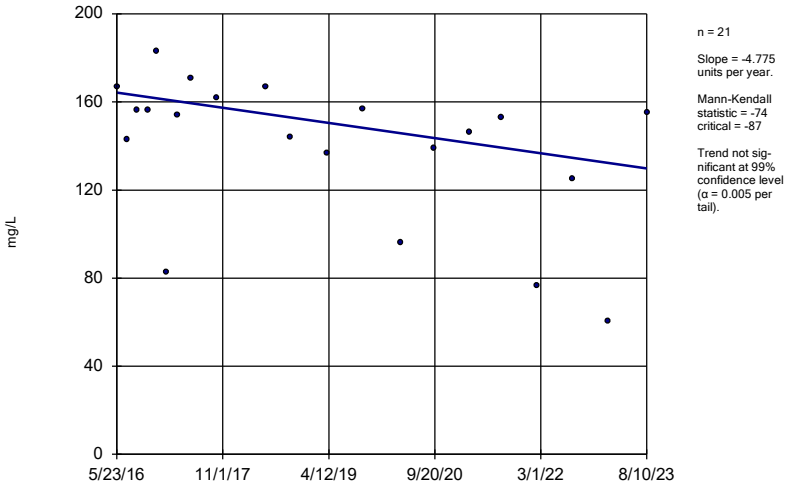
Constituent: Calcium Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWC-10



n = 21

Slope = -4.775 units per year.

Mann-Kendall statistic = -74 critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

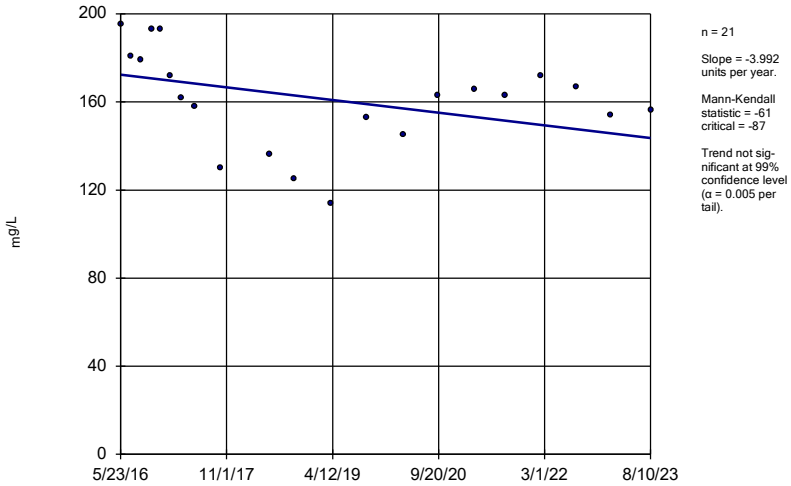
Constituent: Calcium Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWC-12



n = 21

Slope = -3.992 units per year.

Mann-Kendall statistic = -61 critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

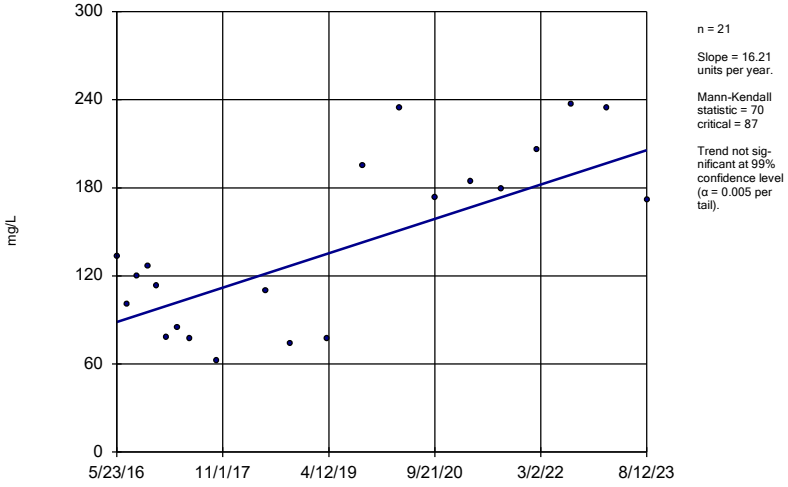
Constituent: Calcium Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWC-13



n = 21

Slope = 16.21 units per year.

Mann-Kendall statistic = 70 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

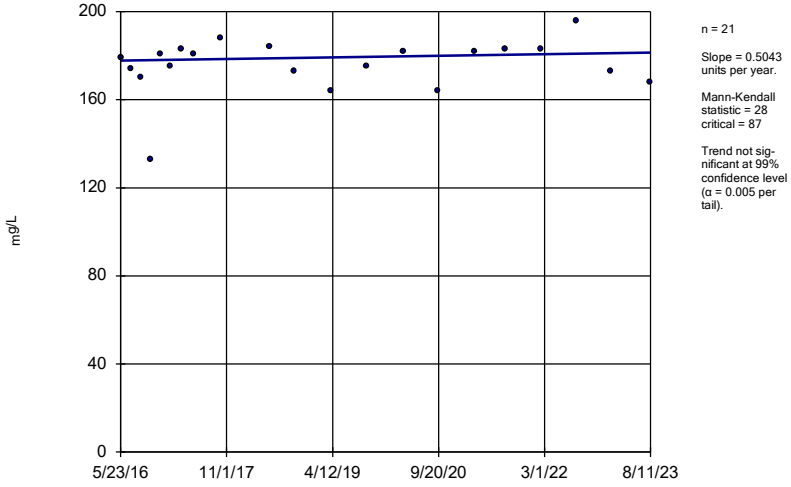
Constituent: Calcium Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWC-9



n = 21

Slope = 0.5043 units per year.

Mann-Kendall statistic = 28 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

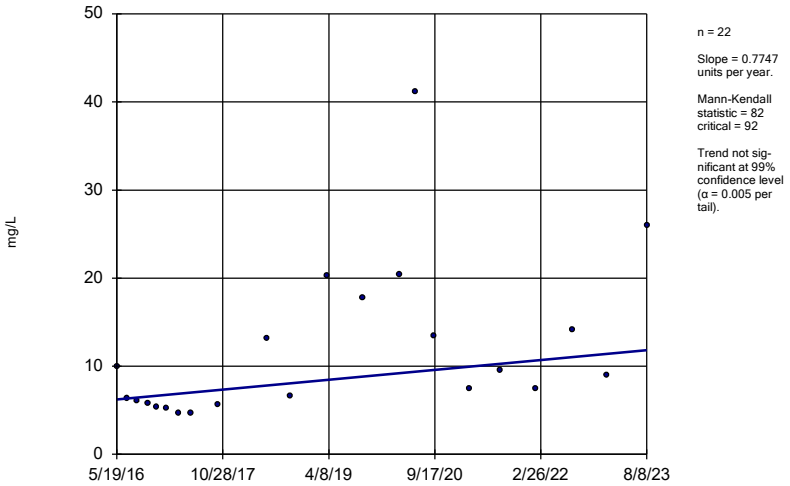
Constituent: Calcium Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWA-1 (bg)



n = 22

Slope = 0.7747 units per year.

Mann-Kendall statistic = 82 critical = 92

Trend not significant at 99% confidence level (α = 0.005 per tail).

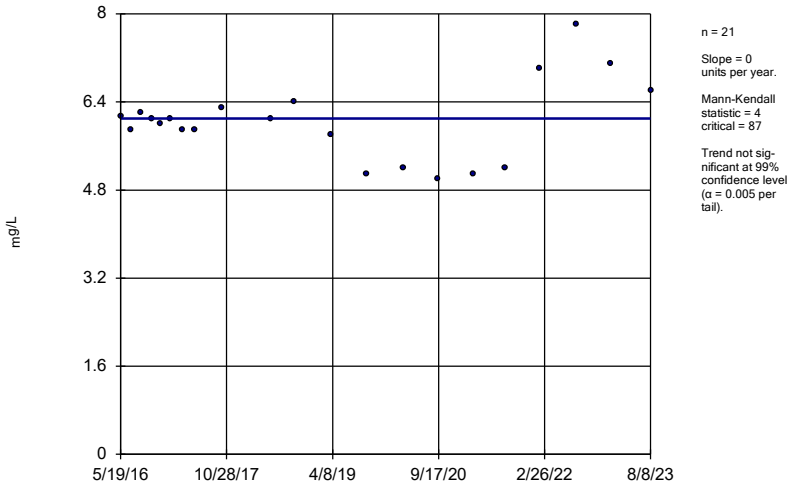
Constituent: Chloride Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWA-2 (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = 4 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

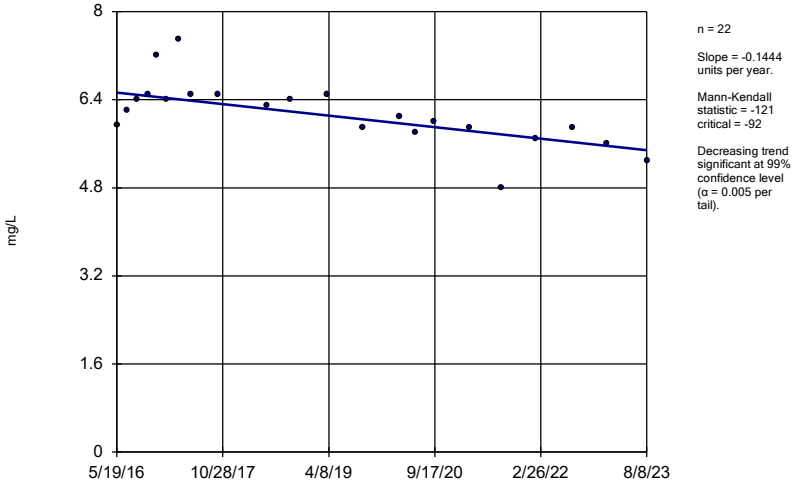
Constituent: Chloride Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWA-3 (bg)



n = 22

Slope = -0.1444 units per year.

Mann-Kendall statistic = -121 critical = -92

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

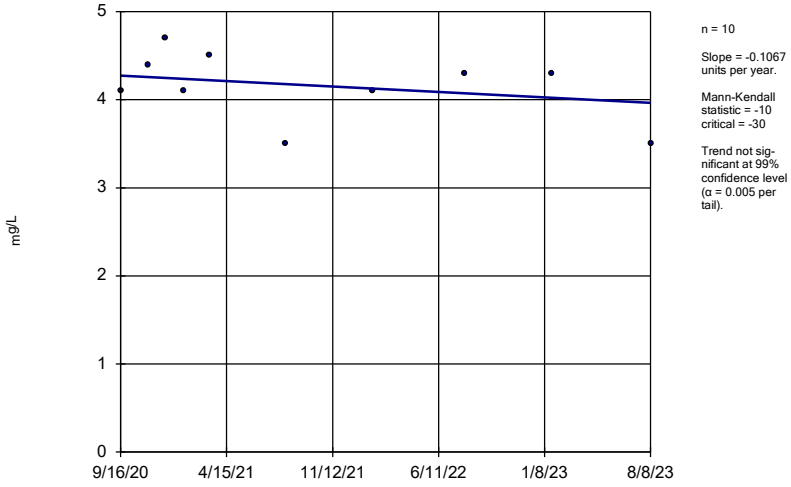
Constituent: Chloride Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWA-43D (bg)



n = 10

Slope = -0.1067 units per year.

Mann-Kendall statistic = -10 critical = -30

Trend not significant at 99% confidence level (α = 0.005 per tail).

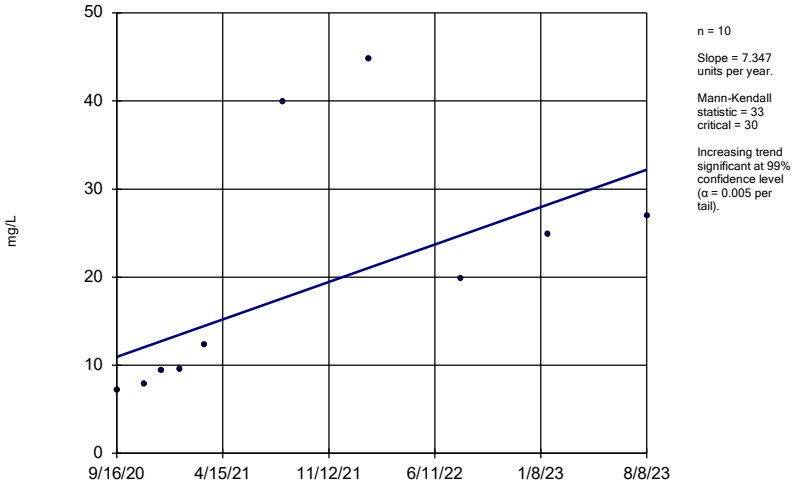
Constituent: Chloride Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWA-44D (bg)



n = 10

Slope = 7.347 units per year.

Mann-Kendall statistic = 33
critical = 30

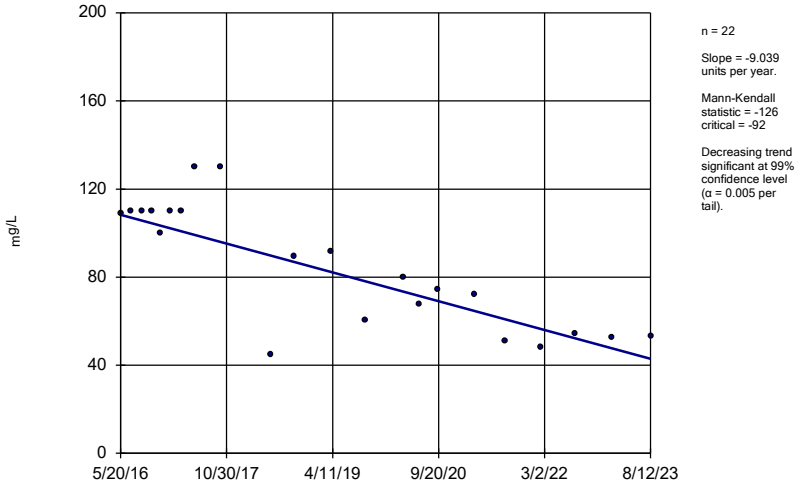
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWC-8



n = 22

Slope = -9.039 units per year.

Mann-Kendall statistic = -126
critical = -92

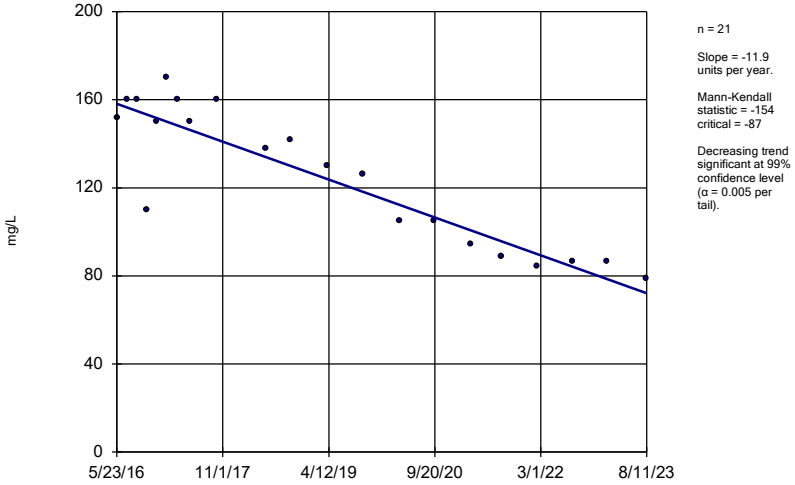
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWC-9



n = 21

Slope = -11.9 units per year.

Mann-Kendall statistic = -154
critical = -87

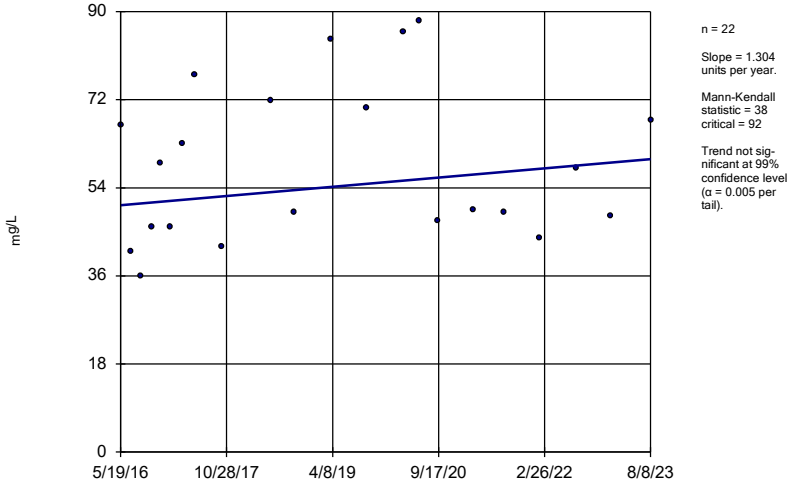
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWA-1 (bg)



n = 22

Slope = 1.304 units per year.

Mann-Kendall statistic = 38
critical = 92

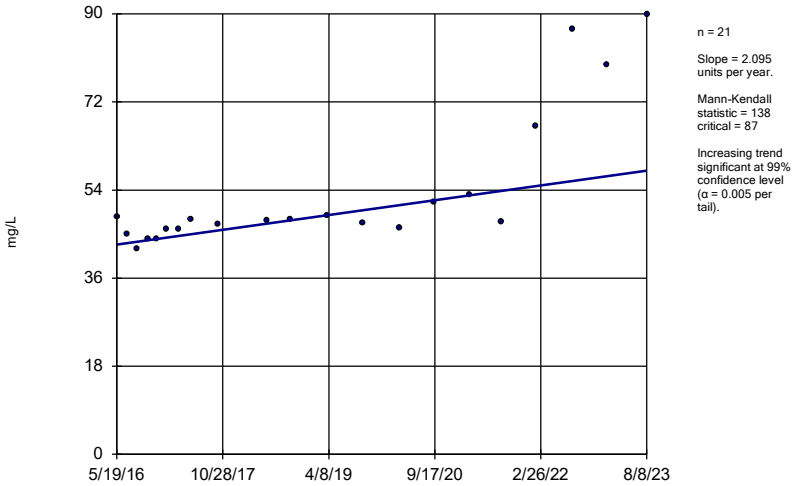
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

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 (α = 0.005 per tail).

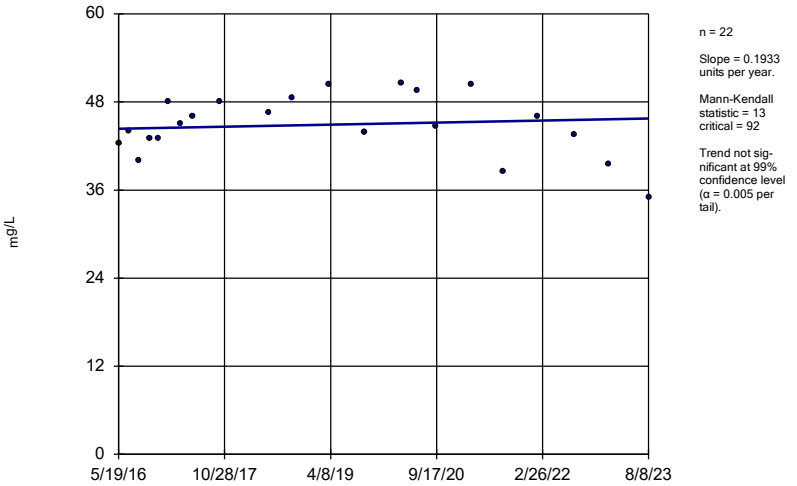
Constituent: Sulfate Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWA-3 (bg)



n = 22

Slope = 0.1933 units per year.

Mann-Kendall statistic = 13 critical = 92

Trend not significant at 99% confidence level (α = 0.005 per tail).

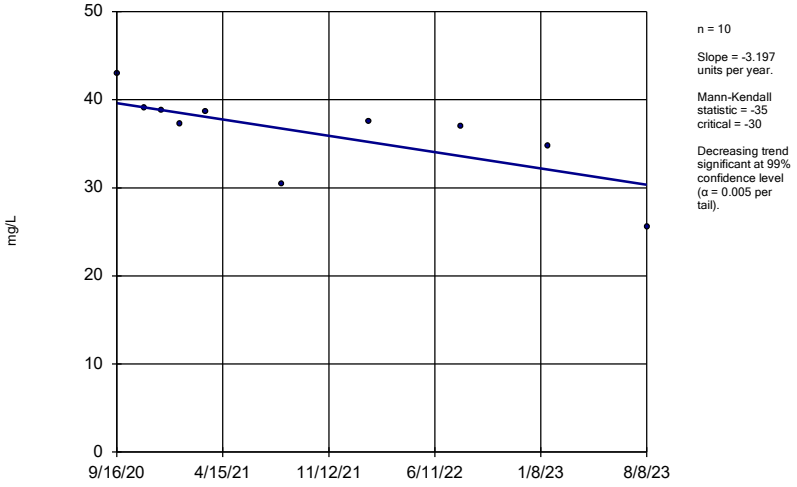
Constituent: Sulfate Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWA-43D (bg)



n = 10

Slope = -3.197 units per year.

Mann-Kendall statistic = -35 critical = -30

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test

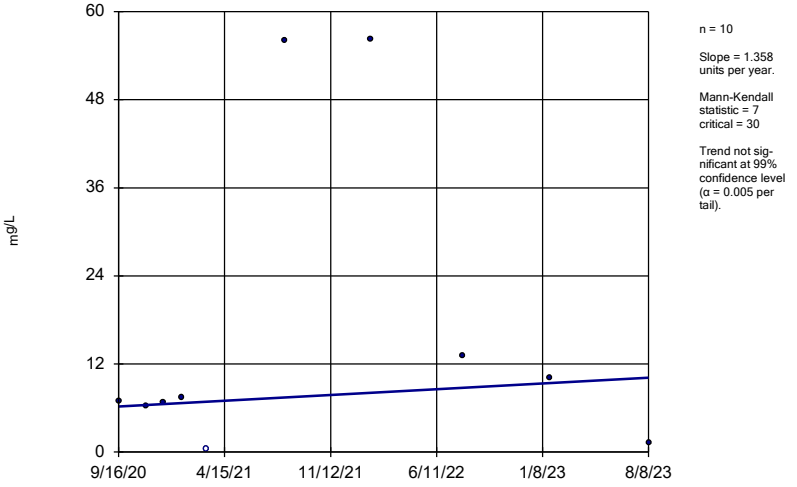
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWA-44D (bg)



n = 10

Slope = 1.358 units per year.

Mann-Kendall statistic = 7 critical = 30

Trend not significant at 99% confidence level (α = 0.005 per tail).

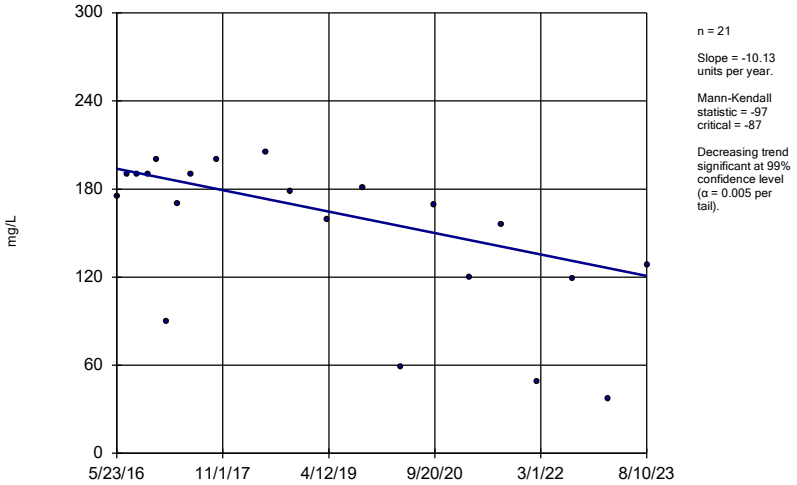
Constituent: Sulfate Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWC-10



n = 21

Slope = -10.13 units per year.

Mann-Kendall statistic = -97 critical = -87

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test

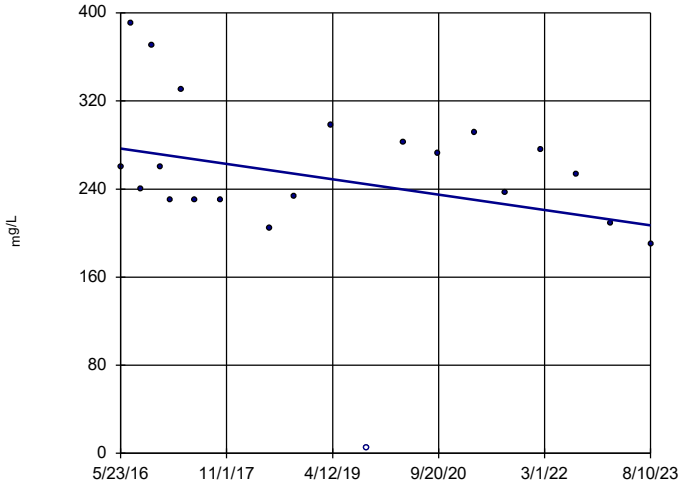
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWC-11



n = 21

Slope = -9.651 units per year.

Mann-Kendall statistic = -52 critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

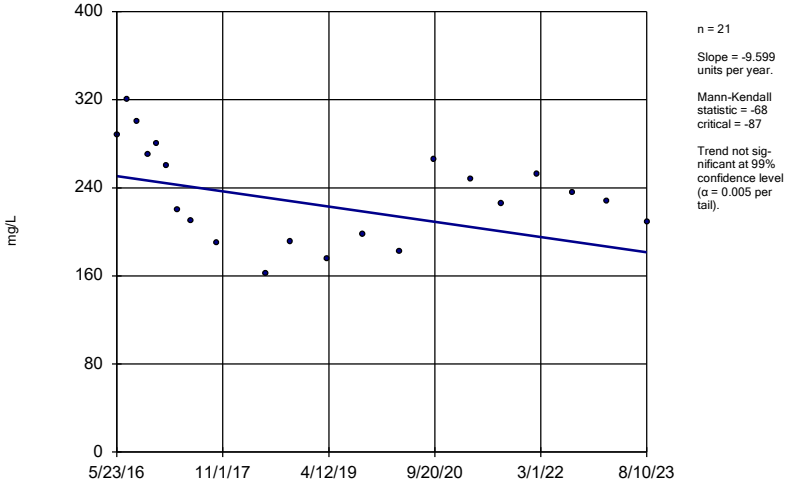
Constituent: Sulfate Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWC-12



n = 21

Slope = -9.599 units per year.

Mann-Kendall statistic = -68 critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

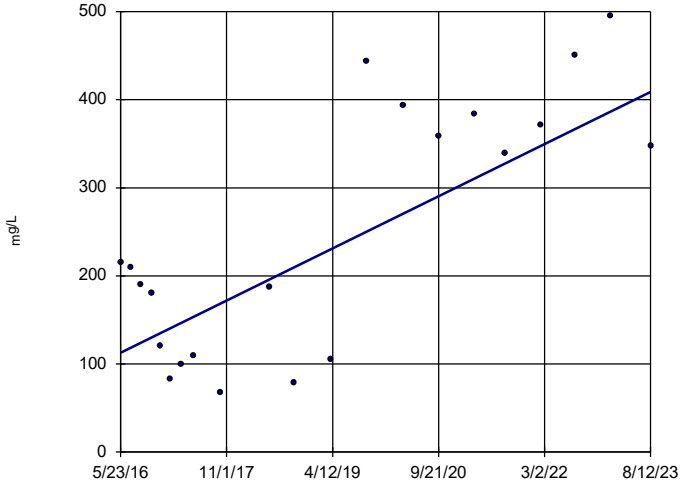
Constituent: Sulfate Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWC-13



n = 21

Slope = 40.99 units per year.

Mann-Kendall statistic = 68 critical = 87

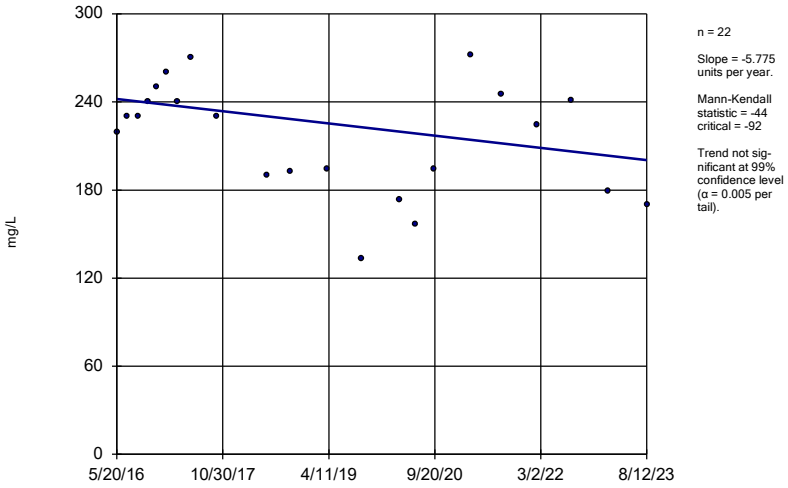
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sen's Slope Estimator

HGWC-8



n = 22

Slope = -5.775 units per year.

Mann-Kendall statistic = -44 critical = -92

Trend not significant at 99% confidence level (α = 0.005 per tail).

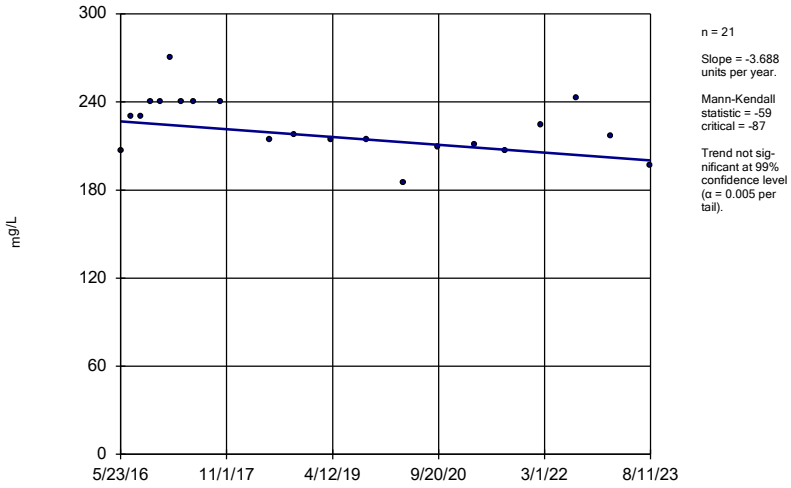
Constituent: Sulfate Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWC-9



n = 21

Slope = -3.688 units per year.

Mann-Kendall statistic = -59 critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

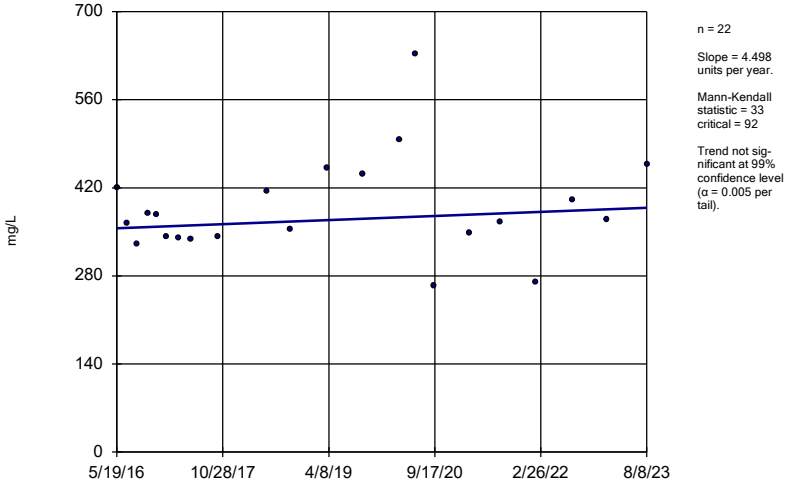
Constituent: Sulfate Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWA-1 (bg)



n = 22

Slope = 4.498 units per year.

Mann-Kendall statistic = 33 critical = 92

Trend not significant at 99% confidence level (α = 0.005 per tail).

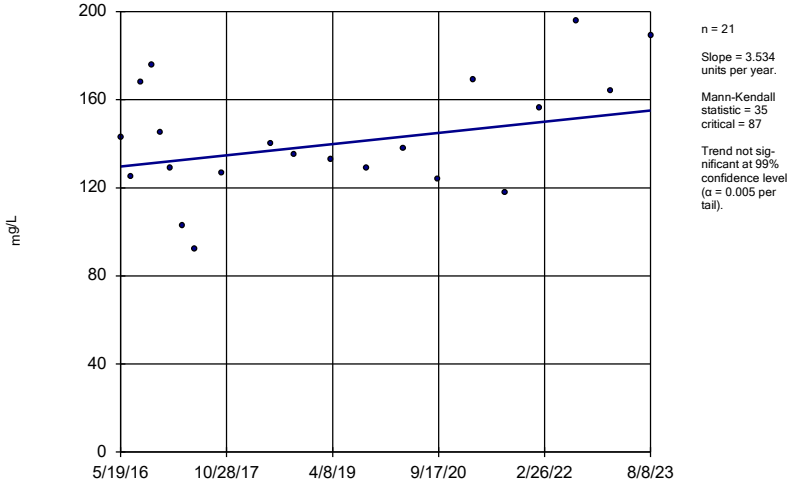
Constituent: Total Dissolved Solids Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWA-2 (bg)



n = 21

Slope = 3.534 units per year.

Mann-Kendall statistic = 35 critical = 87

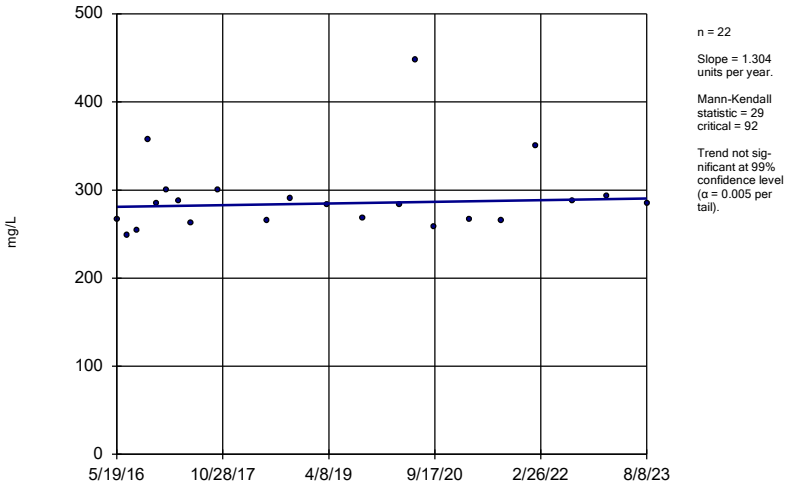
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sen's Slope Estimator

HGWA-3 (bg)



n = 22

Slope = 1.304 units per year.

Mann-Kendall statistic = 29 critical = 92

Trend not significant at 99% confidence level (α = 0.005 per tail).

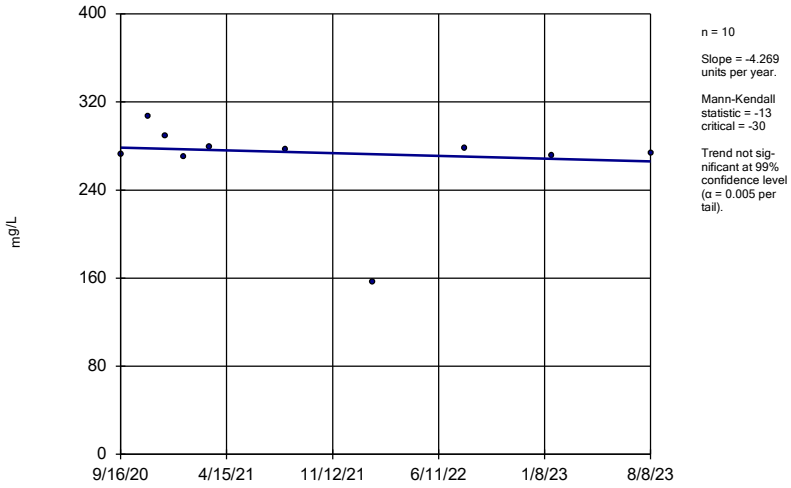
Constituent: Total Dissolved Solids Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWA-43D (bg)



n = 10

Slope = -4.269 units per year.

Mann-Kendall statistic = -13 critical = -30

Trend not significant at 99% confidence level (α = 0.005 per tail).

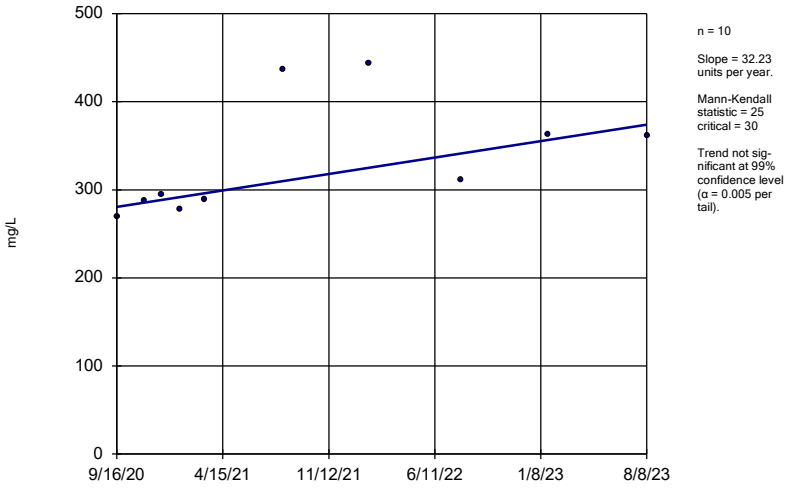
Constituent: Total Dissolved Solids Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWA-44D (bg)



n = 10

Slope = 32.23 units per year.

Mann-Kendall statistic = 25 critical = 30

Trend not significant at 99% confidence level (α = 0.005 per tail).

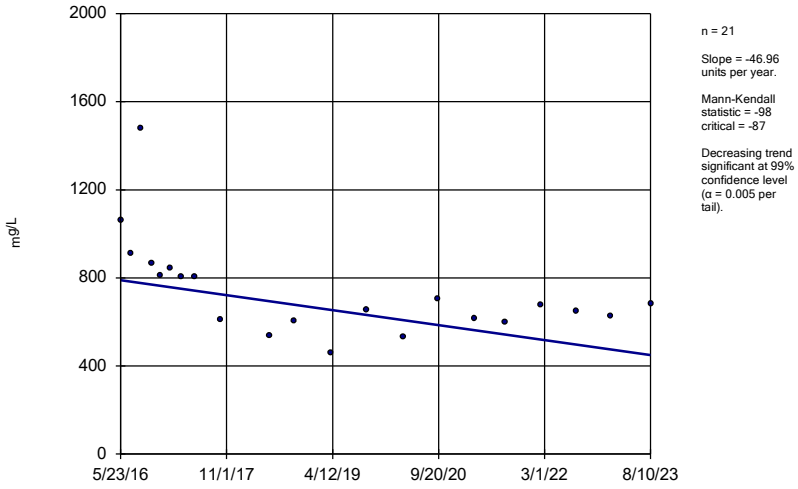
Constituent: Total Dissolved Solids Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWC-12



n = 21

Slope = -46.96 units per year.

Mann-Kendall statistic = -98 critical = -87

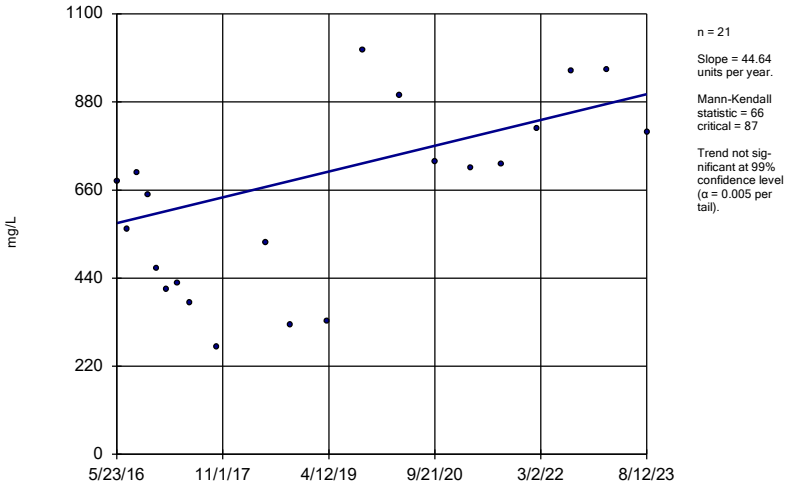
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sen's Slope Estimator

HGWC-13



n = 21

Slope = 44.64 units per year.

Mann-Kendall statistic = 66
critical = 87

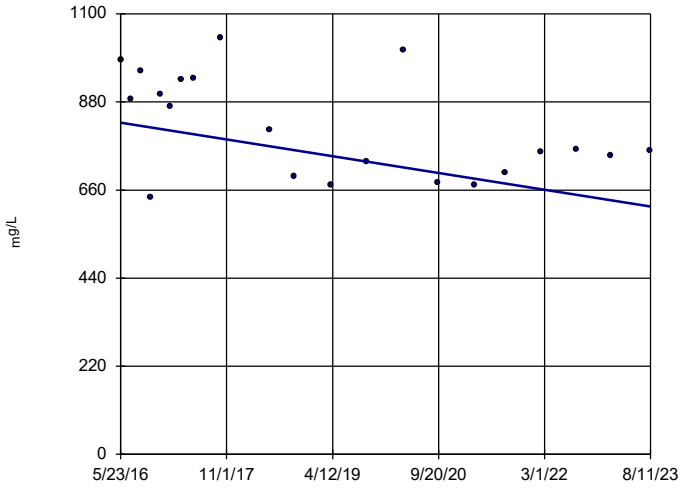
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWC-9



n = 21

Slope = -28.95 units per year.

Mann-Kendall statistic = -54
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 10/17/2023 1:01 PM View: Appendix III - Trend Test
Plant Hammond Client: Southern Company Data: Hammond AP-1

FIGURE F.

Upper Tolerance Limits Summary Table

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 10/25/2023, 2:30 PM

Constituent	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	0.003	n/a	n/a	n/a	n/a	88	81.82	n/a	0.01096	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	n/a	n/a	n/a	94	68.09	n/a	0.008054	NP Inter(NDs)
Barium (mg/L)	0.46	n/a	n/a	n/a	n/a	94	0	n/a	0.008054	NP Inter(normality)
Beryllium (mg/L)	0.0005	n/a	n/a	n/a	n/a	88	78.41	n/a	0.01096	NP Inter(NDs)
Cadmium (mg/L)	0.0005	n/a	n/a	n/a	n/a	88	85.23	n/a	0.01096	NP Inter(NDs)
Chromium (mg/L)	0.0079	n/a	n/a	n/a	n/a	88	84.09	n/a	0.01096	NP Inter(NDs)
Cobalt (mg/L)	0.038	n/a	n/a	n/a	n/a	88	71.59	n/a	0.01096	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	4.36	n/a	n/a	n/a	n/a	94	0	n/a	0.008054	NP Inter(normality)
Fluoride (mg/L)	1.3	n/a	n/a	n/a	n/a	99	27.27	n/a	0.006232	NP Inter(normality)
Lead (mg/L)	0.001	n/a	n/a	n/a	n/a	85	70.59	n/a	0.01278	NP Inter(NDs)
Lithium (mg/L)	0.064	n/a	n/a	n/a	n/a	93	19.35	n/a	0.008478	NP Inter(normality)
Mercury (mg/L)	0.0002	n/a	n/a	n/a	n/a	66	96.97	n/a	0.03387	NP Inter(NDs)
Molybdenum (mg/L)	0.01	n/a	n/a	n/a	n/a	96	77.08	n/a	0.007269	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	n/a	n/a	n/a	94	96.81	n/a	0.008054	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	n/a	n/a	94	98.94	n/a	0.008054	NP Inter(NDs)

FIGURE G.

PLANT HAMMOND AP-1 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		0.0079	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.038	0.038
Combined Radium, Total (pCi/L)	5		4.36	5
Fluoride, Total (mg/L)	4		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 indidcates background is higher than MCL or CCR-Rule*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residuals*

**GWPS = Groundwater Protection Statard*

FIGURE H.

Confidence Intervals Summary Table - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 10/25/2023, 2:35 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**HGWC-13**	**0.4387**	**0.3671**	**0.01**	**Yes**	**24**	**0.07021**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**HGWC-8**	**0.4809**	**0.4128**	**0.1**	**Yes**	**25**	**0.0683**	**0**	**None**	**No**	**0.01**	**Param.**

Confidence Intervals Summary Table - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 10/25/2023, 2:35 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	HGWC-10	0.003	0.0018	0.006	No	22	0.0005516	90.91	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-11	0.003	0.00038	0.006	No	22	0.0005586	95.45	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-13	0.003	0.00049	0.006	No	22	0.001246	68.18	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-7	0.003	0.0017	0.006	No	23	0.0006062	91.3	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-8	0.003	0.00064	0.006	No	22	0.0005032	95.45	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-9	0.003	0.00092	0.006	No	22	0.0009833	81.82	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-24D	0.003	0.0017	0.006	No	13	0.0003606	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-26D	0.003	0.002	0.006	No	13	0.0005267	84.62	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-27D	0.003	0.0003	0.006	No	13	0.0014	53.85	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-28D	0.003	0.0019	0.006	No	13	0.0003051	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-29	0.003	0.00094	0.006	No	13	0.0005713	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-6	0.003	0.0014	0.006	No	13	0.0004438	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-7	0.003	0.00086	0.006	No	13	0.0009336	69.23	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-11	0.005	0.0018	0.01	No	24	0.001712	50	None	No	0.01	NP (normality)
Arsenic (mg/L)	HGWC-12	0.00412	0.002863	0.01	No	24	0.001231	12.5	None	No	0.01	Param.
Arsenic (mg/L)	**HGWC-13**	**0.4387**	**0.3671**	**0.01**	**Yes**	**24**	**0.07021**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	HGWC-7	0.005	0.0019	0.01	No	25	0.00062	96	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-8	0.005	0.002	0.01	No	24	0.0006124	95.83	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-9	0.005	0.0021	0.01	No	24	0.001545	83.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-19	0.005	0.00045	0.01	No	13	0.001262	92.31	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-20	0.005	0.00094	0.01	No	13	0.001712	76.92	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-25D	0.005	0.001	0.01	No	13	0.001848	69.23	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-26D	0.005	0.0008	0.01	No	13	0.001756	76.92	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-27D	0.005	0.00069	0.01	No	13	0.001923	76.92	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-28D	0.005	0.0011	0.01	No	13	0.001082	92.31	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-29	0.005	0.00037	0.01	No	13	0.001284	92.31	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-5	0.005	0.0013	0.01	No	13	0.001026	92.31	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-6	0.005	0.0034	0.01	No	13	0.0004438	92.31	None	No	0.01	NP (NDs)
Barium (mg/L)	HGWC-10	0.08272	0.06105	2	No	24	0.02124	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-11	0.04951	0.03242	2	No	24	0.01881	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	HGWC-12	0.123	0.083	2	No	24	0.02115	0	None	No	0.01	NP (normality)
Barium (mg/L)	HGWC-13	0.08714	0.06691	2	No	24	0.01983	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-7	0.07342	0.06746	2	No	25	0.005986	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-8	0.07264	0.06129	2	No	24	0.01126	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	HGWC-9	0.1176	0.09867	2	No	24	0.01858	0	None	No	0.01	Param.
Barium (mg/L)	MW-19	0.0607	0.04361	2	No	13	0.0115	0	None	No	0.01	Param.
Barium (mg/L)	MW-20	0.09542	0.08658	2	No	13	0.005944	0	None	No	0.01	Param.
Barium (mg/L)	MW-24D	0.081	0.048	2	No	13	0.0202	0	None	No	0.01	NP (normality)
Barium (mg/L)	MW-25D	0.6136	0.4295	2	No	13	0.1238	0	None	No	0.01	Param.
Barium (mg/L)	MW-26D	0.1178	0.07123	2	No	13	0.03134	0	None	No	0.01	Param.
Barium (mg/L)	MW-27D	1.2	0.94	2	No	13	0.1555	0	None	No	0.01	NP (normality)
Barium (mg/L)	MW-28D	0.9551	0.3145	2	No	13	0.5193	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	MW-29	0.08303	0.07389	2	No	13	0.006146	0	None	No	0.01	Param.
Barium (mg/L)	MW-5	0.05173	0.04488	2	No	13	0.004608	0	None	No	0.01	Param.
Barium (mg/L)	MW-6	0.08986	0.07753	2	No	13	0.00829	0	None	No	0.01	Param.
Barium (mg/L)	MW-7	0.06144	0.04979	2	No	13	0.007837	0	None	No	0.01	Param.
Beryllium (mg/L)	HGWC-11	0.0005	0.00012	0.004	No	22	0.000194	63.64	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-13	0.0005	0.000097	0.004	No	22	0.0002075	54.55	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-7	0.0005	0.00019	0.004	No	23	0.0001336	86.96	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-8	0.0005	0.000078	0.004	No	22	0.0002099	63.64	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-19	0.0005	0.000058	0.004	No	13	0.0001226	92.31	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-28D	0.0005	0.000054	0.004	No	13	0.0001851	76.92	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-7	0.0005	0.000051	0.004	No	13	0.0001245	92.31	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-10	0.0005	0.000115	0.005	No	22	0.0001839	68.18	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-11	0.0005	0.0001	0.005	No	22	0.000141	86.36	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-12	0.0005	0.0003	0.005	No	22	0.0001288	81.82	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-7	0.0005	0.0002	0.005	No	23	0.0001371	78.26	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-8	0.0003	0.00017	0.005	No	22	0.0003292	4.545	None	No	0.01	NP (normality)
Cadmium (mg/L)	HGWC-9	0.0005	0.0002	0.005	No	22	0.000134	86.36	None	No	0.01	NP (NDs)
Cadmium (mg/L)	MW-19	0.0003198	0.0001473	0.005	No	13	0.0002661	23.08	Kaplan-Meier	ln(x)	0.01	Param.
Chromium (mg/L)	HGWC-10	0.02	0.0012	0.1	No	22	0.003466	86.36	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-11	0.005	0.0012	0.1	No	22	0.001516	86.36	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-12	0.005	0.0025	0.1	No	22	0.001353	86.36	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-13	0.005	0.00059	0.1	No	22	0.001575	86.36	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-7	0.005	0.0021	0.1	No	23	0.01408	69.57	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-8	0.005	0.0015	0.1	No	22	0.001635	81.82	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-9	0.005	0.0013	0.1	No	22	0.001625	81.82	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-19	0.005	0.00059	0.1	No	13	0.002083	53.85	None	No	0.01	NP (NDs)

Confidence Intervals Summary Table - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 10/25/2023, 2:35 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chromium (mg/L)	MW-20	0.005	0.00068	0.1	No	13	0.001915	76.92	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-24D	0.005	0.0017	0.1	No	13	0.001502	84.62	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-25D	0.005	0.0012	0.1	No	13	0.001543	84.62	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-26D	0.005	0.001	0.1	No	13	0.001878	61.54	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-27D	0.005	0.00082	0.1	No	13	0.001592	84.62	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-28D	0.005	0.00081	0.1	No	13	0.001991	53.85	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-29	0.005	0.001	0.1	No	13	0.001109	92.31	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-5	0.003816	0.002199	0.1	No	13	0.001087	0	None	No	0.01	Param.
Chromium (mg/L)	MW-6	0.005	0.00059	0.1	No	13	0.001849	76.92	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-7	0.0023	0.0015	0.1	No	13	0.001259	15.38	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-10	0.005	0.0012	0.038	No	22	0.001933	72.73	None	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-11	0.005	0.0014	0.038	No	22	0.001801	45.45	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-12	0.0017	0.0012	0.038	No	22	0.001094	9.091	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-13	0.0042	0.0026	0.038	No	22	0.003718	4.545	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-7	0.001586	0.0007039	0.038	No	23	0.001483	13.04	None	ln(x)	0.01	Param.
Cobalt (mg/L)	HGWC-8	0.0023	0.0019	0.038	No	22	0.003091	9.091	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-9	0.0007	0.00053	0.038	No	22	0.00131	9.091	None	No	0.01	NP (normality)
Cobalt (mg/L)	MW-19	0.04072	0.02913	0.038	No	13	0.007794	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-20	0.005	0.0011	0.038	No	13	0.001082	92.31	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-24D	0.005	0.00056	0.038	No	13	0.001921	76.92	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-26D	0.005	0.00044	0.038	No	13	0.002295	38.46	None	No	0.01	NP (normality)
Cobalt (mg/L)	MW-27D	0.005	0.0004	0.038	No	13	0.002057	76.92	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-28D	0.005	0.00093	0.038	No	13	0.001129	92.31	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-29	0.001421	0.0007121	0.038	No	13	0.0005295	7.692	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	MW-6	0.00094	0.00041	0.038	No	13	0.001694	15.38	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	HGWC-10	1.056	0.6144	5	No	24	0.4326	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-11	1.106	0.6289	5	No	24	0.4677	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-12	1.009	0.5651	5	No	24	0.4347	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-13	0.9631	0.5954	5	No	24	0.3603	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-7	0.8357	0.428	5	No	25	0.4663	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-8	0.9454	0.6612	5	No	24	0.2785	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-9	0.8903	0.543	5	No	24	0.3403	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-19	0.9195	0.413	5	No	13	0.3406	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-20	0.9599	0.396	5	No	13	0.3792	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-24D	0.5693	0.1574	5	No	13	0.3358	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-25D	1.252	0.8297	5	No	13	0.2841	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-26D	0.8929	0.1581	5	No	13	0.4941	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-27D	1.479	0.7939	5	No	13	0.51	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-28D	1.616	0.6323	5	No	13	0.6615	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-29	0.8957	0.3631	5	No	13	0.3582	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-5	0.9444	0.5523	5	No	13	0.2637	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-6	0.872	0.493	5	No	13	0.4313	0	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	MW-7	1.127	0.4685	5	No	13	0.4429	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-10	0.1782	0.07724	4	No	25	0.1313	16	Kaplan-Meier	x^(1/3)	0.01	Param.
Fluoride (mg/L)	HGWC-11	0.3899	0.2407	4	No	25	0.1605	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	HGWC-12	0.31	0.17	4	No	25	0.2299	4	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-13	0.6761	0.4894	4	No	25	0.1872	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-7	0.15	0.083	4	No	27	0.1041	7.407	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-8	0.6099	0.4748	4	No	26	0.1673	0	None	ln(x)	0.01	Param.
Fluoride (mg/L)	HGWC-9	0.233	0.103	4	No	25	0.1473	8	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	MW-19	0.2368	0.108	4	No	13	0.1242	0	None	ln(x)	0.01	Param.
Fluoride (mg/L)	MW-20	0.1	0.074	4	No	13	0.01084	76.92	None	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-24D	0.09377	0.05216	4	No	13	0.03452	30.77	Kaplan-Meier	sqrt(x)	0.01	Param.
Fluoride (mg/L)	MW-25D	1.7	1.5	4	No	13	0.1951	0	None	No	0.01	NP (normality)
Fluoride (mg/L)	MW-26D	0.1221	0.05944	4	No	13	0.04213	7.692	None	No	0.01	Param.
Fluoride (mg/L)	MW-27D	0.3	0.24	4	No	13	0.05003	0	None	No	0.01	NP (normality)
Fluoride (mg/L)	MW-28D	0.2443	0.1696	4	No	13	0.05023	0	None	No	0.01	Param.
Fluoride (mg/L)	MW-29	0.18	0.068	4	No	13	0.03156	61.54	None	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-5	0.08458	0.05951	4	No	13	0.01921	15.38	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	MW-6	0.15	0.055	4	No	13	0.0496	15.38	None	No	0.01	NP (normality)
Fluoride (mg/L)	MW-7	0.17	0.069	4	No	13	0.02567	69.23	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-10	0.001	0.00005	0.015	No	20	0.0002124	95	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-11	0.001	0.0003	0.015	No	20	0.0003911	70	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-12	0.001	0.00043	0.015	No	20	0.0003856	75	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-13	0.001	0.00015	0.015	No	20	0.0004088	70	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-7	0.001	0.0001	0.015	No	21	0.0004263	57.14	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-8	0.001	0.0002	0.015	No	20	0.000357	80	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-9	0.001	0.0002	0.015	No	20	0.0004221	60	None	No	0.01	NP (NDs)

Confidence Intervals Summary Table - All Results

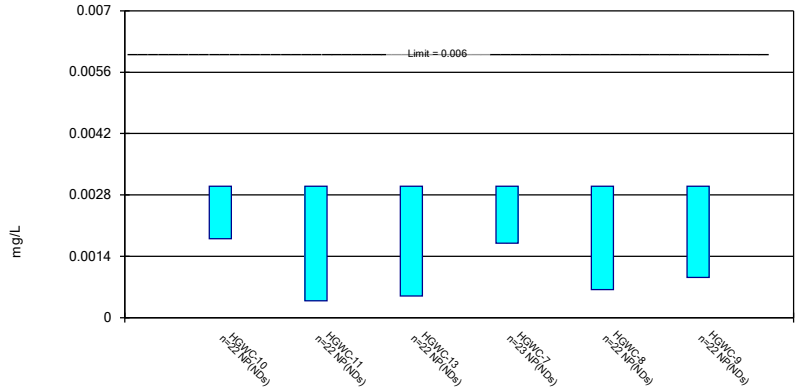
Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 10/25/2023, 2:35 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lead (mg/L)	MW-19	0.001	0.000071	0.015	No	11	0.0004665	63.64	None	No	0.006	NP (NDs)
Lead (mg/L)	MW-20	0.001	0.0001	0.015	No	11	0.0004502	63.64	None	No	0.006	NP (NDs)
Lead (mg/L)	MW-24D	0.001	0.000042	0.015	No	11	0.0004763	54.55	None	No	0.006	NP (NDs)
Lead (mg/L)	MW-26D	0.001	0.0001	0.015	No	11	0.0003681	81.82	None	No	0.006	NP (NDs)
Lead (mg/L)	MW-27D	0.001	0.00043	0.015	No	11	0.0002989	81.82	None	No	0.006	NP (NDs)
Lead (mg/L)	MW-28D	0.001	0.00018	0.015	No	11	0.0003867	54.55	None	No	0.006	NP (NDs)
Lead (mg/L)	MW-29	0.001	0.00009	0.015	No	11	0.0004281	72.73	None	No	0.006	NP (NDs)
Lead (mg/L)	MW-5	0.001	0.001	0.015	No	11	0.0002873	90.91	None	No	0.006	NP (NDs)
Lead (mg/L)	MW-6	0.001	0.000084	0.015	No	11	0.0004433	63.64	None	No	0.006	NP (NDs)
Lead (mg/L)	MW-7	0.001	0.001	0.015	No	11	0.0002828	90.91	None	No	0.006	NP (NDs)
Lithium (mg/L)	HGWC-12	0.01036	0.007988	0.064	No	24	0.002326	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-13	0.03837	0.03131	0.064	No	24	0.006919	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-7	0.0026	0.0021	0.064	No	25	0.004541	4	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-8	0.0029	0.0025	0.064	No	24	0.004593	4.167	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-9	0.0044	0.004	0.064	No	24	0.004295	4.167	None	No	0.01	NP (normality)
Lithium (mg/L)	MW-19	0.01289	0.008115	0.064	No	13	0.003208	0	None	No	0.01	Param.
Lithium (mg/L)	MW-20	0.03	0.00082	0.064	No	13	0.01389	30.77	None	No	0.01	NP (normality)
Lithium (mg/L)	MW-24D	0.002867	0.002564	0.064	No	13	0.0002035	0	None	No	0.01	Param.
Lithium (mg/L)	MW-25D	0.04964	0.04206	0.064	No	13	0.005097	0	None	No	0.01	Param.
Lithium (mg/L)	MW-26D	0.0041	0.0031	0.064	No	13	0.007354	0	None	No	0.01	NP (normality)
Lithium (mg/L)	MW-27D	0.008425	0.006344	0.064	No	13	0.001399	0	None	No	0.01	Param.
Lithium (mg/L)	MW-28D	0.01331	0.007708	0.064	No	13	0.003765	0	None	No	0.01	Param.
Lithium (mg/L)	MW-29	0.002328	0.00201	0.064	No	13	0.0002136	0	None	No	0.01	Param.
Mercury (mg/L)	HGWC-10	0.0002	0.00005	0.002	No	16	0.0000375	93.75	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-11	0.0002	0.00005	0.002	No	16	0.0000375	93.75	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-13	0.0002	0.00005	0.002	No	16	0.00005297	87.5	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-9	0.0002	0.00004	0.002	No	16	0.00004	93.75	None	No	0.01	NP (NDs)
Mercury (mg/L)	MW-25D	0.0002	0.00013	0.002	No	7	0.00002646	85.71	None	No	0.008	NP (NDs)
Mercury (mg/L)	MW-29	0.0002	0.00017	0.002	No	7	0.00001134	85.71	None	No	0.008	NP (NDs)
Molybdenum (mg/L)	HGWC-10	0.01	0.0014	0.1	No	24	0.004388	58.33	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	HGWC-11	0.02588	0.01687	0.1	No	24	0.008837	0	None	No	0.01	Param.
Molybdenum (mg/L)	HGWC-12	0.04919	0.04574	0.1	No	24	0.003379	0	None	No	0.01	Param.
Molybdenum (mg/L)	HGWC-13	0.03496	0.0289	0.1	No	24	0.005941	0	None	No	0.01	Param.
Molybdenum (mg/L)	HGWC-7	0.04238	0.03571	0.1	No	26	0.006839	0	None	No	0.01	Param.
Molybdenum (mg/L)	**HGWC-8**	**0.4809**	**0.4128**	**0.1**	**Yes**	**25**	**0.0683**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	HGWC-9	0.033	0.0236	0.1	No	24	0.09178	0	None	No	0.01	NP (normality)
Molybdenum (mg/L)	MW-19	0.05113	0.02656	0.1	No	13	0.01652	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-24D	0.01	0.0008	0.1	No	13	0.004341	30.77	None	No	0.01	NP (normality)
Molybdenum (mg/L)	MW-25D	0.01	0.0022	0.1	No	13	0.003176	84.62	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-26D	0.02349	0.01194	0.1	No	14	0.008152	7.143	None	No	0.01	Param.
Molybdenum (mg/L)	MW-27D	0.003468	0.001448	0.1	No	13	0.001521	7.692	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	MW-28D	0.01874	0.006572	0.1	No	13	0.008179	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-29	0.00326	0.002525	0.1	No	13	0.0004941	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-6	0.00269	0.00231	0.1	No	13	0.000255	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-7	0.01	0.0014	0.1	No	13	0.004122	38.46	None	No	0.01	NP (normality)
Selenium (mg/L)	HGWC-10	0.005	0.0031	0.05	No	24	0.001249	66.67	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-11	0.01372	0.006577	0.05	No	24	0.007001	0	None	No	0.01	Param.
Selenium (mg/L)	HGWC-12	0.005	0.0011	0.05	No	24	0.0007961	95.83	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-13	0.005	0.0016	0.05	No	24	0.001179	91.67	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-8	0.005	0.0024	0.05	No	24	0.0005307	95.83	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-9	0.005	0.0037	0.05	No	24	0.0002654	95.83	None	No	0.01	NP (NDs)
Selenium (mg/L)	MW-19	0.004794	0.002441	0.05	No	13	0.001637	15.38	Kaplan-Meier	No	0.01	Param.
Selenium (mg/L)	MW-27D	0.005	0.00012	0.05	No	13	0.001353	92.31	Kaplan-Meier	No	0.01	NP (NDs)
Selenium (mg/L)	MW-5	0.003635	0.002381	0.05	No	13	0.0008431	0	None	No	0.01	Param.
Selenium (mg/L)	MW-7	0.005	0.0015	0.05	No	13	0.001707	53.85	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-11	0.001	0.00008	0.002	No	24	0.0002597	91.67	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-12	0.001	0.0002	0.002	No	24	0.000397	75	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-13	0.0004223	0.0003342	0.002	No	24	0.00008631	8.333	None	No	0.01	Param.
Thallium (mg/L)	HGWC-8	0.001	0.00011	0.002	No	24	0.0004205	70.83	None	No	0.01	NP (NDs)
Thallium (mg/L)	MW-19	0.001	0.00023	0.002	No	13	0.0003787	38.46	None	No	0.01	NP (normality)
Thallium (mg/L)	MW-28D	0.001	0.000092	0.002	No	13	0.0002518	92.31	None	No	0.01	NP (NDs)
Thallium (mg/L)	MW-29	0.001	0.000064	0.002	No	13	0.0002596	92.31	None	No	0.01	NP (NDs)
Thallium (mg/L)	MW-6	0.001	0.000082	0.002	No	13	0.0002546	92.31	None	No	0.01	NP (NDs)

Sanitas™ v.10.0.13 . UG

Non-Parametric Confidence Interval

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

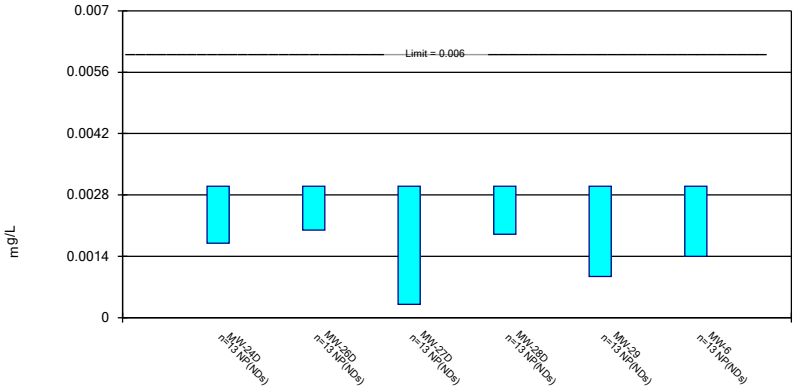


Constituent: Antimony Analysis Run 10/25/2023 2:33 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Non-Parametric Confidence Interval

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

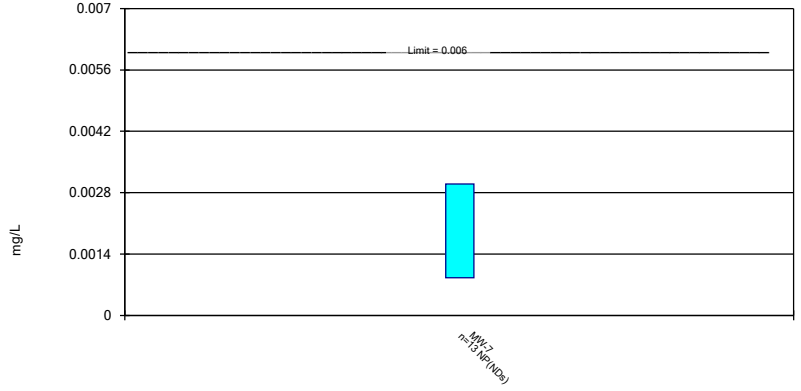


Constituent: Antimony Analysis Run 10/25/2023 2:33 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Non-Parametric Confidence Interval

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

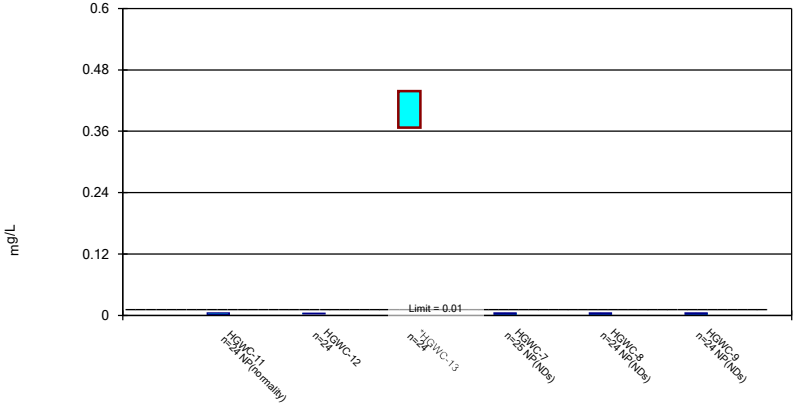


Constituent: Antimony Analysis Run 10/25/2023 2:33 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

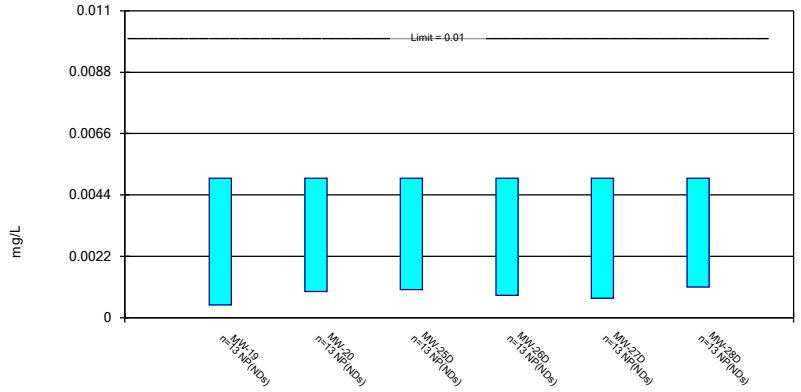


Constituent: Arsenic Analysis Run 10/25/2023 2:33 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Non-Parametric Confidence Interval

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

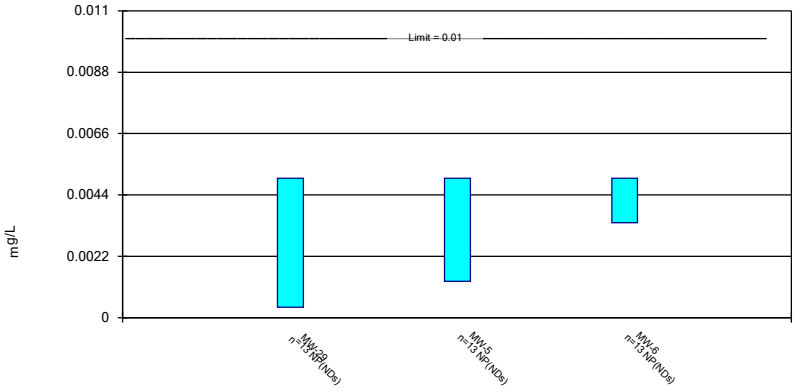


Constituent: Arsenic Analysis Run 10/25/2023 2:33 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Non-Parametric Confidence Interval

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

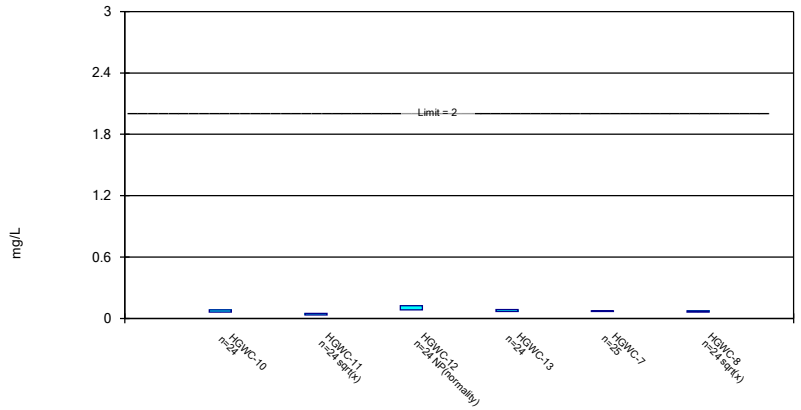


Constituent: Arsenic Analysis Run 10/25/2023 2:33 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

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

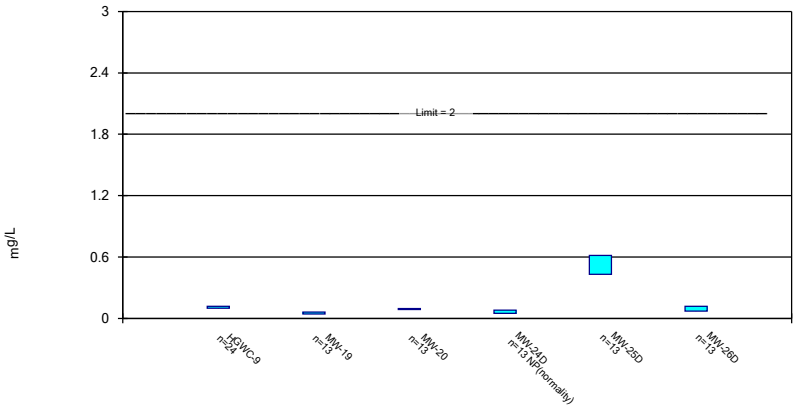


Constituent: Barium Analysis Run 10/25/2023 2:33 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

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

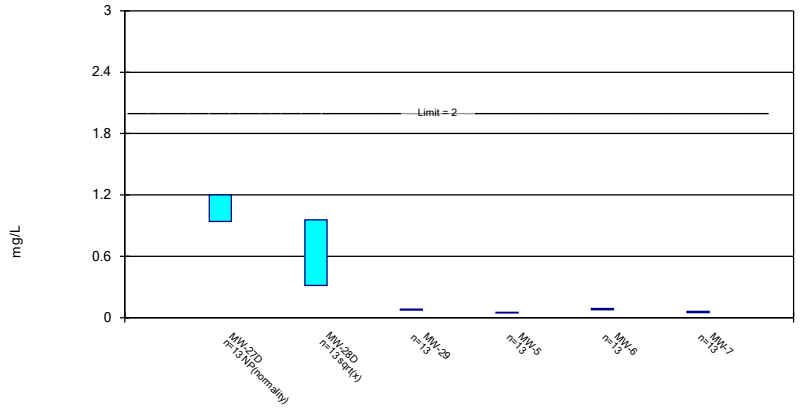


Constituent: Barium Analysis Run 10/25/2023 2:33 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

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

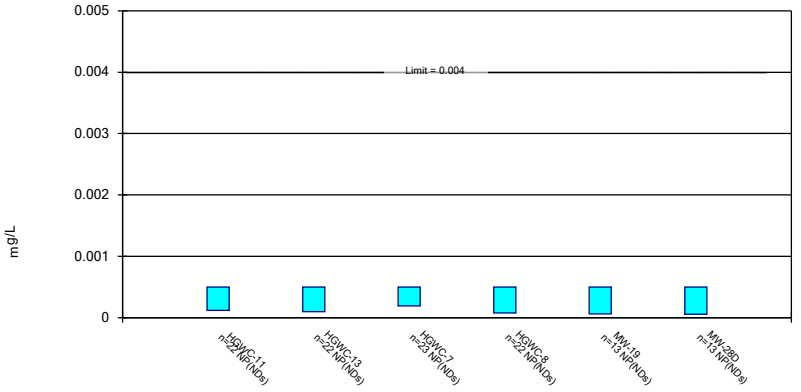


Constituent: Barium Analysis Run 10/25/2023 2:33 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Non-Parametric Confidence Interval

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

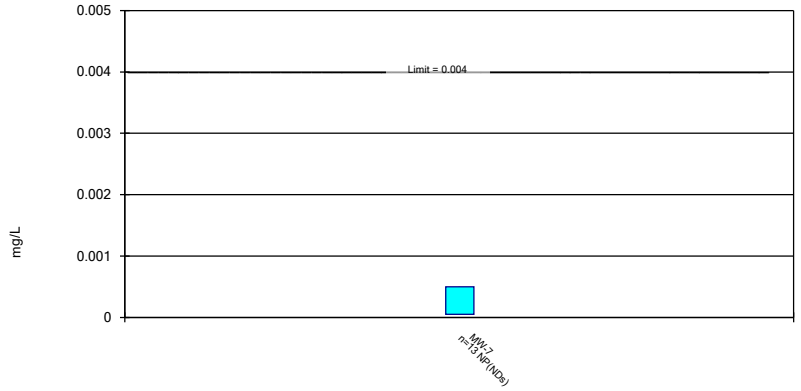


Constituent: Beryllium Analysis Run 10/25/2023 2:33 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Non-Parametric Confidence Interval

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

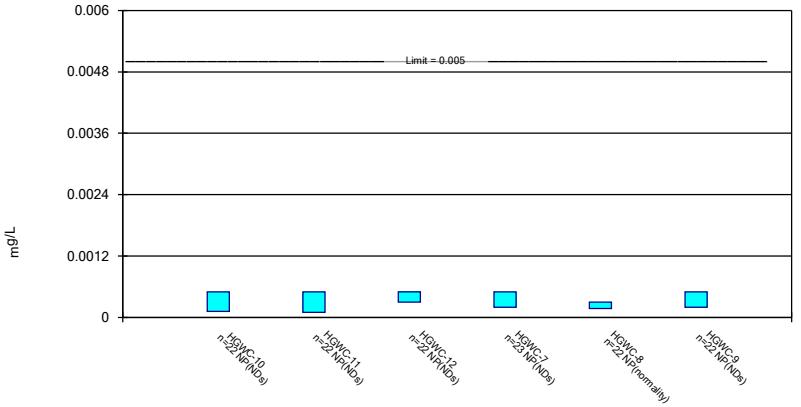


Constituent: Beryllium Analysis Run 10/25/2023 2:33 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Non-Parametric Confidence Interval

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

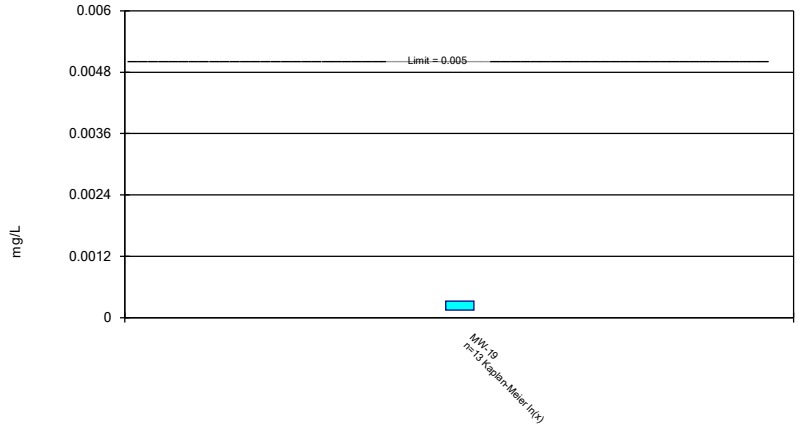


Constituent: Cadmium Analysis Run 10/25/2023 2:33 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Parametric Confidence Interval

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

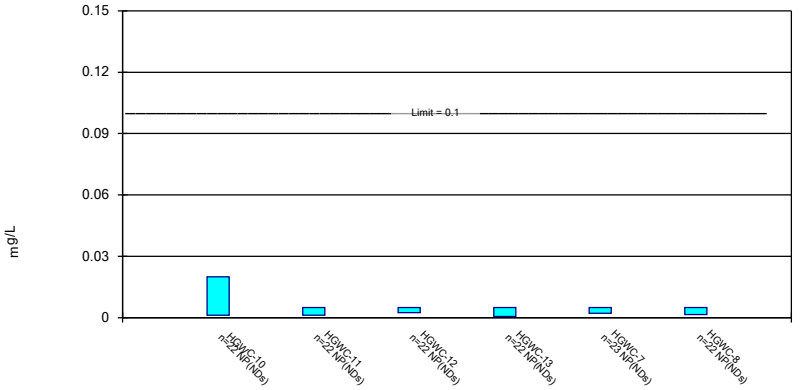


Constituent: Cadmium Analysis Run 10/25/2023 2:33 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Non-Parametric Confidence Interval

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

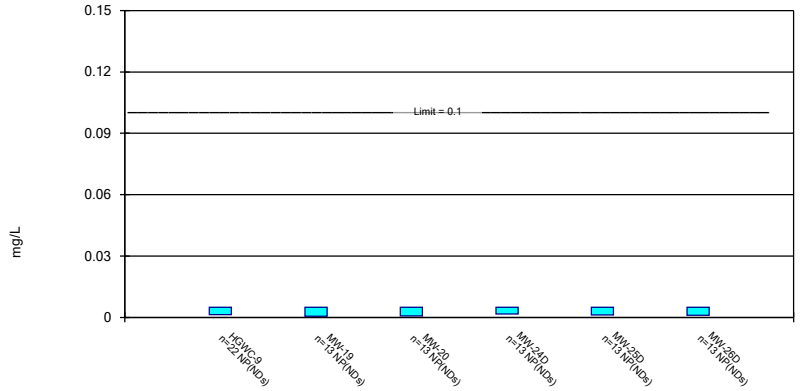


Constituent: Chromium Analysis Run 10/25/2023 2:33 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Non-Parametric Confidence Interval

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

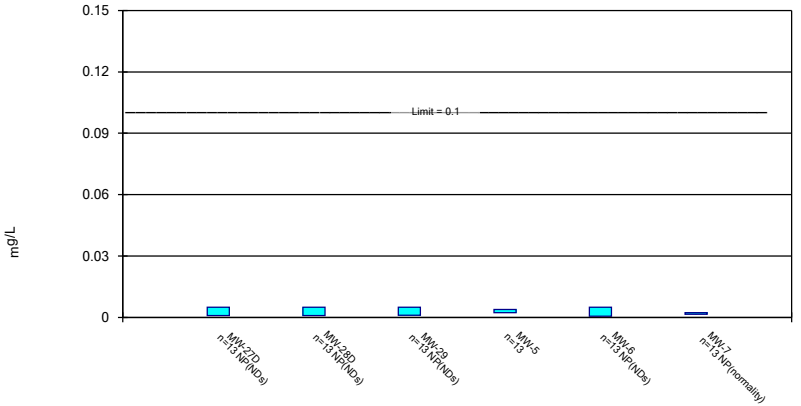


Constituent: Chromium Analysis Run 10/25/2023 2:33 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

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

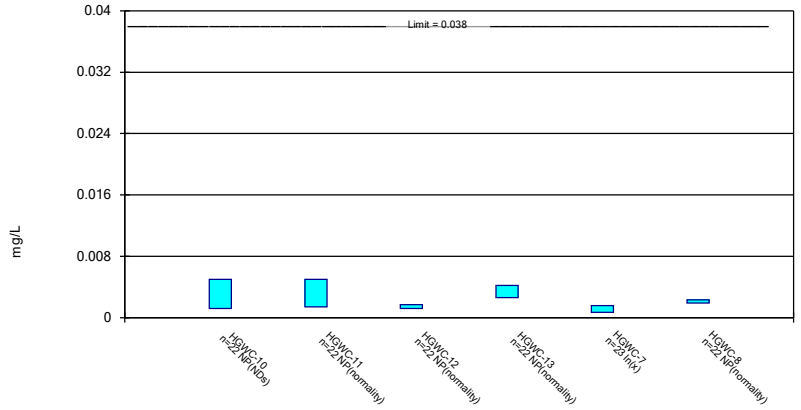


Constituent: Chromium Analysis Run 10/25/2023 2:33 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

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

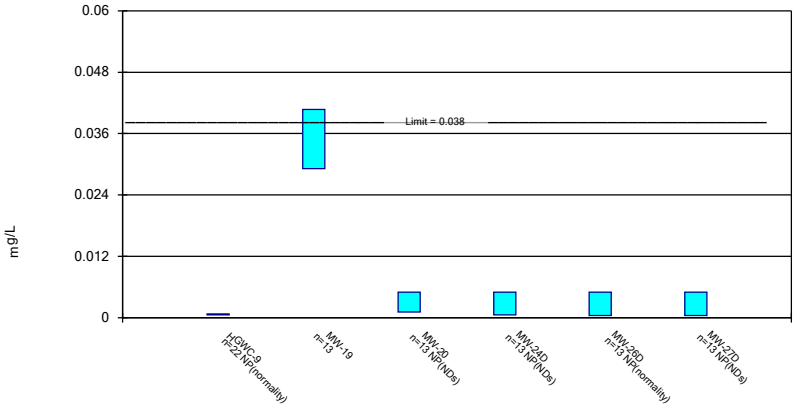


Constituent: Cobalt Analysis Run 10/25/2023 2:34 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

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

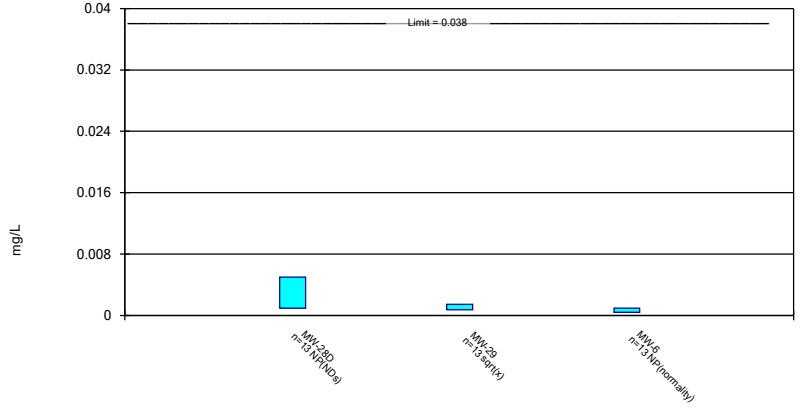


Constituent: Cobalt Analysis Run 10/25/2023 2:34 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

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

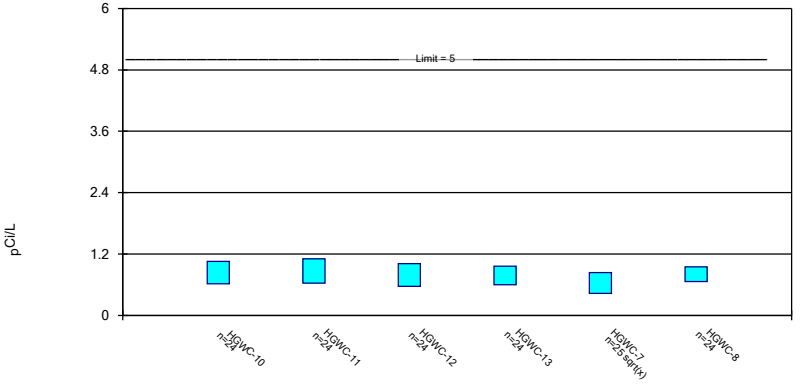


Constituent: Cobalt Analysis Run 10/25/2023 2:34 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Parametric Confidence Interval

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

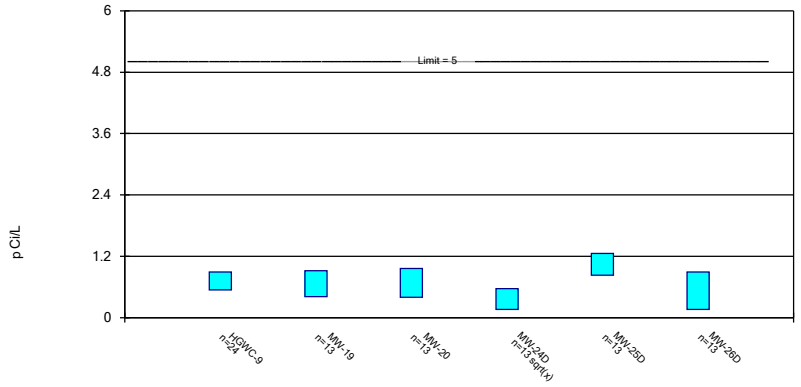


Constituent: Combined Radium 226 + 228 Analysis Run 10/25/2023 2:34 PM View: Appendix IV - Confide
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Parametric Confidence Interval

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



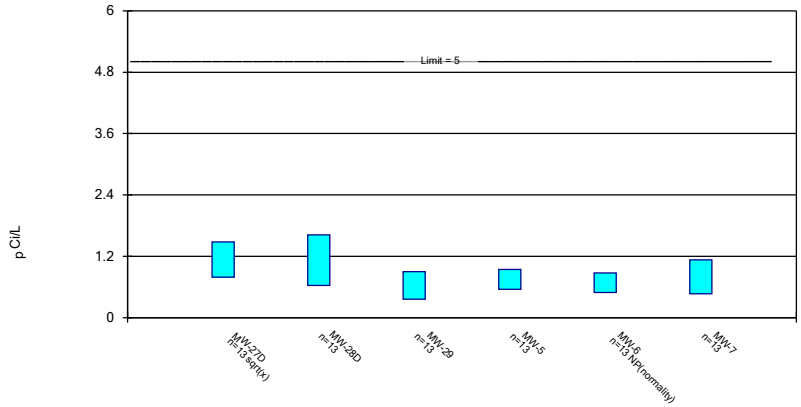
Constituent: Combined Radium 226 + 228 Analysis Run 10/25/2023 2:34 PM View: Appendix IV - Confide

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

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



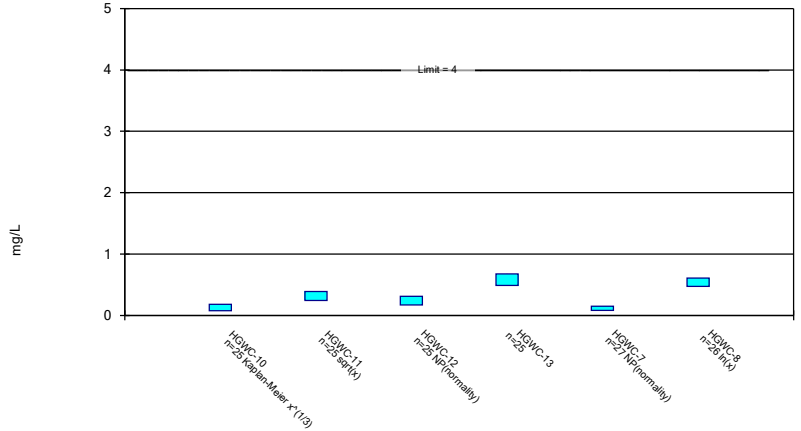
Constituent: Combined Radium 226 + 228 Analysis Run 10/25/2023 2:34 PM View: Appendix IV - Confide

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

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



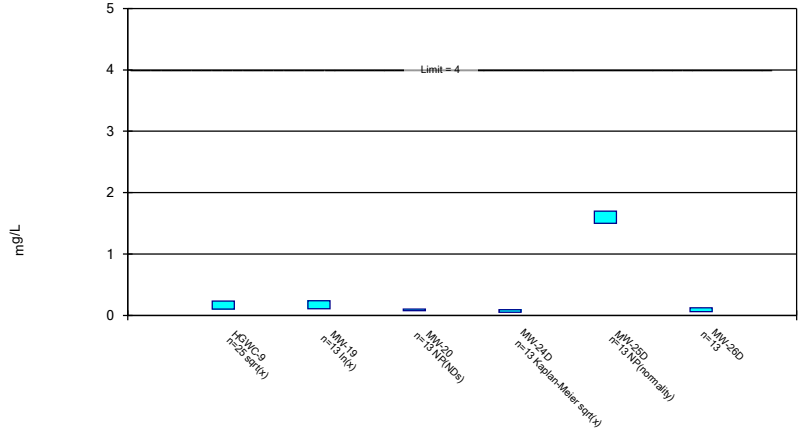
Constituent: Fluoride Analysis Run 10/25/2023 2:34 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

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



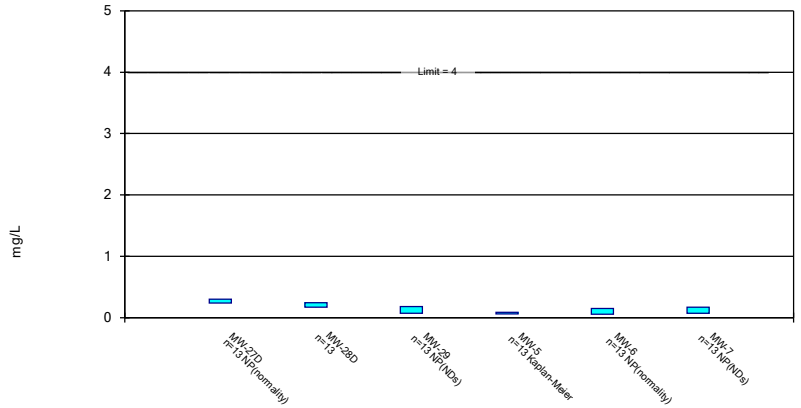
Constituent: Fluoride Analysis Run 10/25/2023 2:34 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

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

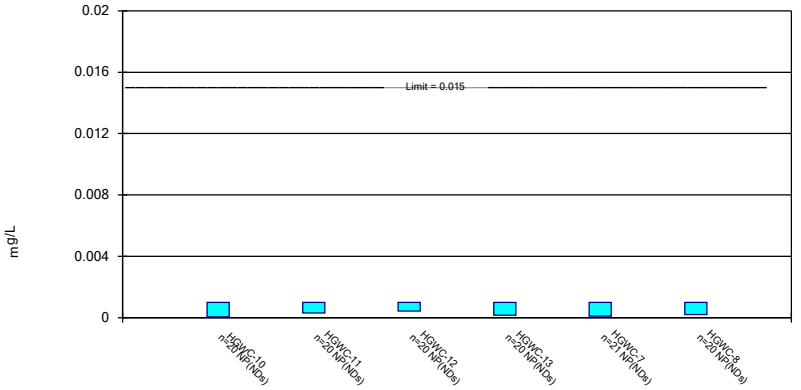


Constituent: Fluoride Analysis Run 10/25/2023 2:34 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Non-Parametric Confidence Interval

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

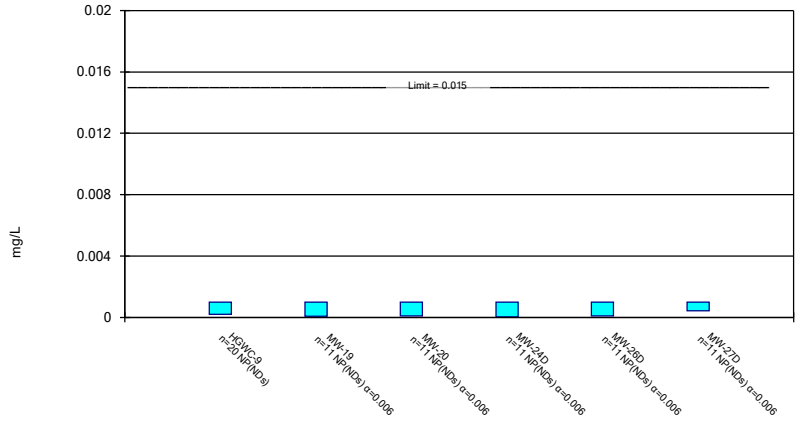


Constituent: Lead Analysis Run 10/25/2023 2:34 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Non-Parametric Confidence Interval

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

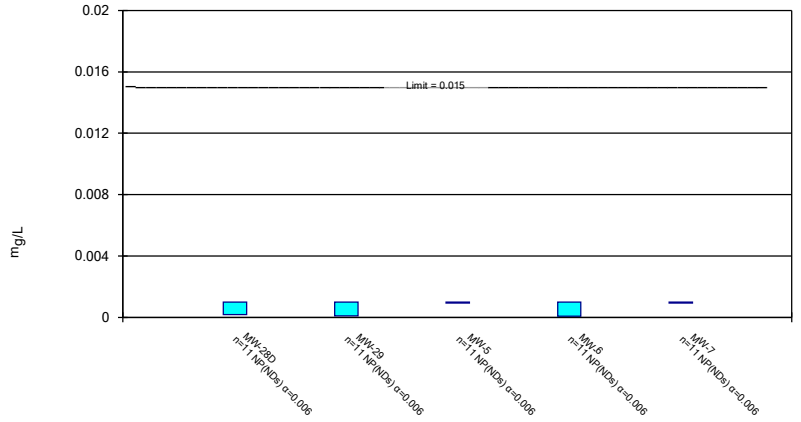


Constituent: Lead Analysis Run 10/25/2023 2:34 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

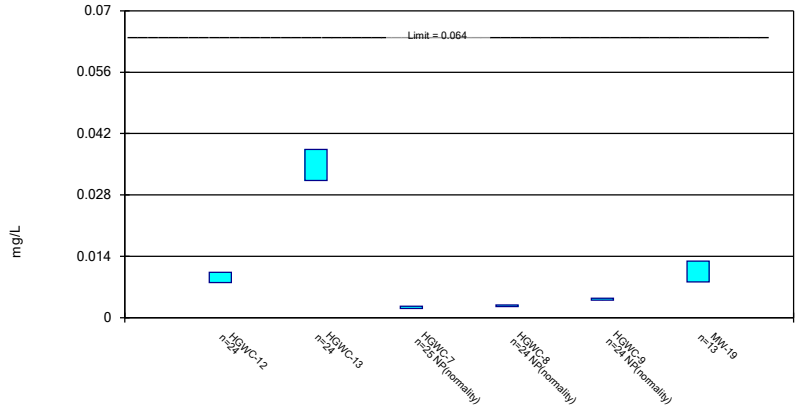


Constituent: Lead Analysis Run 10/25/2023 2:34 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

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

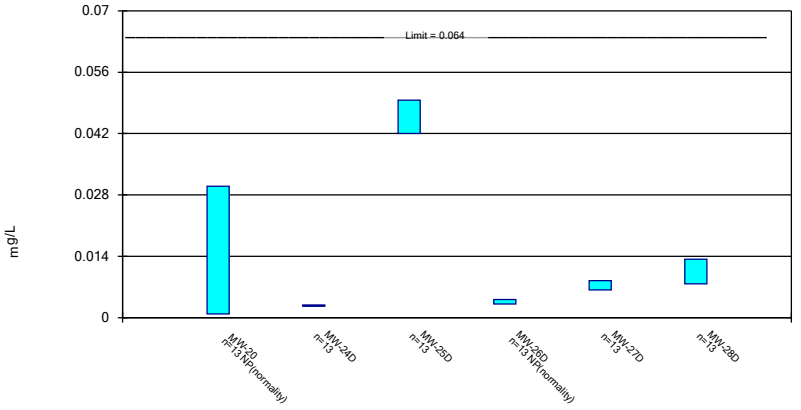


Constituent: Lithium Analysis Run 10/25/2023 2:34 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

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

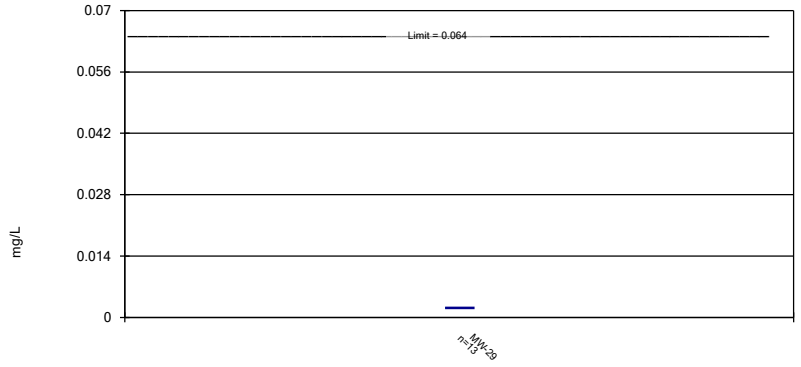


Constituent: Lithium Analysis Run 10/25/2023 2:34 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Parametric Confidence Interval

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

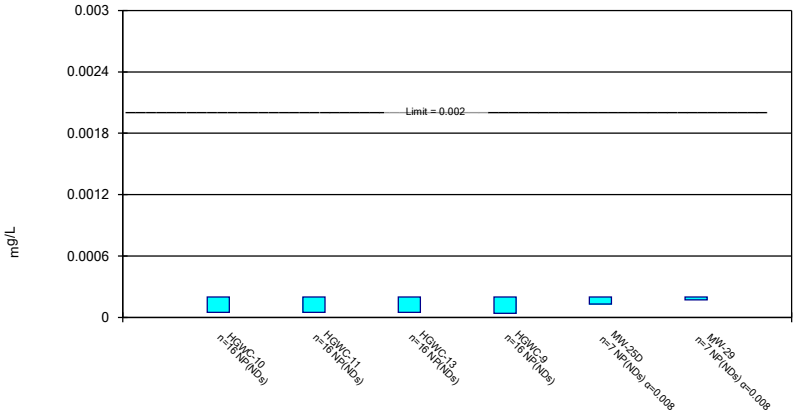


Constituent: Lithium Analysis Run 10/25/2023 2:34 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Non-Parametric Confidence Interval

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

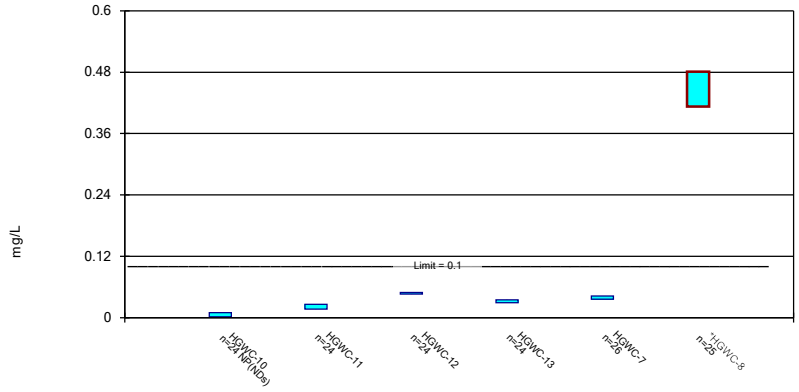


Constituent: Mercury Analysis Run 10/25/2023 2:34 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

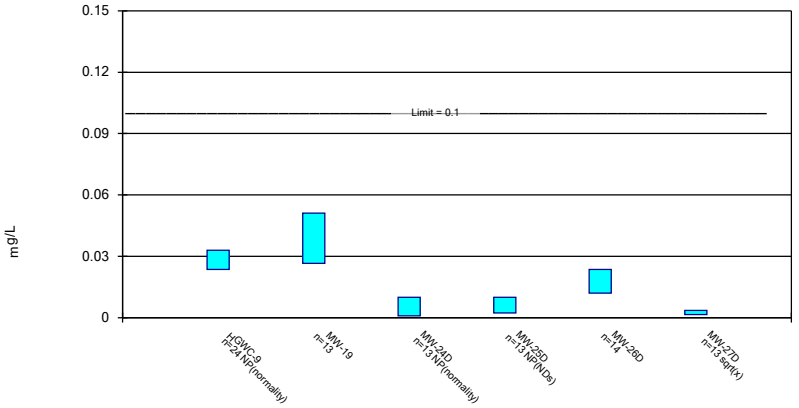


Constituent: Molybdenum Analysis Run 10/25/2023 2:34 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

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

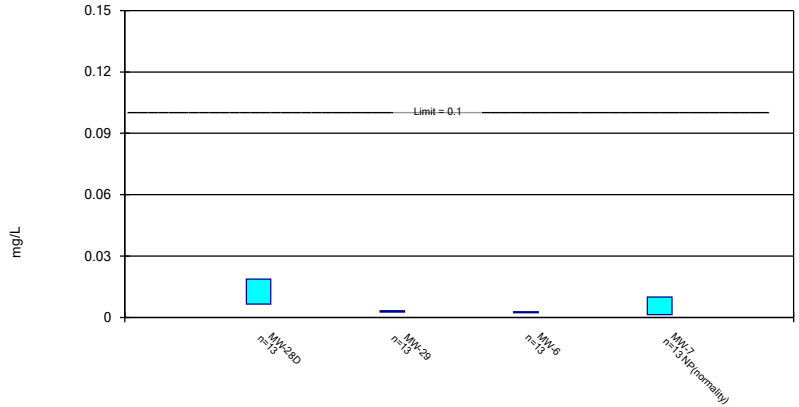


Constituent: Molybdenum Analysis Run 10/25/2023 2:34 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

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

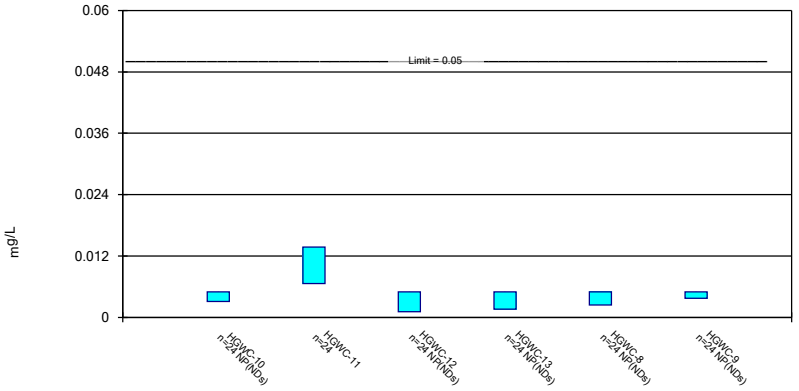


Constituent: Molybdenum Analysis Run 10/25/2023 2:34 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

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

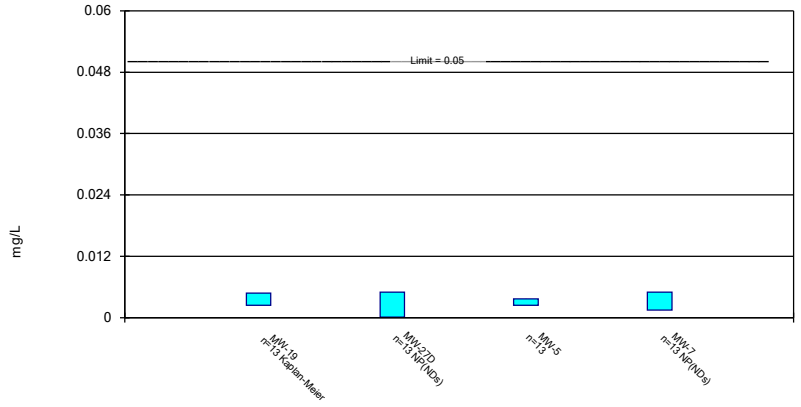


Constituent: Selenium Analysis Run 10/25/2023 2:34 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

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

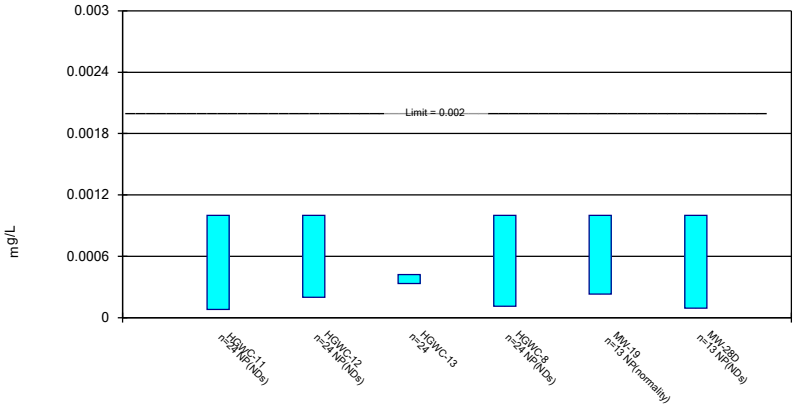


Constituent: Selenium Analysis Run 10/25/2023 2:34 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

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

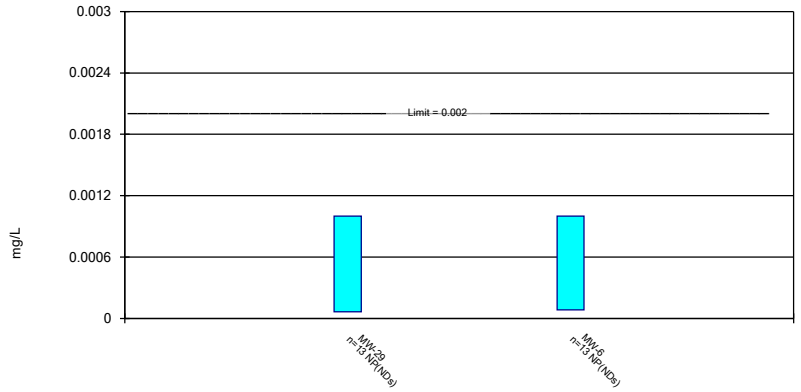


Constituent: Thallium Analysis Run 10/25/2023 2:34 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Non-Parametric Confidence Interval

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



Constituent: Thallium Analysis Run 10/25/2023 2:34 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				<0.003	<0.003	
5/23/2016	<0.003	<0.003	<0.003			<0.003
7/12/2016	<0.003	<0.003	0.0003 (J)	<0.003	<0.003	<0.003
9/1/2016	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
10/20/2016				<0.003	<0.003	<0.003
10/24/2016	<0.003	<0.003	<0.003			
12/6/2016				<0.003	<0.003	<0.003
12/7/2016	<0.003	<0.003	<0.003			
1/25/2017				<0.003	<0.003	
1/26/2017	<0.003	<0.003	<0.003			<0.003
3/21/2017				<0.003	<0.003	
3/22/2017	<0.003	<0.003	<0.003			<0.003
5/23/2017				<0.003	<0.003	<0.003
5/24/2017	<0.003	<0.003	<0.003			
4/3/2018				<0.003	<0.003	<0.003
4/4/2018	<0.003	<0.003	<0.003			
3/12/2019					<0.003	
3/13/2019	<0.003	<0.003	<0.003	<0.003		<0.003
4/2/2019				<0.003		
4/3/2019	<0.003	<0.003			<0.003	<0.003
4/5/2019			0.00021 (J)			
9/24/2019					<0.003	
9/25/2019				<0.003		
9/26/2019			<0.003			
9/27/2019	<0.003	<0.003				<0.003
3/3/2020	<0.003	<0.003			<0.003	
3/4/2020			0.00061 (J)	<0.003		0.00032 (J)
3/27/2020				<0.003	<0.003	
3/30/2020			0.00036 (J)			
3/31/2020		<0.003				0.00042 (J)
4/1/2020	<0.003					
9/16/2020	<0.003			0.00034 (J)	<0.003	
9/17/2020						<0.003
9/18/2020		0.00038 (J)				
9/21/2020			0.00029 (J)			
2/10/2021				<0.003		
2/12/2021		<0.003				
2/15/2021	0.00065 (J)					
2/16/2021					0.00064 (J)	0.00043 (J)
2/22/2021			0.00047 (J)			
3/12/2021	<0.003					
3/15/2021				<0.003	<0.003	
3/16/2021		<0.003				<0.003
3/17/2021			0.00049 (J)			
8/16/2021				0.0017 (J)		
8/17/2021	<0.003					<0.003
8/18/2021		<0.003			<0.003	
8/19/2021			<0.003			
2/9/2022	<0.003	<0.003				<0.003
2/10/2022			<0.003	<0.003	<0.003	
8/3/2022	0.0018 (J)	<0.003	<0.003	<0.003	<0.003	
8/4/2022						<0.003

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-13	HGWC-7	HGWC-8	HGWC-9
8/11/2022				<0.003		
1/26/2023		<0.003	<0.003			0.00092 (J)
1/27/2023	<0.003			<0.003		
2/1/2023					<0.003	
8/10/2023	<0.003	<0.003				
8/11/2023						<0.003
8/12/2023			<0.003	<0.003	<0.003	
Mean	0.002839	0.002881	0.00217	0.002828	0.002893	0.00255
Std. Dev.	0.0005516	0.0005586	0.001246	0.0006062	0.0005032	0.0009833
Upper Lim.	0.003	0.003	0.003	0.003	0.003	0.003
Lower Lim.	0.0018	0.00038	0.00049	0.0017	0.00064	0.00092

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-24D	MW-26D	MW-27D	MW-28D	MW-29	MW-6
3/12/2019				<0.003	<0.003	
3/13/2019	<0.003	<0.003	<0.003			<0.003
4/2/2019				<0.003	<0.003	
4/3/2019		<0.003				<0.003
4/4/2019			0.00016 (J)			
4/8/2019	<0.003					
9/24/2019					<0.003	
9/26/2019	<0.003	<0.003	0.0003 (J)	<0.003		<0.003
3/2/2020					<0.003	
3/3/2020						<0.003
3/4/2020	0.0017 (J)	0.002 (J)	0.00037 (J)	<0.003		
3/27/2020				<0.003		<0.003
3/30/2020	<0.003				<0.003	
3/31/2020		0.0013 (J)				
4/2/2020			0.0003 (J)			
9/16/2020					<0.003	
9/17/2020		<0.003				
9/18/2020			0.00031 (J)			
9/21/2020	<0.003			<0.003		0.0014 (J)
2/10/2021				0.0019 (J)		
2/15/2021					0.00094 (J)	
2/16/2021	<0.003	<0.003	0.00038 (J)			<0.003
3/12/2021			<0.003			
3/15/2021				<0.003	<0.003	
3/16/2021						<0.003
3/17/2021	<0.003	<0.003				
8/16/2021					<0.003	
8/17/2021		<0.003	<0.003			<0.003
8/18/2021				<0.003		
8/19/2021	<0.003					
2/9/2022		<0.003				<0.003
2/10/2022	<0.003		<0.003	<0.003	<0.003	
8/3/2022	<0.003		<0.003		<0.003	<0.003
8/4/2022		<0.003		<0.003		
1/26/2023	<0.003	<0.003		<0.003	<0.003	<0.003
1/27/2023			<0.003			
8/10/2023					<0.003	<0.003
8/11/2023		<0.003		<0.003		
8/12/2023	<0.003		<0.003			
Mean	0.0029	0.002792	0.001755	0.002915	0.002842	0.002877
Std. Dev.	0.0003606	0.0005267	0.0014	0.0003051	0.0005713	0.0004438
Upper Lim.	0.003	0.003	0.003	0.003	0.003	0.003
Lower Lim.	0.0017	0.002	0.0003	0.0019	0.00094	0.0014

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-7
3/13/2019	0.00086 (J)
4/3/2019	<0.003
9/26/2019	<0.003
3/3/2020	0.0013 (J)
3/30/2020	<0.003
9/21/2020	0.00051 (J)
2/15/2021	0.0021 (J)
3/15/2021	<0.003
8/17/2021	<0.003
2/8/2022	<0.003
8/4/2022	<0.003
1/26/2023	<0.003
8/10/2023	<0.003
Mean	0.002444
Std. Dev.	0.0009336
Upper Lim.	0.003
Lower Lim.	0.00086

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
5/20/2016				<0.005	<0.005	
5/23/2016	<0.005	0.0046 (J)	0.329			<0.005
7/12/2016	0.0015 (J)	0.005	0.297	<0.005	<0.005	<0.005
9/1/2016	<0.005	0.0043 (J)	0.314	<0.005	<0.005	<0.005
10/20/2016				<0.005	<0.005	<0.005
10/24/2016	<0.005	0.0049 (J)	0.334			
12/6/2016				<0.005	<0.005	<0.005
12/7/2016	<0.005	0.0046 (J)	0.35			
1/25/2017				<0.005	<0.005	
1/26/2017	<0.005	<0.005	0.424			<0.005
3/21/2017				<0.005	<0.005	
3/22/2017	0.0053	0.0019 (J)	0.419			0.0008 (J)
5/23/2017				<0.005	<0.005	<0.005
5/24/2017	<0.005	0.0022 (J)	0.393			
4/3/2018				<0.005	<0.005	<0.005
4/4/2018	<0.005	<0.005	0.49			
6/5/2018	0.0012 (J)		0.38	<0.005		
6/6/2018		0.0048 (J)			<0.005	<0.005
10/2/2018				0.0019 (J)	<0.005	<0.005
10/3/2018	<0.005	0.0037 (J)				
10/5/2018			0.34			
3/12/2019					<0.005	
3/13/2019	0.0024 (J)		0.42	<0.005		0.00075 (J)
3/14/2019		0.0026 (J)				
4/2/2019				<0.005		
4/3/2019	0.00094 (J)	0.0022 (J)			<0.005	<0.005
4/5/2019			0.36			
9/24/2019					<0.005	
9/25/2019				<0.005		
9/26/2019			0.44			
9/27/2019	0.0018 (J)	0.0061				0.00037 (J)
3/3/2020	0.0022 (J)	0.0023 (J)			<0.005	
3/4/2020			0.52	<0.005		<0.005
3/26/2020		0.0028 (J)				
3/27/2020				<0.005	<0.005	
3/30/2020			0.47			
3/31/2020	0.0022 (J)					<0.005
9/16/2020				<0.005	<0.005	
9/17/2020						<0.005
9/18/2020	0.00081 (J)	0.0031 (J)				
9/21/2020			0.39			
2/10/2021				<0.005		
2/12/2021	0.002 (J)	0.0045 (J)				
2/16/2021					<0.005	<0.005
2/22/2021			0.45			
3/15/2021				<0.005	<0.005	
3/16/2021	0.0017 (J)	0.0038 (J)				<0.005
3/17/2021			0.39			
8/16/2021				<0.005		
8/17/2021						<0.005
8/18/2021	<0.005	0.0028 (J)			<0.005	
8/19/2021			0.31			

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9
2/9/2022	0.0047 (J)	0.0053				0.0021 (J)
2/10/2022			0.38	<0.005	0.002 (J)	
8/3/2022	<0.005	0.0023 (J)	0.4	<0.005	<0.005	
8/4/2022						<0.005
8/11/2022				<0.005		
1/26/2023	<0.005	0.0025 (J)	0.53			<0.005
1/27/2023				<0.005		
2/1/2023					<0.005	
8/10/2023	<0.005	<0.005				
8/11/2023						<0.005
8/12/2023			0.54	<0.005	<0.005	
Mean	0.003615	0.003492	0.4029	0.004876	0.004875	0.004334
Std. Dev.	0.001712	0.001231	0.07021	0.00062	0.0006124	0.001545
Upper Lim.	0.005	0.00412	0.4387	0.005	0.005	0.005
Lower Lim.	0.0018	0.002863	0.3671	0.0019	0.002	0.0021

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-20	MW-25D	MW-26D	MW-27D	MW-28D
3/12/2019						<0.005
3/13/2019		0.0023 (J)		<0.005	<0.005	
3/14/2019	<0.005		0.0019 (J)			
4/2/2019		<0.005				<0.005
4/3/2019	<0.005		<0.005	<0.005		
4/4/2019					0.0002 (J)	
9/25/2019		<0.005				
9/26/2019				<0.005	<0.005	<0.005
9/27/2019	<0.005		0.0011 (J)			
3/2/2020		0.00038 (J)				
3/3/2020			0.001 (J)			
3/4/2020	0.00045 (J)			0.0006 (J)	0.00069 (J)	<0.005
3/26/2020	<0.005		0.00075 (J)			
3/27/2020		<0.005				<0.005
3/31/2020				<0.005		
4/2/2020					<0.005	
9/17/2020		<0.005		<0.005		
9/18/2020			<0.005		<0.005	
9/21/2020	<0.005					<0.005
2/10/2021						0.0011 (J)
2/11/2021		0.00094 (J)				
2/12/2021	<0.005		<0.005			
2/16/2021				0.0008 (J)	0.001 (J)	
3/12/2021					<0.005	
3/15/2021		<0.005				<0.005
3/16/2021			<0.005			
3/17/2021	<0.005			<0.005		
8/17/2021		<0.005		<0.005	<0.005	
8/18/2021	<0.005					<0.005
8/19/2021			<0.005			
2/9/2022	<0.005		<0.005	0.0017 (J)		
2/10/2022		<0.005			<0.005	<0.005
8/3/2022					<0.005	
8/4/2022	<0.005	<0.005	<0.005	<0.005		<0.005
1/26/2023	<0.005	<0.005	<0.005	<0.005		<0.005
1/27/2023					<0.005	
8/10/2023	<0.005	<0.005	<0.005			
8/11/2023				<0.005		<0.005
8/12/2023					<0.005	
Mean	0.00465	0.004125	0.003827	0.004085	0.003992	0.0047
Std. Dev.	0.001262	0.001712	0.001848	0.001756	0.001923	0.001082
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.00045	0.00094	0.001	0.0008	0.00069	0.0011

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-29	MW-5	MW-6
3/12/2019	<0.005		
3/13/2019		<0.005	<0.005
4/2/2019	<0.005		
4/3/2019		<0.005	<0.005
9/24/2019	<0.005		
9/25/2019		<0.005	
9/26/2019			<0.005
3/2/2020	<0.005	<0.005	
3/3/2020			<0.005
3/26/2020		<0.005	
3/27/2020			<0.005
3/30/2020	0.00037 (J)		
9/16/2020	<0.005		
9/17/2020		<0.005	
9/21/2020			<0.005
2/15/2021	<0.005		
2/16/2021		<0.005	<0.005
3/15/2021	<0.005		
3/16/2021		<0.005	<0.005
8/16/2021	<0.005		
8/17/2021		<0.005	<0.005
2/9/2022		0.0013 (J)	0.0034 (J)
2/10/2022	<0.005		
8/3/2022	<0.005	<0.005	<0.005
1/26/2023	<0.005	<0.005	<0.005
8/10/2023	<0.005	<0.005	<0.005
Mean	0.004644	0.004715	0.004877
Std. Dev.	0.001284	0.001026	0.0004438
Upper Lim.	0.005	0.005	0.005
Lower Lim.	0.00037	0.0013	0.0034

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8
5/20/2016					0.0687	0.0808
5/23/2016	0.0877	0.0466	0.133	0.0779		
7/12/2016	0.0926	0.0616	0.135	0.0697	0.0731	0.083
9/1/2016	0.0994	0.0497	0.123	0.07	0.0747	0.0829
10/20/2016					0.072	0.0811
10/24/2016	0.101	0.0794	0.135	0.0882		
12/6/2016					0.0752	0.0845
12/7/2016	0.107	0.1	0.13	0.0798		
1/25/2017					0.0747	0.078
1/26/2017	0.0538	0.0696	0.127	0.0738		
3/21/2017					0.0722	0.0791
3/22/2017	0.0962	0.0346	0.112	0.0755		
5/23/2017					0.0794	0.0846
5/24/2017	0.0996	0.0437	0.106	0.0627		
4/3/2018					0.075	0.065
4/4/2018	0.084	0.029	0.083	0.099		
6/5/2018	0.086	0.039		0.13	0.071	
6/6/2018			0.09			0.063
10/2/2018	0.076				0.078	0.061
10/3/2018		0.033	0.087			
10/5/2018				0.076		
3/12/2019						0.062
3/13/2019	0.044	0.024		0.1	0.083	
3/14/2019			0.081			
4/2/2019					0.072	
4/3/2019	0.076	0.023	0.077			0.066
4/5/2019				0.079		
9/24/2019						0.053
9/25/2019					0.061	
9/26/2019				0.11		
9/27/2019	0.078	0.033	0.096			
3/3/2020	0.048	0.022	0.092			0.052
3/4/2020				0.1	0.068	
3/26/2020			0.089			
3/27/2020					0.059	0.059
3/30/2020				0.08		
3/31/2020		0.026				
4/1/2020	0.058					
9/16/2020	0.068				0.068	0.06
9/18/2020		0.043	0.086			
9/21/2020				0.052		
2/10/2021					0.069	
2/12/2021		0.039	0.09			
2/15/2021	0.06					
2/16/2021						0.069
2/22/2021				0.061		
3/12/2021	0.058					
3/15/2021					0.074	0.063
3/16/2021		0.035	0.084			
3/17/2021				0.056		
8/16/2021					0.068	
8/17/2021	0.055					

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8
8/18/2021		0.04	0.083			0.062
8/19/2021				0.049		
2/9/2022	0.042	0.042	0.075			
2/10/2022				0.053	0.063	0.056
8/3/2022	0.069	0.041	0.086	0.07	0.066	0.06
8/11/2022					0.071	
1/26/2023		0.031	0.076	0.079		
1/27/2023	0.041				0.065	
2/1/2023						0.058
8/10/2023	0.045	0.027	0.075			
8/12/2023				0.057	0.06	0.052
Mean	0.07189	0.04218	0.09796	0.07703	0.07044	0.06729
Std. Dev.	0.02124	0.01881	0.02115	0.01983	0.005986	0.01126
Upper Lim.	0.08272	0.04951	0.123	0.08714	0.07342	0.07264
Lower Lim.	0.06105	0.03242	0.083	0.06691	0.06746	0.06129

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-9	MW-19	MW-20	MW-24D	MW-25D	MW-26D
5/23/2016	0.117					
7/12/2016	0.13					
9/1/2016	0.13					
10/20/2016	0.0806					
12/6/2016	0.128					
1/26/2017	0.142					
3/22/2017	0.122					
5/23/2017	0.127					
4/3/2018	0.1					
6/6/2018	0.11					
10/2/2018	0.11					
3/13/2019	0.1		0.087	0.053		0.099
3/14/2019		0.06			0.44	
4/2/2019			0.08			
4/3/2019	0.12	0.05			0.38	0.12
4/8/2019				0.043		
9/25/2019			0.085			
9/26/2019				0.12		0.12
9/27/2019	0.11	0.068			0.39	
3/2/2020			0.099			
3/3/2020					0.42	
3/4/2020	0.11	0.069		0.081		0.17
3/26/2020		0.067			0.45	
3/27/2020			0.093			
3/30/2020				0.056		
3/31/2020	0.11					0.11
9/17/2020	0.11		0.096			0.099
9/18/2020					0.44	
9/21/2020		0.056		0.053		
2/11/2021			0.093			
2/12/2021		0.051			0.46	
2/16/2021	0.11			0.062		0.093
3/15/2021			0.096			
3/16/2021	0.11				0.51	
3/17/2021		0.049		0.055		0.094
8/17/2021	0.095		0.089			0.072
8/18/2021		0.045				
8/19/2021				0.048	0.58	
2/9/2022	0.096	0.042			0.6	0.066
2/10/2022			0.082	0.048		
8/3/2022				0.053		
8/4/2022	0.091	0.05	0.093		0.75	0.062
1/26/2023	0.069	0.039	0.097	0.054	0.65	0.065
8/10/2023		0.032	0.093		0.71	
8/11/2023	0.068					0.059
8/12/2023				0.053		
Mean	0.1082	0.05215	0.091	0.05992	0.5215	0.09454
Std. Dev.	0.01858	0.0115	0.005944	0.0202	0.1238	0.03134
Upper Lim.	0.1176	0.0607	0.09542	0.081	0.6136	0.1178
Lower Lim.	0.09867	0.04361	0.08658	0.048	0.4295	0.07123

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-27D	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019		0.82	0.089			
3/13/2019	1.5			0.056	0.1	0.063
4/2/2019		0.37	0.078			
4/3/2019				0.049	0.09	0.058
4/4/2019	1.2					
9/24/2019			0.081			
9/25/2019				0.046		
9/26/2019	0.95	0.15			0.089	0.066
3/2/2020			0.088	0.049		
3/3/2020					0.09	0.043
3/4/2020	0.95	0.77				
3/26/2020				0.046		
3/27/2020		0.64			0.086	
3/30/2020			0.08			0.05
4/2/2020	1					
9/16/2020			0.076			
9/17/2020				0.043		
9/18/2020	1					
9/21/2020		0.18			0.083	0.065
2/10/2021		0.26				
2/15/2021			0.081			0.048
2/16/2021	1			0.05	0.085	
3/12/2021	1.1					
3/15/2021		0.45	0.078			0.053
3/16/2021				0.046	0.081	
8/16/2021			0.074			
8/17/2021	1.1			0.045	0.081	0.057
8/18/2021		0.53				
2/8/2022						0.053
2/9/2022				0.042	0.074	
2/10/2022	0.99	0.76	0.072			
8/3/2022	0.94		0.081	0.058	0.084	
8/4/2022		0.7				0.064
1/26/2023		0.8	0.076	0.05	0.079	0.044
1/27/2023	0.94					
8/10/2023			0.066	0.048	0.066	0.059
8/11/2023		2.2				
8/12/2023	0.98					
Mean	1.05	0.6638	0.07846	0.04831	0.08369	0.05562
Std. Dev.	0.1555	0.5193	0.006146	0.004608	0.00829	0.007837
Upper Lim.	1.2	0.9551	0.08303	0.05173	0.08986	0.06144
Lower Lim.	0.94	0.3145	0.07389	0.04488	0.07753	0.04979

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-13	HGWC-7	HGWC-8	MW-19	MW-28D
5/20/2016			<0.0005	<0.0005		
5/23/2016	<0.0005	<0.0005				
7/12/2016	<0.0005	<0.0005	<0.0005	<0.0005		
9/1/2016	<0.0005	<0.0005	<0.0005	<0.0005		
10/20/2016			<0.0005	<0.0005		
10/24/2016	<0.0005	<0.0005				
12/6/2016			<0.0005	<0.0005		
12/7/2016	<0.0005	<0.0005				
1/25/2017			<0.0005	<0.0005		
1/26/2017	<0.0005	<0.0005				
3/21/2017			<0.0005	<0.0005		
3/22/2017	9E-05 (J)	<0.0005				
5/23/2017			<0.0005	<0.0005		
5/24/2017	<0.0005	<0.0005				
4/3/2018			<0.0005	<0.0005		
4/4/2018	<0.0005	<0.0005				
3/12/2019				<0.0005		<0.0005
3/13/2019	0.0001 (J)	6.2E-05 (J)	<0.0005			
3/14/2019					<0.0005	
4/2/2019			<0.0005			<0.0005
4/3/2019	0.00017 (J)			7.4E-05 (J)	<0.0005	
4/5/2019		<0.0005				
9/24/2019				<0.0005		
9/25/2019			<0.0005			
9/26/2019		0.00011 (J)				<0.0005
9/27/2019	8.6E-05 (J)				<0.0005	
3/3/2020	0.00012 (J)			<0.0005		
3/4/2020		9.3E-05 (J)	7.7E-05 (J)		<0.0005	0.00014 (J)
3/26/2020					<0.0005	
3/27/2020			<0.0005	<0.0005		<0.0005
3/30/2020		9.9E-05 (J)				
3/31/2020	0.00015 (J)					
9/16/2020			<0.0005	0.0001 (J)		
9/18/2020	<0.0005					
9/21/2020		0.00011 (J)			<0.0005	<0.0005
2/10/2021			8.1E-05 (J)			5.4E-05 (J)
2/12/2021	<0.0005				<0.0005	
2/16/2021				7.1E-05 (J)		
2/22/2021		9.7E-05 (J)				
3/15/2021			0.00019 (J)	7.8E-05 (J)		4.8E-05 (J)
3/16/2021	8.1E-05 (J)					
3/17/2021		9E-05 (J)			<0.0005	
8/16/2021			<0.0005			
8/18/2021	<0.0005			8.7E-05 (J)	5.8E-05 (J)	<0.0005
8/19/2021		7.3E-05 (J)				
2/9/2022	<0.0005				<0.0005	
2/10/2022		<0.0005	<0.0005	7.1E-05 (J)		<0.0005
8/3/2022	<0.0005	<0.0005	<0.0005	5.6E-05 (J)		
8/4/2022					<0.0005	<0.0005
8/11/2022			<0.0005			
1/26/2023	<0.0005	9.9E-05 (J)			<0.0005	<0.0005
1/27/2023			<0.0005			

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-13	HGWC-7	HGWC-8	MW-19	MW-28D
2/1/2023				5.6E-05 (J)		
8/10/2023	6.9E-05 (J)				<0.0005	
8/11/2023						<0.0005
8/12/2023		0.0001 (J)	<0.0005	<0.0005		
Mean	0.0003575	0.0003151	0.0004499	0.0003451	0.000466	0.0004032
Std. Dev.	0.000194	0.0002075	0.0001336	0.0002099	0.0001226	0.0001851
Upper Lim.	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Lower Lim.	0.00012	9.7E-05	0.00019	7.8E-05	5.8E-05	5.4E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-7
3/13/2019	<0.0005
4/3/2019	5.1E-05 (J)
9/26/2019	<0.0005
3/3/2020	<0.0005
3/30/2020	<0.0005
9/21/2020	<0.0005
2/15/2021	<0.0005
3/15/2021	<0.0005
8/17/2021	<0.0005
2/8/2022	<0.0005
8/4/2022	<0.0005
1/26/2023	<0.0005
8/10/2023	<0.0005
Mean	0.0004655
Std. Dev.	0.0001245
Upper Lim.	0.0005
Lower Lim.	5.1E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-7	HGWC-8	HGWC-9
5/20/2016				<0.0005	0.00024 (J)	
5/23/2016	0.000115 (J)	<0.0005	<0.0005			<0.0005
7/12/2016	<0.0005	<0.0005	<0.0005	<0.0005	0.0002 (J)	<0.0005
9/1/2016	0.0001 (J)	<0.0005	<0.0005	<0.0005	0.0001 (J)	<0.0005
10/20/2016				<0.0005	0.0001 (J)	0.0002 (J)
10/24/2016	0.0001 (J)	<0.0005	<0.0005			
12/6/2016				0.0002 (J)	0.0017	0.0001 (J)
12/7/2016	0.0001 (J)	0.0001 (J)	0.0002 (J)			
1/25/2017				0.0002 (J)	0.0002 (J)	
1/26/2017	<0.0005	<0.0005	<0.0005			<0.0005
3/21/2017				0.0002 (J)	0.0002 (J)	
3/22/2017	0.0001 (J)	0.0001 (J)	0.0003 (J)			7E-05 (J)
5/23/2017				0.0001 (J)	0.0003 (J)	<0.0005
5/24/2017	0.0002 (J)	<0.0005	9E-05 (J)			
4/3/2018				<0.0005	<0.001	<0.0005
4/4/2018	<0.0005	<0.0005	<0.0005			
3/12/2019					0.0002 (J)	
3/13/2019	<0.0005	<0.0005		<0.0005		<0.0005
3/14/2019			<0.0005			
4/2/2019				<0.0005		
4/3/2019	0.0001 (J)	9.6E-05 (J)	<0.0005		0.00032 (J)	<0.0005
9/24/2019					0.0002 (J)	
9/25/2019				<0.0005		
9/27/2019	<0.0005	<0.0005	<0.0005			<0.0005
3/3/2020	<0.0005	<0.0005	0.00015 (J)		0.00017 (J)	
3/4/2020				<0.0005		<0.0005
3/26/2020			<0.0005			
3/27/2020				<0.0005	0.00014 (J)	
3/31/2020		<0.0005				<0.0005
4/1/2020	<0.0005					
9/16/2020	<0.0005			<0.0005	0.00023 (J)	
9/17/2020						<0.0005
9/18/2020		<0.0005	<0.0005			
2/10/2021				<0.0005		
2/12/2021		<0.0005	<0.0005			
2/15/2021	<0.0005					
2/16/2021					0.00037 (J)	<0.0005
3/12/2021	<0.0005					
3/15/2021				<0.0005	0.00017 (J)	
3/16/2021		<0.0005	<0.0005			<0.0005
8/16/2021				<0.0005		
8/17/2021	<0.0005					<0.0005
8/18/2021		<0.0005	<0.0005		0.0002 (J)	
2/9/2022	<0.0005	<0.0005	<0.0005			<0.0005
2/10/2022				<0.0005	0.00029 (J)	
8/3/2022	<0.0005	<0.0005	<0.0005	<0.0005	0.00017 (J)	
8/4/2022						<0.0005
8/11/2022				<0.0005		
1/26/2023		<0.0005	<0.0005			<0.0005
1/27/2023	<0.0005			0.00019 (J)		
2/1/2023					0.00014 (J)	
8/10/2023	<0.0005	<0.0005	<0.0005			

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-7	HGWC-8	HGWC-9
8/11/2023						<0.0005
8/12/2023				<0.0005	0.00044 (J)	
Mean	0.000378	0.0004453	0.0004427	0.00043	0.0002991	0.0004486
Std. Dev.	0.0001839	0.000141	0.0001288	0.0001371	0.0003292	0.000134
Upper Lim.	0.0005	0.0005	0.0005	0.0005	0.0003	0.0005
Lower Lim.	0.000115	0.0001	0.0003	0.0002	0.00017	0.0002

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19
3/14/2019	<0.0005
4/3/2019	<0.0005
9/27/2019	0.00013 (J)
3/4/2020	0.00026 (J)
3/26/2020	0.00019 (J)
9/21/2020	0.00018 (J)
2/12/2021	0.0002 (J)
3/17/2021	0.00016 (J)
8/18/2021	0.00027 (J)
2/9/2022	0.0011
8/4/2022	0.00022 (J)
1/26/2023	<0.0005
8/10/2023	0.00018 (J)
Mean	0.0003377
Std. Dev.	0.0002661
Upper Lim.	0.0003198
Lower Lim.	0.0001473

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8
5/20/2016					<0.005	<0.005
5/23/2016	<0.005	<0.005	<0.005	<0.005		
7/12/2016	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
9/1/2016	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
10/20/2016					<0.005	<0.005
10/24/2016	<0.005	<0.005	<0.005	<0.005		
12/6/2016					<0.005	<0.005
12/7/2016	<0.005	<0.005	<0.005	<0.005		
1/25/2017					<0.005	<0.005
1/26/2017	<0.005	<0.005	<0.005	<0.005		
3/21/2017					<0.005	0.0005 (J)
3/22/2017	<0.005	0.0003 (J)	0.0004 (J)	0.0004 (J)		
5/23/2017					<0.005	<0.005
5/24/2017	<0.005	<0.005	<0.005	<0.005		
4/3/2018					<0.005	<0.005
4/4/2018	<0.005	<0.005	<0.005	<0.005		
3/12/2019						<0.005
3/13/2019	<0.005	<0.005		<0.005	<0.005	
3/14/2019			0.0025 (J)			
4/2/2019					<0.005	
4/3/2019	0.02	<0.005	<0.005			<0.005
4/5/2019				<0.005		
9/24/2019						<0.005
9/25/2019					0.071	
9/26/2019				<0.005		
9/27/2019	<0.005	<0.005	<0.005			
3/3/2020	<0.005	0.00061 (J)	<0.005			0.0007 (J)
3/4/2020				<0.005	0.0016 (J)	
3/26/2020			<0.005			
3/27/2020					0.0004 (J)	<0.005
3/30/2020				0.00059 (J)		
3/31/2020		<0.005				
4/1/2020	<0.005					
9/16/2020	<0.005				0.00074 (J)	0.0015 (J)
9/18/2020		<0.005	0.00091 (J)			
9/21/2020				0.00056 (J)		
2/10/2021					0.0014 (J)	
2/12/2021		<0.005	<0.005			
2/15/2021	<0.005					
2/16/2021						<0.005
2/22/2021				<0.005		
3/12/2021	<0.005					
3/15/2021					0.0021 (J)	0.00082 (J)
3/16/2021		<0.005	<0.005			
3/17/2021				<0.005		
8/16/2021					<0.005	
8/17/2021	<0.005					
8/18/2021		<0.005	<0.005			<0.005
8/19/2021				<0.005		
2/9/2022	0.0011 (J)	<0.005	<0.005			
2/10/2022				<0.005	<0.005	<0.005
8/3/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8
8/11/2022					<0.005	
1/26/2023		0.0012 (J)	<0.005	<0.005		
1/27/2023	0.0012 (J)				0.0014 (J)	
2/1/2023						<0.005
8/10/2023	<0.005	<0.005	<0.005			
8/12/2023				<0.005	<0.005	<0.005
Mean	0.005332	0.004414	0.004491	0.004389	0.006897	0.004251
Std. Dev.	0.003466	0.001516	0.001353	0.001575	0.01408	0.001635
Upper Lim.	0.02	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.0012	0.0012	0.0025	0.00059	0.0021	0.0015

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-9	MW-19	MW-20	MW-24D	MW-25D	MW-26D
5/23/2016	<0.005					
7/12/2016	<0.005					
9/1/2016	<0.005					
10/20/2016	<0.005					
12/6/2016	<0.005					
1/26/2017	<0.005					
3/22/2017	<0.005					
5/23/2017	<0.005					
4/3/2018	<0.005					
3/13/2019	<0.005		<0.005	<0.005		<0.005
3/14/2019		<0.005			<0.005	
4/2/2019			<0.005			
4/3/2019	<0.005	<0.005			<0.005	<0.005
4/8/2019				<0.005		
9/25/2019			<0.005			
9/26/2019				0.00042 (J)		0.00076 (J)
9/27/2019	<0.005	<0.005			<0.005	
3/2/2020			0.00071 (J)			
3/3/2020					<0.005	
3/4/2020	<0.005	0.00066 (J)		<0.005		0.0028 (J)
3/26/2020		0.00047 (J)			0.00061 (J)	
3/27/2020			0.00051 (J)			
3/30/2020				<0.005		
3/31/2020	0.00052 (J)					0.001 (J)
9/17/2020	<0.005		<0.005			<0.005
9/18/2020					<0.005	
9/21/2020		0.0014 (J)		<0.005		
2/11/2021			<0.005			
2/12/2021		0.00059 (J)			<0.005	
2/16/2021	0.00067 (J)			<0.005		0.001 (J)
3/15/2021			0.00068 (J)			
3/16/2021	<0.005				<0.005	
3/17/2021		0.0022 (J)		0.0017 (J)		0.0015 (J)
8/17/2021	<0.005		<0.005			<0.005
8/18/2021		<0.005				
8/19/2021				<0.005	<0.005	
2/9/2022	0.0011 (J)	<0.005			<0.005	<0.005
2/10/2022			<0.005	<0.005		
8/3/2022				<0.005		
8/4/2022	<0.005	<0.005	<0.005		<0.005	<0.005
1/26/2023	0.0013 (J)	0.0011 (J)	<0.005	<0.005	0.0012 (J)	<0.005
8/10/2023		<0.005	<0.005		<0.005	
8/11/2023	<0.005					<0.005
8/12/2023				<0.005		
Mean	0.004254	0.003186	0.003992	0.004394	0.00437	0.00362
Std. Dev.	0.001625	0.002083	0.001915	0.001502	0.001543	0.001878
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.0013	0.00059	0.00068	0.0017	0.0012	0.001

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-27D	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019		<0.005	<0.005			
3/13/2019	<0.005			0.003 (J)	<0.005	<0.005
4/2/2019		<0.005	<0.005			
4/3/2019				0.003 (J)	<0.005	0.0023 (J)
4/4/2019	<0.005					
9/24/2019			<0.005			
9/25/2019				0.0052 (J)		
9/26/2019	<0.005	0.00081 (J)			<0.005	0.0013 (J)
3/2/2020			<0.005	0.0042 (J)		
3/3/2020					0.00044 (J)	0.0015 (J)
3/4/2020	<0.005	0.0027 (J)				
3/26/2020				0.0044 (J)		
3/27/2020		<0.005			0.00059 (J)	
3/30/2020			0.001 (J)			0.0021 (J)
4/2/2020	<0.005					
9/16/2020			<0.005			
9/17/2020				0.0021 (J)		
9/18/2020	0.0007 (J)					
9/21/2020		0.00085 (J)			<0.005	0.0017 (J)
2/10/2021		0.0014 (J)				
2/15/2021			<0.005			0.0015 (J)
2/16/2021	0.00082 (J)			0.0032 (J)	<0.005	
3/12/2021	<0.005					
3/15/2021		0.00078 (J)	<0.005			0.0018 (J)
3/16/2021				0.0024 (J)	<0.005	
8/16/2021			<0.005			
8/17/2021	<0.005			0.0018 (J)	<0.005	<0.005
8/18/2021		<0.005				
2/8/2022						0.0016 (J)
2/9/2022				0.0031 (J)	<0.005	
2/10/2022	<0.005	0.0011 (J)	<0.005			
8/3/2022	<0.005		<0.005	0.0015 (J)	<0.005	
8/4/2022		<0.005				0.002 (J)
1/26/2023		<0.005	<0.005	0.0032 (J)	0.0014 (J)	0.0017 (J)
1/27/2023	<0.005					
8/10/2023			<0.005	0.002 (J)	<0.005	0.0015 (J)
8/11/2023		<0.005				
8/12/2023	<0.005					
Mean	0.004348	0.00328	0.004692	0.003008	0.004033	0.002231
Std. Dev.	0.001592	0.001991	0.001109	0.001087	0.001849	0.001259
Upper Lim.	0.005	0.005	0.005	0.003816	0.005	0.0023
Lower Lim.	0.00082	0.00081	0.001	0.002199	0.00059	0.0015

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8
5/20/2016					<0.01	0.00207 (J)
5/23/2016	<0.005	<0.005	<0.01	0.00361 (J)		
7/12/2016	0.0006 (J)	0.0021 (J)	0.0018 (J)	0.0032 (J)	0.0003 (J)	0.0019 (J)
9/1/2016	0.0007 (J)	0.0025 (J)	0.0016 (J)	0.0033 (J)	<0.01	0.0023 (J)
10/20/2016					0.0008 (J)	0.002 (J)
10/24/2016	0.0009 (J)	0.0032 (J)	0.0017 (J)	0.004 (J)		
12/6/2016					0.0009 (J)	0.0026 (J)
12/7/2016	0.0012 (J)	0.003 (J)	0.0021 (J)	0.0034 (J)		
1/25/2017					0.0005 (J)	0.002 (J)
1/26/2017	<0.005	0.0014 (J)	0.0016 (J)	0.0024 (J)		
3/21/2017					0.0005 (J)	0.0023 (J)
3/22/2017	0.0006 (J)	0.0014 (J)	0.0018 (J)	0.0026 (J)		
5/23/2017					0.0005 (J)	0.0023 (J)
5/24/2017	0.0006 (J)	0.0008 (J)	0.0015 (J)	0.0022 (J)		
4/3/2018					<0.01	<0.025
4/4/2018	<0.005	<0.005	<0.01	<0.01		
3/12/2019						0.002 (J)
3/13/2019	<0.005	0.00098 (J)		0.0022 (J)	0.00067 (J)	
3/14/2019			0.0011 (J)			
4/2/2019					0.00069 (J)	
4/3/2019	<0.005	0.0018 (J)	0.0011 (J)			0.0019 (J)
4/5/2019				0.0017 (J)		
9/24/2019						0.0015 (J)
9/25/2019					0.0026 (J)	
9/26/2019				0.0042 (J)		
9/27/2019	<0.005	0.00071 (J)	0.0012 (J)			
3/3/2020	<0.005	0.00087 (J)	0.0013 (J)			0.002 (J)
3/4/2020				0.0066	0.0011 (J)	
3/26/2020			0.0012 (J)			
3/27/2020					0.00074 (J)	0.0018 (J)
3/30/2020				0.0053		
3/31/2020		0.0014 (J)				
4/1/2020	<0.005					
9/16/2020	<0.005				0.00065 (J)	0.0019 (J)
9/18/2020		<0.005	0.0014 (J)			
9/21/2020				0.0032 (J)		
2/10/2021					0.00081 (J)	
2/12/2021		<0.005	0.0012 (J)			
2/15/2021	<0.005					
2/16/2021						0.002 (J)
2/22/2021				0.003 (J)		
3/12/2021	<0.005					
3/15/2021					0.0014 (J)	0.0019 (J)
3/16/2021		<0.005	0.0012 (J)			
3/17/2021				0.0029 (J)		
8/16/2021					0.0012 (J)	
8/17/2021	<0.005					
8/18/2021		<0.005	0.0012 (J)			0.002 (J)
8/19/2021				0.0024 (J)		
2/9/2022	<0.005	<0.005	0.0013 (J)			
2/10/2022				0.0026 (J)	0.0011 (J)	0.0021 (J)
8/3/2022	<0.005	<0.005	0.0012 (J)	0.0041 (J)	0.0015 (J)	0.0024 (J)

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8
8/11/2022					0.0018 (J)	
1/26/2023		<0.005	0.0012 (J)	0.012		
1/27/2023	<0.005				0.00067 (J)	
2/1/2023						<0.025
8/10/2023	<0.005	<0.005	0.0012 (J)			
8/12/2023				0.018	0.00061 (J)	0.0016 (J)
Mean	0.003845	0.003189	0.001723	0.00445	0.00148	0.00298
Std. Dev.	0.001933	0.001801	0.001094	0.003718	0.001483	0.003091
Upper Lim.	0.005	0.005	0.0017	0.0042	0.001586	0.0023
Lower Lim.	0.0012	0.0014	0.0012	0.0026	0.0007039	0.0019

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-9	MW-19	MW-20	MW-24D	MW-26D	MW-27D
5/23/2016	<0.01					
7/12/2016	0.0006 (J)					
9/1/2016	0.0007 (J)					
10/20/2016	0.002 (J)					
12/6/2016	0.0011 (J)					
1/26/2017	0.0006 (J)					
3/22/2017	0.0005 (J)					
5/23/2017	0.0006 (J)					
4/3/2018	<0.01					
3/13/2019	0.00065 (J)		0.0011 (J)	<0.005	<0.005	<0.005
3/14/2019		0.025				
4/2/2019			<0.005			
4/3/2019	0.00069 (J)	0.036			<0.005	
4/4/2019						9.1E-05 (J)
4/8/2019				0.00025 (J)		
9/25/2019			<0.005			
9/26/2019				0.0011 (J)	0.00053 (J)	<0.005
9/27/2019	0.00057 (J)	0.033				
3/2/2020			<0.005			
3/4/2020	0.00053 (J)	0.048		0.00056 (J)	<0.005	0.00045 (J)
3/26/2020		0.045				
3/27/2020			<0.005			
3/30/2020				<0.005		
3/31/2020	0.00051 (J)				0.0003 (J)	
4/2/2020						<0.005
9/17/2020	0.0007 (J)		<0.005		<0.005	
9/18/2020						<0.005
9/21/2020		0.032		<0.005		
2/11/2021			<0.005			
2/12/2021		0.037				
2/16/2021	0.00061 (J)			<0.005	0.00045 (J)	0.0004 (J)
3/12/2021						<0.005
3/15/2021			<0.005			
3/16/2021	0.00069 (J)					
3/17/2021		0.037		<0.005	0.00044 (J)	
8/17/2021	0.00045 (J)		<0.005		0.00045 (J)	<0.005
8/18/2021		0.039				
8/19/2021				<0.005		
2/9/2022	0.00051 (J)	0.03			0.00059 (J)	
2/10/2022			<0.005	<0.005		<0.005
8/3/2022				<0.005		<0.005
8/4/2022	0.00046 (J)	0.043	<0.005		0.00048 (J)	
1/26/2023	0.00068 (J)	0.022	<0.005	<0.005	0.00051 (J)	
1/27/2023						<0.005
8/10/2023		0.027	<0.005			
8/11/2023	0.00057 (J)				<0.005	
8/12/2023				<0.005		<0.005
Mean	0.001078	0.03492	0.0047	0.003993	0.002212	0.003919
Std. Dev.	0.00131	0.007794	0.001082	0.001921	0.002295	0.002057
Upper Lim.	0.0007	0.04072	0.005	0.005	0.005	0.005
Lower Lim.	0.00053	0.02913	0.0011	0.00056	0.00044	0.0004

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-6
3/12/2019	<0.005	0.00057 (J)	
3/13/2019			0.00055 (J)
4/2/2019	<0.005	0.00084 (J)	
4/3/2019			<0.005
9/24/2019		0.0015 (J)	
9/26/2019	<0.005		0.00036 (J)
3/2/2020		0.00067 (J)	
3/3/2020			0.00094 (J)
3/4/2020	0.00093 (J)		
3/27/2020	<0.005		0.00059 (J)
3/30/2020		0.00063 (J)	
9/16/2020		0.0013 (J)	
9/21/2020	<0.005		0.00041 (J)
2/10/2021	<0.005		
2/15/2021		0.00097 (J)	
2/16/2021			0.00045 (J)
3/15/2021	<0.005	0.0011 (J)	
3/16/2021			0.00042 (J)
8/16/2021		0.0014 (J)	
8/17/2021			<0.005
8/18/2021	<0.005		
2/9/2022			0.00059 (J)
2/10/2022	<0.005	0.00089 (J)	
8/3/2022		0.0012 (J)	0.00041 (J)
8/4/2022	<0.005		
1/26/2023	<0.005	0.00056 (J)	0.00044 (J)
8/10/2023		<0.005	0.00041 (J)
8/11/2023	<0.005		
Mean	0.004687	0.001087	0.001198
Std. Dev.	0.001129	0.0005295	0.001694
Upper Lim.	0.005	0.001421	0.00094
Lower Lim.	0.00093	0.0007121	0.00041

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8
5/20/2016					0.62 (U)	0.56 (U)
5/23/2016	0.419 (U)	0.509 (U)	1.12	0.625 (U)		
7/12/2016	0.855	0.784 (U)	1.61	0.478 (U)	0.283 (U)	0.636 (U)
9/1/2016	0.844 (U)	0.261 (U)	1.23	0.595 (U)	0.703 (U)	0.818 (U)
10/20/2016					1.97	1.04 (U)
10/24/2016	0.917 (U)	1.42	1.98	1.54		
12/6/2016					2	0.771 (U)
12/7/2016	0.558 (U)	0.781 (U)	0.319 (U)	0.657 (U)		
1/25/2017					1.06 (U)	0.859 (U)
1/26/2017	0.922 (U)	0.842 (U)	0.54 (U)	1.22		
3/21/2017					0.668 (U)	0.851 (U)
3/22/2017	0.751 (U)	0.318 (U)	0.635 (U)	0.285 (U)		
5/23/2017					0.621 (U)	0.705 (U)
5/24/2017	0.725 (U)	0.687 (U)	1.01	0.655 (U)		
4/3/2018					0.538 (U)	0.311 (U)
4/4/2018	0.715 (U)	1.5	0.956	0.882 (U)		
6/5/2018	0.718 (U)	0.549 (U)		1.1 (U)	0.985 (U)	
6/6/2018			0.424 (U)			0.896 (U)
10/2/2018	0.948				0.837 (U)	1.21
10/3/2018		1.48	0.57 (U)			
10/5/2018				0.558 (U)		
3/12/2019						0.544 (U)
3/13/2019	1.19 (U)	0.584 (U)		0.39 (U)	0.403 (U)	
3/14/2019			0.992 (U)			
4/2/2019					0.865 (U)	
4/3/2019	1.82 (U)	0.36 (U)	0.734 (U)			0.885 (U)
4/5/2019				0.422 (U)		
9/24/2019						1.3
9/25/2019					0.884 (U)	
9/26/2019				0.939 (U)		
9/27/2019	1.16 (U)	1.78	0.958 (U)			
3/3/2020	0.667 (U)	0.716 (U)	0.971 (U)			0.835 (U)
3/4/2020				0.708 (U)	0.624 (U)	
3/26/2020			0.209 (U)			
3/27/2020					0.485 (U)	1.04 (U)
3/30/2020				0.602 (U)		
3/31/2020		1.3 (U)				
4/1/2020	0.235 (U)					
9/16/2020	0 (U)				0.135 (U)	0.526 (U)
9/18/2020		1.24 (U)	0.916 (U)			
9/21/2020				1.53		
2/10/2021					0.281 (U)	
2/12/2021		1.1	0.236 (U)			
2/15/2021	1.91					
2/16/2021						0.764 (U)
2/22/2021				1.02		
3/12/2021	1.12 (U)					
3/15/2021					0.666 (U)	1.3 (U)
3/16/2021		1.71	0.245 (U)			
3/17/2021				1.45 (U)		
8/16/2021					0.143 (U)	
8/17/2021	0.595 (U)					

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8
8/18/2021		0.919 (U)	0.919 (U)			1.02 (U)
8/19/2021				0.764 (U)		
2/9/2022	0.49 (U)	0.444 (U)	0.564 (U)			
2/10/2022				0.442 (U)	0.175 (U)	0.945 (U)
8/3/2022	0.454 (U)	0.823 (U)	0.418 (U)	0.54 (U)	0.42 (U)	0.455 (U)
8/11/2022					0.461 (U)	
1/26/2023		0.441 (U)	0.877	0.719		
1/27/2023	1.2				0.45 (U)	
2/1/2023						0.241 (U)
8/10/2023	0.831 (U)	0.273 (U)	0.453 (U)			
8/12/2023				0.58 (U)	0.729 (U)	0.767 (U)
Mean	0.8352	0.8675	0.7869	0.7792	0.6802	0.8033
Std. Dev.	0.4326	0.4677	0.4347	0.3603	0.4663	0.2785
Upper Lim.	1.056	1.106	1.009	0.9631	0.8357	0.9454
Lower Lim.	0.6144	0.6289	0.5651	0.5954	0.428	0.6612

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-9	MW-19	MW-20	MW-24D	MW-25D	MW-26D
5/23/2016	0.826 (U)					
7/12/2016	0.511 (U)					
9/1/2016	0.762 (U)					
10/20/2016	1.17					
12/6/2016	0.126 (U)					
1/26/2017	0.515 (U)					
3/22/2017	0.451 (U)					
5/23/2017	0.924 (U)					
4/3/2018	0.732 (U)					
6/6/2018	0.813 (U)					
10/2/2018	0.61 (U)					
3/13/2019	1 (U)		0.538 (U)	0.311 (U)		0.627 (U)
3/14/2019		0.347 (U)			1.28 (U)	
4/2/2019			1.02 (U)			
4/3/2019	0.156 (U)	0.884 (U)			0.662 (U)	0.205 (U)
4/8/2019				0.573 (U)		
9/25/2019			1.35 (U)			
9/26/2019				0.878 (U)		0.912 (U)
9/27/2019	0.428 (U)	0.534 (U)			0.945 (U)	
3/2/2020			0.653 (U)			
3/3/2020					1.36	
3/4/2020	1.03	1.04		0.333 (U)		1.27 (U)
3/26/2020		1.1 (U)			0.793 (U)	
3/27/2020			0.1 (U)			
3/30/2020				0.107 (U)		
3/31/2020	1.2 (U)					1.65
9/17/2020	1.38 (U)		0.469 (U)			0.42 (U)
9/18/2020					1.17 (U)	
9/21/2020		1.36 (U)		1.23 (U)		
2/11/2021			0.334 (U)			
2/12/2021		0.764 (U)			1.17	
2/16/2021	1.17 (U)			0.156 (U)		0.505 (U)
3/15/2021			1.24 (U)			
3/16/2021	0.446 (U)				0.742 (U)	
3/17/2021		0.466 (U)		0.174 (U)		0.165 (U)
8/17/2021	0.771 (U)		0.709 (U)			0.0468 (U)
8/18/2021		0.642 (U)				
8/19/2021				0.227 (U)	0.935 (U)	
2/9/2022	0.198 (U)	0.245 (U)			0.754 (U)	0.0677 (U)
2/10/2022			0.32 (U)	0.178 (U)		
8/3/2022				0.263 (U)		
8/4/2022	0.597 (U)	0.509 (U)	1.05 (U)		1.65	0.0273 (U)
1/26/2023	0.516 (U)	0.333 (U)	0.561 (U)	0.0906 (U)	1.1	0.386 (U)
8/10/2023		0.437 (U)	0.469 (U)		0.972	
8/11/2023	0.867 (U)					0.55 (U)
8/12/2023				0.481 (U)		
Mean	0.7166	0.6662	0.6779	0.3847	1.041	0.5255
Std. Dev.	0.3403	0.3406	0.3792	0.3358	0.2841	0.4941
Upper Lim.	0.8903	0.9195	0.9599	0.5693	1.252	0.8929
Lower Lim.	0.543	0.413	0.396	0.1574	0.8297	0.1581

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-27D	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019		0.926 (U)	1.37			
3/13/2019	1.81			0.621 (U)	2.07	1.23
4/2/2019		0.479 (U)	0.62 (U)			
4/3/2019				0.932 (U)	0.872 (U)	1.05 (U)
4/4/2019	1.33					
9/24/2019			0.675 (U)			
9/25/2019				0.798 (U)		
9/26/2019	0.974 (U)	0.997 (U)			0.745 (U)	0.947 (U)
3/2/2020			0.413 (U)	0.964 (U)		
3/3/2020					0.757 (U)	1.15
3/4/2020	1.12	1.31				
3/26/2020				1.1		
3/27/2020		1.59			0.758 (U)	
3/30/2020			0.885 (U)			0.83 (U)
4/2/2020	2.48					
9/16/2020			0.193 (U)			
9/17/2020				0.618 (U)		
9/18/2020	1.13 (U)					
9/21/2020		1.39 (U)			0.796 (U)	1.55 (U)
2/10/2021		0.201 (U)				
2/15/2021			1.17 (U)			0.892 (U)
2/16/2021	1.21			0.466 (U)	0.198 (U)	
3/12/2021	0.649 (U)					
3/15/2021		0.564 (U)	0.436 (U)			0.386 (U)
3/16/2021				1.22	0.727 (U)	
8/16/2021			0.208 (U)			
8/17/2021	1.06 (U)			0.304 (U)	0.557 (U)	0.183 (U)
8/18/2021		0.876 (U)				
2/8/2022						0.417 (U)
2/9/2022				0.567 (U)	0.619 (U)	
2/10/2022	0.809 (U)	1.96 (U)	0.594 (U)			
8/3/2022	0.685 (U)		0.581 (U)	0.63 (U)	0.543 (U)	
8/4/2022		0.84 (U)				1.18 (U)
1/26/2023		0.821	0.793 (U)	0.909	0.493 (U)	0.318 (U)
1/27/2023	1.1					
8/10/2023			0.244 (U)	0.599 (U)	0.839 (U)	0.239 (U)
8/11/2023		2.66				
8/12/2023	0.645 (U)					
Mean	1.154	1.124	0.6294	0.7483	0.7672	0.7978
Std. Dev.	0.51	0.6615	0.3582	0.2637	0.4313	0.4429
Upper Lim.	1.479	1.616	0.8957	0.9444	0.872	1.127
Lower Lim.	0.7939	0.6323	0.3631	0.5523	0.493	0.4685

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8
5/20/2016					0.0828 (J)	0.499
5/23/2016	0.0394 (J)	0.203 (J)	0.212 (J)	0.2587 (J)		
7/12/2016	0.15 (J)	0.44	0.31	0.53	0.2 (J)	0.67
9/1/2016	0.5	0.67	0.62	0.74	0.51	0.94
10/20/2016					0.4	0.56
10/24/2016	0.06 (J)	0.26 (J)	0.19 (J)	0.31		
12/6/2016					0.26 (J)	0.76
12/7/2016	0.44	0.55	0.73	1		
1/25/2017					0.24 (J)	1.1
1/26/2017	0.29 (J)	0.27 (J)	0.12 (J)	0.68		
3/21/2017					0.13 (J)	0.46
3/22/2017	0.34	0.66	0.44	0.76		
5/23/2017					0.11 (J)	0.65
5/24/2017	0.13 (J)	0.35	0.34	0.54		
10/3/2017	0.46	0.56	0.58	0.83	0.17 (J)	0.66
4/3/2018					<0.3	0.39
4/4/2018	<0.1	0.39	<0.3	0.65		
6/5/2018	<0.1	0.24 (J)		0.47	0.099 (J)	
6/6/2018			0.21 (J)			0.46
10/2/2018	0.17 (J)				<0.3	0.51
10/3/2018		0.31	0.15 (J)			
10/5/2018				0.77		
3/12/2019						0.58
3/13/2019	0.17 (J)	0.51		0.78	0.12 (J)	
3/14/2019			1.1			
4/2/2019					0.097 (J)	
4/3/2019	0.082 (J)	0.43	0.3 (J)			0.63
4/5/2019				0.83		
9/24/2019						0.49
9/25/2019					0.1 (J)	
9/26/2019				0.64		
9/27/2019	0.17 (J)	0.42	0.26 (J)			
3/3/2020	0.11 (J)	0.24 (J)	0.21 (J)			0.45
3/4/2020				0.37	0.077 (J)	
3/26/2020			0.17 (J)			
3/27/2020					0.059 (J)	0.46
3/30/2020				0.44		
3/31/2020		0.19 (J)				
4/1/2020	0.12 (J)					
6/16/2020						0.45
6/17/2020					0.077 (J)	
9/16/2020	<0.1				0.081 (J)	0.53
9/18/2020		0.15	0.15			
9/21/2020				0.44		
2/10/2021					0.085 (J)	
2/12/2021		0.17	0.19			
2/15/2021	0.08 (J)					
2/16/2021						0.47
2/22/2021				0.55		
3/12/2021	0.054 (J)					
3/15/2021					0.086 (J)	0.51
3/16/2021		0.21	0.2			

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8
3/17/2021				0.65		
8/16/2021					0.084 (J)	
8/17/2021	<0.1					
8/18/2021		0.21	0.15			0.41
8/19/2021				0.53		
2/9/2022	0.12	0.2	0.2			
2/10/2022				0.53	0.083 (J)	0.42
8/3/2022	0.13	0.22	0.21	0.55	0.11	0.44
8/11/2022					0.11	
1/26/2023		0.2	0.21	0.4		
1/27/2023	0.16				0.1	
2/1/2023						0.4
8/10/2023	0.05 (J)	0.15	0.17			
8/12/2023				0.32	0.071 (J)	0.59
Mean	0.169	0.3281	0.3029	0.5827	0.1423	0.5573
Std. Dev.	0.1313	0.1605	0.2299	0.1872	0.1041	0.1673
Upper Lim.	0.1782	0.3899	0.31	0.6761	0.15	0.6099
Lower Lim.	0.07724	0.2407	0.17	0.4894	0.083	0.4748

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-9	MW-19	MW-20	MW-24D	MW-25D	MW-26D
5/23/2016	<0.3					
7/12/2016	0.24 (J)					
9/1/2016	0.46					
10/20/2016	0.56					
12/6/2016	0.31					
1/26/2017	0.004 (J)					
3/22/2017	0.28 (J)					
5/23/2017	0.29 (J)					
10/3/2017	0.53					
4/3/2018	<0.3					
6/6/2018	0.12 (J)					
10/2/2018	0.031 (J)					
3/13/2019	0.14 (J)		0.072 (J)	0.074 (J)		0.052 (J)
3/14/2019		0.35			2.2	
4/2/2019			<0.1			
4/3/2019	0.14 (J)	0.19 (J)			1.6	0.044 (J)
4/8/2019				0.048 (J)		
9/25/2019			<0.1			
9/26/2019				0.18 (J)		0.19 (J)
9/27/2019	0.26 (J)	0.53			1.5	
3/2/2020			<0.1			
3/3/2020					1.4	
3/4/2020	0.08 (J)	0.096 (J)		0.051 (J)		0.052 (J)
3/26/2020		0.12 (J)			1.6	
3/27/2020			<0.1			
3/30/2020				0.064 (J)		
3/31/2020	0.074 (J)					<0.3
9/17/2020	0.1		<0.1			0.069 (J)
9/18/2020					1.6	
9/21/2020		0.17		<0.1		
2/11/2021			<0.1			
2/12/2021		0.16			1.6	
2/16/2021	0.096 (J)			<0.1		0.071 (J)
3/15/2021			<0.1			
3/16/2021	0.098 (J)				1.7	
3/17/2021		0.18		<0.1		0.072 (J)
8/17/2021	0.095 (J)		<0.1			0.075 (J)
8/18/2021		0.12				
8/19/2021				<0.1	1.5	
2/9/2022	0.1	0.076 (J)			1.7	0.092 (J)
2/10/2022			<0.1	0.051 (J)		
8/3/2022				0.075 (J)		
8/4/2022	0.13	0.18	0.074 (J)		1.5	0.12
1/26/2023	0.11	0.098 (J)	0.081 (J)	0.083 (J)	1.6	0.11
8/10/2023		0.14	<0.1		1.5	
8/11/2023	0.12					0.083 (J)
8/12/2023				0.08 (J)		
Mean	0.1867	0.1854	0.09438	0.08508	1.615	0.09077
Std. Dev.	0.1473	0.1242	0.01084	0.03452	0.1951	0.04213
Upper Lim.	0.233	0.2368	0.1	0.09377	1.7	0.1221
Lower Lim.	0.103	0.108	0.074	0.05216	1.5	0.05944

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-27D	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019		0.24 (J)	0.07 (J)			
3/13/2019	0.28 (J)			0.1 (J)	0.19 (J)	0.069 (J)
4/2/2019		0.18 (J)	0.045 (J)			
4/3/2019				0.049 (J)	0.15 (J)	<0.1
4/4/2019	0.26 (J)					
9/24/2019			0.18 (J)			
9/25/2019				0.076 (J)		
9/26/2019	0.42	0.22 (J)			0.19 (J)	0.17 (J)
3/2/2020			<0.1	0.065 (J)		
3/3/2020					0.062 (J)	<0.1
3/4/2020	0.25 (J)	0.26 (J)				
3/26/2020				0.082 (J)		
3/27/2020		0.26 (J)			<0.1	
3/30/2020			<0.1			<0.1
4/2/2020	0.24 (J)					
9/16/2020			<0.1			
9/17/2020				0.094 (J)		
9/18/2020	0.22					
9/21/2020		0.1			<0.1	<0.1
2/10/2021		0.16				
2/15/2021			<0.1			<0.1
2/16/2021	0.25			0.051 (J)	0.059 (J)	
3/12/2021	0.24					
3/15/2021		0.24	<0.1			<0.1
3/16/2021				<0.1	0.06 (J)	
8/16/2021			<0.1			
8/17/2021	0.24			<0.1	0.055 (J)	<0.1
8/18/2021		0.14				
2/8/2022						<0.1
2/9/2022				0.056 (J)	0.059 (J)	
2/10/2022	0.25	0.22	<0.1			
8/3/2022	0.27		0.069 (J)	0.094 (J)	0.085 (J)	
8/4/2022		0.19				0.078 (J)
1/26/2023		0.22	0.068 (J)	0.087 (J)	0.088 (J)	0.06 (J)
1/27/2023	0.3					
8/10/2023			<0.1	0.066 (J)	0.053 (J)	<0.1
8/11/2023		0.26				
8/12/2023	0.26					
Mean	0.2677	0.2069	0.09477	0.07846	0.09623	0.09823
Std. Dev.	0.05003	0.05023	0.03156	0.01921	0.0496	0.02567
Upper Lim.	0.3	0.2443	0.18	0.08458	0.15	0.17
Lower Lim.	0.24	0.1696	0.068	0.05951	0.055	0.069

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8
5/20/2016					<0.001	<0.001
5/23/2016	<0.001	<0.001	<0.001	<0.001		
7/12/2016	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
9/1/2016	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
10/20/2016					<0.001	<0.001
10/24/2016	<0.001	<0.001	<0.001	<0.001		
12/6/2016					0.0001 (J)	<0.001
12/7/2016	<0.001	<0.001	<0.001	<0.001		
1/25/2017					0.0001 (J)	<0.001
1/26/2017	<0.001	<0.001	<0.001	<0.001		
3/21/2017					9E-05 (J)	<0.001
3/22/2017	<0.001	0.0003 (J)	<0.001	7E-05 (J)		
5/23/2017					8E-05 (J)	<0.001
5/24/2017	<0.001	9E-05 (J)	<0.001	<0.001		
4/3/2018					<0.001	<0.001
4/4/2018	<0.001	<0.001	<0.001	<0.001		
3/12/2019						<0.001
3/13/2019	<0.001	<0.001		<0.001	<0.001	
3/14/2019			<0.001			
3/3/2020	<0.001	0.00021 (J)	5.6E-05 (J)			0.00013 (J)
3/4/2020				0.00014 (J)	0.00051 (J)	
3/26/2020			0.00043 (J)			
3/27/2020					5.4E-05 (J)	<0.001
3/30/2020				0.0001 (J)		
3/31/2020		0.0003 (J)				
4/1/2020	5E-05 (J)					
9/16/2020	<0.001				0.0002 (J)	0.0002 (J)
9/18/2020		6E-05 (J)	9.6E-05 (J)			
9/21/2020				0.00015 (J)		
2/10/2021					0.00056 (J)	
2/12/2021		<0.001	6.7E-05 (J)			
2/15/2021	<0.001					
2/16/2021						8.6E-05 (J)
2/22/2021				0.00018 (J)		
3/12/2021	<0.001					
3/15/2021					0.0013	0.00011 (J)
3/16/2021		9.9E-05 (J)	8.9E-05 (J)			
3/17/2021				0.00015 (J)		
8/16/2021					<0.001	
8/17/2021	<0.001					
8/18/2021		<0.001	<0.001			<0.001
8/19/2021				<0.001		
2/9/2022	<0.001	<0.001	<0.001			
2/10/2022				<0.001	<0.001	<0.001
8/3/2022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/11/2022					<0.001	
1/26/2023		<0.001	<0.001	<0.001		
1/27/2023	<0.001				<0.001	
2/1/2023						<0.001
8/10/2023	<0.001	<0.001	<0.001			
8/12/2023				<0.001	<0.001	<0.001
Mean	0.0009525	0.000753	0.0007869	0.0007395	0.000714	0.0008263

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8
Std. Dev.	0.0002124	0.0003911	0.0003856	0.0004088	0.0004263	0.000357
Upper Lim.	0.001	0.001	0.001	0.001	0.001	0.001
Lower Lim.	5E-05	0.0003	0.00043	0.00015	0.0001	0.0002

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-9	MW-19	MW-20	MW-24D	MW-26D	MW-27D
5/23/2016	<0.001					
7/12/2016	<0.001					
9/1/2016	<0.001					
10/20/2016	<0.001					
12/6/2016	0.0002 (J)					
1/26/2017	0.0001 (J)					
3/22/2017	<0.001					
5/23/2017	0.0001 (J)					
4/3/2018	<0.001					
3/13/2019	<0.001		<0.001	<0.001	<0.001	<0.001
3/14/2019		<0.001				
3/2/2020			0.00017 (J)			
3/4/2020	8.4E-05 (J)	0.00011 (J)		0.00019 (J)	<0.001	<0.001
3/26/2020		<0.001				
3/27/2020			0.00013 (J)			
3/30/2020				6.4E-05 (J)		
3/31/2020	0.00014 (J)				0.0001 (J)	
4/2/2020						0.00013 (J)
9/17/2020	0.00022 (J)		<0.001		<0.001	
9/18/2020						<0.001
9/21/2020		8.5E-05 (J)		4.2E-05 (J)		
2/11/2021			3.9E-05 (J)			
2/12/2021		7.1E-05 (J)				
2/16/2021	0.0002 (J)			0.00012 (J)	8E-05 (J)	0.00043 (J)
3/12/2021						<0.001
3/15/2021			0.0001 (J)			
3/16/2021	0.00027 (J)					
3/17/2021		3.8E-05 (J)		4E-05 (J)	<0.001	
8/17/2021	<0.001		<0.001		<0.001	<0.001
8/18/2021		<0.001				
8/19/2021				<0.001		
2/9/2022	<0.001	<0.001			<0.001	
2/10/2022			<0.001	<0.001		<0.001
8/3/2022				<0.001		<0.001
8/4/2022	<0.001	<0.001	<0.001		<0.001	
1/26/2023	<0.001	<0.001	<0.001	<0.001	<0.001	
1/27/2023						<0.001
8/10/2023		<0.001	<0.001			
8/11/2023	<0.001				<0.001	
8/12/2023				<0.001		<0.001
Mean	0.0006657	0.000664	0.0006763	0.0005869	0.0008345	0.0008691
Std. Dev.	0.0004221	0.0004665	0.0004502	0.0004763	0.0003681	0.0002989
Upper Lim.	0.001	0.001	0.001	0.001	0.001	0.001
Lower Lim.	0.0002	7.1E-05	0.0001	4.2E-05	0.0001	0.00043

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-5	MW-6	MW-7
3/12/2019	<0.001	<0.001			
3/13/2019			<0.001	<0.001	<0.001
3/2/2020		9E-05 (J)	4.7E-05 (J)		
3/3/2020				0.00013 (J)	6.2E-05 (J)
3/4/2020	0.001 (J)				
3/26/2020			<0.001		
3/27/2020	6.2E-05 (J)			<0.001	
3/30/2020		0.00011 (J)			<0.001
9/16/2020		<0.001			
9/17/2020			<0.001		
9/21/2020	0.00018 (J)			0.00026 (J)	<0.001
2/10/2021	0.00044 (J)				
2/15/2021		5.2E-05 (J)			<0.001
2/16/2021			<0.001	8.4E-05 (J)	
3/15/2021	0.00034 (J)	<0.001			<0.001
3/16/2021			<0.001	3.6E-05 (J)	
8/16/2021		<0.001			
8/17/2021			<0.001	<0.001	<0.001
8/18/2021	<0.001				
2/8/2022					<0.001
2/9/2022			<0.001	<0.001	
2/10/2022	<0.001	<0.001			
8/3/2022		<0.001	<0.001	<0.001	
8/4/2022	<0.001				<0.001
1/26/2023	<0.001	<0.001	<0.001	<0.001	<0.001
8/10/2023		<0.001	<0.001	<0.001	<0.001
8/11/2023	<0.001				
Mean	0.0007293	0.0007502	0.0009134	0.0006827	0.0009147
Std. Dev.	0.0003867	0.0004281	0.0002873	0.0004433	0.0002828
Upper Lim.	0.001	0.001	0.001	0.001	0.001
Lower Lim.	0.00018	9E-05	0.001	8.4E-05	0.001

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9	MW-19
5/20/2016			<0.05	<0.05		
5/23/2016	0.0107 (J)	0.0422 (J)			<0.05	
7/12/2016	0.0113 (J)	0.0366 (J)	0.0021 (J)	0.0023 (J)	0.004 (J)	
9/1/2016	0.0118 (J)	0.04 (J)	0.0025 (J)	0.0029 (J)	0.0044 (J)	
10/20/2016			0.0021 (J)	0.0027 (J)	0.0027 (J)	
10/24/2016	0.0114 (J)	0.0435 (J)				
12/6/2016			0.0026 (J)	0.0032 (J)	0.005 (J)	
12/7/2016	0.0155 (J)	0.0477 (J)				
1/25/2017			0.0024 (J)	0.0026 (J)		
1/26/2017	0.0099 (J)	0.0342 (J)			0.0042 (J)	
3/21/2017			0.0026 (J)	0.0029 (J)		
3/22/2017	0.0098 (J)	0.0353 (J)			0.0043 (J)	
5/23/2017			0.0026 (J)	0.0029 (J)	0.0048 (J)	
5/24/2017	0.0105 (J)	0.0317 (J)				
4/3/2018			0.0023 (J)	0.0025 (J)	0.0043 (J)	
4/4/2018	0.008 (J)	0.031 (J)				
6/5/2018		0.031 (J)	0.0022 (J)			
6/6/2018	0.0095 (J)			0.0023 (J)	0.0043 (J)	
10/2/2018			0.003 (J)	0.0025 (J)	0.004 (J)	
10/3/2018	0.0083 (J)					
10/5/2018		0.027 (J)				
3/12/2019				0.0025 (J)		
3/13/2019		0.029 (J)	0.0024 (J)		0.004 (J)	
3/14/2019	0.0058 (J)					0.0089 (J)
4/2/2019			0.002 (J)			
4/3/2019	0.0066 (J)			0.0025 (J)	0.004 (J)	0.0061 (J)
4/5/2019		0.023 (J)				
9/24/2019				0.0024 (J)		
9/25/2019			0.0019 (J)			
9/26/2019		0.035				
9/27/2019	0.011 (J)				0.0044 (J)	0.013 (J)
3/3/2020	0.0063 (J)			0.0028 (J)		
3/4/2020		0.041	0.0034 (J)		0.004 (J)	0.01 (J)
3/26/2020	0.0063 (J)					0.013 (J)
3/27/2020			0.002 (J)	0.0026 (J)		
3/30/2020		0.038				
3/31/2020					0.0043 (J)	
9/16/2020			0.0026 (J)	0.0033 (J)		
9/17/2020					0.004 (J)	
9/18/2020	0.01 (J)					
9/21/2020		0.028 (J)				0.013 (J)
2/10/2021			0.0032 (J)			
2/12/2021	0.0094 (J)					0.012 (J)
2/16/2021				0.0027 (J)	0.0045 (J)	
2/22/2021		0.032				
3/15/2021			0.0038 (J)	0.0029 (J)		
3/16/2021	0.0081 (J)				0.0046 (J)	
3/17/2021		0.031				0.012 (J)
8/16/2021			0.0025 (J)			
8/17/2021					0.004 (J)	
8/18/2021	0.0099 (J)			0.0029 (J)		0.014 (J)
8/19/2021		0.028 (J)				

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-12	HGWC-13	HGWC-7	HGWC-8	HGWC-9	MW-19
2/9/2022	0.01 (J)				0.0041 (J)	0.0067 (J)
2/10/2022		0.031	0.0022 (J)	0.003 (J)		
8/3/2022	0.0068 (J)	0.029 (J)	0.0019 (J)	0.0026 (J)		
8/4/2022					0.0036 (J)	0.013 (J)
8/11/2022			0.0019 (J)			
1/26/2023	0.0058 (J)	0.04			0.0032 (J)	0.0038 (J)
1/27/2023			0.0018 (J)			
2/1/2023				0.0015 (J)		
8/10/2023	0.0075 (J)					0.011 (J)
8/11/2023					0.0035 (J)	
8/12/2023		0.051	0.0023 (J)	0.0014 (J)		
Mean	0.009175	0.03484	0.003332	0.003538	0.004967	0.0105
Std. Dev.	0.002326	0.006919	0.004541	0.004593	0.004295	0.003208
Upper Lim.	0.01036	0.03837	0.0026	0.0029	0.0044	0.01289
Lower Lim.	0.007988	0.03131	0.0021	0.0025	0.004	0.008115

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-20	MW-24D	MW-25D	MW-26D	MW-27D	MW-28D
3/12/2019						0.011 (J)
3/13/2019	0.0016 (J)	0.0029 (J)		0.0033 (J)	0.0097 (J)	
3/14/2019			0.05			
4/2/2019	0.0015 (J)					0.0052 (J)
4/3/2019			0.047 (J)	0.0034 (J)		
4/4/2019					0.0069 (J)	
4/8/2019		0.0027 (J)				
9/25/2019	<0.03					
9/26/2019		0.003 (J)		0.0041 (J)	0.0055 (J)	0.0055 (J)
9/27/2019			0.047			
3/2/2020	0.00082 (J)					
3/3/2020			0.05			
3/4/2020		0.0026 (J)		0.03 (J)	0.0047 (J)	0.015 (J)
3/26/2020			0.054			
3/27/2020	0.0012 (J)					0.014 (J)
3/30/2020		0.0027 (J)				
3/31/2020				0.0036 (J)		
4/2/2020					0.0068 (J)	
9/17/2020	<0.03			0.0032 (J)		
9/18/2020			0.046		0.0084 (J)	
9/21/2020		0.0024 (J)				0.0053 (J)
2/10/2021						0.0092 (J)
2/11/2021	0.001 (J)					
2/12/2021			0.045			
2/16/2021		0.0028 (J)		0.0038 (J)	0.0078 (J)	
3/12/2021					0.009 (J)	
3/15/2021	0.0011 (J)					0.013 (J)
3/16/2021			0.049			
3/17/2021		0.0027 (J)		0.004 (J)		
8/17/2021	0.00091 (J)			0.0036 (J)	0.0079 (J)	
8/18/2021						0.0086 (J)
8/19/2021		0.0027 (J)	0.046			
2/9/2022			0.048	0.0039 (J)		
2/10/2022	0.00099 (J)	0.0029 (J)			0.0086 (J)	0.014 (J)
8/3/2022		0.0024 (J)			0.0063 (J)	
8/4/2022	0.00075 (J)		0.04	0.0033 (J)		0.0088 (J)
1/26/2023	<0.03	0.0025 (J)	0.036	0.0031 (J)		0.011 (J)
1/27/2023					0.0072 (J)	
8/10/2023	<0.03		0.038			
8/11/2023				0.0029 (J)		0.016 (J)
8/12/2023		0.003 (J)			0.0072 (J)	
Mean	0.00999	0.002715	0.04585	0.005554	0.007385	0.01051
Std. Dev.	0.01389	0.0002035	0.005097	0.007354	0.001399	0.003765
Upper Lim.	0.03	0.002867	0.04964	0.0041	0.008425	0.01331
Lower Lim.	0.00082	0.002564	0.04206	0.0031	0.006344	0.007708

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-29
3/12/2019	0.0024 (J)
4/2/2019	0.0021 (J)
9/24/2019	0.0022 (J)
3/2/2020	0.0025 (J)
3/30/2020	0.0023 (J)
9/16/2020	0.0021 (J)
2/15/2021	0.0024 (J)
3/15/2021	0.0022 (J)
8/16/2021	0.0021 (J)
2/10/2022	0.0023 (J)
8/3/2022	0.0018 (J)
1/26/2023	0.0019 (J)
8/10/2023	0.0019 (J)
Mean	0.002169
Std. Dev.	0.0002136
Upper Lim.	0.002328
Lower Lim.	0.00201

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-13	HGWC-9	MW-25D	MW-29
5/23/2016	<0.0002	<0.0002	<0.0002	<0.0002		
7/12/2016	<0.0002	<0.0002	<0.0002	<0.0002		
9/1/2016	<0.0002	<0.0002	<0.0002	<0.0002		
10/20/2016				<0.0002		
10/24/2016	<0.0002	<0.0002	<0.0002			
12/6/2016				<0.0002		
12/7/2016	<0.0002	<0.0002	<0.0002			
1/26/2017	5E-05 (J)	5E-05 (J)	4E-05 (J)	4E-05 (J)		
3/22/2017	<0.0002	<0.0002	<0.0002	<0.0002		
5/23/2017				<0.0002		
5/24/2017	<0.0002	<0.0002	5E-05 (J)			
4/3/2018				<0.0002		
4/4/2018	<0.0002	<0.0002	<0.0002			
3/12/2019						<0.0002
3/13/2019	<0.0002	<0.0002	<0.0002	<0.0002		
3/14/2019					<0.0002	
3/2/2020						<0.0002
3/3/2020	<0.0002	<0.0002			<0.0002	
3/4/2020			<0.0002	<0.0002		
2/12/2021		<0.0002			<0.0002	
2/15/2021	<0.0002					<0.0002
2/16/2021				<0.0002		
2/22/2021			<0.0002			
2/9/2022	<0.0002	<0.0002		<0.0002	<0.0002	
2/10/2022			<0.0002			<0.0002
8/3/2022	<0.0002	<0.0002	<0.0002			<0.0002
8/4/2022				<0.0002	<0.0002	
1/26/2023		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1/27/2023	<0.0002					
8/10/2023	<0.0002	<0.0002			0.00013 (J)	0.00017 (J)
8/11/2023				<0.0002		
8/12/2023			<0.0002			
Mean	0.0001906	0.0001906	0.0001806	0.00019	0.00019	0.0001957
Std. Dev.	3.75E-05	3.75E-05	5.297E-05	4E-05	2.646E-05	1.134E-05
Upper Lim.	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Lower Lim.	5E-05	5E-05	5E-05	4E-05	0.00013	0.00017

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8
5/20/2016					0.028	0.446
5/23/2016	<0.01	0.0164	0.0413 (J)	0.027		
7/12/2016	0.0013 (J)	0.0251	0.0484	0.0316	0.0273	0.455
9/1/2016	<0.01	0.0259	0.0474	0.0336	0.0274	0.481
10/20/2016					0.036	0.472
10/24/2016	<0.01	0.0293	0.047	0.0352		
12/6/2016					0.0365	0.52
12/7/2016	<0.01	0.0209	0.0432	0.0383		
1/25/2017					0.0317	0.478
1/26/2017	<0.01	0.0277	0.0484	0.041		
3/21/2017					0.0346	0.547
3/22/2017	0.0013 (J)	0.011	0.0494	0.0426		
5/23/2017					0.0336	0.482
5/24/2017	0.0014 (J)	0.0373	0.047	0.04		
4/3/2018					0.032	0.44
4/4/2018	<0.01	0.013	0.052	0.027		
6/5/2018	<0.01	0.029		0.027	0.036	
6/6/2018			0.054			0.49
10/2/2018	<0.01				0.039	0.47
10/3/2018		0.02	0.054			
10/5/2018				0.033		
3/12/2019						0.5
3/13/2019	<0.01	0.012		0.033	0.04	
3/14/2019			0.046			
4/2/2019					0.041	
4/3/2019	0.0021 (J)	0.01	0.049			0.5
4/5/2019				0.03		
9/24/2019						0.54
9/25/2019					0.047	
9/26/2019				0.026		
9/27/2019	0.0014 (J)	0.016	0.052			
3/3/2020	<0.01	0.011	0.045			0.44
3/4/2020				0.03	0.045	
3/26/2020			0.045			
3/27/2020					0.044	0.42
3/30/2020				0.029		
3/31/2020		0.0074 (J)				
4/1/2020	<0.01					
6/16/2020						0.45
6/17/2020					0.048	
9/16/2020	0.0014 (J)				0.046	0.43
9/18/2020		0.032	0.046			
9/21/2020				0.032		
2/10/2021					0.051	
2/12/2021		0.023	0.048			
2/15/2021	<0.01					
2/16/2021						0.46
2/22/2021				0.036		
3/12/2021	0.0007 (J)					
3/15/2021					0.047	0.41
3/16/2021		0.015	0.044			
3/17/2021				0.035		

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-7	HGWC-8
8/16/2021					0.045	
8/17/2021	0.0012 (J)					
8/18/2021		0.038	0.045			0.48
8/19/2021				0.032		
2/9/2022	<0.01	0.03	0.042			
2/10/2022				0.033	0.045	0.34
8/3/2022	0.00079 (J)	0.027	0.047	0.035	0.038	0.29
8/11/2022					0.044	
1/26/2023		0.022	0.048	0.023		
1/27/2023	<0.01				0.039	
2/1/2023						0.29
8/10/2023	0.0014 (J)	0.014	0.05			
8/12/2023				0.016	0.033	0.34
Mean	0.006375	0.02138	0.04746	0.03193	0.03904	0.4468
Std. Dev.	0.004388	0.008837	0.003379	0.005941	0.006839	0.0683
Upper Lim.	0.01	0.02588	0.04919	0.03496	0.04238	0.4809
Lower Lim.	0.0014	0.01687	0.04574	0.0289	0.03571	0.4128

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-9	MW-19	MW-24D	MW-25D	MW-26D	MW-27D
5/23/2016	0.0187					
7/12/2016	0.0229					
9/1/2016	0.0239					
10/20/2016	0.477					
12/6/2016	0.0236					
1/26/2017	0.0234					
3/22/2017	0.0219					
5/23/2017	0.0242					
4/3/2018	0.025					
6/6/2018	0.027					
10/2/2018	0.028					
3/13/2019	0.028		<0.01		<0.01	<0.01
3/14/2019		0.057		0.0022 (J)		
4/3/2019	0.03	0.04		<0.01	0.0083 (J)	
4/4/2019						0.0018 (J)
4/8/2019			0.00027 (J)			
9/26/2019			<0.01		0.017	0.0042 (J)
9/27/2019	0.033	0.063		<0.01		
11/25/2019					0.02	
3/3/2020				<0.01		
3/4/2020	0.031	0.032	<0.01		0.0074 (J)	0.0058 (J)
3/26/2020		0.033		<0.01		
3/30/2020			<0.01			
3/31/2020	0.031				0.0093 (J)	
4/2/2020						0.003 (J)
9/17/2020	0.03				0.014	
9/18/2020				0.00094 (J)		0.0018 (J)
9/21/2020		0.064	0.00099 (J)			
2/12/2021		0.046		<0.01		
2/16/2021	0.035		0.00096 (J)		0.022	0.0019 (J)
3/12/2021						0.0008 (J)
3/16/2021	0.035			<0.01		
3/17/2021		0.043	0.001 (J)		0.023	
8/17/2021	0.035				0.024	0.0016 (J)
8/18/2021		0.032				
8/19/2021			0.00087 (J)	<0.01		
2/9/2022	0.034	0.011		<0.01	0.028	
2/10/2022			0.0008 (J)			0.0017 (J)
8/3/2022			0.00095 (J)			0.002 (J)
8/4/2022	0.033	0.039		<0.01	0.028	
1/26/2023	0.021	0.012	0.0012 (J)	<0.01	0.028	
1/27/2023						0.0014 (J)
8/10/2023		0.033		<0.01		
8/11/2023	0.03				0.014	
8/12/2023			0.0019 (J)			0.0019 (J)
Mean	0.04673	0.03885	0.003765	0.008703	0.01771	0.002531
Std. Dev.	0.09178	0.01652	0.004341	0.003176	0.008152	0.001521
Upper Lim.	0.033	0.05113	0.01	0.01	0.02349	0.003468
Lower Lim.	0.0236	0.02656	0.0008	0.0022	0.01194	0.001448

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-28D	MW-29	MW-6	MW-7
3/12/2019	0.013	0.0038 (J)		
3/13/2019			0.0021 (J)	<0.01
4/2/2019	0.028	0.0028 (J)		
4/3/2019			0.0021 (J)	<0.01
9/24/2019		0.0021 (J)		
9/26/2019	0.017		0.0026 (J)	0.0033 (J)
3/2/2020		0.0025 (J)		
3/3/2020			0.0022 (J)	<0.01
3/4/2020	0.009 (J)			
3/27/2020	0.0068 (J)		0.0026 (J)	
3/30/2020		0.0029 (J)		<0.01
9/16/2020		0.0021 (J)		
9/21/2020	0.018		0.0025 (J)	0.0015 (J)
2/10/2021	0.02			
2/15/2021		0.0029 (J)		0.0015 (J)
2/16/2021			0.0025 (J)	
3/15/2021	0.013	0.0031 (J)		0.0015 (J)
3/16/2021			0.0023 (J)	
8/16/2021		0.0027 (J)		
8/17/2021			0.0027 (J)	0.003 (J)
8/18/2021	0.022			
2/8/2022				0.0012 (J)
2/9/2022			0.0026 (J)	
2/10/2022	0.0031 (J)	0.0036 (J)		
8/3/2022		0.0032 (J)	0.0028 (J)	
8/4/2022	0.011			0.0014 (J)
1/26/2023	0.0025 (J)	0.0029 (J)	0.0029 (J)	<0.01
8/10/2023		0.003 (J)	0.0026 (J)	0.0022 (J)
8/11/2023	0.0011 (J)			
Mean	0.01265	0.002892	0.0025	0.005046
Std. Dev.	0.008179	0.0004941	0.000255	0.004122
Upper Lim.	0.01874	0.00326	0.00269	0.01
Lower Lim.	0.006572	0.002525	0.00231	0.0014

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-8	HGWC-9
5/20/2016					<0.005	
5/23/2016	<0.005	0.0106	<0.005	<0.005		<0.005
7/12/2016	<0.005	0.0057 (J)	<0.005	<0.005	<0.005	<0.005
9/1/2016	<0.005	0.0057 (J)	<0.005	<0.005	<0.005	<0.005
10/20/2016					<0.005	<0.005
10/24/2016	<0.005	0.0021 (J)	<0.005	<0.005		
12/6/2016					0.0024 (J)	0.0037 (J)
12/7/2016	<0.005	0.0015 (J)	0.0011 (J)	<0.005		
1/25/2017					<0.005	
1/26/2017	0.0041 (J)	0.0062 (J)	<0.005	<0.005		<0.005
3/21/2017					<0.005	
3/22/2017	<0.005	0.0263	<0.005	<0.005		<0.005
5/23/2017					<0.005	<0.005
5/24/2017	<0.005	0.0038 (J)	<0.005	<0.005		
4/3/2018					<0.005	<0.005
4/4/2018	<0.005	0.021	<0.005	<0.005		
6/5/2018	<0.005	0.0062 (J)		<0.005		
6/6/2018			<0.005		<0.005	<0.005
10/2/2018	0.0023 (J)				<0.005	<0.005
10/3/2018		0.009 (J)	<0.005			
10/5/2018				<0.005		
3/12/2019					<0.005	
3/13/2019	0.0015 (J)	0.023		<0.005		<0.005
3/14/2019			<0.005			
4/3/2019	<0.005	0.016	<0.005		<0.005	<0.005
4/5/2019				0.00018 (J)		
9/24/2019					<0.005	
9/26/2019				<0.005		
9/27/2019	<0.005	0.013	<0.005			<0.005
3/3/2020	<0.005	0.016	<0.005		<0.005	
3/4/2020				<0.005		<0.005
3/26/2020			<0.005			
3/27/2020					<0.005	
3/30/2020				<0.005		
3/31/2020		0.019				<0.005
4/1/2020	0.002 (J)					
9/16/2020	<0.005				<0.005	
9/17/2020						<0.005
9/18/2020		0.0042 (J)	<0.005			
9/21/2020				0.0016 (J)		
2/12/2021		0.0079 (J)	<0.005			
2/15/2021	0.0028 (J)					
2/16/2021					<0.005	<0.005
2/22/2021				<0.005		
3/12/2021	<0.005					
3/15/2021					<0.005	
3/16/2021		0.015	<0.005			<0.005
3/17/2021				<0.005		
8/17/2021	<0.005					<0.005
8/18/2021		0.0033 (J)	<0.005		<0.005	
8/19/2021				<0.005		
2/9/2022	0.0031 (J)	0.0035 (J)	<0.005			<0.005

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-10	HGWC-11	HGWC-12	HGWC-13	HGWC-8	HGWC-9
2/10/2022				<0.005	<0.005	
8/3/2022	0.0017 (J)	0.0057	<0.005	<0.005	<0.005	
8/4/2022						<0.005
1/26/2023		0.01	<0.005	<0.005		<0.005
1/27/2023	0.0035 (J)					
2/1/2023					<0.005	
8/10/2023	<0.005	0.0089	<0.005			
8/11/2023						<0.005
8/12/2023				<0.005	<0.005	
Mean	0.004208	0.01015	0.004837	0.004657	0.004892	0.004946
Std. Dev.	0.001249	0.007001	0.0007961	0.001179	0.0005307	0.0002654
Upper Lim.	0.005	0.01372	0.005	0.005	0.005	0.005
Lower Lim.	0.0031	0.006577	0.0011	0.0016	0.0024	0.0037

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-19	MW-27D	MW-5	MW-7
3/13/2019		<0.005	0.0033 (J)	0.0016 (J)
3/14/2019	<0.005			
4/3/2019	0.007 (J)		0.0027 (J)	<0.005
4/4/2019		0.00012 (J)		
9/25/2019			0.0021 (J)	
9/26/2019		<0.005		0.0014 (J)
9/27/2019	0.0013 (J)			
3/2/2020			0.0041 (J)	
3/3/2020				<0.005
3/4/2020	0.0044 (J)	<0.005		
3/26/2020	0.0053 (J)		0.0039 (J)	
3/30/2020				0.0014 (J)
4/2/2020		<0.005		
9/17/2020			0.0028 (J)	
9/18/2020		<0.005		
9/21/2020	0.0033 (J)			0.0026 (J)
2/12/2021	0.0021 (J)			
2/15/2021				<0.005
2/16/2021		<0.005	0.0035 (J)	
3/12/2021		<0.005		
3/15/2021				0.0021 (J)
3/16/2021			0.0026 (J)	
3/17/2021	<0.005			
8/17/2021		<0.005	0.0017 (J)	<0.005
8/18/2021	0.0026 (J)			
2/8/2022				0.0015 (J)
2/9/2022	0.0036 (J)		0.0027 (J)	
2/10/2022		<0.005		
8/3/2022		<0.005	0.0032 (J)	
8/4/2022	0.0022 (J)			<0.005
1/26/2023	0.0056		0.0045 (J)	<0.005
1/27/2023		<0.005		
8/10/2023	0.0038 (J)		0.002 (J)	<0.005
8/12/2023		<0.005		
Mean	0.003938	0.004625	0.003008	0.003508
Std. Dev.	0.001637	0.001353	0.0008431	0.001707
Upper Lim.	0.004794	0.005	0.003635	0.005
Lower Lim.	0.002441	0.00012	0.002381	0.0015

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-8	MW-19	MW-28D
5/20/2016				<0.001		
5/23/2016	<0.001	<0.001	0.000378 (J)			
7/12/2016	8E-05 (J)	0.0002 (J)	0.0004 (J)	7E-05 (J)		
9/1/2016	<0.001	<0.001	0.0004 (J)	<0.001		
10/20/2016				<0.001		
10/24/2016	<0.001	<0.001	0.0005 (J)			
12/6/2016				<0.001		
12/7/2016	<0.001	<0.001	0.0004 (J)			
1/25/2017				<0.001		
1/26/2017	<0.001	<0.001	0.0004 (J)			
3/21/2017				9E-05 (J)		
3/22/2017	<0.001	0.0001 (J)	0.0004 (J)			
5/23/2017				8E-05 (J)		
5/24/2017	8E-05 (J)	9E-05 (J)	0.0003 (J)			
4/3/2018				<0.001		
4/4/2018	<0.001	<0.001	0.00032 (J)			
6/5/2018	<0.001		0.00035 (J)			
6/6/2018		<0.001		<0.001		
10/2/2018				<0.001		
10/3/2018	<0.001	<0.001				
10/5/2018			0.00025 (J)			
3/12/2019				<0.001		<0.001
3/13/2019	<0.001		0.00039 (J)			
3/14/2019		<0.001			<0.001	
4/2/2019						<0.001
4/3/2019	<0.001	<0.001		<0.001	<0.001	
4/5/2019			0.00034 (J)			
9/24/2019				0.00011 (J)		
9/26/2019			0.00039 (J)			<0.001
9/27/2019	<0.001	8.8E-05 (J)			0.00027 (J)	
3/3/2020	<0.001	6.6E-05 (J)		6.1E-05 (J)		
3/4/2020			0.00056 (J)		0.00026 (J)	9.2E-05 (J)
3/26/2020		8E-05 (J)			0.00026 (J)	
3/27/2020				7.7E-05 (J)		<0.001
3/30/2020			0.00048 (J)			
3/31/2020	<0.001					
9/16/2020				<0.001		
9/18/2020	<0.001	<0.001				
9/21/2020			0.00036 (J)		0.0003 (J)	<0.001
2/10/2021						<0.001
2/12/2021	<0.001	<0.001			0.00019 (J)	
2/16/2021				<0.001		
2/22/2021			0.0003 (J)			
3/15/2021				<0.001		<0.001
3/16/2021	<0.001	<0.001				
3/17/2021			0.00037 (J)		0.00026 (J)	
8/18/2021	<0.001	<0.001		<0.001	0.00023 (J)	<0.001
8/19/2021			0.0002 (J)			
2/9/2022	<0.001	<0.001			<0.001	
2/10/2022			<0.001	<0.001		<0.001
8/3/2022	<0.001	<0.001	<0.001	0.00018 (J)		
8/4/2022					0.00026 (J)	<0.001

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWC-12	HGWC-13	HGWC-8	MW-19	MW-28D
1/26/2023	<0.001	<0.001	0.00031 (J)		<0.001	<0.001
2/1/2023				<0.001		
8/10/2023	<0.001	<0.001			<0.001	
8/11/2023						<0.001
8/12/2023			0.00028 (J)	<0.001		
Mean	0.0009233	0.000776	0.0003783	0.0007362	0.0005408	0.0009302
Std. Dev.	0.0002597	0.000397	8.631E-05	0.0004205	0.0003787	0.0002518
Upper Lim.	0.001	0.001	0.0004223	0.001	0.001	0.001
Lower Lim.	8E-05	0.0002	0.0003342	0.00011	0.00023	9.2E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 10/25/2023 2:35 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-1

	MW-29	MW-6
3/12/2019	<0.001	
3/13/2019		<0.001
4/2/2019	<0.001	
4/3/2019		<0.001
9/24/2019	6.4E-05 (J)	
9/26/2019		<0.001
3/2/2020	<0.001	
3/3/2020		8.2E-05 (J)
3/27/2020		<0.001
3/30/2020	<0.001	
9/16/2020	<0.001	
9/21/2020		<0.001
2/15/2021	<0.001	
2/16/2021		<0.001
3/15/2021	<0.001	
3/16/2021		<0.001
8/16/2021	<0.001	
8/17/2021		<0.001
2/9/2022		<0.001
2/10/2022	<0.001	
8/3/2022	<0.001	<0.001
1/26/2023	<0.001	<0.001
8/10/2023	<0.001	<0.001
Mean	0.000928	0.0009294
Std. Dev.	0.0002596	0.0002546
Upper Lim.	0.001	0.001
Lower Lim.	6.4E-05	8.2E-05

ND substitution: RL or RL/2 if <15% NDs.

FIGURE I.

Appendix IV Trend Tests - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 10/25/2023, 2:37 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Arsenic (mg/L)	**HGWC-13**	**0.01769**	**108**	**81**	**Yes**	**24**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Molybdenum (mg/L)	**HGWA-43D (bg)**	**-0.0009202**	**-30**	**-27**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Molybdenum (mg/L)	**HGWC-8**	**-0.01769**	**-118**	**-85**	**Yes**	**25**	**0**	**n/a**	**n/a**	**0.05**	**NP**

Appendix IV Trend Tests - All Results

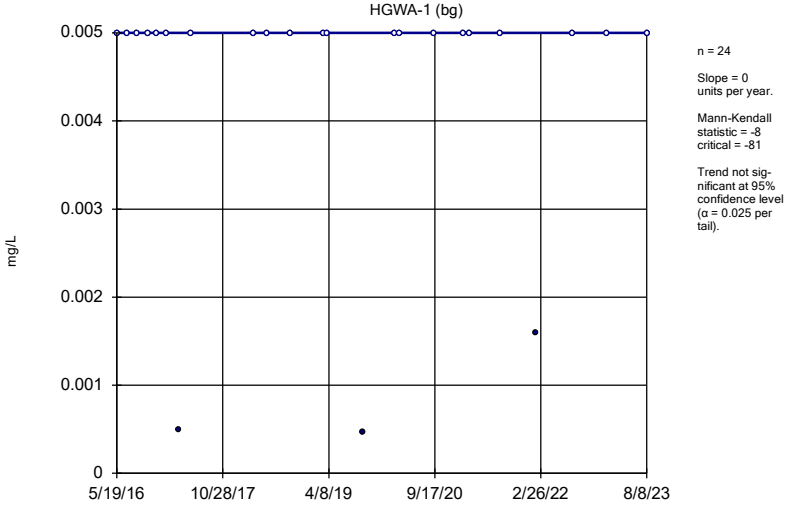
Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 10/25/2023, 2:37 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Arsenic (mg/L)	HGWA-1 (bg)	0	-8	-81	No	24	87.5	n/a	n/a	0.05	NP
Arsenic (mg/L)	HGWA-2 (bg)	0	43	81	No	24	62.5	n/a	n/a	0.05	NP
Arsenic (mg/L)	HGWA-3 (bg)	0	31	81	No	24	62.5	n/a	n/a	0.05	NP
Arsenic (mg/L)	HGWA-43D (bg)	0.0004771	11	27	No	11	45.45	n/a	n/a	0.05	NP
Arsenic (mg/L)	HGWA-44D (bg)	0	-7	-27	No	11	72.73	n/a	n/a	0.05	NP
Arsenic (mg/L)	**HGWC-13**	**0.01769**	**108**	**81**	**Yes**	**24**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Molybdenum (mg/L)	HGWA-1 (bg)	0	0	85	No	25	100	n/a	n/a	0.05	NP
Molybdenum (mg/L)	HGWA-2 (bg)	0	0	81	No	24	100	n/a	n/a	0.05	NP
Molybdenum (mg/L)	HGWA-3 (bg)	0	0	85	No	25	100	n/a	n/a	0.05	NP
Molybdenum (mg/L)	**HGWA-43D (bg)**	**-0.0009202**	**-30**	**-27**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Molybdenum (mg/L)	HGWA-44D (bg)	0.0001159	10	27	No	11	0	n/a	n/a	0.05	NP
Molybdenum (mg/L)	**HGWC-8**	**-0.01769**	**-118**	**-85**	**Yes**	**25**	**0**	**n/a**	**n/a**	**0.05**	**NP**

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWA-1 (bg)



n = 24

Slope = 0 units per year.

Mann-Kendall statistic = -8
critical = -81

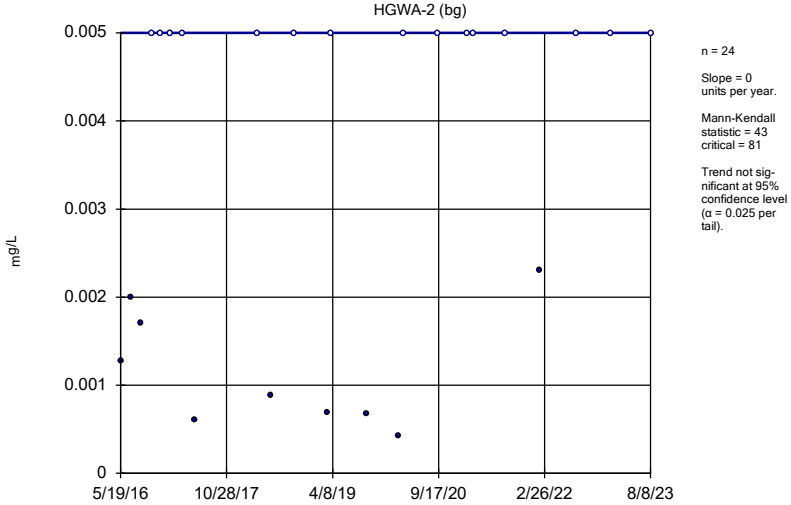
Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Arsenic Analysis Run 10/25/2023 2:37 PM View: Appendix IV - CI Trend Test
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWA-2 (bg)



n = 24

Slope = 0 units per year.

Mann-Kendall statistic = 43
critical = 81

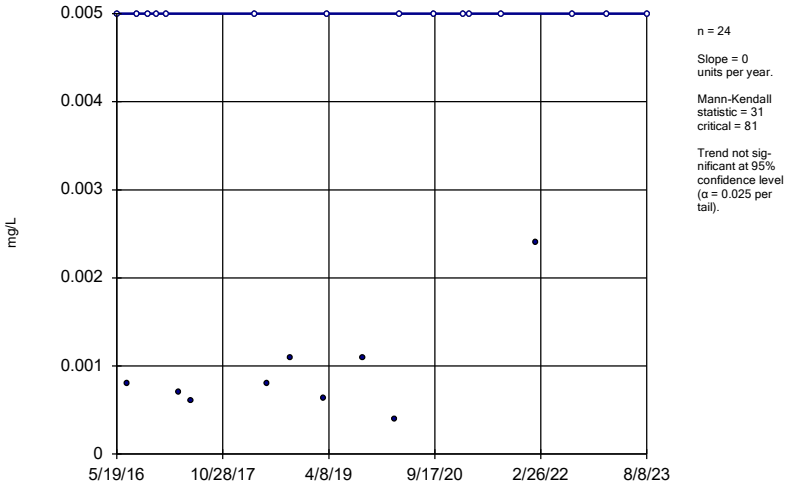
Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Arsenic Analysis Run 10/25/2023 2:37 PM View: Appendix IV - CI Trend Test
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWA-3 (bg)



n = 24

Slope = 0 units per year.

Mann-Kendall statistic = 31
critical = 81

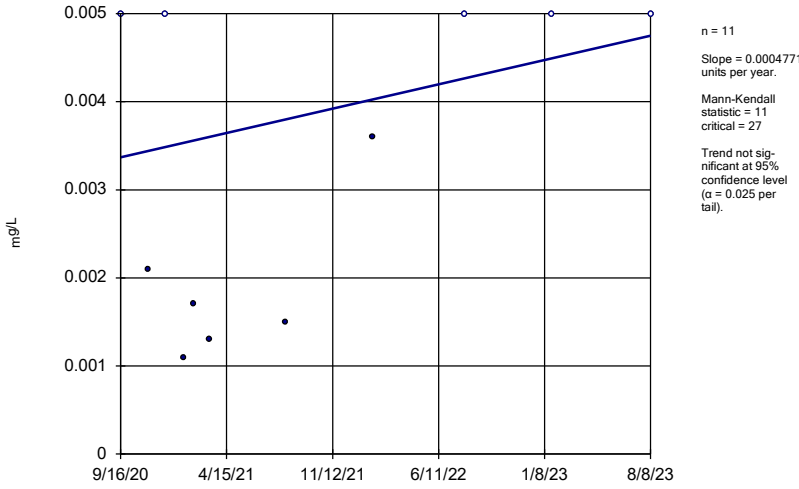
Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Arsenic Analysis Run 10/25/2023 2:37 PM View: Appendix IV - CI Trend Test
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWA-43D (bg)



n = 11

Slope = 0.0004771 units per year.

Mann-Kendall statistic = 11
critical = 27

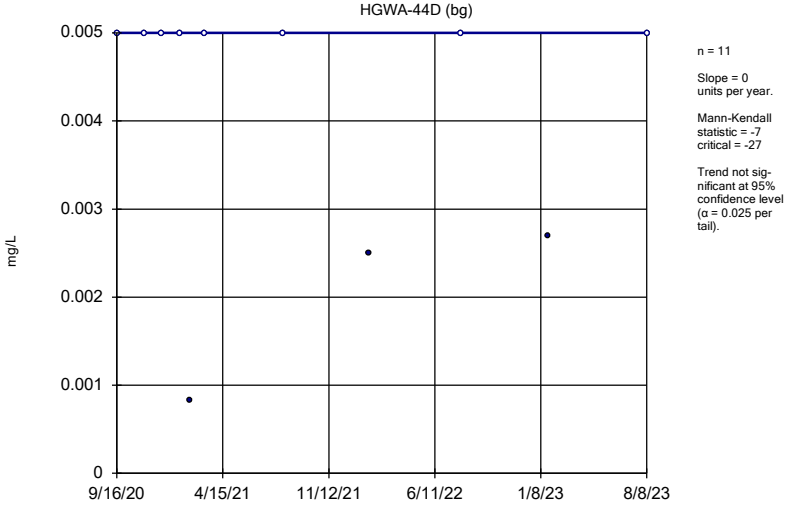
Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Arsenic Analysis Run 10/25/2023 2:37 PM View: Appendix IV - CI Trend Test
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWA-44D (bg)



n = 11

Slope = 0 units per year.

Mann-Kendall statistic = -7 critical = -27

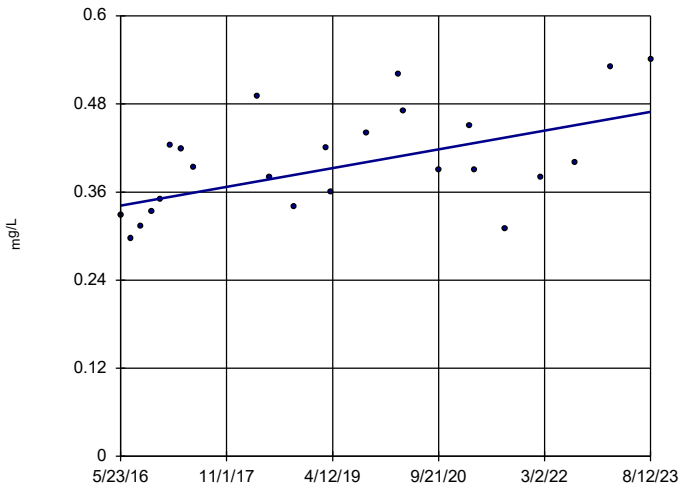
Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Arsenic Analysis Run 10/25/2023 2:37 PM View: Appendix IV - CI Trend Test
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWC-13



n = 24

Slope = 0.01769 units per year.

Mann-Kendall statistic = 108 critical = 81

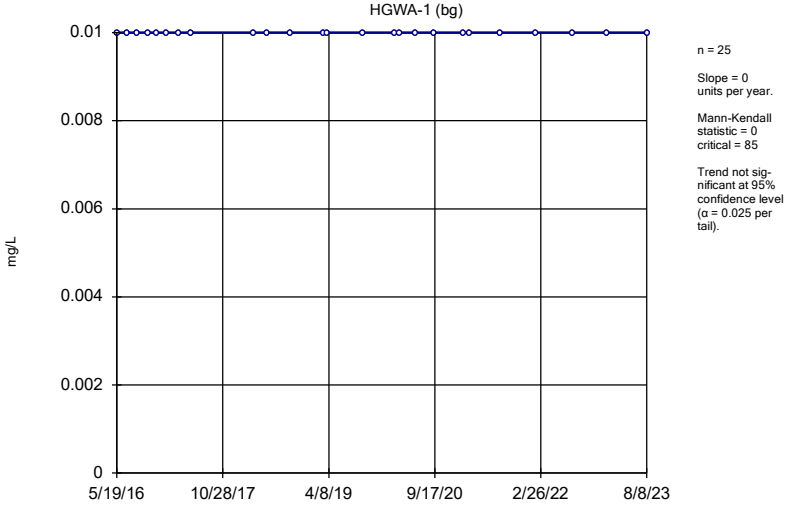
Increasing trend significant at 95% confidence level (α = 0.025 per tail).

Constituent: Arsenic Analysis Run 10/25/2023 2:37 PM View: Appendix IV - CI Trend Test
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWA-1 (bg)



n = 25

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 85

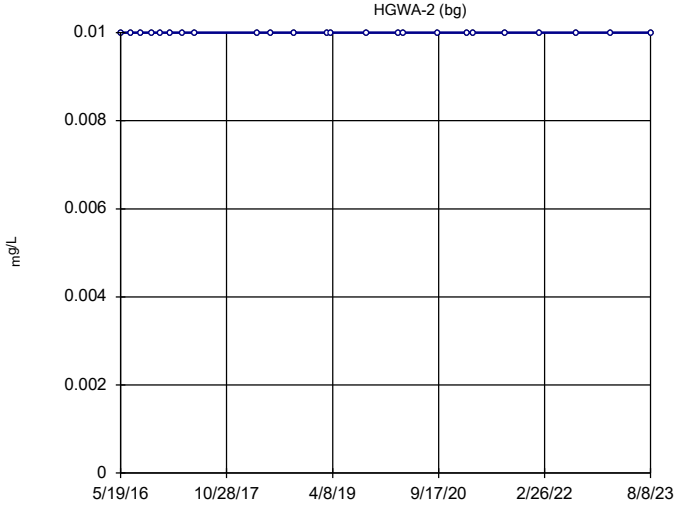
Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Molybdenum Analysis Run 10/25/2023 2:37 PM View: Appendix IV - CI Trend Test
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWA-2 (bg)



n = 24

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 81

Trend not significant at 95% confidence level (α = 0.025 per tail).

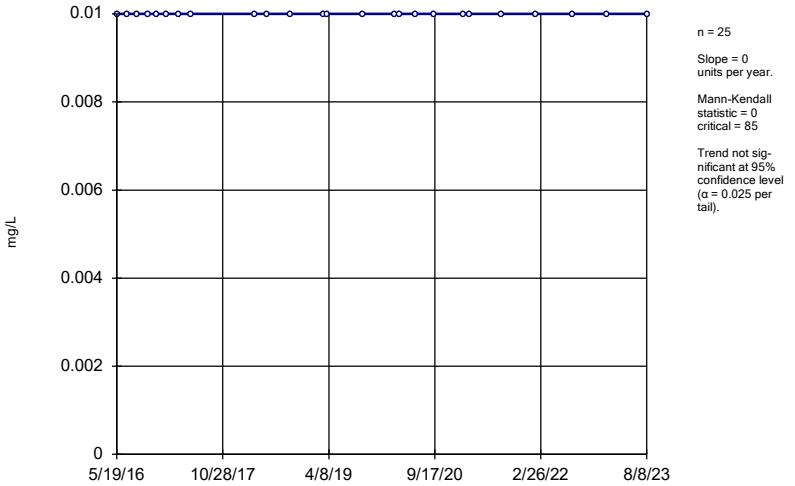
Constituent: Molybdenum Analysis Run 10/25/2023 2:37 PM View: Appendix IV - CI Trend Test
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWA-3 (bg)



n = 25

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 85

Trend not significant at 95% confidence level (α = 0.025 per tail).

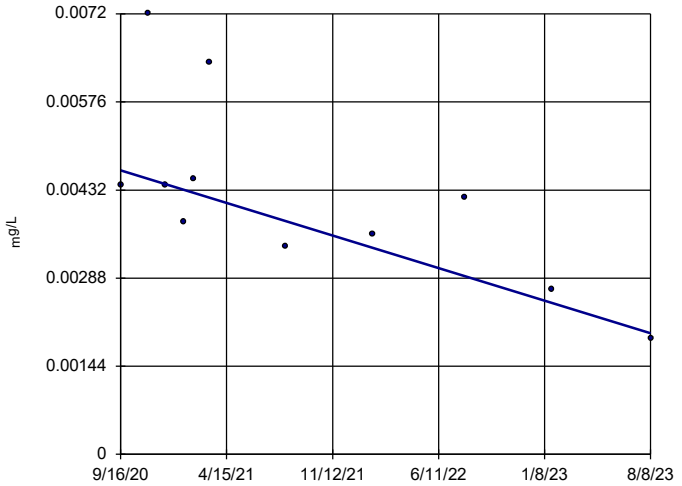
Constituent: Molybdenum Analysis Run 10/25/2023 2:37 PM View: Appendix IV - CI Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWA-43D (bg)



n = 11

Slope = -0.0009202 units per year.

Mann-Kendall statistic = -30
critical = -27

Decreasing trend significant at 95% confidence level (α = 0.025 per tail).

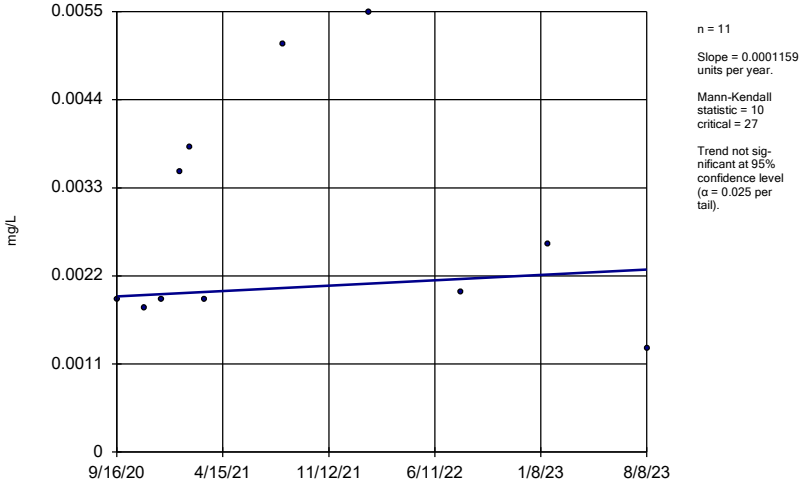
Constituent: Molybdenum Analysis Run 10/25/2023 2:37 PM View: Appendix IV - CI Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWA-44D (bg)



n = 11

Slope = 0.0001159 units per year.

Mann-Kendall statistic = 10
critical = 27

Trend not significant at 95% confidence level (α = 0.025 per tail).

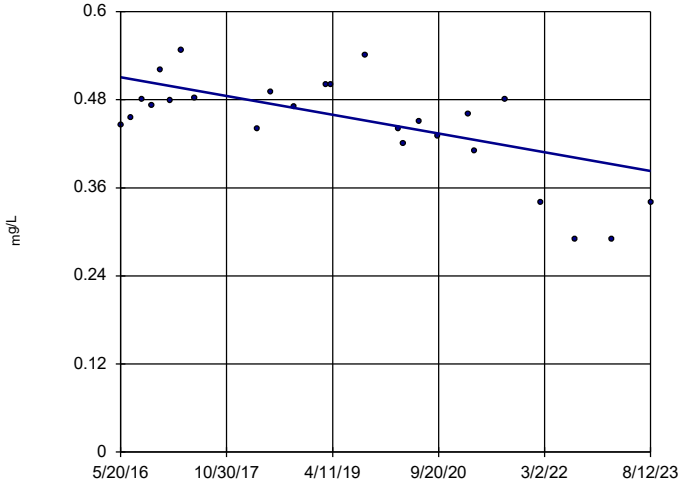
Constituent: Molybdenum Analysis Run 10/25/2023 2:37 PM View: Appendix IV - CI Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

HGWC-8



n = 25

Slope = -0.01769 units per year.

Mann-Kendall statistic = -118
critical = -85

Decreasing trend significant at 95% confidence level (α = 0.025 per tail).

Constituent: Molybdenum Analysis Run 10/25/2023 2:37 PM View: Appendix IV - CI Trend Test

Plant Hammond Client: Southern Company Data: Hammond AP-1

FIGURE J.

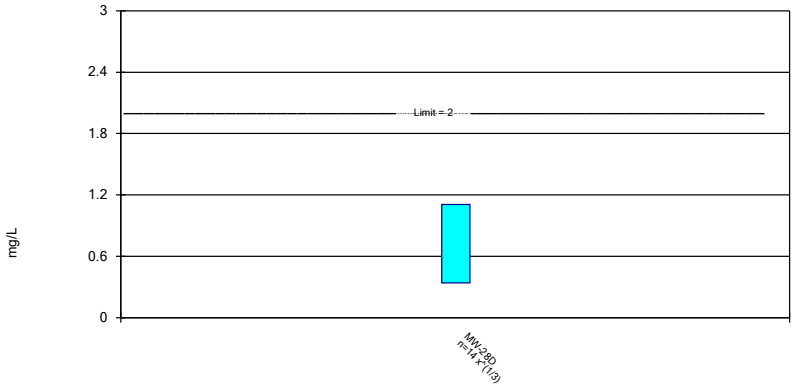
Confidence Intervals Summary Table - Resample Results

Plant Hammond Data: Hammond AP-1 Printed 11/22/2023, 5:11 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	ND Adj.	Transform	Alpha	Method
Barium (mg/L)	MW-28D	1.108	0.3401	2	No	14	0	None	x^(1/3)	0.01	Param.

Parametric Confidence Interval

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



Constituent: Barium Analysis Run 11/22/2023 5:09 PM View: Appendix IV - Resample

Plant Hammond Data: Hammond AP-1

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 11/22/2023 5:11 PM View: Appendix IV - Resample

Plant Hammond Data: Hammond AP-1

	MW-28D
3/12/2019	0.82
4/2/2019	0.37
9/26/2019	0.15
3/4/2020	0.77
3/27/2020	0.64
9/21/2020	0.18
2/10/2021	0.26
3/15/2021	0.45
8/18/2021	0.53
2/10/2022	0.76
8/4/2022	0.7
1/26/2023	0.8
8/11/2023	2.2
10/31/2023	2.5 (R)
Mean	0.795
Std. Dev.	0.6998
Upper Lim.	1.108
Lower Lim.	0.3401

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. UPT000062
PLANT HAMMOND ASH POND 1 (AP-1)

Prepared by

Geosyntec consultants

engineers | scientists | innovators

1255 Roberts Boulevard, Suite 200
Kennesaw, Georgia 30144

Project Number GW6581G

November 2023

Geosyntec
consultants

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.

_____ November 7, 2023

Whitney B. Law — Date

Georgia Professional Engineer No. 36641

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LIST OF APPENDICES

LIST OF ACRONYMS

ACM	Assessment of Corrective Measures
AP-1	Ash Pond 1
bgs	below ground surface
Cascade	Cascade Drilling, Inc.
CCR	coal combustion residual
CFR	Code of Federal Regulations
Co	cobalt
DO	dissolved oxygen
DPT	direct push technology
$FeSO_4$	ferrous sulfate
ft	feet
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
lb	pound
MNA	monitored natural attenuation
mg/L	milligrams per liter
MgO	magnesium oxide
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 molybdenum (Mo) and arsenic (As) reported at statistically significant levels (SSLs) above Groundwater Protection Standards (GWPS) in detection monitoring wells HGWC-8 and HGWC-13, respectively, at Georgia Power Plant Hammond Ash Pond 1 (AP-1; 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 As and Mo 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 and October 2023. These field activities were conducted in accordance with the *HGWC-8 Pilot Study Workplan* and the *HGWC-13 Pilot Study Workplan* (collectively referred to herein as "Workplans") (Geosyntec, 2023b, 2023c) associated with the Underground Injection Control (UIC) Pilot Test Notification Form. This Report has been prepared in accordance with requirements stipulated in the August 24, 2023 UIC Program pilot test notification approval letter.

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-1 is one of four coal combustion residual (CCR) ponds utilized over the course of power generation at Plant Hammond. AP-1 is a 35-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-1 closure activities, consisting of closure by removal, have been initiated under GA EPD's approved closure permit No. 057-023D(CCR).

As documented in the *Draft Remedy Selection Report* (Geosyntec, 2022), CCR groundwater monitoring-related activities are performed at AP-1 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-1 detection monitoring wells, assessment monitoring wells, and piezometers are shown on **Figure 2**.

A Mo SSL was identified at detection well HGWC-8 along the eastern boundary of AP-1 and an As SSL was identified at detection monitoring well HGWC-13 along the southwest boundary of AP-1 (**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-1, a high resolution site characterization was conducted in August 2022 for HGWC-8 and February 2023 for HGWC-13, to characterize and refine proposed treatment areas. The results are summarized in the Workplans (GEOS Submittal ID: 778366). The information collected informed the pilot study summarized in this Report.

2. WELL INSTALLATION

Four performance monitoring wells (PT-07 through PT-10) 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 0.7 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. 5* 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). The boreholes were advanced using rotosonic drilling techniques with continuous core collection. A Terra Sonic compact crawler size track mounted rig with a 6-inch sonic drill rod was used to install the wells.

3. BASELINE CHARACTERIZATION

Two rounds of groundwater samples were collected from the performance monitoring wells (PT-07 through PT-10) 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-1 *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 over two shifts between September 25 and October 17, 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 either ferrous sulfate ($FeSO_4$) heptahydrate or magnesium oxide (MgO) 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 $FeSO_4$ or MgO 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, in the 300-gal mix tanks. A pump was used to deliver injectate through steel rods to a 2-ft long steel well screen advanced using direct push technology (DPT) drilling. Injections were initiated at the top of injectable treatment zone and proceeded downward (i.e., top-down). In some injection point borings the DPT injection system was pressurized with potable water while advancing the tooling to prevent clogging of the injection screen with aquifer solids. After reaching the target treatment interval, potable water pressurization was stopped and the injection of injectate was initiated. Injection point boreholes were abandoned to the ground surface with bentonite chips upon completion of the injection boring in accordance with 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 (3,500 gal per day [gpd]). A summary of daily injected volumes is included in **Table 3.** Field forms are included in **Appendix C**.

4.1 HGWC-8 Injection Area (East Area)

Injections occurred at four injection locations surrounding PT-09 (located south of HGWC-8 and east of AP-1, as shown on **Figure 2**), starting with IP-05. An initial injection consisting of potable water (i.e., without $FeSO_4$ or MgO) was conducted to verify that injection instrumentation was functioning, no leaks in the system were present, and to assess the aquifer response to pressurized injection. Approximately 500 gal of potable water was injected in each 2-ft interval from 19 to 27 ft below ground surface (bgs).

Following completion of the potable water injections, 850 gal of $1.11x10^{-4}$ pounds per gallon (lb/gal) $FeSO_4$ (or 13 milligrams per liter (mg/L) $FeSO_4$ heptahydrate) was injected in 2-ft intervals from 19 to 27 ft bgs at IP-08, followed sequentially by IP-05, IP-07, and IP-06. Injections in the 17 to 19 ft interval were unsuccessful at all locations due to insufficient transmissivity in the aquifer. A second injection at IP-08 (denoted as IP-08A in field forms) consisting of 0.001% MgO was conducted to assess aquifer response. Prior to initiating the injection of MgO, approximately 1 gal of potable water was observed daylighting. Spilled potable water was addressed in accordance with the Workplans, the injection point was offset approximately 2 ft, and no additional daylighting was observed.

The maximum observed flowrate and injection pressure during HGWC-8 pilot study injections was approximately 6.8 gal per minute (gpm) and 4 pounds per square inch (psi), which were below the maximum proposed values included in the Pilot Test Notification Form[1]. Approximately 2,000 gal of potable water and 17,000 gal of injectate was injected at the four injection locations associated with the HGWC-18 pilot study area over the course of twelve days, with a daily maximum of 2,350 gal injected.

4.2 HGWC-13 Injection Area (Southwest Area)

Starting at IP-01, DPT tooling was advanced at four injection locations surrounding PT-07 (located northeast of HGWC-13 and south of AP-1, as shown on **Figure 2**) using similar means and methods employed near HGWC-8. Consistent with the HGWC-8 pilot study approach, an initial injection consisting of potable water (i.e., without $FeSO_4$ or MgO) was conducted to verify that injection instrumentation was functioning, no leaks in the system were present, and to assess the aquifer response to pressurized injection. Between 55 and 238 gal potable water was injected in each 2-ft intervals starting from 35 ft bgs down to 45 ft bgs. In contrast with the HGWC-8 pilot study are injections, transmissivity varied substantially between injection points with groundwater mounding typically less than 2 ft. As such, smaller volumes were injected in intervals where transmissivity was low and minimal mounding was observed in nearby PT wells.

Following completion of potable water injections, 175 gal of $1.67x10^{-4}$ lb/gal (or 20 mg/L $FeSO_4$ heptahydrate) was injected at IP-04 from 35 to 43 ft bgs and 375 gal from 45 to 49 ft bgs. Injection volumes were increased in intervals 45 to 49 ft bgs[2] based on observed mounding PT-07 and PT-08. At IP-03, 350 gal of $FeSO_4$ was injected in each 2-ft

[1] The proposed injection flowrate and pressure included in the Pilot Test Notification Form for IP-05 through IP-08 were 15 gpm and 4 psi, respectively.
[2] The targeted bottom of the treatment zone was 49 ft based on the surveyed as-built bottom elevation of the PT-07 well screen.

intervals from 35 to 38.5 ft bgs and from 41 to 49 ft bgs[3]. At IP-02, 350 gal $FeSO_4$ was injected in each 2-ft interval from 35 to 39 ft bgs, 50 gal from 39 to 41 ft bgs, and 350 gal from 41 to 48.5 ft bgs[4]. At IP-01, 350 gal FeSO4 was injected in 2-ft intervals from 33 to 41 ft bgs, 50 gal from 41 to 43 ft bgs, and 350 gal from 47 to 49 ft bgs.

The maximum observed flowrate and injection pressure during HGWC-13 pilot study injections was approximately 5 gpm and 11 psi, which were below the maximum proposed values included in the Pilot Test Notification Form[5]. Approximately 818 gal of potable water and 7,625 gal of injectate was injected at the four injection locations associated with the HGWC-13 pilot study area over the course of seven days, with a daily maximum of 1,975 gal injected.

[3] The injection screen was raised to 36.5 to 38.5 ft bgs after encountering insufficient transmissivity at 37 to 39 ft bgs. Similarly, insufficient transmissivity was encountered from 39 to 41 ft bgs.
[4] The injection screen was raised to 46.5 to 48.5 ft bgs after encountering insufficient transmissivity at 47 to 49 ft bgs.
[5] The proposed injection flowrate and pressure included in the Pilot Test Notification Form for IP-01 through IP-04 were 15 gpm and 4 psi, respectively.

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 Mo and As GWPS and the results of the baseline characterization to evaluate the efficacy of $FeSO_4$ and MgO as a method of remediation. In addition, Appendix IV monitoring parameters[6] 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 October 10 and October 17, 2023, for the HGWC-8 and HGWC-13 pilot study areas, respectively, with groundwater samples collected from their respective performance monitoring wells. The monitoring frequency will be weekly 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.

[6] Excluding radium.

6. REFERENCES

Geosyntec, 2022. *Draft Remedy Selection Report, Georgia Power Company, Plant Hammond Ash Pond 1 (AP-1).* August 2022.

Geosyntec, 2023a. *Groundwater Monitoring Plan – Plant Hammond Ash Pond 1 (AP-1)*. July 2023, revision 2.

Geosyntec, 2023b. *HGWC-8 Pilot Study Workplan, Plant Hammond Ash Pond 1 (AP-1).* August 2023.

Geosyntec, 2023c. *HGWC-13 Pilot Study Workplan, Plant Hammond Ash Pond 1 (AP-1).* August 2023.

TABLES

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

Pilot Study Area	Well ID	Well Completion	Installation Date	Northing [1]	Easting [1]	Ground Surface Elevation [2] (ft)	Top of Casing Elevation [2] (ft)	Top of Screen Elevation (ft)	Bottom of Screen Elevation (ft)	Well Depth (ft bgs) [3]	Screen Interval Length (ft)
HGWC-13 (Southwest Area)	PT-07	Flush Mount	6/3/2023	1548675.24	1940933.39	592.00	591.75	554.40	544.30	48.00	10
	PT-08	Flush Mount	6/3/2023	1548666.82	1940929.58	592.10	591.83	560.20	550.20	42.20	10
HGWC-8 (East Area)	PT-09	Protective Riser	6/1/2023	1549049.74	1942393.11	577.33	580.35	560.18	550.18	27.45	10
	PT-10	Protective Riser	6/1/2023	1549040.34	1942413.88	577.39	580.44	560.29	550.29	27.40	10

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.

Table 2
Summary of Baseline Groundwater Analytical Data
Plant Hammond AP-1, Floyd County, Georgia

	Pilot Study Area:	Southwest Area				East Area			
	Well ID:	PT-07	PT-07	PT-08	PT-08	PT-09	PT-09	PT-10	PT-10
	Sample Date:	7/13/2023	8/9/2023	7/13/2023	8/9/2023	7/13/2023	8/9/2023	7/13/2023	8/9/2023
	Parameter [1,2,3]								
APPENDIX III	Boron	1.0	0.93	1.0	0.99	2.1	1.6	2.2	2.1
	Calcium	168	173	161	146	110	136	127	116
	Chloride	15.7	13.5	17.0	14.5	55.3	47.5	67.2	62.5
	Fluoride	0.36	0.28	0.36	0.27	0.24	0.26	0.33	0.27
	pH	6.76	6.82	6.66	6.82	6.57	6.89	7.01	7.18
	Sulfate	411	339	417	290	160	188	145	123
	TDS	808	771	734	682	534	594	557	553
APPENDIX IV	Antimony	<0.0012	<0.0012	<0.0012	<0.0012	0.0027 J	<0.0012	<0.0012	<0.0012
	Arsenic	0.34	0.27	0.33	0.32	<0.0037	<0.0037	<0.0037	<0.0037
	Barium	0.056	0.053	0.051	0.050	0.053	0.057	0.074	0.070
	Beryllium	0.00012 J	0.000095 J	0.00011 J	0.000073 J	0.000077 J	<0.000054	<0.000054	<0.000054
	Cadmium	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011
	Chromium	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011
	Cobalt	0.13	0.090	0.031	0.032	0.0045 J	0.0028 J	0.0026 J	0.0019 J
	Fluoride	0.36	0.28	0.36	0.27	0.24	0.26	0.33	0.27
	Lead	<0.00012	<0.00012	0.00019 J	<0.00012	0.00014 J	<0.00012	<0.00012	<0.00012
	Lithium	0.060	0.069	0.065	0.073	0.0013 J	0.0017 J	0.0014 J	0.0012 J
	Mercury	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
	Molybdenum	0.017	0.012	0.0079 J	0.0071 J	0.065	0.21	0.10	0.096
	Selenium	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014
	Thallium	0.00024 J	0.00022 J	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018
INORGANICS	Alkalinity (Bicarbonate) as $CaCO_3$	102	116	107	118	144	150	185	199
	Alkalinity (Carbonate) as $CaCO_3$	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Alkalinity (Total) as $CaCO_3$	102	116	107	118	144	150	185	199
	Sodium	6.1	7.2	6.9	6.8	10.6	10.3	10.5	9.4
	Sulfide	<0.022	<0.022	0.036 J	<0.022	<0.022	<0.022	<0.022	0.045 J
METALS	Iron	23.8	27.1	24.2	22.0	0.33	0.10	3.1	2.9
	Magnesium	18.5	19.4	18.9	17.3	15.6	18.2	16.8	16.8
	Manganese	8.2	7.6	8.7	6.8	0.79	0.51	3.5	3.1
	Potassium	6.0	6.8	6.0	6.3	6.8	7.7	7.1	6.7
FIELD	Dissolved Oxygen	0.30	0.40	0.09	0.94	0.02	0.58	0.03	0.12
	Oxidation-Reduction Potential (mV)	-111	-90.9	-124.9	-84.4	18.4	14.4	-161.5	-80.9
	Temperature (°C)	27.26	21.19	24.53	20.60	24.48	21.59	21.95	21.79
	Specific Conductance (µS/cm)	1065	1012	1007	909.2	779.8	826.9	842.2	770.5
	pH (s.u.)	6.76	6.82	6.66	6.82	6.57	6.89	7.01	7.18
	Turbidity (NTU)	4.91	0.18	4.41	3.98	4.95	0.56	4.94	4.55

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.

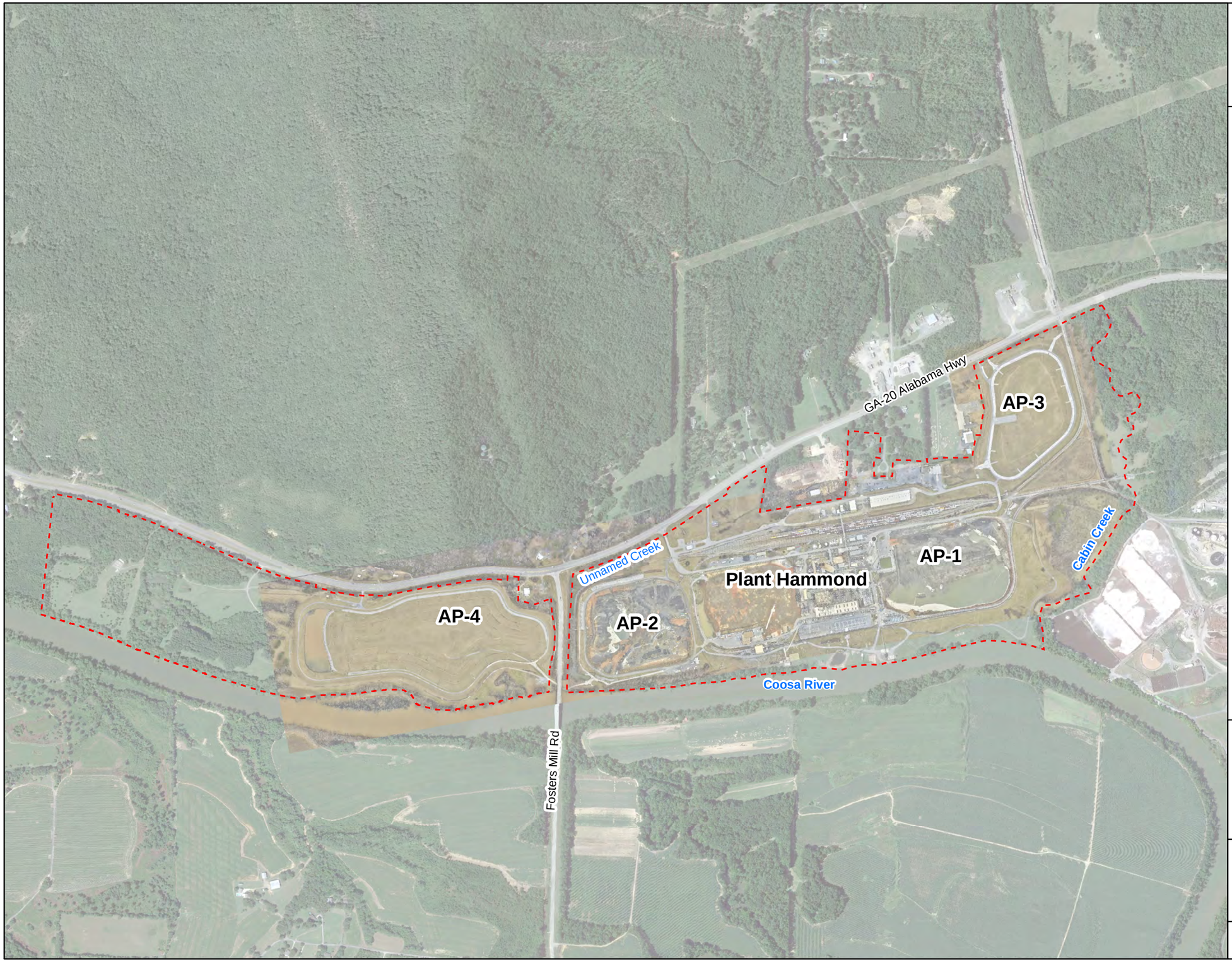
Table 3

Summary of Daily Injection Volumes
Plant Hammond AP-1, Floyd County, Georgia

Date	Daily Injection Volume (gal)	
	HGWC-8 (East Area)	HGWC-13 (Southwest Area)
9/25/2023*	500	--
9/26/2023*	1,500	--
09/27/2023	2,200	--
09/28/2023	2,250	--
09/29/2023	2,350	--
09/30/2023	2,000	--
10/01/2023	2,250	--
10/02/2023	2,300	--
10/03/2023	250	--
10/4/2023*	--	238
10/9/2023*	--	580
10/10/2023	--	1,050
10/11/2023	--	1,575
10/12/2023	--	1,975
10/13/2023	--	1,400
10/14/2023	--	1,625
10/15/2023	735	--
10/16/2023	2,080	--
10/17/2023	585	--
TOTAL:	**19,000**	**8,443**

Notes:
-- = indicates no injections occurred on this date
* = injection consisted of potable water
gal = gallons

FIGURES



N

LEGEND

Plant Hammond Property Boundary

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

0 625 1,250 2,500

SCALE IN FEET

SITE LOCATION MAP

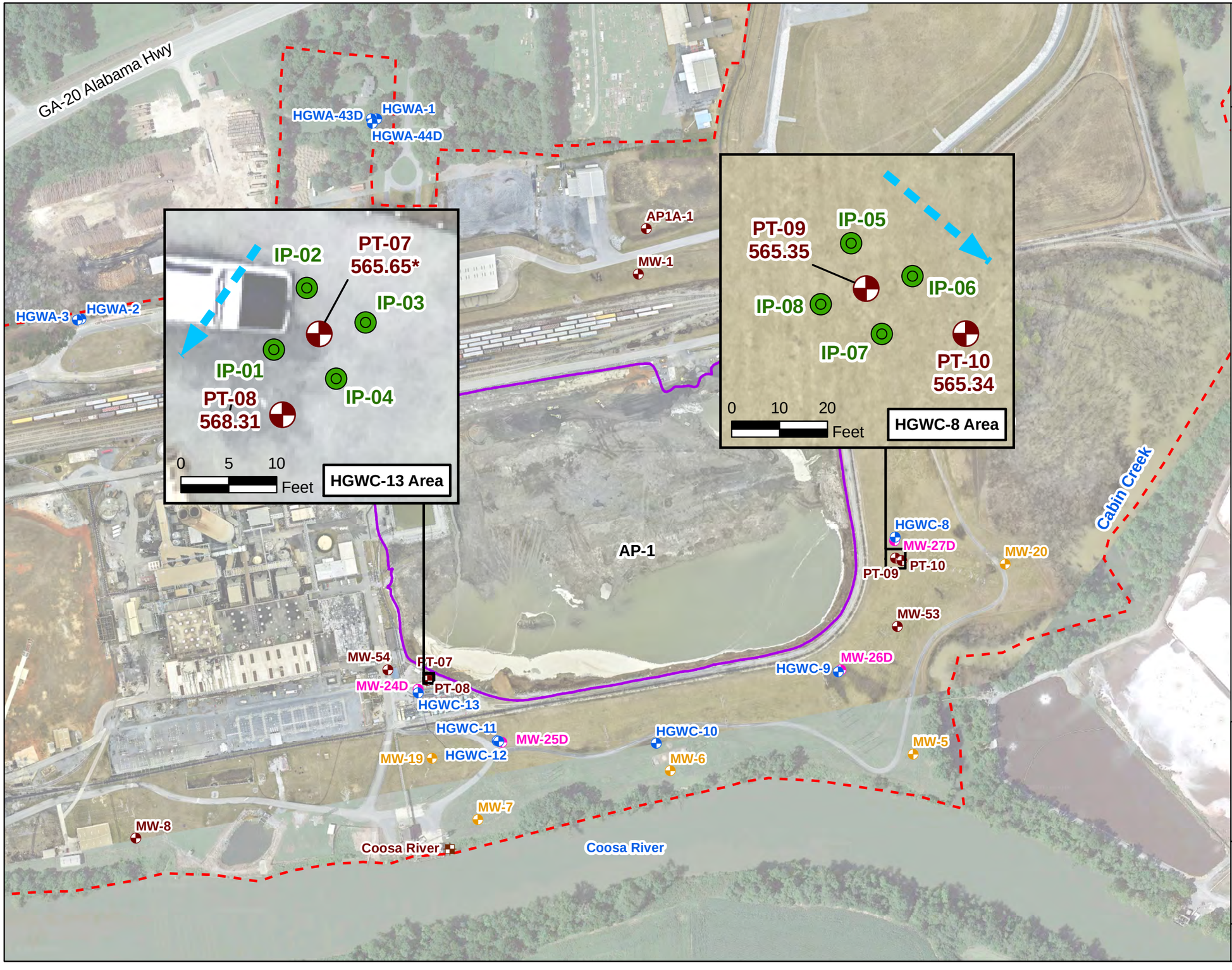
GEORGIA POWER COMPANY
PLANT HAMMOND AP-1
ROME, FLOYD COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA | NOVEMBER 2023

FIGURE 1



LEGEND

- Detection Monitoring Well
- Horizontal Assessment Monitoring
- Vertical Assessment Monitoring
- Piezometer (See Note 2)
- Surface Water Level Gauge Point
- Injection Point
- Approximate Groundwater Flow Direction
- Approximate AP-1
- Plant Hammond Property Boundary

Notes:
1. Piezometers PT-07, PT-08, PT-09, PT-10, MW-53 and MW-54 were installed in support of an Assessment of Corrective Measures geochemical injections pilot study and are not included in the routine semiannual sampling of the monitoring well network.
2. Piezometer water elevations for PT-07 through PT-09 were recorded on August 7, 2023. Elevation are in feet (ft) referenced to the North American Vertical Datum of 1998 (NAVD 88).
3. "*" - The groundwater flow direction in this area is based on historical data for the site and does not consider PT-07.
4. Aerial photograph source: Google Earth Pro, August 2019, and Georgia Power Company, February 2023.

0 150 300 600

SCALE IN FEET

PILOT STUDY INJECTION POINT AND MONITORING WELL LOCATIONS

GEORGIA POWER COMPANY
PLANT HAMMOND AP-1
ROME, FLOYD COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA | NOVEMBER 2023

FIGURE 2

APPENDIX A

Well Design, Installation, and Development Report – Addendum No. 5

Prepared for

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

WELL DESIGN, INSTALLATION, AND DEVELOPMENT REPORT - ADDENDUM No. 5

PLANT HAMMOND ASH POND 1 (AP-1)

Prepared by

engineers | scientists | innovators

1255 Roberts Boulevard, Suite 200
Kennesaw, Georgia 30144

Project Number GW6581E

October 2023

Georgia Power

CERTIFICATION PAGE

I hereby certify that this *Well Design, Installation, and Development Report – Addendum No. 5, Plant Hammond Ash Pond 1 (AP-1)* 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."

October 3, 2023

Christine Hug P.G. Date
Georgia Professional Geologist No. 002221
Project Manager
Geosyntec Consultants

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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 six piezometers[1] (MW-53, MW-54, PT-07, PT-08, PT-09, and PT-10) to supplement the current groundwater monitoring system at Georgia Power Company (Georgia Power) Plant Hammond (Site) Ash Pond 1 (AP-1). 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, and 2020c), 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-1 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-53 and MW-54 were installed to characterize site conditions. PT-07, PT-08, PT-09, and PT-10 were installed to specifically monitor the performance of the pilot study injections in support of the Assessment of Corrective Measures program.

[1] 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 564.98 to 544.30 feet (referenced to the North American Vertical Datum of 1988). The 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 wells. 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 un-coated 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-53, PT-09, and PT-10. A cement apron 2-feet by 2-feet by 4-inches was poured around flush mount wells PT-07, PT-08, and MW-54. The pads were mounded slightly outward to direct surface drainage away from the wells.

2.7 Cap and Protective Casing

The well risers at MW-53, PT-09, and PT-10 were fitted with a locking cap and a lockable cover. A one-quarter inch vent hole was drilled into the PVC riser pipes 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 MW-53, and well cluster PT-09, and PT-10 to protect the general well area.

MW-54, PT-07, and PT-08 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 and calibration 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 pads 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

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TABLE

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

Well ID	Purpose	Well Completion	Installation Date	Northing [1]	Easting [1]	Ground Surface Elevation [2] (ft)	Top of Casing Elevation [2] (ft)	Top of Screen Elevation (ft)	Bottom of Screen Elevation (ft)	Well Depth (ft bgs) [3]
PT-07	Piezometer	Flush Mount	6/3/2023	1548675.24	1940933.39	592.00	591.75	554.40	544.30	48.00
PT-08	Piezometer	Flush Mount	6/3/2023	1548666.82	1940929.58	592.10	591.83	560.20	550.20	42.20
PT-09	Piezometer	Protective Riser	6/1/2023	1549049.74	1942393.11	577.33	580.35	560.18	550.18	27.45
PT-10	Piezometer	Protective Riser	6/1/2023	1549040.34	1942413.88	577.39	580.44	560.29	550.29	27.40
MW-53	Piezometer	Protective Riser	6/2/2023	1548835.51	1942399.62	577.64	580.59	554.54	544.54	33.40
MW-54	Piezometer	Flush mount	6/2/2023	1548699.51	1940805.03	592.98	592.66	564.98	554.98	38.30

Notes:

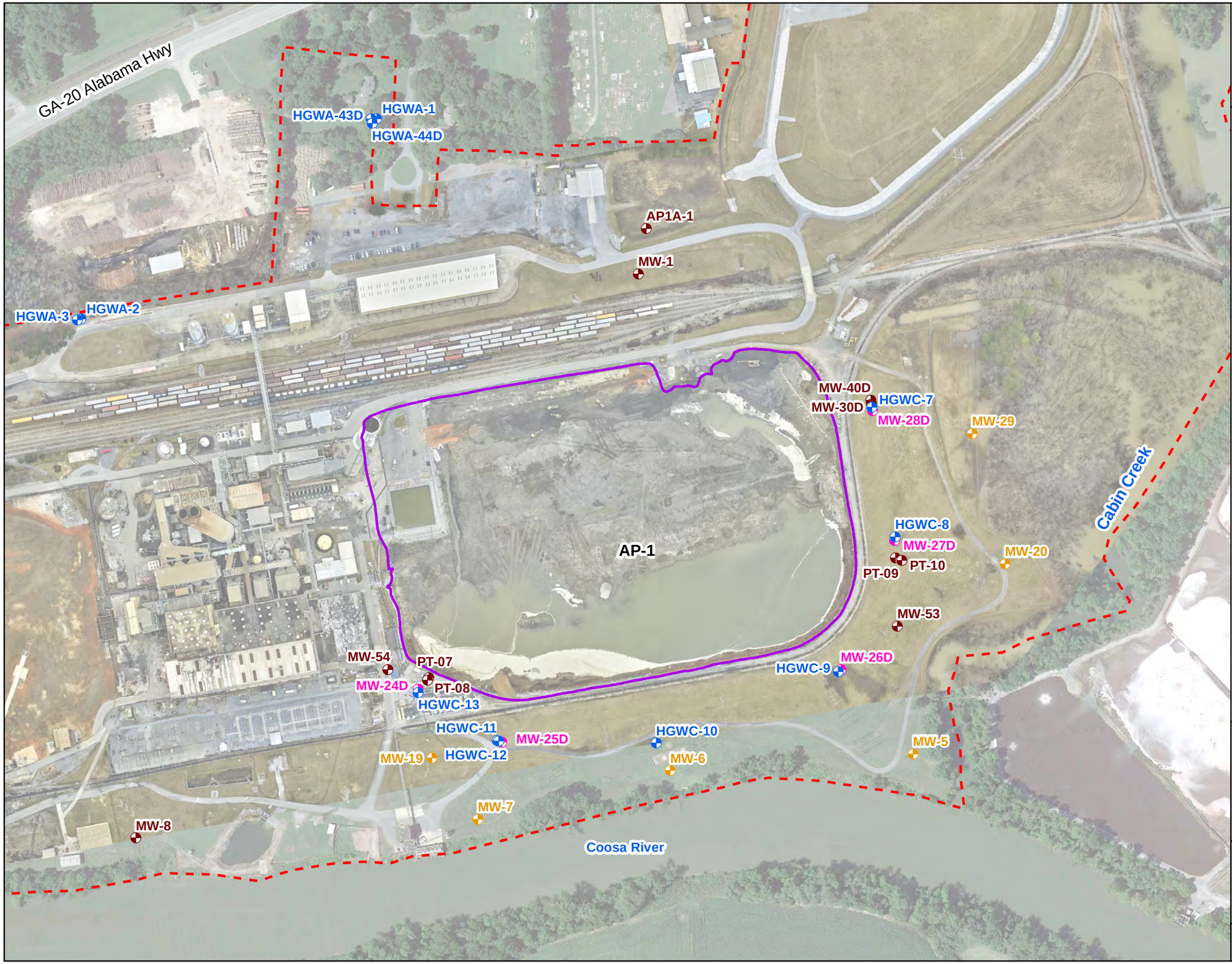
ft bgs = feet below ground surface.

(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



N

LEGEND

- Detection Monitoring Well
- Horizontal Assessment Monitoring Well
- Vertical Assessment Monitoring Well
- Piezometer
- Approximate AP-1 Boundary
- Plant Hammond Property Boundary

Notes:

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

0 150 300 600

SCALE IN FEET

GROUNDWATER MONITORING NETWORK MAP

GEORGIA POWER COMPANY
PLANT HAMMOND AP-1
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

intact INSURANCE

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.

ATLANTIC SPECIALTY INSURANCE COMPANY CORPORATE SEAL 1986 NEW YORK

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.

ALISON DWAN NASH-TROUT
NOTARY PUBLIC - MINNESOTA
My Commission Expires
January 31, 2026

_____
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 13th day of April, 2023.

ATLANTIC SPECIALTY INSURANCE COMPANY CORPORATE SEAL 1986 NEW YORK

This Power of Attorney expires
January 31, 2025

_____
Kara Barrow, Secretary

Please direct bond verifications to surety@intactinsurance.com

APPENDIX B

Boring and Well Construction Logs

Geosyntec consultants
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PT-07

CLIENT Southern Company Services
PROJECT NAME Plant Hammond Well Installation
PROJECT NUMBER GW6581E
PROJECT LOCATION Plant Hammond
DATE STARTED 06/03/23 **COMPLETED** 06/03/23
NORTHING 1548675.24 ft **EASTING** 1940933.39 ft
DRILLER Cascade Drilling
GROUND ELEVATION 592.00 ft **BORING DIAMETER** 6 in.
DRILLING METHOD Sonic
TOP OF CASING ELEVATION 591.75 ft
SAMPLING METHOD Sonic Core
GEOPHYSICAL CONTRACTOR ---
RIG TYPE Terrasonic Compact Crawler
LOGGED BY T. Kessler **CHECKED BY** C. Hug

DEPTH (ft)	ELEVATION (ft)	REMARKS	MATERIAL DESCRIPTION	CONSTRUCTION DIAGRAM
0	590	Air knifed material	SILTY SAND, reddish-brown, fine sand with abundant angular fine gravel, moist.	Flush mount well cover set in concrete
10	580	Hard drilling; high water return.	579.0 CLAY, reddish-brown to gray, trace fine sand, trace angular fine gravel, medium plasticity, moist.	Approx. 45 gallon of Aquaguard Bentonite Grout
20	570		572.0 CLAY, reddish yellow, trace silt, medium plasticity, moist, red and gray mottling throughout.	
30	560		27 to 30 ft: Light gray, trace fine sand. 559.0 SANDY CLAY, reddish yellow, fine sand with trace rounded gravel, medium to low plasticity, wet. 557.0	Approx 3.75 gallon of uncoated 3/8" bentonite pellets
40	550		SILTY SAND, reddish yellow, subangular, medium to fine sand, rounded, fine gravel throughout, wet. 551.0 SILTY CLAY, reddish yellow, medium to high plasticity, moist to wet, trace gray mottling.	Approx. 19 gallon of 20/40 Silica Sand 0.010 slot size 2" Pre Pack, U-Pack Screen
		Hard drilling; rock at 46 feet bgs.	545.0 No recovery (47 to 48.6 ft) 543.4	0.3 ft Sump

Bottom of borehole at 48.6 feet below ground surface (ft bgs).

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PT-08

CLIENT Southern Company Services
PROJECT NAME Plant Hammond Well Installation
PROJECT NUMBER GW6581E
PROJECT LOCATION Plant Hammond
DATE STARTED 06/03/23 **COMPLETED** 06/03/23
NORTHING 1548666.82 ft **EASTING** 1940929.58 ft
DRILLER Cascade Drilling
GROUND ELEVATION 592.10 ft **BORING DIAMETER** 6 in.
DRILLING METHOD Sonic
TOP OF CASING ELEVATION 591.83 ft
SAMPLING METHOD Sonic Core
GEOPHYSICAL CONTRACTOR ---
RIG TYPE Terrasonic Compact Crawler
LOGGED BY T. Kessler **CHECKED BY** C. Hug

DEPTH (ft)	ELEVATION (ft)	REMARKS	GRAPHIC LOG	MATERIAL DESCRIPTION	CONSTRUCTION DIAGRAM
0	590	Air knifed material		SILTY SAND, reddish-brown, fine sand, abundant angular fine to coarse gravel, moist.	Flush mount well cover set in concrete
				582.1	
10	580	Very soft drilling, no vibrations to 18 feet bgs. Fill material from 13-16 feet bgs.		CLAY, reddish-brown to gray, trace fine sand and angular to rounded fine gravel, trace silt, medium plasticity, moist, trace organic material.	Approx. 35 gallon of Aquaguard Bentonite Grout
				572.1	
20	570	Drilling becomes harder; significant amount of return water to surface during overdrill.		CLAY, red to yellowish red, trace silt and trace fine sand from 20-21 feet bgs, medium plasticity, moist, gray mottling throughout.	Approx 2.5 gallon of uncoated 3/8" bentonite pellets
30	560			559.1	Approx. 19 gallon of 20/40 Silica Sand
				SILTY SAND, yellowish red, fine sand with trace rounded fine gravel, moist to wet.	
				555.1	0.010 slot size 2" Pre Pack, U-Pack Screen
				SILTY SAND, yellowish red, subrounded medium to fine sand, abundant rounded fine to coarse gravel, wet.	
40	550			550.6	
				SANDY CLAY, yellowish red, fine sand and trace gravel, medium plasticity, moist.	0.3 ft Sump
				549.1	

Bottom of borehole at 43.0 feet below ground surface (ft bgs).

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PT-09

CLIENT Southern Company Services
PROJECT NAME Plant Hammond Well Installation
PROJECT NUMBER GW6581E
PROJECT LOCATION Plant Hammond
DATE STARTED 05/31/23 **COMPLETED** 06/01/23
NORTHING 1549049.74 ft **EASTING** 1942393.11 ft
DRILLER Cascade Drilling
GROUND ELEVATION 577.33 ft **BORING DIAMETER** 6 in.
DRILLING METHOD Sonic
TOP OF CASING ELEVATION 580.35 ft
SAMPLING METHOD Sonic Core
GEOPHYSICAL CONTRACTOR ---
RIG TYPE Terrasonic Compact Crawler
LOGGED BY T. Kessler **CHECKED BY** C. Hug

DEPTH (ft)	ELEVATION (ft)	REMARKS	GRAPHIC LOG	MATERIAL DESCRIPTION	CONSTRUCTION DIAGRAM
0		Hand augered from 0-10 feet bgs.		CLAY, reddish-brown, trace fine sand, medium to low plasticity, dry to moist, trace organics.	Aboveground well cover set in concrete
	570				Approx. 17 gallon of Aquauard Bentonite Grout
				567.3	
10		Water encountered at ~11 feet bgs; easy drilling.		CLAY, reddish-brown to yellowish-brown, trace fine sand, medium to low plasticity, moist, gray mottling throughout.	Approx. 2.5 gallon of uncoated 3/8" bentonite pellets
				560.3	
	560	Alluvium from 17-28 feet bgs.		CLAYEY SAND, gray to yellowish-brown, subrounded medium to fine sand and trace silt, medium plasticity clay, moist to wet.	Approx. 19 gallon of 20/40 Silica Sand
				559.0	
				18 to 18.3 ft: Trace subrounded gravel.	
20				CLAYEY SAND, yellowish-brown, subrounded medium to fine sand, abundant rounded to subrounded gravel, abundant silt, wet. From 20 ft: Medium to coarse grained sand, trace silt.	0.010 slot size 2" Pre Pack, U-Pack Screen
				From 26 ft: Trace rounded fine to coarse gravel.	
	550				0.3 ft Sump
				548.8	

Bottom of borehole at 28.5 feet below ground surface (ft bgs).

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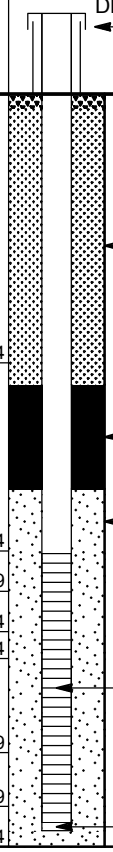
PT-10

CLIENT Southern Company Services
PROJECT NAME Plant Hammond Well Installation
PROJECT NUMBER GW6581E
PROJECT LOCATION Plant Hammond
DATE STARTED 06/01/23 **COMPLETED** 06/01/23
NORTHING 1549040.34 ft **EASTING** 1942413.88 ft
DRILLER Cascade Drilling
GROUND ELEVATION 577.39 ft **BORING DIAMETER** 6 in.
DRILLING METHOD Sonic
TOP OF CASING ELEVATION 580.44 ft
SAMPLING METHOD Sonic Core
GEOPHYSICAL CONTRACTOR ---
RIG TYPE Terrasonic Compact Crawler
LOGGED BY T. Kessler **CHECKED BY** C. Hug

DEPTH (ft)	ELEVATION (ft)	REMARKS	MATERIAL DESCRIPTION	
0		Hand augered from 0-10 feet bgs.	CLAY, brown to reddish-brown, trace sand, medium to low plasticity, moist, trace organics, black and gray mottling throughout.	
	570			
10			567.4 CLAY, yellowish-brown, trace fine sand, medium to low plasticity, moist to dry, gray and red mottling throughout.	
	560		560.4 SANDY CLAY, yellowish-brown, medium to low plasticity, trace subrounded gravel, moist to wet.	
			558.9 CLAYEY SAND, yellowish-brown/reddish yellow, subrounded medium to fine sand, abundant rounded/sub rounded gravel, abundant silt.	
20			557.4 SANDY CLAY, reddish yellow, medium plasticity, abundant subrounded gravel, trace fine sand, wet.	
			556.4 SILTY SAND, yellow, medium to fine, subangular, with trace subrounded fine gravel, wet.	
		Hard drilling from 26-27.5 feet bgs; rod drop from 26.5-27 feet bgs.	552.9 SILTY CLAY, brown, low plasticity, abundant fine sand and subrounded fine gravel, wet.	
	550		550.9 LIMESTONE, gray, hard, effervesces with acid.	
			549.4	

CONSTRUCTION DIAGRAM



Bottom of borehole at 28.0 feet below ground surface (ft bgs).

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MW-53

CLIENT Southern Company Services
PROJECT NAME Plant Hammond Well Installation
PROJECT NUMBER GW6581E
PROJECT LOCATION Plant Hammond
DATE STARTED 06/01/23 **COMPLETED** 06/02/23
NORTHING 1548835.51 ft **EASTING** 1942399.62 ft
DRILLER Cascade Drilling
GROUND ELEVATION 577.64 ft **BORING DIAMETER** 6 in.
DRILLING METHOD Sonic
TOP OF CASING ELEVATION 580.59 ft
SAMPLING METHOD Sonic Core
GEOPHYSICAL CONTRACTOR ---
RIG TYPE Terrasonic Compact Crawler
LOGGED BY T. Kessler **CHECKED BY** C. Hug

DEPTH (ft)	ELEVATION (ft)	REMARKS	GRAPHIC LOG	MATERIAL DESCRIPTION
0		Hand augered from 0-10 feet bgs.		CLAY, reddish-brown, medium to low plasticity, dry to moist, trace organic, black mottling throughout.
	570			567.6
10				CLAY, reddish yellow, trace silt, medium to low plasticity, moist, gray mottling throughout. From 11 ft: Trace organics.
	560			558.6
				CLAYEY SAND, reddish yellow, medium to coarse grained, subrounded, moist to wet. 557.6
20				CLAY, reddish yellow, medium plasticity, abundant rounded gravel and abundant silt, wet. 555.6
				SAND, reddish yellow, subrounded to subangular, fine to coarse grained with trace rounded gravel and trace low plasticity clay, wet.
	550	Drill to 30 feet bgs. Rod drop from 30-33 feet bgs.		
30				543.2

CONSTRUCTION DIAGRAM

- Aboveground well cover set in concrete
- Approx. 25 gallon of Aquauard Bentonite Grout
- Approx. 2.5 gallon of uncoated 3/8" bentonite pellets
- Approx. 19 gallon of 20/40 Silica Sand
- 0.010 slot size 2" Pre Pack, U-Pack Screen
- 0.3 ft Sump

Bottom of borehole at 34.4 feet below ground surface (ft bgs).

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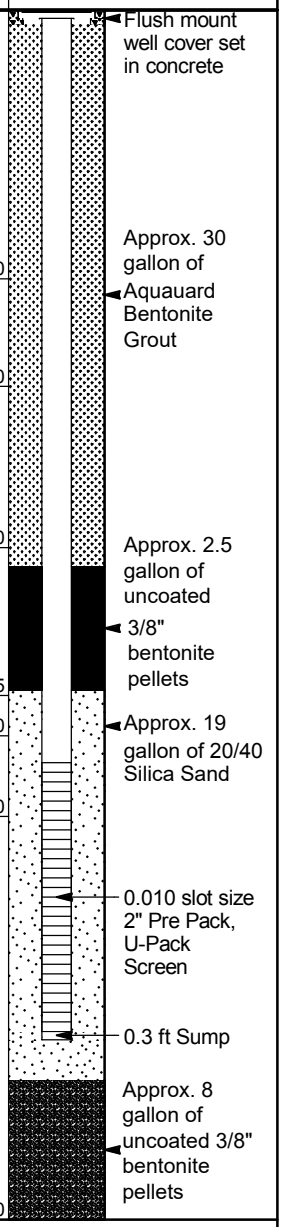
MW-54

CLIENT Southern Company Services
PROJECT NAME Plant Hammond Well Installation
PROJECT NUMBER GW6581E
PROJECT LOCATION Plant Hammond
DATE STARTED 06/02/23 **COMPLETED** 06/02/23
NORTHING 1548699.51 ft **EASTING** 1940805.03 ft
DRILLER Cascade Drilling
GROUND ELEVATION 592.98 ft **BORING DIAMETER** 6 in.
DRILLING METHOD Sonic
TOP OF CASING ELEVATION 592.66 ft
SAMPLING METHOD Sonic Core
GEOPHYSICAL CONTRACTOR ---
RIG TYPE Terrasonic Compact Crawler
LOGGED BY T. Kessler **CHECKED BY** C. Hug

DEPTH (ft)	ELEVATION (ft)	REMARKS	MATERIAL DESCRIPTION
0	590	Air knifed material	CLAY, reddish yellow, trace silt, medium plasticity, wet, dark gray mottling.
			583.0
10	580	Gravel from 10.5 feet bgs is collapse from air knife material.	SILTY SAND, dark gray to black, subrounded medium to fine sand, trace rounded gravel, moist.
			579.0
			CLAY, reddish yellow, medium plasticity, moist to dry, red black and gray mottling throughout.
			573.0
20	570	Slow drilling.	SILTY CLAY, reddish yellow, hard, medium to low plasticity, dry to moist, red/gray mottling throughout.
			567.5
			SILTY SAND, pink/light yellowish gray, fine, subrounded, moist.
			566.0
			SANDY CLAY, reddish yellow, low plasticity, sand is fine to medium, moist.
			563.0
30	560		SAND, reddish yellow/light gray, fine-grained with trace of fine, rounded gravel throughout, wet.
			36 to 36.3 ft: Clay.
40	550	Drilled to 39 feet bgs; core barrel sinks to 45 feet bgs; settles on rock.	
			548.0



Bottom of borehole at 45.0 feet below ground surface (ft bgs).

APPENDIX C

Well Development and Equipment Calibration Forms

Geosyntec consultants

GROUNDWATER SAMPLING LOG SHEET

Client: SCS
Site: Plant Hammond
Well ID: PT-07
Total Depth (ft): 48.6
Depth to Water (ft): 24.3
Well Diameter (in): 2
Well Volume (gal) = 0.041d²h: 3.99
Well Volume (L) = gal * 3.785: 15.10
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.: GNV65816
Location: AP-1
Pump Type/Model: Monsoon
Tubing Material: Poly
Pump Intake Depth (ft): 43
Start/Stop Purge Time: 1205/1301
Purge Rate (mL/min): 8000
Total Purge Volume (L): 388
Purge Method: Low-Flow Well Volume Other: —
Sampling Method: Pump Discharge Other: —

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. —

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.)
1205										Begin pre purging
1231	6.87	950.09	-58.2	0.01	19.25	73	28.5	8000	168	motor got filament stuck, had to clean multiplemmos
1236	6.85	953.21	-93.0	0.00	18.90	57.6	28.8	8000	208	
1241	6.85	954.95	-71.8	4.28	19.16	1083 AU	28.1	8000	248	had to remove filament
1246	6.86	953.78	-88.6	0.00	18.92	12.4	28.1	8000	288	
1251	6.86	955.59	-78.3	0.24	18.97	50.1	28.1	8000	328	
1256	6.86	953.56	-53.4	0.00	18.92	12.4	28.1	8000	348	
1301	6.86	954.07	-53.2	0.00	18.96	8.32	28.1	8000	388	
									6/28/23 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**	

Geosyntec consultants

GROUNDWATER SAMPLING LOG SHEET

Client: SCS
Site: Plant Hammond
Well ID: PT-07
Total Depth (ft): 48.6
Depth to Water (ft): 24.3
Well Diameter (in): 2
Well Volume (gal) = 0.041d²h: 3.99
Well Volume (L) = gal * 3.785: 15.10
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.: GWES81G
Location: AP-1
Pump Type/Model: monsoon
Tubing Material: poly
Pump Intake Depth (ft): 43
Start/Stop Purge Time: 1303 / 1328
Purge Rate (mL/min): 200
Total Purge Volume (L): 5
Purge Method: (Low-Flow) Well Volume Other: –
Sampling Method: Pump Discharge Other: –

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. –

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.)
1308	6.72	1046.8	-68.3	0.02	20.5	14.6	25.8	200	1	
1313	6.69	1058.8	-95.3	0.01	19.9	7.21	25.8	200	2	
1318	6.666	1073.6	-66.7	0.02	21.46	6.75	25.58	200	3	
1323	6.666	1069.0	-71.4	0.02	24.11	8.72	25.5	200	4	
1328	6.68	1045.1	-64.1	0.02	22.27	4.15	25.5	200	5	
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**	

Geosyntec consultants

GROUNDWATER SAMPLING LOG SHEET

Client: SCS
Site: Plant Hammond
Well ID: PT-08
Total Depth (ft): 42.2
Depth to Water (ft): 22.7
Well Diameter (in): 2
Well Volume (gal) = 0.041d²h: 3.198
Well Volume (L) = gal * 3 785: 12.104
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.: GW6581G
Location: AP-1
Pump Type/Model: monsoon
Tubing Material: poly
Pump Intake Depth (ft): 32
Start/Stop Purge Time: 0820/0908
Purge Rate (mL/min): 10000
Total Purge Volume (L): 480
Purge Method: Low-Flow Well Volume Other: —
Sampling Method: Pump Discharge Other: —

Sampling Date: 01/29/23
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.)
0843	6.58	1022.7	-54.0	0.03	18.88	614 AV	28.6	10000	230	pre-purge 20 mins
0848	6.103	1026.8	-87.0	0.02	18.79	70.8	28.6	10000	280	
0853	6.105	1026.8	-56.7	0.01	18.78	36.9	28.6	10000	330	
0858	6.105	1027.8	-55.6	0.01	18.75	22.8	28.6	10000	380	
0903	6.106	1028.1	-88.0	0.01	18.78	11.7	28.6	10000	430	
0908	6.106	1027.7	-88.0	0.01	18.78	9.55	28.6	10000	480	
							AN			
								01/29/23		
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**	

Geosyntec consultants

GROUNDWATER SAMPLING LOG SHEET

Client: SCS
Site: Plant Hammond
Well ID: PT-08
Total Depth (ft): 42.2
Depth to Water (ft): 22.7
Well Diameter (in): 2
Well Volume (gal) = 0.041d²h: 3.198
Well Volume (L) = gal * 3.785: 12.104
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.: GW65816
Location: AP-1
Pump Type/Model: MONSOON
Tubing Material: poly
Pump Intake Depth (ft): 32
Start/Stop Purge Time: 0908/0940
Purge Rate (mL/min): 250
Total Purge Volume (L): 8
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.)
0915	6.163	1044.1	-67.1	0.04	20.88	15.8	23.1	250	1.75	Pre-Purge for flow (~7 min)
0920	6.07	1035.0	-63.0	0.07	22.12	17.7	23.1	250	3	
0925	6.04	1032.0	-91.1	0.07	21.93	12.62	23.1	250	4.25	
0930	6.04	1039.16	-61.2	0.06	22.09	10.77	23.1	250	5.5	
0935	6.05	1037.5	-59.7	0.05	22.00	5.71	23.1	250	6.75	
0940	6.05	1037.9	-89.0	0.05	22.02	4.68	23.1	250	8	
										6/29/23 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**	

Geosyntec consultants

GROUNDWATER SAMPLING LOG SHEET

Client: Southern Company
Site: Plant Hammond
Well ID: PT-09
Total Depth (ft): 31
Depth to Water (ft): 14.65
Well Diameter (in): 2
Well Volume (gal) = 0.041d²h: 2.681
Well Volume (L) = gal * 3.785: 10.14
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.: GW165581
Location: Plant Hammond
Pump Type/Model: mega monsoon pro
Tubing Material: poly
Pump Intake Depth (ft): 26
Start/Stop Purge Time: 0830 / 1123
Purge Rate (mL/min): 15,000, 250
Total Purge Volume (L): 1458.75
Purge Method: Low-Flow / Well Volume / Other: —
Sampling Method: Pump Discharge / Other: —

Sampling Date: 6/27/23
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.)
0852	6.72	865.25	2.9	0.03	18.39	3884 AU	15.35	15,000	330	pre-purged for 20 min
0858	6.74	868.23	8.7	0.02	18.21	2747 AU	15.3	15,000	405	
0902	6.74	867.72	-5.7	0.01	18.21	2249 AU	15.3	15,000	480	
0906	6.75	867.44	12.4	0.01	18.20	723 AU	15.3	15,000	540	
0911	6.75	865.02	-2.0	0.01	18.20	1205 AU	15.3	15,000	615	
0916	6.75	868.97	14.1	0.01	18.21	128 NTU	15.3	15,000	690	
0921	6.75	864.78	10.3	0.01	18.23	69.1 NTU	15.3	15,000	765	
0926	6.75	867.14	-0.7	0.00	18.25	37.8	15.3	15,000	840	
0931	6.75	868.88	16.6	0.00	18.25	37.3	15.3	15,000	915	
0936	6.75	867.74	13.7	0.00	18.21	73	15.3	15,000	990	
0941	6.75	866.15	8.2	0.00	18.26	57	15.3	15,000	1065	
0946	6.75	870.58	17.5	0.00	18.26	23.8	15.3	15,000	1140	
0951	6.75	868.96	18.0	0.00	18.20	21.2	15.3	15,000	1215	
0956	6.75	869.01	18.3	0.00	18.15	14.3	15.3	15,000	1290	
1001	6.75	867.43	18.4	0.00	18.26	11.9	15.3	15,000	1365	
1006	6.75	861.04	10.4	0.00	18.16	8.37	15.3	15,000	1440	
1011	6.76	864.47	14.8	0.01	18.14	23.7	15.3	250	1491.25	switch to low flow to stabilize
1016	6.72	834.85	15.3	0.04	24.8	17.4	14.9	250	1442.5	
1023	6.74	861.19	11.8	0.00	19.08	36.1	14.9	250	1443.75	
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**	

Geosyntec consultants

GROUNDWATER SAMPLING LOG SHEET

Client:	Southern Company	Project No.:	GN6581	Sampling Date:	01/27/2023
Site:	Plant Hammond	Location:	Plant Hammond	Sampler's Name:	AN
Well ID:	PT-09	Pump Type/Model:	mega monsoon pro	Sample Collection Time:	—
Total Depth (ft):	31	Tubing Material:	poly	Sample Purge Rate (mL/min):	—
Depth to Water (ft):	14.65	Pump Intake Depth (ft):	26	Sample ID:	—
Well Diameter (in):	2	Start/Stop Purge Time:	1030 / 1123	Laboratory Analyses:	—
Well Volume (gal) = 0.041d²h:	2.686	Purge Rate (mL/min):	15000, 250		
Well Volume (L) = gal * 3 785:	10.14	Total Purge Volume (L):	1458.75		
d = well diameter (inches); h = length of water column (feet)		Purge Method:	Low-Flow Well Volume Other: —	QA/QC Collected?	—
Well Type:	Flush (Stick Up)	Sampling Method:	Pump Discharge Other: —	QA/QC I D.	—
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.)
1028	6.74	804.55	12.6	0.00	18.96	30.3	14.9	250	1445	
1033	6.74	804.37	12.8	0.00	18.97	25.4	14.9	250	1446.25	
1038	6.75	802.81	13.0	0.00	18.89	21.0	14.9	250	1447.5	
1043	6.74	803.05	1.3	0.00	18.85	18.9	14.9	250	1448.75	
1048	6.75	803.72	12.9	0.00	18.88	19.9	14.9	250	1450	
1053	6.75	803.74	1.7	0.00	18.84	14.2	14.9	250	1451.25	
1058	6.75	803.80	0.4	0.00	18.90	13.2	14.9	250	1452.5	
1103	6.75	803.59	0.4	0.00	18.90	9.57	14.9	250	1453.75	
1108	6.75	805.55	12.7	0.00	18.94	7.39	14.9	250	1455	
1113	6.75	804.61	2.6	0.00	18.88	4.26	14.9	250	1456.25	
1118	6.75	804.98	13.6	0.00	18.97	3.93	14.9	250	1457.5	
1123	6.75	805.63	14.3	0.00	18.84	3.03	14.9	250	1458.75	
AN		01/27/23								
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**	

Geosyntec consultants

GROUNDWATER SAMPLING LOG SHEET

Client: SCS
Site: Plant Hammond
Well ID: PT-10
Total Depth (ft): 30.7
Depth to Water (ft): 14.80
Well Diameter (in): 2
Well Volume (gal) = 0.041d²h: 2.61
Well Volume (L) = gal * 3.785: 9.88
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.: GAN06S816
Location: AP-1
Pump Type/Model: Monsoon
Tubing Material: poly
Pump Intake Depth (ft): 25
Start/Stop Purge Time: 1435 / 1618
Purge Rate (mL/min): 9000
Total Purge Volume (L): 585
Purge Method: Low-Flow / Well Volume / Other: —
Sampling Method: Pump Discharge / Other: —

Sampling Date: 06/27/23
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.)
1435										Start purge, purged dry,
1450										waited + began to purge
1504	6.93	856.25	-34.9	0.25	18.79	89.1	16.8	9000	180	
1509	6.94	855.27	-25.4	0.30	18.88	44.8	16.9	9000	225	
1514	6.93	851.86	-22.8	0.37	18.63	36.4	17.45	9000	270	
1519	6.93	856.43	-48.9	0.27	18.53	94.2	17.6	9000	315	
1524	6.91	859.79	-40.4	0.17	18.58	25.5	17.3	9000	360	
1529							↓	9000	405	Motor broke, had to replace
1603	6.91	856.85	-45.5	0.22	18.01	875AV	19.8	9000	450	
1608	6.90	857.92	-38.9	0.12	17.89	84.4	19.05	9000	495	
1613	6.89	858.38	-38.5	0.12	17.85	18.3	19.1	9000	540	
1618	6.88	858.15	-11.1	0.12	17.85	7.09	19.1	9000	585	
		AN	6/27/23							
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**	

Geosyntec consultants

GROUNDWATER SAMPLING LOG SHEET

Client: SCS
Site: Plant Hammond
Well ID: PT-10
Total Depth (ft): 30.7
Depth to Water (ft): 14.8
Well Diameter (in): 2
Well Volume (gal) = $0.041d^2h$: 2.61
Well Volume (L) = gal * 3.785: 9.89
d = well diameter (inches); h = length of water column (feet)
Well Type: Flush / **Stick Up** (circled)
Well Lock: **Yes** (circled) / No
Well Cap Condition: **Good** (circled) / Replace
Well Tag Present: **Yes** (circled) / No

Project No.: GW6581
Location: AP-1
Pump Type/Model: Monsoon
Tubing Material: Poly
Pump Intake Depth (ft): 25
Start/Stop Purge Time: 1626/1636
Purge Rate (mL/min): 300
Total Purge Volume (L): 4.5
Purge Method: **Low-Flow** (circled) / Well Volume / Other: –
Sampling Method: Pump Discharge / Other: –

Sampling Date: 10/27/23
Sampler's Name: AW
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.)
1626	6.87	860.76	-18.4	0.01	18.91	4.86	15.4	300	1.5	
1631	6.87	865.22	-12.1	0.02	18.88	2.34	15.4	300	3	
1636	6.88	863.27	-37.8	0.04	18.76	1.09	15.4	300	4.5	
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	

AW 10/27/23

Geosyntec consultants

GROUNDWATER SAMPLING LOG SHEET

Client: SCS
Site: Plant Hammond
Well ID: MW-53
Total Depth (ft): ~~45.6~~ AN 36.6
Depth to Water (ft): 15.8
Well Diameter (in): 2
Well Volume (gal) = 0.041d²h: 3.41
Well Volume (L) = gal * 3.785: 12.91
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.: GW0581G
Location: AP-1
Pump Type/Model: Monsoon
Tubing Material: POLY
Pump Intake Depth (ft): ~~40~~ AN 31.6
Start/Stop Purge Time: ~~1535~~ 0850/1652
Purge Rate (mL/min): 15000
Total Purge Volume (L): 930
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.)
0350										begin pre-purge, filament turn
1612	6.64	944.07	18.9	0.01	18.25	901 AN	16.7	15000	330	PVC got stuck, had to clean
1617	6.69	945.14	8.5	0.00	18.17	58	19.6	15000	405	
1622	6.67	952.03	18.8	0.00	18.17	94.7	19.6	15000	480	
1627	6.67	954.81	18.1	0.00	18.19	102.9	19.6	15000	555	
1632	6.67	956.48	12.6	0.00	18.20	41.4	19.6	15000	630	
1637	6.67	960.70	19.2	0.00	18.21	40.8	19.6	15000	705	
1642	6.67	957.41	20.1	0.00	18.21	25.2	19.6	15000	780	
1647	6.67	960.21	20.3	0.00	18.23	22.8	19.6	15000	855	
1652	6.67	959.28	20.3	0.00	18.23	9.95	19.6	15000	930	
										6/29/23 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**	

Geosyntec consultants

GROUNDWATER SAMPLING LOG SHEET

Client: SCS
Site: Plant Hammond
Well ID: MW-S3
Total Depth (ft): 36.6
Depth to Water (ft): 15.8
Well Diameter (in): 2
Well Volume (gal) = 0.041d²h: 3.41
Well Volume (L) = gal * 3.785: 12.91
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.: GW1658816
Location: AD-1
Pump Type/Model: monsoon
Tubing Material: poly
Pump Intake Depth (ft): 31.6
Start/Stop Purge Time: 1658/1751
Purge Rate (mL/min): 300
Total Purge Volume (L): 14.9
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.)
1701	6.67	979.82	19.4	0.15	21.17	21.4	16.3	300	0.9	pre purge for flow
1706	6.57	910.53	19.4	0.09	22.62	42.2	16.0	300	2.4	
1711	6.53	886.85	14.4	0.00	22.09	41.9	16.0	300	3.9	
1716	6.52	876.80	17.6	0.04	21.33	45.0	16.0	300	5.4	
1721	6.52	871.62	8.4	0.02	19.62	38.0	16.0	300	6.9	
1726	6.51	871.99	14.1	0.01	19.46	18.0	16.0	300	7.4	
1731	6.64	953.33	8.5	0.00	18.55	39.6	16.0	300	8.9	
1736	6.64	952.14	15.4	0.00	18.57	11.78	16.0	300	10.4	MW
1741	6.64	949.89	13.5	0.00	18.52	7.09	16.0	300	11.9	
1746	6.64	950.31	6.2	0.00	18.57	5.15	16.0	300	13.4	
1751	6.64	951.32	5.6	0.00	18.64	4.93	16.0	300	14.9	
										6/29/23 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**	

Geosyntec consultants

GROUNDWATER SAMPLING LOG SHEET

Client: SCS
Site: Plant Hammond
Well ID: MW-54
Total Depth (ft): 38.8
Depth to Water (ft): 23.3
Well Diameter (in): 2
Well Volume (gal) = 0.041d²h: 2.54
Well Volume (L) = gal * 3.785: 9.61
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.: GW0581G
Location: AP-2
Pump Type/Model: Monsoon
Tubing Material: poly
Pump Intake Depth (ft): 33.8
Start/Stop Purge Time: 1030/1116
Purge Rate (mL/min): 10000
Total Purge Volume (L): 460
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.)
1051	6.77	743.50	-1.8	0.02	20.88	863 AN	27.3	10000	210	
1056	6.77	745.92	-28.3	0.03	20.44	overrange	27.3	10000	260	
1101	6.78	753.73	-27.2	0.02	20.36	68.6	28.0	10000	310	
1106	6.78	756.16	-8.2	0.01	20.35	53.0	28.0	10000	360	
1111	6.78	759.90	-8.7	0.02	20.30	12.94	28.0	10000	410	
1116	6.77	747.9	-26.1	0.08	20.30	8.58 AN3	28.0	10000	460	
						AN	6/29/23			
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**	

Geosyntec consultants

GROUNDWATER SAMPLING LOG SHEET

Client: SCS
Site: Plant Hammond
Well ID: MW-54
Total Depth (ft): 38.8
Depth to Water (ft): 23.3
Well Diameter (in): 2
Well Volume (gal) = 0.041d²h: 2.54
Well Volume (L) = gal * 3.785: 9.61
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.: GW0S816
Location: AP-1
Pump Type/Model: monsoon
Tubing Material: poly
Pump Intake Depth (ft): 33.8
Start/Stop Purge Time: 1125/1237
Purge Rate (mL/min): 250
Total Purge Volume (L): 18
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.)
1127	6.69	748.01	-2.0	0.30	22.48	11.5	23.6	250	0.5	
1132	6.73	750.46	-22.8	0.15	24.17	12.80	23.6	250	1.75	
1137	6.74	739.19	-26.3	0.12	24.78	11.44	23.6	250	3	
1142	6.74	706.06	-26.6	0.11	23.82	37.7	23.6	250	4.25	
1147	6.71	708.108	-26.6	0.12	23.33	69.0	23.6	250	5.5	
1152	6.71	718.13	-28.5	0.11	24.04	56.1	23.6	250	6.75	
1157	6.71	723.43	-29.9	0.11	23.29	50.4	23.6	250	8	
1202	6.72	707.70	-8.4	0.10	25.15	7.0	23.6	250	9.25	
1207	6.70	704.43	-23.2	0.14	23.18	58.1	23.6	250	10.5	
1212	6.72	728.86	-24.4	0.08	23.18	27.0	23.6	250	11.75	
1217	6.67	684.7	-13.5	0.28	23.164	600+N	23.6	250	13	
1222	6.73	711.77	-17.7	0.11	22.27	108.6	23.6	250	14.25	
1227	6.77	737.69	-37.4	0.02	21.87	11.9	23.6	250	15.5	
1232	6.77	740.76	-46.6	0.89	21.87	5.18	23.6	250	16.75	
1237	6.77	746.91	-36.5	0.02	21.85	3.54	21.85	250	~~18~~	
										AN 6/29/23
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**	

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EQUIPMENT CALIBRATION LOG

Field Technician: Mana Neely | Date: 6/27/23 | 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 11/23	27.06	4490	4,501.1	4486.0	+/- 5 %	(Yes) No	
pH (4)			4.00	4.18	3.99	+/- 0.1 SU	(Yes) No	
Mid-Day pH (4) check	—	—	4.00	—	—	+/- 0.1 SU	Yes No	
pH (7)	2216893 11/23	26.72	7.00	6.97	7.00	+/- 0.1 SU	(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	(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	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	98.78%	99.78%	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0	0.04	-0.01	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1.00	~~0.3~~ 0.80	0.99	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			10.00	12.42	9.87	+/- 0.5 NTU	(Yes) No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Alana Neely | Date: 6/28/23 | Time (start): 0730 | Time (finish): 0800

smarTroll SN: 883553 | Turbidity Meter Type: LaMote 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 11/23	24.51	4490	4435.3	4490.8	+/- 5 %	(Yes) No	
pH (4)			4.00	4.21	3.99	+/- 0.1 SU	(Yes) No	
Mid-Day pH (4) check	–	–	4.00	–	–	+/- 0.1 SU	Yes No	
pH (7)	22108933 11/23	23.80	7.00	7.00	7.00	+/- 0.1 SU	(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	(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	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	98.60	100.52	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0	-0.02	0.00	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1.00	0.62	0.75	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			10.00	12.35	9.96	+/- 0.5 NTU	(Yes) No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Anana Neely

Date: 6/29/23

Time (start): 0735 Time (finish): 0755

smarTroll SN: 883553

Turbidity Meter Type: LaMote 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 11/23	25.95	4490	4478.9	4494.5	+/- 5 %	(Yes) No	
pH (4)			4.00	4.24	3.99	+/- 0.1 SU	(Yes) No	
Mid-Day pH (4) check	–	–	4.00	–	–	+/- 0.1 SU	Yes No	
pH (7)	2216893 11/23	25.14	7.00	6.91	7.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (7) check	–	–	7.00	–	–	+/- 0.1 SU	Yes No	
pH (10)	21320202 12/23	25.92	10.00	9.86	10.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (10) check	–	–	10.00	–	–	+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/23	23.50	228	226.2	228.0	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	99.65	100.48	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0	0.27	0.00	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1.00	0.42	0.95	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			10.00	9.82	10.04	+/- 0.5 NTU	(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
MW-53	1548835.51	1942399.62	580.59	1548835.08	1942400.25	577.64	NAIL ON PAD
PT-09	1549049.74	1942393.11	580.35	1549049.80	1942394.19	577.33	NAIL ON PAD
PT-10	1549040.34	1942413.88	580.44	1549040.30	1942415.26	577.39	NAIL ON PAD
Benchmark	Northing	Easting	Elevation				
BM-H3	1548237.413	1941013.571	574.63				

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-H3 SET BY GEL SOLUTIONS USING A TRIMBLE DINI LEVEL

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
MW-54	1548699.509	1940805.028	592.66	1548699.426	1940804.22	592.977	Nail on Pad
PT-07	1548675.239	1940933.391	591.75	1548675.251	1940932.71	591.998	Nail on Pad
PT-08	1548666.824	1940929.582	591.83	1548666.667	1940928.983	592.104	Nail on Pad
Benchmark	Northing	Easting	Elevation				
BM-H3	1548237.413	1941013.571	574.63				

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-H3 SET BY GEL SOLUTIONS USING A TRIMBLE DINI LEVEL

8/30/2023

COA - LS003119
Exp. 12/31/2023

APPENDIX B

Baseline Analytical Laboratory Results and Field Sampling Forms

Laboratory Analytical Reports

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

July 28, 2023

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

RE: Project: Hammond AP-1
Pace Project No.: 92677694

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory on July 17, 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
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

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

CERTIFICATIONS

Project: Hammond AP-1
Pace Project No.: 92677694

Pace Analytical Services Charlotte

South Carolina Laboratory ID: 99006
9800 Kincey 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

Pace Analytical Services Asheville

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

Pace Analytical Services Peachtree Corners

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

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

SAMPLE SUMMARY

Project: Hammond AP-1
Pace Project No.: 92677694

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92677694001	**HAM-HGWC-8**	Water	07/13/23 10:35	07/17/23 12:30
92677694002	**HAM-PT-09**	Water	07/13/23 12:47	07/17/23 12:30
92677694003	**HAM-PT-10**	Water	07/13/23 14:15	07/17/23 12:30
92677694004	**HAM-PT-07**	Water	07/13/23 16:22	07/17/23 12:30
92677694005	**HAM-PT-08**	Water	07/13/23 17:51	07/17/23 12:30
92677694006	**HAM-AP1-FD-01**	Water	07/13/23 00:00	07/17/23 12:30
92677694007	**HAM-AP1-FB-01**	Water	07/17/23 08:40	07/17/23 12:30
92677694008	**HAM-HGWC-13**	Water	07/17/23 11:47	07/17/23 12:30

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Hammond AP-1
Pace Project No.: 92677694

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92677694001	**HAM-HGWC-8**	EPA 6010D	MS	6
		EPA 6020B	CW1	12
		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
92677694002	**HAM-PT-09**	EPA 6010D	MS	6
		EPA 6020B	CW1	12
		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
92677694003	**HAM-PT-10**	EPA 6010D	MS	6
		EPA 6020B	CW1	12
		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
92677694004	**HAM-PT-07**	EPA 6010D	MS	6
		EPA 6020B	CW1	12
		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
92677694005	**HAM-PT-08**	EPA 6010D	MS	6
		EPA 6020B	CW1	12
		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
92677694006	**HAM-AP1-FD-01**	EPA 6010D	MS	6
		EPA 6020B	CW1	12

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: Hammond AP-1
Pace Project No.: 92677694

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
92677694007	**HAM-AP1-FB-01**	EPA 6010D	MS	6
		EPA 6020B	CW1	12
		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
92677694008	**HAM-HGWC-13**	EPA 6010D	MS	6
		EPA 6020B	CW1	12
		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-C = Pace Analytical Services - Charlotte
PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92677694

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92677694001	**HAM-HGWC-8**					
	Performed by	CUSTOMER			07/17/23 17:16	
	pH	6.65	Std. Units		07/17/23 17:16	
EPA 6010D	Manganese	0.28	mg/L	0.040	07/20/23 15:39	
EPA 6010D	Potassium	6.9	mg/L	0.50	07/20/23 15:39	
EPA 6010D	Sodium	8.8	mg/L	1.0	07/20/23 15:39	M1
EPA 6010D	Calcium	107	mg/L	1.0	07/20/23 15:39	M1
EPA 6010D	Magnesium	14.9	mg/L	0.050	07/20/23 15:39	M1
EPA 6010D	Iron	0.27	mg/L	0.040	07/25/23 15:53	
EPA 6020B	Barium	0.047	mg/L	0.0050	07/19/23 17:55	
EPA 6020B	Beryllium	0.000073J	mg/L	0.00050	07/19/23 17:55	
EPA 6020B	Boron	2.0	mg/L	0.20	07/21/23 16:37	
EPA 6020B	Cadmium	0.00031J	mg/L	0.00050	07/19/23 17:55	
EPA 6020B	Cobalt	0.0015J	mg/L	0.0050	07/19/23 17:55	
EPA 6020B	Lithium	0.0015J	mg/L	0.030	07/19/23 17:55	
EPA 6020B	Molybdenum	0.30	mg/L	0.010	07/19/23 17:55	
EPA 6020B	Thallium	0.00026J	mg/L	0.0010	07/19/23 17:55	
SM 2540C-2015	Total Dissolved Solids	513	mg/L	25.0	07/18/23 15:24	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	136	mg/L	5.0	07/19/23 19:16	
SM 2320B-2011	Alkalinity, Total as CaCO3	136	mg/L	5.0	07/19/23 19:16	
EPA 300.0 Rev 2.1 1993	Chloride	47.9	mg/L	1.0	07/19/23 03:12	
EPA 300.0 Rev 2.1 1993	Fluoride	0.49	mg/L	0.10	07/19/23 03:12	
EPA 300.0 Rev 2.1 1993	Sulfate	163	mg/L	3.0	07/19/23 09:10	
92677694002	**HAM-PT-09**					
	Performed by	CUSTOMER			07/17/23 17:16	
	pH	6.57	Std. Units		07/17/23 17:16	
EPA 6010D	Iron	0.33	mg/L	0.040	07/25/23 16:08	
EPA 6010D	Manganese	0.79	mg/L	0.040	07/20/23 15:59	
EPA 6010D	Potassium	6.8	mg/L	0.50	07/20/23 15:59	
EPA 6010D	Sodium	10.6	mg/L	1.0	07/20/23 15:59	
EPA 6010D	Calcium	110	mg/L	1.0	07/20/23 15:59	
EPA 6010D	Magnesium	15.6	mg/L	0.050	07/20/23 15:59	
EPA 6020B	Antimony	0.0027J	mg/L	0.0030	07/19/23 18:19	
EPA 6020B	Barium	0.053	mg/L	0.0050	07/19/23 18:19	
EPA 6020B	Beryllium	0.000077J	mg/L	0.00050	07/19/23 18:19	
EPA 6020B	Boron	2.1	mg/L	0.20	07/21/23 16:55	
EPA 6020B	Cobalt	0.0045J	mg/L	0.0050	07/19/23 18:19	
EPA 6020B	Lithium	0.0013J	mg/L	0.030	07/19/23 18:19	
EPA 6020B	Molybdenum	0.065	mg/L	0.010	07/19/23 18:19	
SM 2540C-2015	Total Dissolved Solids	534	mg/L	25.0	07/18/23 15:24	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	144	mg/L	5.0	07/19/23 19:26	
SM 2320B-2011	Alkalinity, Total as CaCO3	144	mg/L	5.0	07/19/23 19:26	
EPA 300.0 Rev 2.1 1993	Chloride	55.3	mg/L	1.0	07/19/23 03:27	
EPA 300.0 Rev 2.1 1993	Fluoride	0.24	mg/L	0.10	07/19/23 03:27	
EPA 300.0 Rev 2.1 1993	Sulfate	160	mg/L	3.0	07/19/23 09:53	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92677694

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92677694003	**HAM-PT-10**					
	Performed by	CUSTOMER			07/17/23 17:16	
	pH	7.01	Std. Units		07/17/23 17:16	
EPA 6010D	Manganese	3.5	mg/L	0.040	07/20/23 16:14	
EPA 6010D	Potassium	7.1	mg/L	0.50	07/20/23 16:14	
EPA 6010D	Sodium	10.5	mg/L	1.0	07/20/23 16:14	
EPA 6010D	Calcium	127	mg/L	1.0	07/20/23 16:14	
EPA 6010D	Magnesium	16.8	mg/L	0.050	07/20/23 16:14	
EPA 6010D	Iron	3.1	mg/L	0.040	07/25/23 16:12	
EPA 6020B	Barium	0.074	mg/L	0.0050	07/19/23 18:25	
EPA 6020B	Boron	2.2	mg/L	0.20	07/21/23 17:01	
EPA 6020B	Cobalt	0.0026J	mg/L	0.0050	07/19/23 18:25	
EPA 6020B	Lithium	0.0014J	mg/L	0.030	07/19/23 18:25	
EPA 6020B	Molybdenum	0.10	mg/L	0.010	07/19/23 18:25	
SM 2540C-2015	Total Dissolved Solids	557	mg/L	25.0	07/18/23 15:24	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	185	mg/L	5.0	07/20/23 16:41	
SM 2320B-2011	Alkalinity, Total as CaCO3	185	mg/L	5.0	07/20/23 16:41	
EPA 300.0 Rev 2.1 1993	Chloride	67.2	mg/L	1.0	07/19/23 04:10	
EPA 300.0 Rev 2.1 1993	Fluoride	0.33	mg/L	0.10	07/19/23 04:10	
EPA 300.0 Rev 2.1 1993	Sulfate	145	mg/L	3.0	07/19/23 10:07	
92677694004	**HAM-PT-07**					
	Performed by	CUSTOMER			07/17/23 17:16	
	pH	6.76	Std. Units		07/17/23 17:16	
EPA 6010D	Manganese	8.2	mg/L	0.040	07/20/23 16:19	
EPA 6010D	Potassium	6.0	mg/L	0.50	07/20/23 16:19	
EPA 6010D	Sodium	6.1	mg/L	1.0	07/20/23 16:19	
EPA 6010D	Calcium	168	mg/L	1.0	07/20/23 16:19	
EPA 6010D	Magnesium	18.5	mg/L	0.050	07/20/23 16:19	
EPA 6010D	Iron	23.8	mg/L	0.040	07/25/23 16:17	
EPA 6020B	Arsenic	0.34	mg/L	0.010	07/19/23 18:30	
EPA 6020B	Barium	0.056	mg/L	0.0050	07/19/23 18:30	
EPA 6020B	Beryllium	0.00012J	mg/L	0.00050	07/19/23 18:30	
EPA 6020B	Boron	1.0	mg/L	0.20	07/21/23 17:07	
EPA 6020B	Cobalt	0.13	mg/L	0.0050	07/19/23 18:30	
EPA 6020B	Lithium	0.060	mg/L	0.030	07/19/23 18:30	
EPA 6020B	Molybdenum	0.017	mg/L	0.010	07/19/23 18:30	
EPA 6020B	Thallium	0.00024J	mg/L	0.0010	07/19/23 18:30	
SM 2540C-2015	Total Dissolved Solids	808	mg/L	25.0	07/18/23 15:24	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	102	mg/L	5.0	07/20/23 16:53	
SM 2320B-2011	Alkalinity, Total as CaCO3	102	mg/L	5.0	07/20/23 16:53	
EPA 300.0 Rev 2.1 1993	Chloride	15.7	mg/L	1.0	07/19/23 04:24	
EPA 300.0 Rev 2.1 1993	Fluoride	0.36	mg/L	0.10	07/19/23 04:24	
EPA 300.0 Rev 2.1 1993	Sulfate	411	mg/L	9.0	07/19/23 10:21	
92677694005	**HAM-PT-08**					
	Performed by	CUSTOMER			07/17/23 17:17	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92677694

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92677694005	**HAM-PT-08**					
	pH	6.66	Std. Units		07/17/23 17:17	
EPA 6010D	Manganese	8.7	mg/L	0.040	07/20/23 16:24	
EPA 6010D	Potassium	6.0	mg/L	0.50	07/20/23 16:24	
EPA 6010D	Sodium	6.9	mg/L	1.0	07/20/23 16:24	
EPA 6010D	Calcium	161	mg/L	1.0	07/20/23 16:24	
EPA 6010D	Magnesium	18.9	mg/L	0.050	07/20/23 16:24	
EPA 6010D	Iron	24.2	mg/L	0.040	07/25/23 16:38	
EPA 6020B	Arsenic	0.33	mg/L	0.010	07/19/23 18:36	
EPA 6020B	Barium	0.051	mg/L	0.0050	07/19/23 18:36	
EPA 6020B	Beryllium	0.00011J	mg/L	0.00050	07/19/23 18:36	
EPA 6020B	Boron	1.0	mg/L	0.20	07/21/23 17:13	
EPA 6020B	Cobalt	0.031	mg/L	0.0050	07/19/23 18:36	
EPA 6020B	Lithium	0.065	mg/L	0.030	07/19/23 18:36	
EPA 6020B	Molybdenum	0.0079J	mg/L	0.010	07/19/23 18:36	
SM 2540C-2015	Total Dissolved Solids	734	mg/L	25.0	07/18/23 15:25	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	107	mg/L	5.0	07/20/23 17:03	
SM 2320B-2011	Alkalinity, Total as CaCO3	107	mg/L	5.0	07/20/23 17:03	
SM 4500-S2D-2011	Sulfide	0.036J	mg/L	0.10	07/20/23 03:42	
EPA 300.0 Rev 2.1 1993	Chloride	17.0	mg/L	1.0	07/19/23 04:38	
EPA 300.0 Rev 2.1 1993	Fluoride	0.36	mg/L	0.10	07/19/23 04:38	
EPA 300.0 Rev 2.1 1993	Sulfate	417	mg/L	8.0	07/19/23 12:00	
92677694006	**HAM-AP1-FD-01**					
EPA 6010D	Iron	24.6	mg/L	0.040	07/25/23 16:48	
EPA 6010D	Manganese	8.6	mg/L	0.040	07/20/23 16:29	
EPA 6010D	Potassium	6.4	mg/L	0.50	07/20/23 16:29	
EPA 6010D	Sodium	6.6	mg/L	1.0	07/20/23 16:29	
EPA 6010D	Calcium	180	mg/L	1.0	07/20/23 16:29	
EPA 6010D	Magnesium	19.6	mg/L	0.050	07/20/23 16:29	
EPA 6020B	Arsenic	0.34	mg/L	0.010	07/19/23 18:54	
EPA 6020B	Barium	0.057	mg/L	0.0050	07/19/23 18:54	
EPA 6020B	Beryllium	0.00011J	mg/L	0.00050	07/19/23 18:54	
EPA 6020B	Boron	0.99	mg/L	0.20	07/21/23 17:19	
EPA 6020B	Cobalt	0.14	mg/L	0.0050	07/19/23 18:54	
EPA 6020B	Lithium	0.060	mg/L	0.030	07/19/23 18:54	
EPA 6020B	Molybdenum	0.018	mg/L	0.010	07/19/23 18:54	
EPA 6020B	Thallium	0.00025J	mg/L	0.0010	07/19/23 18:54	
SM 2540C-2015	Total Dissolved Solids	804	mg/L	25.0	07/18/23 15:25	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	102	mg/L	5.0	07/20/23 17:12	
SM 2320B-2011	Alkalinity, Total as CaCO3	102	mg/L	5.0	07/20/23 17:12	
EPA 300.0 Rev 2.1 1993	Chloride	15.6	mg/L	1.0	07/19/23 04:53	
EPA 300.0 Rev 2.1 1993	Fluoride	0.31	mg/L	0.10	07/19/23 04:53	
EPA 300.0 Rev 2.1 1993	Sulfate	428	mg/L	9.0	07/19/23 12:56	
92677694008	**HAM-HGWC-13**					
	Performed by	CUSTOMER			07/17/23 17:17	
	pH	6.67	Std. Units		07/17/23 17:17	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92677694

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92677694008	**HAM-HGWC-13**					
EPA 6010D	Iron	7.2	mg/L	0.040	07/20/23 16:39	
EPA 6010D	Manganese	8.9	mg/L	0.040	07/20/23 16:39	
EPA 6010D	Potassium	6.0	mg/L	0.50	07/20/23 16:39	
EPA 6010D	Sodium	6.8	mg/L	1.0	07/20/23 16:39	
EPA 6010D	Calcium	179	mg/L	1.0	07/20/23 16:39	
EPA 6010D	Magnesium	19.5	mg/L	0.050	07/20/23 16:39	
EPA 6020B	Arsenic	0.63	mg/L	0.010	07/19/23 19:06	
EPA 6020B	Barium	0.056	mg/L	0.0050	07/19/23 19:06	
EPA 6020B	Beryllium	0.00012J	mg/L	0.00050	07/19/23 19:06	
EPA 6020B	Boron	1.0	mg/L	0.20	07/21/23 17:43	
EPA 6020B	Cobalt	0.018	mg/L	0.0050	07/19/23 19:06	
EPA 6020B	Lithium	0.048	mg/L	0.030	07/19/23 19:06	
EPA 6020B	Molybdenum	0.017	mg/L	0.010	07/19/23 19:06	
EPA 6020B	Thallium	0.00030J	mg/L	0.0010	07/19/23 19:06	
SM 2540C-2015	Total Dissolved Solids	817	mg/L	25.0	07/18/23 15:31	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	140	mg/L	5.0	07/20/23 17:26	
SM 2320B-2011	Alkalinity, Total as CaCO3	140	mg/L	5.0	07/20/23 17:26	
EPA 300.0 Rev 2.1 1993	Chloride	17.8	mg/L	1.0	07/19/23 05:50	
EPA 300.0 Rev 2.1 1993	Fluoride	0.32	mg/L	0.10	07/19/23 05:50	
EPA 300.0 Rev 2.1 1993	Sulfate	393	mg/L	8.0	07/19/23 13:10	M1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-HGWC-8 **Lab ID: 92677694001** Collected: 07/13/23 10:35 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		07/17/23 17:16		
pH	**6.65**	Std. Units			1		07/17/23 17:16		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Manganese	**0.28**	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 15:39	7439-96-5	
Potassium	**6.9**	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 15:39	7440-09-7	
Sodium	**8.8**	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 15:39	7440-23-5	M1
Calcium	**107**	mg/L	1.0	0.12	1	07/20/23 09:50	07/20/23 15:39	7440-70-2	M1
Magnesium	**14.9**	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 15:39	7439-95-4	M1
Iron	**0.27**	mg/L	0.040	0.025	1	07/20/23 09:50	07/25/23 15:53	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 17:55	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 17:55	7440-38-2	
Barium	**0.047**	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 17:55	7440-39-3	
Beryllium	**0.000073J**	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 17:55	7440-41-7	
Boron	**2.0**	mg/L	0.20	0.043	5	07/18/23 13:46	07/21/23 16:37	7440-42-8	
Cadmium	**0.00031J**	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 17:55	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 17:55	7440-47-3	
Cobalt	**0.0015J**	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 17:55	7440-48-4	
Lithium	**0.0015J**	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 17:55	7439-93-2	
Molybdenum	**0.30**	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 17:55	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 17:55	7782-49-2	
Thallium	**0.00026J**	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 17:55	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	07/27/23 12:00	07/27/23 14:51	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**513**	mg/L	25.0	25.0	1		07/18/23 15:24		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**136**	mg/L	5.0	5.0	1		07/19/23 19:16		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/19/23 19:16		
Alkalinity, Total as CaCO3	**136**	mg/L	5.0	5.0	1		07/19/23 19:16		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-HGWC-8 **Lab ID: 92677694001** Collected: 07/13/23 10:35 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 03:39	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**47.9**	mg/L	1.0	0.60	1		07/19/23 03:12	16887-00-6	
Fluoride	**0.49**	mg/L	0.10	0.050	1		07/19/23 03:12	16984-48-8	
Sulfate	**163**	mg/L	3.0	1.5	3		07/19/23 09:10	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-PT-09 **Lab ID: 92677694002** Collected: 07/13/23 12:47 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		07/17/23 17:16		
pH	**6.57**	Std. Units			1		07/17/23 17:16		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.33**	mg/L	0.040	0.025	1	07/20/23 09:50	07/25/23 16:08	7439-89-6	
Manganese	**0.79**	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 15:59	7439-96-5	
Potassium	**6.8**	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 15:59	7440-09-7	
Sodium	**10.6**	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 15:59	7440-23-5	
Calcium	**110**	mg/L	1.0	0.12	1	07/20/23 09:50	07/20/23 15:59	7440-70-2	
Magnesium	**15.6**	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 15:59	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.0027J**	mg/L	0.0030	0.0012	1	07/18/23 13:46	07/19/23 18:19	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 18:19	7440-38-2	
Barium	**0.053**	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 18:19	7440-39-3	
Beryllium	**0.000077J**	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 18:19	7440-41-7	
Boron	**2.1**	mg/L	0.20	0.043	5	07/18/23 13:46	07/21/23 16:55	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 18:19	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 18:19	7440-47-3	
Cobalt	**0.0045J**	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 18:19	7440-48-4	
Lithium	**0.0013J**	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 18:19	7439-93-2	
Molybdenum	**0.065**	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 18:19	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 18:19	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 18:19	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	07/27/23 12:00	07/27/23 14:53	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**534**	mg/L	25.0	25.0	1		07/18/23 15:24		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**144**	mg/L	5.0	5.0	1		07/19/23 19:26		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/19/23 19:26		
Alkalinity, Total as CaCO3	**144**	mg/L	5.0	5.0	1		07/19/23 19:26		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-PT-09 **Lab ID: 92677694002** Collected: 07/13/23 12:47 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 03:41	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**55.3**	mg/L	1.0	0.60	1		07/19/23 03:27	16887-00-6	
Fluoride	**0.24**	mg/L	0.10	0.050	1		07/19/23 03:27	16984-48-8	
Sulfate	**160**	mg/L	3.0	1.5	3		07/19/23 09:53	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-PT-10 **Lab ID: 92677694003** Collected: 07/13/23 14:15 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		07/17/23 17:16		
pH	**7.01**	Std. Units			1		07/17/23 17:16		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Manganese	**3.5**	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 16:14	7439-96-5	
Potassium	**7.1**	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 16:14	7440-09-7	
Sodium	**10.5**	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 16:14	7440-23-5	
Calcium	**127**	mg/L	1.0	0.12	1	07/20/23 09:50	07/20/23 16:14	7440-70-2	
Magnesium	**16.8**	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 16:14	7439-95-4	
Iron	**3.1**	mg/L	0.040	0.025	1	07/20/23 09:50	07/25/23 16:12	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 18:25	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 18:25	7440-38-2	
Barium	**0.074**	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 18:25	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 18:25	7440-41-7	
Boron	**2.2**	mg/L	0.20	0.043	5	07/18/23 13:46	07/21/23 17:01	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 18:25	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 18:25	7440-47-3	
Cobalt	**0.0026J**	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 18:25	7440-48-4	
Lithium	**0.0014J**	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 18:25	7439-93-2	
Molybdenum	**0.10**	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 18:25	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 18:25	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 18:25	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	07/27/23 12:00	07/27/23 15:09	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**557**	mg/L	25.0	25.0	1		07/18/23 15:24		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**185**	mg/L	5.0	5.0	1		07/20/23 16:41		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 16:41		
Alkalinity, Total as CaCO3	**185**	mg/L	5.0	5.0	1		07/20/23 16:41		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-PT-10 **Lab ID: 92677694003** Collected: 07/13/23 14:15 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 03:41	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**67.2**	mg/L	1.0	0.60	1		07/19/23 04:10	16887-00-6	
Fluoride	**0.33**	mg/L	0.10	0.050	1		07/19/23 04:10	16984-48-8	
Sulfate	**145**	mg/L	3.0	1.5	3		07/19/23 10:07	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-PT-07 **Lab ID: 92677694004** Collected: 07/13/23 16:22 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		07/17/23 17:16		
pH	**6.76**	Std. Units			1		07/17/23 17:16		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Manganese	**8.2**	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 16:19	7439-96-5	
Potassium	**6.0**	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 16:19	7440-09-7	
Sodium	**6.1**	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 16:19	7440-23-5	
Calcium	**168**	mg/L	1.0	0.12	1	07/20/23 09:50	07/20/23 16:19	7440-70-2	
Magnesium	**18.5**	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 16:19	7439-95-4	
Iron	**23.8**	mg/L	0.040	0.025	1	07/20/23 09:50	07/25/23 16:17	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 18:30	7440-36-0	
Arsenic	**0.34**	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 18:30	7440-38-2	
Barium	**0.056**	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 18:30	7440-39-3	
Beryllium	**0.00012J**	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 18:30	7440-41-7	
Boron	**1.0**	mg/L	0.20	0.043	5	07/18/23 13:46	07/21/23 17:07	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 18:30	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 18:30	7440-47-3	
Cobalt	**0.13**	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 18:30	7440-48-4	
Lithium	**0.060**	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 18:30	7439-93-2	
Molybdenum	**0.017**	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 18:30	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 18:30	7782-49-2	
Thallium	**0.00024J**	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 18:30	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	07/27/23 12:00	07/27/23 15:12	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**808**	mg/L	25.0	25.0	1		07/18/23 15:24		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**102**	mg/L	5.0	5.0	1		07/20/23 16:53		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 16:53		
Alkalinity, Total as CaCO3	**102**	mg/L	5.0	5.0	1		07/20/23 16:53		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-PT-07 **Lab ID: 92677694004** Collected: 07/13/23 16:22 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 03:42	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**15.7**	mg/L	1.0	0.60	1		07/19/23 04:24	16887-00-6	
Fluoride	**0.36**	mg/L	0.10	0.050	1		07/19/23 04:24	16984-48-8	
Sulfate	**411**	mg/L	9.0	4.5	9		07/19/23 10:21	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-PT-08 **Lab ID: 92677694005** Collected: 07/13/23 17:51 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		07/17/23 17:17		
pH	**6.66**	Std. Units			1		07/17/23 17:17		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Manganese	**8.7**	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 16:24	7439-96-5	
Potassium	**6.0**	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 16:24	7440-09-7	
Sodium	**6.9**	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 16:24	7440-23-5	
Calcium	**161**	mg/L	1.0	0.12	1	07/20/23 09:50	07/20/23 16:24	7440-70-2	
Magnesium	**18.9**	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 16:24	7439-95-4	
Iron	**24.2**	mg/L	0.040	0.025	1	07/20/23 09:50	07/25/23 16:38	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 18:36	7440-36-0	
Arsenic	**0.33**	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 18:36	7440-38-2	
Barium	**0.051**	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 18:36	7440-39-3	
Beryllium	**0.00011J**	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 18:36	7440-41-7	
Boron	**1.0**	mg/L	0.20	0.043	5	07/18/23 13:46	07/21/23 17:13	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 18:36	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 18:36	7440-47-3	
Cobalt	**0.031**	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 18:36	7440-48-4	
Lithium	**0.065**	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 18:36	7439-93-2	
Molybdenum	**0.0079J**	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 18:36	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 18:36	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 18:36	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	07/27/23 12:00	07/27/23 15:14	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**734**	mg/L	25.0	25.0	1		07/18/23 15:25		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**107**	mg/L	5.0	5.0	1		07/20/23 17:03		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 17:03		
Alkalinity, Total as CaCO3	**107**	mg/L	5.0	5.0	1		07/20/23 17:03		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-PT-08 **Lab ID: 92677694005** Collected: 07/13/23 17:51 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	**0.036J**	mg/L	0.10	0.022	1		07/20/23 03:42	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**17.0**	mg/L	1.0	0.60	1		07/19/23 04:38	16887-00-6	
Fluoride	**0.36**	mg/L	0.10	0.050	1		07/19/23 04:38	16984-48-8	
Sulfate	**417**	mg/L	8.0	4.0	8		07/19/23 12:00	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-AP1-FD-01 **Lab ID: 92677694006** Collected: 07/13/23 00:00 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**24.6**	mg/L	0.040	0.025	1	07/20/23 09:50	07/25/23 16:48	7439-89-6	
Manganese	**8.6**	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 16:29	7439-96-5	
Potassium	**6.4**	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 16:29	7440-09-7	
Sodium	**6.6**	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 16:29	7440-23-5	
Calcium	**180**	mg/L	1.0	0.12	1	07/20/23 09:50	07/20/23 16:29	7440-70-2	
Magnesium	**19.6**	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 16:29	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 18:54	7440-36-0	
Arsenic	**0.34**	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 18:54	7440-38-2	
Barium	**0.057**	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 18:54	7440-39-3	
Beryllium	**0.00011J**	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 18:54	7440-41-7	
Boron	**0.99**	mg/L	0.20	0.043	5	07/18/23 13:46	07/21/23 17:19	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 18:54	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 18:54	7440-47-3	
Cobalt	**0.14**	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 18:54	7440-48-4	
Lithium	**0.060**	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 18:54	7439-93-2	
Molybdenum	**0.018**	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 18:54	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 18:54	7782-49-2	
Thallium	**0.00025J**	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 18:54	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	07/27/23 12:00	07/27/23 15:17	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**804**	mg/L	25.0	25.0	1		07/18/23 15:25		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**102**	mg/L	5.0	5.0	1		07/20/23 17:12		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 17:12		
Alkalinity, Total as CaCO3	**102**	mg/L	5.0	5.0	1		07/20/23 17:12		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 03:42	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**15.6**	mg/L	1.0	0.60	1		07/19/23 04:53	16887-00-6	
Fluoride	**0.31**	mg/L	0.10	0.050	1		07/19/23 04:53	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-AP1-FD-01 **Lab ID: 92677694006** Collected: 07/13/23 00:00 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	**428**	mg/L	9.0	4.5	9		07/19/23 12:56	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-AP1-FB-01 **Lab ID: 92677694007** Collected: 07/17/23 08:40 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Manganese	ND	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 16:34	7439-96-5	
Potassium	ND	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 16:34	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 16:34	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	07/20/23 09:50	07/20/23 16:34	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 16:34	7439-95-4	
Iron	ND	mg/L	0.040	0.025	1	07/20/23 09:50	07/25/23 16:53	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 19:00	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 19:00	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 19:00	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 19:00	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	07/18/23 13:46	07/21/23 17:37	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 19:00	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 19:00	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 19:00	7440-48-4	
Lithium	ND	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 19:00	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 19:00	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 19:00	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 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	07/27/23 12:00	07/27/23 15:19	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		07/18/23 15:30		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 17:22		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 17:22		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		07/20/23 17:22		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 04:00	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		07/19/23 05:07	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		07/19/23 05:07	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-AP1-FB-01 **Lab ID: 92677694007** Collected: 07/17/23 08:40 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	ND	mg/L	1.0	0.50	1		07/19/23 05:07	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-HGWC-13 **Lab ID: 92677694008** Collected: 07/17/23 11:47 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		07/17/23 17:17		
pH	**6.67**	Std. Units			1		07/17/23 17:17		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**7.2**	mg/L	0.040	0.025	1	07/20/23 09:50	07/20/23 16:39	7439-89-6	
Manganese	**8.9**	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 16:39	7439-96-5	
Potassium	**6.0**	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 16:39	7440-09-7	
Sodium	**6.8**	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 16:39	7440-23-5	
Calcium	**179**	mg/L	1.0	0.12	1	07/20/23 09:50	07/20/23 16:39	7440-70-2	
Magnesium	**19.5**	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 16:39	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 19:06	7440-36-0	
Arsenic	**0.63**	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 19:06	7440-38-2	
Barium	**0.056**	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 19:06	7440-39-3	
Beryllium	**0.00012J**	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 19:06	7440-41-7	
Boron	**1.0**	mg/L	0.20	0.043	5	07/18/23 13:46	07/21/23 17:43	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 19:06	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 19:06	7440-47-3	
Cobalt	**0.018**	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 19:06	7440-48-4	
Lithium	**0.048**	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 19:06	7439-93-2	
Molybdenum	**0.017**	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 19:06	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 19:06	7782-49-2	
Thallium	**0.00030J**	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 19:06	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	07/27/23 12:00	07/27/23 15:22	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**817**	mg/L	25.0	25.0	1		07/18/23 15:31		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**140**	mg/L	5.0	5.0	1		07/20/23 17:26		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 17:26		
Alkalinity, Total as CaCO3	**140**	mg/L	5.0	5.0	1		07/20/23 17:26		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(704)875-9092

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-HGWC-13 **Lab ID: 92677694008** Collected: 07/17/23 11:47 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 04:00	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**17.8**	mg/L	1.0	0.60	1		07/19/23 05:50	16887-00-6	
Fluoride	**0.32**	mg/L	0.10	0.050	1		07/19/23 05:50	16984-48-8	
Sulfate	**393**	mg/L	8.0	4.0	8		07/19/23 13:10	14808-79-8	M1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92677694

QC Batch: 787863
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92677694001, 92677694002, 92677694003, 92677694004, 92677694005, 92677694006, 92677694007, 92677694008

METHOD BLANK: 4084625 Matrix: Water
Associated Lab Samples: 92677694001, 92677694002, 92677694003, 92677694004, 92677694005, 92677694006, 92677694007, 92677694008

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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92677694

QC Batch: 787489
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92677694001, 92677694002, 92677694003, 92677694004, 92677694005, 92677694006, 92677694007, 92677694008

METHOD BLANK: 4082463 Matrix: Water
Associated Lab Samples: 92677694001, 92677694002, 92677694003, 92677694004, 92677694005, 92677694006, 92677694007, 92677694008

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	
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	
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	92677694001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	109	110	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.11	104	106	75-125	2	20	
Barium	mg/L	0.047	0.1	0.1	0.16	0.16	114	113	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92677694

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4082465 4082466

Parameter	Units	92677694001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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	
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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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92677694

QC Batch: 789561 | Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A | Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92677694001, 92677694002, 92677694003, 92677694004, 92677694005, 92677694006, 92677694007, 92677694008

METHOD BLANK: 4092350 Matrix: Water
Associated Lab Samples: 92677694001, 92677694002, 92677694003, 92677694004, 92677694005, 92677694006, 92677694007, 92677694008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	07/27/23 14:41	

LABORATORY CONTROL SAMPLE: 4092351

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: 4092352 4092353

Parameter	Units	92677694002 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	0.0021	0.0021	83	85	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92677694

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: 92677694001, 92677694002, 92677694003, 92677694004, 92677694005, 92677694006, 92677694007, 92677694008

METHOD BLANK: 4082157 Matrix: Water
Associated Lab Samples: 92677694001, 92677694002, 92677694003, 92677694004, 92677694005, 92677694006, 92677694007, 92677694008

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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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92677694

QC Batch: 787723
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92677694001, 92677694002

METHOD BLANK: 4083535 Matrix: Water
Associated Lab Samples: 92677694001, 92677694002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	07/19/23 16:09	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	07/19/23 16:09	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	07/19/23 16:09	

LABORATORY CONTROL SAMPLE: 4083536

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: 4083537

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	49.5	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4083538 4083539

Parameter	Units	92677420019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	48.7	50	50	102	103	106	108	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4083540 4083541

Parameter	Units	92677318002 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	330	50	50	390	394	120	129	80-120	1	25	M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92677694

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: 92677694003, 92677694004, 92677694005, 92677694006, 92677694007, 92677694008

METHOD BLANK: 4085797 Matrix: Water
Associated Lab Samples: 92677694003, 92677694004, 92677694005, 92677694006, 92677694007, 92677694008

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 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	121	50	50	180	180	118	118	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4085802 4085803

Parameter	Units	92677753006 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	76.8	50	50	129	131	103	108	80-120	2	25	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92677694

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: 92677694001, 92677694002, 92677694003, 92677694004, 92677694005, 92677694006

METHOD BLANK: 4084741 Matrix: Water
Associated Lab Samples: 92677694001, 92677694002, 92677694003, 92677694004, 92677694005, 92677694006

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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.47	0.47	93	93	80-120	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4084745 4084746

Parameter	Units	92677696005 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	0.48	0.46	94	90	80-120	5	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92677694

QC Batch: 787903
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92677694007, 92677694008

METHOD BLANK: 4084747 Matrix: Water
Associated Lab Samples: 92677694007, 92677694008

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 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	0.53	0.54	105	108	80-120	3	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4084751 4084752

Parameter	Units	92677696012 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	0.43	0.47	84	93	80-120	10	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92677694

QC Batch: 787373
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92677694001, 92677694002, 92677694003, 92677694004, 92677694005, 92677694006, 92677694007

METHOD BLANK: 4081842 Matrix: Water
Associated Lab Samples: 92677694001, 92677694002, 92677694003, 92677694004, 92677694005, 92677694006, 92677694007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	07/18/23 12:46	
Fluoride	mg/L	ND	0.10	0.050	07/18/23 12:46	
Sulfate	mg/L	ND	1.0	0.50	07/18/23 12:46	

LABORATORY CONTROL SAMPLE: 4081843

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.3	101	90-110	
Fluoride	mg/L	2.5	2.5	101	90-110	
Sulfate	mg/L	50	49.5	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4081844 4081845

Parameter	Units	92677589002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.9	50	50	54.1	54.7	102	104	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.7	2.7	107	107	90-110	0	10	
Sulfate	mg/L	25.2	50	50	75.9	76.5	101	103	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4081846 4081847

Parameter	Units	92677589020 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	21.6	50	50	60.3	60.3	78	77	90-110	0	10	M1
Fluoride	mg/L	0.37J	2.5	2.5	2.8J	3.2J	96	113	90-110		10	M1
Sulfate	mg/L	3080	50	50	3000	2940	-145	-278	90-110	2	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

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

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92677694

QC Batch: 787377
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92677694008

METHOD BLANK: 4081859 Matrix: Water
Associated Lab Samples: 92677694008

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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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

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

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

QUALIFIERS

Project: Hammond AP-1
Pace Project No.: 92677694

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.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-1
Pace Project No.: 92677694

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92677694001	**HAM-HGWC-8**				
92677694002	**HAM-PT-09**				
92677694003	**HAM-PT-10**				
92677694004	**HAM-PT-07**				
92677694005	**HAM-PT-08**				
92677694008	**HAM-HGWC-13**				
92677694001	**HAM-HGWC-8**	EPA 3010A	787863	EPA 6010D	788067
92677694002	**HAM-PT-09**	EPA 3010A	787863	EPA 6010D	788067
92677694003	**HAM-PT-10**	EPA 3010A	787863	EPA 6010D	788067
92677694004	**HAM-PT-07**	EPA 3010A	787863	EPA 6010D	788067
92677694005	**HAM-PT-08**	EPA 3010A	787863	EPA 6010D	788067
92677694006	**HAM-AP1-FD-01**	EPA 3010A	787863	EPA 6010D	788067
92677694007	**HAM-AP1-FB-01**	EPA 3010A	787863	EPA 6010D	788067
92677694008	**HAM-HGWC-13**	EPA 3010A	787863	EPA 6010D	788067
92677694001	**HAM-HGWC-8**	EPA 3005A	787489	EPA 6020B	787561
92677694002	**HAM-PT-09**	EPA 3005A	787489	EPA 6020B	787561
92677694003	**HAM-PT-10**	EPA 3005A	787489	EPA 6020B	787561
92677694004	**HAM-PT-07**	EPA 3005A	787489	EPA 6020B	787561
92677694005	**HAM-PT-08**	EPA 3005A	787489	EPA 6020B	787561
92677694006	**HAM-AP1-FD-01**	EPA 3005A	787489	EPA 6020B	787561
92677694007	**HAM-AP1-FB-01**	EPA 3005A	787489	EPA 6020B	787561
92677694008	**HAM-HGWC-13**	EPA 3005A	787489	EPA 6020B	787561
92677694001	**HAM-HGWC-8**	EPA 7470A	789561	EPA 7470A	789666
92677694002	**HAM-PT-09**	EPA 7470A	789561	EPA 7470A	789666
92677694003	**HAM-PT-10**	EPA 7470A	789561	EPA 7470A	789666
92677694004	**HAM-PT-07**	EPA 7470A	789561	EPA 7470A	789666
92677694005	**HAM-PT-08**	EPA 7470A	789561	EPA 7470A	789666
92677694006	**HAM-AP1-FD-01**	EPA 7470A	789561	EPA 7470A	789666
92677694007	**HAM-AP1-FB-01**	EPA 7470A	789561	EPA 7470A	789666
92677694008	**HAM-HGWC-13**	EPA 7470A	789561	EPA 7470A	789666
92677694001	**HAM-HGWC-8**	SM 2540C-2015	787441		
92677694002	**HAM-PT-09**	SM 2540C-2015	787441		
92677694003	**HAM-PT-10**	SM 2540C-2015	787441		
92677694004	**HAM-PT-07**	SM 2540C-2015	787441		
92677694005	**HAM-PT-08**	SM 2540C-2015	787441		
92677694006	**HAM-AP1-FD-01**	SM 2540C-2015	787441		
92677694007	**HAM-AP1-FB-01**	SM 2540C-2015	787441		
92677694008	**HAM-HGWC-13**	SM 2540C-2015	787441		
92677694001	**HAM-HGWC-8**	SM 2320B-2011	787723		
92677694002	**HAM-PT-09**	SM 2320B-2011	787723		
92677694003	**HAM-PT-10**	SM 2320B-2011	788121		
92677694004	**HAM-PT-07**	SM 2320B-2011	788121		
92677694005	**HAM-PT-08**	SM 2320B-2011	788121		
92677694006	**HAM-AP1-FD-01**	SM 2320B-2011	788121		
92677694007	**HAM-AP1-FB-01**	SM 2320B-2011	788121		
92677694008	**HAM-HGWC-13**	SM 2320B-2011	788121		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-1
Pace Project No.: 92677694

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92677694001	**HAM-HGWC-8**	SM 4500-S2D-2011	787902		
92677694002	**HAM-PT-09**	SM 4500-S2D-2011	787902		
92677694003	**HAM-PT-10**	SM 4500-S2D-2011	787902		
92677694004	**HAM-PT-07**	SM 4500-S2D-2011	787902		
92677694005	**HAM-PT-08**	SM 4500-S2D-2011	787902		
92677694006	**HAM-AP1-FD-01**	SM 4500-S2D-2011	787902		
92677694007	**HAM-AP1-FB-01**	SM 4500-S2D-2011	787903		
92677694008	**HAM-HGWC-13**	SM 4500-S2D-2011	787903		
92677694001	**HAM-HGWC-8**	EPA 300.0 Rev 2.1 1993	787373		
92677694002	**HAM-PT-09**	EPA 300.0 Rev 2.1 1993	787373		
92677694003	**HAM-PT-10**	EPA 300.0 Rev 2.1 1993	787373		
92677694004	**HAM-PT-07**	EPA 300.0 Rev 2.1 1993	787373		
92677694005	**HAM-PT-08**	EPA 300.0 Rev 2.1 1993	787373		
92677694006	**HAM-AP1-FD-01**	EPA 300.0 Rev 2.1 1993	787373		
92677694007	**HAM-AP1-FB-01**	EPA 300.0 Rev 2.1 1993	787373		
92677694008	**HAM-HGWC-13**	EPA 300.0 Rev 2.1 1993	787377		

Pace ANALYTICAL SERVICES

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# : 92677694

92677694

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 A

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

Cooler Temp Corrected (°C): 6.5

Temp should be above freezing to 6°C

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

USDA Regulated Soil (☐ N/A, water sample)

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

Qualtrax ID: 69614

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

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

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

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

Project #

WO# : 92677694

PM: BV Due Date: 07/31/23

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			1	1																						
2		2	1			1	1																						
3		2	1			1	1																						
4		2	1			1	1																						
5		2	1			1	1																						
6		2	1			1	1																						
7		2	1			1	1																						
8		2	1			1	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.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of

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

Section B Required Project Information:
Report To: SCS Contacts
Copy To: Geosyntec Contacts
Task Code: HAM-CCR-CA-20230713
Purchase Order No.:
Project Name: Hammond AP-1
Project Number:

Section C Invoice Information:
Attention: Southern Co.
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Bonnie Vang
Pace Profile #: 10839- 16483-20

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

Site Location STATE: GA

Requested Analysis Filtered (Y/N)

Section D Required Client Information: SAMPLE ID (A-Z, 0-9 / , -) Sample IDs MUST BE UNIQUE	Valid Matrix Codes: MATRIX / CODE — DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Full App. III and IV metals	Major Ions (10839-21)	Boron and Cobalt	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 92677694
HAM-HGWC-8		WG	G	7/13/23	1035			21	5	X		X		X		ZnAc		N	X	X		N	001 pH = 6.65
HAM-PT-09		WG	G	7/13/23	1747			24	5	X		X		X		ZnAc		N	X	X		N	002 pH = 6.57
HAM-PT-10		WG	G	7/13/23	1415			22	5	X		X		X		ZnAc		N	X	X		N	003 pH = 7.01
HAM-PT-07		WG	G	7/13/23	1622			27	5	X		X		X		ZnAc		N	X	X		N	004 pH = 6.76
HAM-PT-08		WG	G	7/13/23	1751			24	5	X		X		X		ZnAc		N	X	X		N	005 pH = 6.66
HAM-AP1-FD-01		WG	G	7/13/23	0000			-	5	X		X		X		ZnAc		N	X	X		N	006 —
HAM-AP1-FB-01		WG	G	7/17/23	0840			-	5	X		X		X		ZnAc		N	X	X		N	007 —
HAM-AP HGWC-13		WG	G	7/17/23	1147			23	5	X		X		X		ZnAc		N	X	X		N	008 pH = 6.07
																		N					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Code: HAM-CCR-CA-20230713	Alana Neely / Geosyntec	7/17/23	1230	Ryan Williams / Pace	7/17/23	1230	
	Ryan Williams / Pace	7/18/23	1425		7/17	1425	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Alana Neely / Geosyntec Consultants, In
SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 7/17/23

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 invoices not paid within 30 days.

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

August 25, 2023

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

RE: Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

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,

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

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

CERTIFICATIONS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

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

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

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92682397001	**HAM-PT-07**	Water	08/09/23 17:59	08/11/23 13:12
92682397002	**HAM-PT-08**	Water	08/09/23 10:50	08/11/23 13:12
92682397003	**HAM-PT-09**	Water	08/09/23 14:42	08/11/23 13:12
92682397004	**HAM-PT-10**	Water	08/09/23 13:05	08/11/23 13:12
92682397005	**HAM-MW-53**	Water	08/09/23 16:40	08/11/23 13:12
92682397006	**HAM-MW-54**	Water	08/09/23 16:51	08/11/23 13:12
92682397007	**HAM-AP1-FD-06**	Water	08/09/23 00:00	08/11/23 13:12
92682397008	**HAM-AP1-FB-06**	Water	08/09/23 16:50	08/11/23 13:12

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SAMPLE ANALYTE COUNT

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92682397001	**HAM-PT-07**	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
92682397002	**HAM-PT-08**	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	CDC	3
92682397003	**HAM-PT-09**	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	CDC	3
92682397004	**HAM-PT-10**	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
92682397005	**HAM-MW-53**	EPA 6020B	CW1	2
92682397006	**HAM-MW-54**	EPA 6020B	CW1	2
92682397007	**HAM-AP1-FD-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

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92682397008	**HAM-AP1-FB-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

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SUMMARY OF DETECTION

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92682397001	**HAM-PT-07**					
EPA 6010D	Iron	27.1	mg/L	0.040	08/18/23 21:03	
EPA 6010D	Manganese	7.6	mg/L	0.040	08/18/23 21:03	
EPA 6010D	Potassium	6.8	mg/L	0.50	08/18/23 21:03	
EPA 6010D	Sodium	7.2	mg/L	1.0	08/18/23 21:03	
EPA 6010D	Calcium	173	mg/L	1.0	08/18/23 21:03	
EPA 6010D	Magnesium	19.4	mg/L	0.050	08/18/23 21:03	
EPA 6020B	Arsenic	0.27	mg/L	0.010	08/22/23 16:32	
EPA 6020B	Barium	0.053	mg/L	0.0050	08/22/23 16:32	
EPA 6020B	Beryllium	0.000095J	mg/L	0.00050	08/22/23 16:32	
EPA 6020B	Boron	0.93	mg/L	0.040	08/23/23 13:17	
EPA 6020B	Cobalt	0.090	mg/L	0.0050	08/23/23 13:17	
EPA 6020B	Lithium	0.069	mg/L	0.030	08/23/23 13:17	
EPA 6020B	Molybdenum	0.012	mg/L	0.010	08/22/23 16:32	
EPA 6020B	Thallium	0.00022J	mg/L	0.0010	08/22/23 16:32	
SM 2540C-2015	Total Dissolved Solids	771	mg/L	25.0	08/15/23 16:56	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	116	mg/L	5.0	08/16/23 15:20	
SM 2320B-2011	Alkalinity, Total as CaCO3	116	mg/L	5.0	08/16/23 15:20	
EPA 300.0 Rev 2.1 1993	Chloride	13.5	mg/L	1.0	08/15/23 21:32	
EPA 300.0 Rev 2.1 1993	Fluoride	0.28	mg/L	0.10	08/15/23 21:32	
EPA 300.0 Rev 2.1 1993	Sulfate	339	mg/L	7.0	08/16/23 08:19	
92682397002	**HAM-PT-08**					
EPA 6010D	Iron	22.0	mg/L	0.040	08/18/23 21:13	
EPA 6010D	Manganese	6.8	mg/L	0.040	08/18/23 21:13	
EPA 6010D	Potassium	6.3	mg/L	0.50	08/18/23 21:13	
EPA 6010D	Sodium	6.8	mg/L	1.0	08/18/23 21:13	
EPA 6010D	Calcium	146	mg/L	1.0	08/18/23 21:13	
EPA 6010D	Magnesium	17.3	mg/L	0.050	08/18/23 21:13	
EPA 6020B	Arsenic	0.32	mg/L	0.010	08/22/23 16:39	
EPA 6020B	Barium	0.050	mg/L	0.0050	08/22/23 16:39	
EPA 6020B	Beryllium	0.000073J	mg/L	0.00050	08/22/23 16:39	
EPA 6020B	Boron	0.99	mg/L	0.040	08/23/23 13:23	
EPA 6020B	Cobalt	0.032	mg/L	0.0050	08/22/23 16:39	
EPA 6020B	Lithium	0.073	mg/L	0.030	08/23/23 13:23	
EPA 6020B	Molybdenum	0.0071J	mg/L	0.010	08/22/23 16:39	
SM 2540C-2015	Total Dissolved Solids	682	mg/L	25.0	08/15/23 16:57	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	118	mg/L	5.0	08/16/23 15:40	
SM 2320B-2011	Alkalinity, Total as CaCO3	118	mg/L	5.0	08/16/23 15:40	
EPA 300.0 Rev 2.1 1993	Chloride	14.5	mg/L	1.0	08/15/23 22:30	
EPA 300.0 Rev 2.1 1993	Fluoride	0.27	mg/L	0.10	08/15/23 22:30	
EPA 300.0 Rev 2.1 1993	Sulfate	290	mg/L	6.0	08/16/23 09:16	M1
92682397003	**HAM-PT-09**					
EPA 6010D	Iron	0.10	mg/L	0.040	08/18/23 21:18	
EPA 6010D	Manganese	0.51	mg/L	0.040	08/18/23 21:18	
EPA 6010D	Potassium	7.7	mg/L	0.50	08/18/23 21:18	
EPA 6010D	Sodium	10.3	mg/L	1.0	08/18/23 21:18	
EPA 6010D	Calcium	136	mg/L	1.0	08/18/23 21:18	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SUMMARY OF DETECTION

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92682397003	**HAM-PT-09**					
EPA 6010D	Magnesium	18.2	mg/L	0.050	08/18/23 21:18	
EPA 6020B	Barium	0.057	mg/L	0.0050	08/22/23 16:43	
EPA 6020B	Boron	1.6	mg/L	0.40	08/23/23 19:25	
EPA 6020B	Cobalt	0.0028J	mg/L	0.0050	08/22/23 16:43	
EPA 6020B	Lithium	0.0017J	mg/L	0.030	08/22/23 16:43	
EPA 6020B	Molybdenum	0.21	mg/L	0.010	08/22/23 16:43	
SM 2540C-2015	Total Dissolved Solids	594	mg/L	25.0	08/15/23 16:57	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	150	mg/L	5.0	08/16/23 15:50	
SM 2320B-2011	Alkalinity, Total as CaCO3	150	mg/L	5.0	08/16/23 15:50	
EPA 300.0 Rev 2.1 1993	Chloride	47.5	mg/L	1.0	08/15/23 23:14	
EPA 300.0 Rev 2.1 1993	Fluoride	0.26	mg/L	0.10	08/15/23 23:14	
EPA 300.0 Rev 2.1 1993	Sulfate	188	mg/L	4.0	08/16/23 09:59	
92682397004	**HAM-PT-10**					
EPA 6010D	Iron	2.9	mg/L	0.040	08/23/23 21:33	
EPA 6010D	Manganese	3.1	mg/L	0.040	08/23/23 21:33	
EPA 6010D	Potassium	6.7	mg/L	0.50	08/23/23 21:33	M1
EPA 6010D	Sodium	9.4	mg/L	1.0	08/23/23 21:33	M1
EPA 6010D	Calcium	116	mg/L	1.0	08/23/23 21:33	M1
EPA 6010D	Magnesium	16.8	mg/L	0.050	08/23/23 21:33	M1
EPA 6020B	Barium	0.070	mg/L	0.0050	08/22/23 16:51	
EPA 6020B	Boron	2.1	mg/L	0.40	08/23/23 19:48	
EPA 6020B	Cobalt	0.0019J	mg/L	0.0050	08/22/23 16:51	
EPA 6020B	Lithium	0.0012J	mg/L	0.030	08/22/23 16:51	
EPA 6020B	Molybdenum	0.096	mg/L	0.010	08/22/23 16:51	
SM 2540C-2015	Total Dissolved Solids	553	mg/L	25.0	08/15/23 16:57	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	199	mg/L	5.0	08/16/23 16:00	
SM 2320B-2011	Alkalinity, Total as CaCO3	199	mg/L	5.0	08/16/23 16:00	
SM 4500-S2D-2011	Sulfide	0.045J	mg/L	0.10	08/15/23 06:30	
EPA 300.0 Rev 2.1 1993	Chloride	62.5	mg/L	1.0	08/15/23 23:42	
EPA 300.0 Rev 2.1 1993	Fluoride	0.27	mg/L	0.10	08/15/23 23:42	
EPA 300.0 Rev 2.1 1993	Sulfate	123	mg/L	3.0	08/16/23 10:27	
92682397005	**HAM-MW-53**					
EPA 6020B	Boron	1.5	mg/L	0.040	08/22/23 20:17	
EPA 6020B	Molybdenum	0.14	mg/L	0.010	08/22/23 20:17	
92682397006	**HAM-MW-54**					
EPA 6020B	Arsenic	0.085	mg/L	0.010	08/22/23 20:23	
EPA 6020B	Boron	0.45	mg/L	0.040	08/22/23 20:23	
92682397007	**HAM-AP1-FD-06**					
EPA 6010D	Iron	21.3	mg/L	0.040	08/23/23 21:54	
EPA 6010D	Manganese	6.8	mg/L	0.040	08/23/23 21:54	
EPA 6010D	Potassium	5.6	mg/L	0.50	08/23/23 21:54	
EPA 6010D	Sodium	6.3	mg/L	1.0	08/23/23 21:54	
EPA 6010D	Calcium	128	mg/L	1.0	08/23/23 21:54	
EPA 6010D	Magnesium	16.7	mg/L	0.050	08/23/23 21:54	
EPA 6020B	Arsenic	0.36	mg/L	0.010	08/22/23 20:29	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SUMMARY OF DETECTION

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92682397007	**HAM-AP1-FD-06**					
EPA 6020B	Barium	0.047	mg/L	0.0050	08/22/23 20:29	
EPA 6020B	Beryllium	0.000065J	mg/L	0.00050	08/22/23 20:29	
EPA 6020B	Boron	0.90	mg/L	0.040	08/22/23 20:29	
EPA 6020B	Cobalt	0.034	mg/L	0.0050	08/22/23 20:29	
EPA 6020B	Lithium	0.066	mg/L	0.030	08/22/23 20:29	
EPA 6020B	Molybdenum	0.0068J	mg/L	0.010	08/22/23 20:29	
SM 2540C-2015	Total Dissolved Solids	699	mg/L	25.0	08/15/23 16:57	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	111	mg/L	5.0	08/16/23 16:12	
SM 2320B-2011	Alkalinity, Total as CaCO3	111	mg/L	5.0	08/16/23 16:12	
EPA 300.0 Rev 2.1 1993	Chloride	14.6	mg/L	1.0	08/16/23 03:19	
EPA 300.0 Rev 2.1 1993	Fluoride	0.29	mg/L	0.10	08/16/23 03:19	
EPA 300.0 Rev 2.1 1993	Sulfate	293	mg/L	6.0	08/16/23 12:22	
92682397008	**HAM-AP1-FB-06**					
EPA 6020B	Boron	0.012J	mg/L	0.040	08/22/23 20:35	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Sample: HAM-PT-07 **Lab ID: 92682397001** Collected: 08/09/23 17:59 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**27.1**	mg/L	0.040	0.025	1	08/18/23 10:36	08/18/23 21:03	7439-89-6	
Manganese	**7.6**	mg/L	0.040	0.011	1	08/18/23 10:36	08/18/23 21:03	7439-96-5	
Potassium	**6.8**	mg/L	0.50	0.15	1	08/18/23 10:36	08/18/23 21:03	7440-09-7	
Sodium	**7.2**	mg/L	1.0	0.58	1	08/18/23 10:36	08/18/23 21:03	7440-23-5	
Calcium	**173**	mg/L	1.0	0.12	1	08/18/23 10:36	08/18/23 21:03	7440-70-2	
Magnesium	**19.4**	mg/L	0.050	0.012	1	08/18/23 10:36	08/18/23 21:03	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 16:32	7440-36-0	
Arsenic	**0.27**	mg/L	0.010	0.0037	1	08/16/23 14:27	08/22/23 16:32	7440-38-2	
Barium	**0.053**	mg/L	0.0050	0.00067	1	08/16/23 14:27	08/22/23 16:32	7440-39-3	
Beryllium	**0.000095J**	mg/L	0.00050	0.000054	1	08/16/23 14:27	08/22/23 16:32	7440-41-7	
Boron	**0.93**	mg/L	0.040	0.0086	1	08/16/23 14:27	08/23/23 13:17	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 14:27	08/22/23 16:32	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 14:27	08/23/23 13:17	7440-47-3	
Cobalt	**0.090**	mg/L	0.0050	0.00039	1	08/16/23 14:27	08/23/23 13:17	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 14:27	08/22/23 16:32	7439-92-1	
Lithium	**0.069**	mg/L	0.030	0.00073	1	08/16/23 14:27	08/23/23 13:17	7439-93-2	
Molybdenum	**0.012**	mg/L	0.010	0.00074	1	08/16/23 14:27	08/22/23 16:32	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/16/23 14:27	08/22/23 16:32	7782-49-2	
Thallium	**0.00022J**	mg/L	0.0010	0.00018	1	08/16/23 14:27	08/22/23 16:32	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/17/23 12:00	08/17/23 15:18	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**771**	mg/L	25.0	25.0	1		08/15/23 16:56		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**116**	mg/L	5.0	5.0	1		08/16/23 15:20		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 15:20		
Alkalinity, Total as CaCO3	**116**	mg/L	5.0	5.0	1		08/16/23 15:20		
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 06:29	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**13.5**	mg/L	1.0	0.60	1		08/15/23 21:32	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Sample: HAM-PT-07 **Lab ID: 92682397001** Collected: 08/09/23 17:59 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.28**	mg/L	0.10	0.050	1		08/15/23 21:32	16984-48-8	
Sulfate	**339**	mg/L	7.0	3.5	7		08/16/23 08:19	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Sample: HAM-PT-08 **Lab ID: 92682397002** Collected: 08/09/23 10:50 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**22.0**	mg/L	0.040	0.025	1	08/18/23 10:36	08/18/23 21:13	7439-89-6	
Manganese	**6.8**	mg/L	0.040	0.011	1	08/18/23 10:36	08/18/23 21:13	7439-96-5	
Potassium	**6.3**	mg/L	0.50	0.15	1	08/18/23 10:36	08/18/23 21:13	7440-09-7	
Sodium	**6.8**	mg/L	1.0	0.58	1	08/18/23 10:36	08/18/23 21:13	7440-23-5	
Calcium	**146**	mg/L	1.0	0.12	1	08/18/23 10:36	08/18/23 21:13	7440-70-2	
Magnesium	**17.3**	mg/L	0.050	0.012	1	08/18/23 10:36	08/18/23 21:13	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 16:39	7440-36-0	
Arsenic	**0.32**	mg/L	0.010	0.0037	1	08/16/23 14:27	08/22/23 16:39	7440-38-2	
Barium	**0.050**	mg/L	0.0050	0.00067	1	08/16/23 14:27	08/22/23 16:39	7440-39-3	
Beryllium	**0.000073J**	mg/L	0.00050	0.000054	1	08/16/23 14:27	08/22/23 16:39	7440-41-7	
Boron	**0.99**	mg/L	0.040	0.0086	1	08/16/23 14:27	08/23/23 13:23	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 14:27	08/22/23 16:39	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 14:27	08/22/23 16:39	7440-47-3	
Cobalt	**0.032**	mg/L	0.0050	0.00039	1	08/16/23 14:27	08/22/23 16:39	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 14:27	08/22/23 16:39	7439-92-1	
Lithium	**0.073**	mg/L	0.030	0.00073	1	08/16/23 14:27	08/23/23 13:23	7439-93-2	
Molybdenum	**0.0071J**	mg/L	0.010	0.00074	1	08/16/23 14:27	08/22/23 16:39	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/16/23 14:27	08/22/23 16:39	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/16/23 14:27	08/22/23 16:39	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/17/23 12:00	08/17/23 15:34	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**682**	mg/L	25.0	25.0	1		08/15/23 16:57		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**118**	mg/L	5.0	5.0	1		08/16/23 15:40		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 15:40		
Alkalinity, Total as CaCO3	**118**	mg/L	5.0	5.0	1		08/16/23 15:40		
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 06:29	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**14.5**	mg/L	1.0	0.60	1		08/15/23 22:30	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(704)875-9092

ANALYTICAL RESULTS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Sample: HAM-PT-08 **Lab ID: 92682397002** Collected: 08/09/23 10:50 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.27**	mg/L	0.10	0.050	1		08/15/23 22:30	16984-48-8	
Sulfate	**290**	mg/L	6.0	3.0	6		08/16/23 09:16	14808-79-8	M1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Sample: HAM-PT-09 **Lab ID: 92682397003** Collected: 08/09/23 14:42 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.10**	mg/L	0.040	0.025	1	08/18/23 10:36	08/18/23 21:18	7439-89-6	
Manganese	**0.51**	mg/L	0.040	0.011	1	08/18/23 10:36	08/18/23 21:18	7439-96-5	
Potassium	**7.7**	mg/L	0.50	0.15	1	08/18/23 10:36	08/18/23 21:18	7440-09-7	
Sodium	**10.3**	mg/L	1.0	0.58	1	08/18/23 10:36	08/18/23 21:18	7440-23-5	
Calcium	**136**	mg/L	1.0	0.12	1	08/18/23 10:36	08/18/23 21:18	7440-70-2	
Magnesium	**18.2**	mg/L	0.050	0.012	1	08/18/23 10:36	08/18/23 21:18	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 16:43	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/16/23 14:27	08/22/23 16:43	7440-38-2	
Barium	**0.057**	mg/L	0.0050	0.00067	1	08/16/23 14:27	08/22/23 16:43	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/16/23 14:27	08/22/23 16:43	7440-41-7	
Boron	**1.6**	mg/L	0.40	0.086	10	08/16/23 14:27	08/23/23 19:25	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 14:27	08/22/23 16:43	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 14:27	08/22/23 16:43	7440-47-3	
Cobalt	**0.0028J**	mg/L	0.0050	0.00039	1	08/16/23 14:27	08/22/23 16:43	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 14:27	08/22/23 16:43	7439-92-1	
Lithium	**0.0017J**	mg/L	0.030	0.00073	1	08/16/23 14:27	08/22/23 16:43	7439-93-2	
Molybdenum	**0.21**	mg/L	0.010	0.00074	1	08/16/23 14:27	08/22/23 16:43	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/16/23 14:27	08/22/23 16:43	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/16/23 14:27	08/22/23 16:43	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/17/23 12:00	08/17/23 15:37	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**594**	mg/L	25.0	25.0	1		08/15/23 16:57		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**150**	mg/L	5.0	5.0	1		08/16/23 15:50		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 15:50		
Alkalinity, Total as CaCO3	**150**	mg/L	5.0	5.0	1		08/16/23 15:50		
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 06:30	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**47.5**	mg/L	1.0	0.60	1		08/15/23 23:14	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Sample: HAM-PT-09 **Lab ID: 92682397003** Collected: 08/09/23 14:42 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.26**	mg/L	0.10	0.050	1		08/15/23 23:14	16984-48-8	
Sulfate	**188**	mg/L	4.0	2.0	4		08/16/23 09:59	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Sample: HAM-PT-10 **Lab ID: 92682397004** Collected: 08/09/23 13:05 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**2.9**	mg/L	0.040	0.025	1	08/23/23 12:06	08/23/23 21:33	7439-89-6	
Manganese	**3.1**	mg/L	0.040	0.011	1	08/23/23 12:06	08/23/23 21:33	7439-96-5	
Potassium	**6.7**	mg/L	0.50	0.15	1	08/23/23 12:06	08/23/23 21:33	7440-09-7	M1
Sodium	**9.4**	mg/L	1.0	0.58	1	08/23/23 12:06	08/23/23 21:33	7440-23-5	M1
Calcium	**116**	mg/L	1.0	0.12	1	08/23/23 12:06	08/23/23 21:33	7440-70-2	M1
Magnesium	**16.8**	mg/L	0.050	0.012	1	08/23/23 12:06	08/23/23 21:33	7439-95-4	M1
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.0012	1	08/16/23 14:27	08/22/23 16:51	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/16/23 14:27	08/22/23 16:51	7440-38-2	
Barium	**0.070**	mg/L	0.0050	0.00067	1	08/16/23 14:27	08/22/23 16:51	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/16/23 14:27	08/22/23 16:51	7440-41-7	
Boron	**2.1**	mg/L	0.40	0.086	10	08/16/23 14:27	08/23/23 19:48	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 14:27	08/22/23 16:51	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 14:27	08/22/23 16:51	7440-47-3	
Cobalt	**0.0019J**	mg/L	0.0050	0.00039	1	08/16/23 14:27	08/22/23 16:51	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 14:27	08/22/23 16:51	7439-92-1	
Lithium	**0.0012J**	mg/L	0.030	0.00073	1	08/16/23 14:27	08/22/23 16:51	7439-93-2	
Molybdenum	**0.096**	mg/L	0.010	0.00074	1	08/16/23 14:27	08/22/23 16:51	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/16/23 14:27	08/22/23 16:51	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/16/23 14:27	08/22/23 16:51	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 12:00	08/17/23 15:39	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**553**	mg/L	25.0	25.0	1		08/15/23 16:57		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**199**	mg/L	5.0	5.0	1		08/16/23 16:00		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 16:00		
Alkalinity, Total as CaCO3	**199**	mg/L	5.0	5.0	1		08/16/23 16:00		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	**0.045J**	mg/L	0.10	0.022	1		08/15/23 06:30	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**62.5**	mg/L	1.0	0.60	1		08/15/23 23:42	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Sample: HAM-PT-10 **Lab ID: 92682397004** Collected: 08/09/23 13:05 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.27**	mg/L	0.10	0.050	1		08/15/23 23:42	16984-48-8	
Sulfate	**123**	mg/L	3.0	1.5	3		08/16/23 10:27	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Sample: HAM-MW-53 **Lab ID: 92682397005** Collected: 08/09/23 16:40 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	**1.5**	mg/L	0.040	0.0086	1	08/17/23 10:25	08/22/23 20:17	7440-42-8	
Molybdenum	**0.14**	mg/L	0.010	0.00074	1	08/17/23 10:25	08/22/23 20:17	7439-98-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Sample: HAM-MW-54 **Lab ID: 92682397006** 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								
Arsenic	**0.085**	mg/L	0.010	0.0037	1	08/17/23 10:25	08/22/23 20:23	7440-38-2	
Boron	**0.45**	mg/L	0.040	0.0086	1	08/17/23 10:25	08/22/23 20:23	7440-42-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Sample: HAM-AP1-FD-06 **Lab ID: 92682397007** 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
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**21.3**	mg/L	0.040	0.025	1	08/23/23 12:06	08/23/23 21:54	7439-89-6	
Manganese	**6.8**	mg/L	0.040	0.011	1	08/23/23 12:06	08/23/23 21:54	7439-96-5	
Potassium	**5.6**	mg/L	0.50	0.15	1	08/23/23 12:06	08/23/23 21:54	7440-09-7	
Sodium	**6.3**	mg/L	1.0	0.58	1	08/23/23 12:06	08/23/23 21:54	7440-23-5	
Calcium	**128**	mg/L	1.0	0.12	1	08/23/23 12:06	08/23/23 21:54	7440-70-2	
Magnesium	**16.7**	mg/L	0.050	0.012	1	08/23/23 12:06	08/23/23 21:54	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.0012	1	08/17/23 10:25	08/22/23 20:29	7440-36-0	
Arsenic	**0.36**	mg/L	0.010	0.0037	1	08/17/23 10:25	08/22/23 20:29	7440-38-2	
Barium	**0.047**	mg/L	0.0050	0.00067	1	08/17/23 10:25	08/22/23 20:29	7440-39-3	
Beryllium	**0.000065J**	mg/L	0.00050	0.000054	1	08/17/23 10:25	08/22/23 20:29	7440-41-7	
Boron	**0.90**	mg/L	0.040	0.0086	1	08/17/23 10:25	08/22/23 20:29	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/17/23 10:25	08/22/23 20:29	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/17/23 10:25	08/23/23 17:24	7440-47-3	
Cobalt	**0.034**	mg/L	0.0050	0.00039	1	08/17/23 10:25	08/22/23 20:29	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/17/23 10:25	08/22/23 20:29	7439-92-1	
Lithium	**0.066**	mg/L	0.030	0.00073	1	08/17/23 10:25	08/22/23 20:29	7439-93-2	
Molybdenum	**0.0068J**	mg/L	0.010	0.00074	1	08/17/23 10:25	08/22/23 20:29	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/17/23 10:25	08/22/23 20:29	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/17/23 10:25	08/22/23 20:29	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/17/23 12:00	08/17/23 15:42	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**699**	mg/L	25.0	25.0	1		08/15/23 16:57		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**111**	mg/L	5.0	5.0	1		08/16/23 16:12		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 16:12		
Alkalinity, Total as CaCO3	**111**	mg/L	5.0	5.0	1		08/16/23 16:12		
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 06:31	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**14.6**	mg/L	1.0	0.60	1		08/16/23 03:19	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Sample: HAM-AP1-FD-06 **Lab ID: 92682397007** 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
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.29**	mg/L	0.10	0.050	1		08/16/23 03:19	16984-48-8	
Sulfate	**293**	mg/L	6.0	3.0	6		08/16/23 12:22	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Sample: HAM-AP1-FB-06 **Lab ID: 92682397008** Collected: 08/09/23 16:50 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	ND	mg/L	0.040	0.025	1	08/23/23 12:06	08/23/23 21:59	7439-89-6	
Manganese	ND	mg/L	0.040	0.011	1	08/23/23 12:06	08/23/23 21:59	7439-96-5	
Potassium	ND	mg/L	0.50	0.15	1	08/23/23 12:06	08/23/23 21:59	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	08/23/23 12:06	08/23/23 21:59	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	08/23/23 12:06	08/23/23 21:59	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	08/23/23 12:06	08/23/23 21:59	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	08/17/23 10:25	08/22/23 20:35	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/17/23 10:25	08/22/23 20:35	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	08/17/23 10:25	08/22/23 20:35	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/17/23 10:25	08/22/23 20:35	7440-41-7	
Boron	**0.012J**	mg/L	0.040	0.0086	1	08/17/23 10:25	08/22/23 20:35	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/17/23 10:25	08/22/23 20:35	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/17/23 10:25	08/23/23 17:28	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/17/23 10:25	08/22/23 20:35	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/17/23 10:25	08/22/23 20:35	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/17/23 10:25	08/22/23 20:35	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/17/23 10:25	08/22/23 20:35	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/17/23 10:25	08/22/23 20:35	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/17/23 10:25	08/22/23 20:35	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/17/23 12:00	08/17/23 15:44	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		08/15/23 16:57		
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 16:22		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 16:22		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		08/16/23 16:22		
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 06:32	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		08/16/23 03:33	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Sample: HAM-AP1-FB-06 **Lab ID: 92682397008** Collected: 08/09/23 16:50 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		08/16/23 03:33	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		08/16/23 03:33	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

QC Batch: 793618
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92682397001, 92682397002, 92682397003

METHOD BLANK: 4112489 Matrix: Water
Associated Lab Samples: 92682397001, 92682397002, 92682397003

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	92682392001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

QC Batch: 795409
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92682397004, 92682397007, 92682397008

METHOD BLANK: 4121384 Matrix: Water
Associated Lab Samples: 92682397004, 92682397007, 92682397008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/23/23 21:12	
Iron	mg/L	ND	0.040	0.025	08/23/23 21:12	
Magnesium	mg/L	ND	0.050	0.012	08/23/23 21:12	
Manganese	mg/L	ND	0.040	0.011	08/23/23 21:12	
Potassium	mg/L	ND	0.50	0.15	08/23/23 21:12	
Sodium	mg/L	ND	1.0	0.58	08/23/23 21:12	

LABORATORY CONTROL SAMPLE: 4121385

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.93J	93	80-120	
Iron	mg/L	1	1.0	102	80-120	
Magnesium	mg/L	1	1.1	109	80-120	
Manganese	mg/L	1	1.0	105	80-120	
Potassium	mg/L	1	1.0	100	80-120	
Sodium	mg/L	1	1.1	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4121386 4121387

Parameter	Units	92682397004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	116	1	1	112	116	-370	-33	75-125	3	20	M1
Iron	mg/L	2.9	1	1	3.7	3.8	84	95	75-125	3	20	
Magnesium	mg/L	16.8	1	1	17.0	17.5	22	63	75-125	2	20	M1
Manganese	mg/L	3.1	1	1	4.0	4.0	83	90	75-125	2	20	
Potassium	mg/L	6.7	1	1	7.5	7.7	73	98	75-125	3	20	M1
Sodium	mg/L	9.4	1	1	9.9	10.3	54	92	75-125	4	20	M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

QC Batch: 794002
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92682397001, 92682397002, 92682397003, 92682397004

METHOD BLANK: 4114214 Matrix: Water
Associated Lab Samples: 92682397001, 92682397002, 92682397003, 92682397004

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	92682396010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.0014J	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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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4114216 4114217

Parameter	Units	92682396010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.042	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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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

QC Batch: 794177
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92682397005, 92682397006, 92682397007, 92682397008

METHOD BLANK: 4115107 Matrix: Water
Associated Lab Samples: 92682397005, 92682397006, 92682397007, 92682397008

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 Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4115109 4115110

Parameter	Units	92681886001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.039	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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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

QC Batch: 794154
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92682397001, 92682397002, 92682397003, 92682397004, 92682397007, 92682397008

METHOD BLANK: 4115033 Matrix: Water
Associated Lab Samples: 92682397001, 92682397002, 92682397003, 92682397004, 92682397007, 92682397008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	08/17/23 15:13	

LABORATORY CONTROL SAMPLE: 4115034

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0023	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4115035 4115036

Parameter	Units	92682397001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0024	0.0024	94	94	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

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: 92682397001, 92682397002, 92682397003, 92682397004, 92682397007, 92682397008

METHOD BLANK: 4112841 Matrix: Water
Associated Lab Samples: 92682397001, 92682397002, 92682397003, 92682397004, 92682397007, 92682397008

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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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

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: 92682397001, 92682397002, 92682397003, 92682397004, 92682397007, 92682397008

METHOD BLANK: 4113632 Matrix: Water
Associated Lab Samples: 92682397001, 92682397002, 92682397003, 92682397004, 92682397007, 92682397008

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 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	464	50	50	487	487	47	46	80-120	0	25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4113637 4113638

Parameter	Units	92682175002 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	12.5	50	50	65.7	65.4	106	106	80-120	0	25	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

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: 92682397001, 92682397002, 92682397003, 92682397004, 92682397007, 92682397008

METHOD BLANK: 4111958 Matrix: Water
Associated Lab Samples: 92682397001, 92682397002, 92682397003, 92682397004, 92682397007, 92682397008

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 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	0.45	99	89	80-120	11	10	R1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4111962 4111963

Parameter	Units	92682397007 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	0.53	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

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

QUALITY CONTROL DATA

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

QC Batch: 793550
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92682397001

METHOD BLANK: 4112126 Matrix: Water
Associated Lab Samples: 92682397001

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

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

QUALITY CONTROL DATA

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

QC Batch: 793553
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92682397002, 92682397003, 92682397004, 92682397007, 92682397008

METHOD BLANK: 4112135 Matrix: Water
Associated Lab Samples: 92682397002, 92682397003, 92682397004, 92682397007, 92682397008

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	92682397002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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	92682398009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	13.6	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	

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

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

QUALIFIERS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

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

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92682397001	**HAM-PT-07**	EPA 3010A	793618	EPA 6010D	794582
92682397002	**HAM-PT-08**	EPA 3010A	793618	EPA 6010D	794582
92682397003	**HAM-PT-09**	EPA 3010A	793618	EPA 6010D	794582
92682397004	**HAM-PT-10**	EPA 3010A	795409	EPA 6010D	795455
92682397007	**HAM-AP1-FD-06**	EPA 3010A	795409	EPA 6010D	795455
92682397008	**HAM-AP1-FB-06**	EPA 3010A	795409	EPA 6010D	795455
92682397001	**HAM-PT-07**	EPA 3005A	794002	EPA 6020B	794064
92682397002	**HAM-PT-08**	EPA 3005A	794002	EPA 6020B	794064
92682397003	**HAM-PT-09**	EPA 3005A	794002	EPA 6020B	794064
92682397004	**HAM-PT-10**	EPA 3005A	794002	EPA 6020B	794064
92682397005	**HAM-MW-53**	EPA 3005A	794177	EPA 6020B	794304
92682397006	**HAM-MW-54**	EPA 3005A	794177	EPA 6020B	794304
92682397007	**HAM-AP1-FD-06**	EPA 3005A	794177	EPA 6020B	794304
92682397008	**HAM-AP1-FB-06**	EPA 3005A	794177	EPA 6020B	794304
92682397001	**HAM-PT-07**	EPA 7470A	794154	EPA 7470A	794256
92682397002	**HAM-PT-08**	EPA 7470A	794154	EPA 7470A	794256
92682397003	**HAM-PT-09**	EPA 7470A	794154	EPA 7470A	794256
92682397004	**HAM-PT-10**	EPA 7470A	794154	EPA 7470A	794256
92682397007	**HAM-AP1-FD-06**	EPA 7470A	794154	EPA 7470A	794256
92682397008	**HAM-AP1-FB-06**	EPA 7470A	794154	EPA 7470A	794256
92682397001	**HAM-PT-07**	SM 2540C-2015	793700		
92682397002	**HAM-PT-08**	SM 2540C-2015	793700		
92682397003	**HAM-PT-09**	SM 2540C-2015	793700		
92682397004	**HAM-PT-10**	SM 2540C-2015	793700		
92682397007	**HAM-AP1-FD-06**	SM 2540C-2015	793700		
92682397008	**HAM-AP1-FB-06**	SM 2540C-2015	793700		
92682397001	**HAM-PT-07**	SM 2320B-2011	793896		
92682397002	**HAM-PT-08**	SM 2320B-2011	793896		
92682397003	**HAM-PT-09**	SM 2320B-2011	793896		
92682397004	**HAM-PT-10**	SM 2320B-2011	793896		
92682397007	**HAM-AP1-FD-06**	SM 2320B-2011	793896		
92682397008	**HAM-AP1-FB-06**	SM 2320B-2011	793896		
92682397001	**HAM-PT-07**	SM 4500-S2D-2011	793500		
92682397002	**HAM-PT-08**	SM 4500-S2D-2011	793500		
92682397003	**HAM-PT-09**	SM 4500-S2D-2011	793500		
92682397004	**HAM-PT-10**	SM 4500-S2D-2011	793500		
92682397007	**HAM-AP1-FD-06**	SM 4500-S2D-2011	793500		
92682397008	**HAM-AP1-FB-06**	SM 4500-S2D-2011	793500		
92682397001	**HAM-PT-07**	EPA 300.0 Rev 2.1 1993	793550		
92682397002	**HAM-PT-08**	EPA 300.0 Rev 2.1 1993	793553		
92682397003	**HAM-PT-09**	EPA 300.0 Rev 2.1 1993	793553		
92682397004	**HAM-PT-10**	EPA 300.0 Rev 2.1 1993	793553		
92682397007	**HAM-AP1-FD-06**	EPA 300.0 Rev 2.1 1993	793553		
92682397008	**HAM-AP1-FB-06**	EPA 300.0 Rev 2.1 1993	793553		

Pace ANALYTICAL SERVICES

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#: 92682397

92682397

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

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☐ No

Date/Initials Person Examining Contents: 8/11/23 TS

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ ~~None~~ ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☐ ~~N/A~~

Thermometer: ☑ ~~IR Gun~~ ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 3.1 **Correction Factor:** Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 3.1

Temp should be above freezing to 6°C

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

USDA Regulated Soil (☐ N/A, water sample)

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date: 8/14/23

Project Manager SRF Review: Date: 8/14/23

Qualtrax ID: 69614

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

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

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

***Check all unpreserved Nitrates for chlorine

Project # WO#:92682397

PM: BV Due Date: 08/28/23

CLIENT: 92-GR-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			1	1																						
2		2	1			1	1																						
3		2	1			1	1																						
4		2	1			1	1																						
5						1	1																						
6						1	1																						
7		2	1			1	1																						
8		2	1			1	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.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

Section A Required Client Information:

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

Section B Required Project Information:

Report To:	SCS Contacts
Copy To:	Geosyntec Contacts
Purchase Order No.:	
Project Name:	Hammond AP-1
Project Number:	

Section C Invoice Information:

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

REGULATORY AGENCY

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

Site Location STATE: GA

Section D Required Client Information

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

Valid Matrix Codes

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analysis Test: Chloride, Fluoride, Sulfate	Full App. III and IV metals	Major Ions (Profile 10839-2)	TDS	Boron and Molybdenum	Boron and Arsenic	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 92682397
1	HAM-PT-07	WG	G	8/9/2023	1759			21	5	3		1					1	N	X	X	X	X			N	001
2	HAM-PT-08	WG	G	8/9/2023	1050			21	5	3		1					1	N	X	X	X	X			N	002
3	HAM-PT-09	WG	G	8/9/2023	1442			22	5	3		1					1	N	X	X	X	X			N	003
4	HAM-PT-10	WG	G	8/9/2023	1305			22	5	3		1					1	N	X	X	X	X			N	004
5	HAM-MW-53	WG	G	8/9/2023	1640			20	1			1						N					X		N	005
6	HAM-MW-54	WG	G	8/9/2023	1651			23	1			1						N						X	N	006
7	HAM-AP1-FD-06	WG	G	8/9/2023	0000			22	5	3		1					1	N	X	X	X	X			N	007
8	HAM-AP1-FB-06	WQ	G	8/9/2023	1650	TK 8/9/2023		22	5	3		1					1	N	X	X	X	X			N	008
9																										Last Sample
10																										
11																										
12						TK 8/9/2023																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-CA-20230809	Thomas Kessler / Geosyntec	8/11/2023	1312	Ryan Williams / Pace	8/11/2023	1312	
	Ryan Williams / Pace	8/11/2023	1535	Elizabeth McDonnell	8/11/23	1535	

SAMPLER NAME AND SIGNATURE

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

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 08/09/2023

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.

Field Sampling Forms

Low-Flow Test Report:

Test Date / Time: 7/13/2023 3:37:26 PM
Project: GW6581
Operator Name: Alana Neely

Location Name: PT-07 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 38.6 ft** **Total Depth: 48.6 ft** **Initial Depth to Water: 25.3 ft**	**Pump Type: Peri** **Tubing Type: Poly** **Pump Intake From TOC: 43.6 ft** **Estimated Total Volume Pumped: 9 L** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 884187**

Test Notes:
Five bottles: Full App III and IV and Geochem

Weather Conditions:
73-91 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	+/- 5	+/- 10	+/- 0.3	
7/13/2023 3:37 PM	00:00	6.80 pH	28.25 °C	1,056.0 µS/cm	1.39 mg/L	21.70 NTU	-108.6 mV	25.30 ft	200.00 ml/min
7/13/2023 3:42 PM	05:00	6.81 pH	26.88 °C	1,079.0 µS/cm	0.68 mg/L	21.30 NTU	-111.1 mV	25.30 ft	200.00 ml/min
7/13/2023 3:47 PM	10:00	6.82 pH	26.52 °C	1,072.1 µS/cm	0.49 mg/L	18.70 NTU	-127.0 mV	25.30 ft	200.00 ml/min
7/13/2023 3:52 PM	15:00	6.80 pH	27.35 °C	1,080.9 µS/cm	0.48 mg/L	16.00 NTU	-128.2 mV	25.30 ft	200.00 ml/min
7/13/2023 3:57 PM	20:00	6.77 pH	27.44 °C	979.74 µS/cm	0.41 mg/L	9.81 NTU	-113.5 mV	25.30 ft	200.00 ml/min
7/13/2023 4:02 PM	25:00	6.76 pH	27.85 °C	1,068.5 µS/cm	0.35 mg/L	9.08 NTU	-126.8 mV	25.30 ft	200.00 ml/min
7/13/2023 4:07 PM	30:00	6.76 pH	27.68 °C	1,061.0 µS/cm	0.32 mg/L	6.69 NTU	-111.9 mV	25.30 ft	200.00 ml/min
7/13/2023 4:12 PM	35:00	6.75 pH	27.81 °C	1,069.4 µS/cm	0.29 mg/L	6.01 NTU	-125.6 mV	25.30 ft	200.00 ml/min
7/13/2023 4:17 PM	40:00	6.76 pH	27.26 °C	1,064.5 µS/cm	0.30 mg/L	4.91 NTU	-111.0 mV	25.30 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-07	Grab.

HAM-AP1-FD-01	Grab.

Low-Flow Test Report:

Test Date / Time: 7/13/2023 5:11:34 PM
Project: GW6581
Operator Name: Alana Neely

Location Name: PT-08 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 33 ft** **Total Depth: 43 ft** **Initial Depth to Water: 22.2 ft**	**Pump Type: Peri** **Tubing Type: Poly** **Pump Intake From TOC: 38 ft** **Estimated Total Volume Pumped: 8 L** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min Final Draw Down: 0.1 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 884187**

Test Notes:
Five bottles: Full App III and IV and Geochem
Weather Conditions:
73-91 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	+/- 5	+/- 10	+/- 0.3	
7/13/2023 5:11 PM	00:00	6.70 pH	26.09 °C	930.24 µS/cm	0.88 mg/L	20.20 NTU	-77.5 mV	22.30 ft	200.00 ml/min
7/13/2023 5:16 PM	05:00	6.68 pH	24.72 °C	960.77 µS/cm	1.07 mg/L	19.70 NTU	-81.4 mV	22.30 ft	200.00 ml/min
7/13/2023 5:21 PM	10:00	6.67 pH	24.21 °C	962.53 µS/cm	0.13 mg/L	24.30 NTU	-101.1 mV	22.30 ft	200.00 ml/min
7/13/2023 5:26 PM	15:00	6.66 pH	24.14 °C	972.51 µS/cm	0.11 mg/L	22.50 NTU	-107.9 mV	22.30 ft	200.00 ml/min
7/13/2023 5:31 PM	20:00	6.67 pH	24.49 °C	1,002.9 µS/cm	0.10 mg/L	8.59 NTU	-124.8 mV	22.30 ft	200.00 ml/min
7/13/2023 5:36 PM	25:00	6.68 pH	24.12 °C	999.67 µS/cm	0.08 mg/L	6.25 NTU	-115.1 mV	22.30 ft	200.00 ml/min
7/13/2023 5:41 PM	30:00	6.66 pH	24.79 °C	1,007.2 µS/cm	0.09 mg/L	7.11 NTU	-116.7 mV	22.30 ft	200.00 ml/min
7/13/2023 5:46 PM	35:00	6.66 pH	24.53 °C	1,007.1 µS/cm	0.09 mg/L	4.41 NTU	-124.9 mV	22.30 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-08	Grab.

Low-Flow Test Report:

Test Date / Time: 7/13/2023 11:06:04 AM
Project: GW6581
Operator Name: Alana Neely

Location Name: PT-09 **Well Diameter: 2 in Casing** **Type: PVC** **Screen Length: 10 ft** **Top of Screen: 18.5 ft** **Total Depth: 28.5 ft** **Initial Depth to Water: 14 ft**	**Pump Type: Peri** **Tubing Type: Poly** **Pump Intake From TOC: 23.5 ft** **Estimated Total Volume Pumped: 25.25 L** **Flow Cell Volume: 90 ml** **Final Flow Rate: 250 ml/min Final Draw Down: 0.1 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 884187**

Test Notes:
Five bottles: Full App III and IV and Geochem

Weather Conditions:
73-91 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	+/- 5	+/- 10	+/- 0.3	
7/13/2023 11:06 AM	00:00	6.47 pH	23.91 °C	730.32 µS/cm	0.18 mg/L	3.55 NTU	32.8 mV	14.10 ft	250.00 ml/min
7/13/2023 11:07 AM	01:07	6.52 pH	23.22 °C	743.74 µS/cm	0.15 mg/L	-	11.4 mV	14.10 ft	250.00 ml/min
7/13/2023 11:12 AM	06:07	6.56 pH	22.23 °C	753.03 µS/cm	0.09 mg/L	2.51 NTU	6.0 mV	14.10 ft	250.00 ml/min
7/13/2023 11:17 AM	11:07	6.57 pH	22.47 °C	754.10 µS/cm	0.06 mg/L	2.49 NTU	3.4 mV	14.10 ft	250.00 ml/min
7/13/2023 11:22 AM	16:07	6.57 pH	22.10 °C	764.27 µS/cm	0.05 mg/L	4.55 NTU	-9.5 mV	14.10 ft	250.00 ml/min
7/13/2023 11:27 AM	21:07	6.58 pH	22.12 °C	768.51 µS/cm	0.04 mg/L	3.98 NTU	-12.2 mV	14.10 ft	250.00 ml/min
7/13/2023 11:32 AM	26:08	6.42 pH	22.27 °C	729.76 µS/cm	0.04 mg/L	4.56 NTU	4.1 mV	14.10 ft	250.00 ml/min
7/13/2023 11:37 AM	31:08	6.57 pH	22.45 °C	763.33 µS/cm	0.03 mg/L	10.50 NTU	3.6 mV	14.10 ft	250.00 ml/min
7/13/2023 11:42 AM	36:08	6.56 pH	22.99 °C	768.69 µS/cm	0.03 mg/L	16.20 NTU	-19.3 mV	14.10 ft	250.00 ml/min
7/13/2023 11:47 AM	41:08	6.45 pH	23.29 °C	723.65 µS/cm	0.03 mg/L	16.60 NTU	6.2 mV	14.10 ft	250.00 ml/min
7/13/2023 11:52 AM	46:08	6.54 pH	23.37 °C	768.73 µS/cm	0.04 mg/L	16.00 NTU	14.3 mV	14.10 ft	250.00 ml/min
7/13/2023 11:57 AM	51:08	6.56 pH	23.35 °C	767.51 µS/cm	0.03 mg/L	18.00 NTU	12.2 mV	14.10 ft	250.00 ml/min
7/13/2023 12:02 PM	56:08	6.56 pH	23.59 °C	770.87 µS/cm	0.02 mg/L	16.30 NTU	3.5 mV	14.10 ft	250.00 ml/min

7/13/2023 12:07 PM	01:01:08	6.56 pH	23.26 °C	771.12 µS/cm	0.02 mg/L	20.10 NTU	5.6 mV	14.10 ft	250.00 ml/min
7/13/2023 12:12 PM	01:06:08	6.56 pH	23.45 °C	773.37 µS/cm	0.02 mg/L	16.70 NTU	7.1 mV	14.10 ft	250.00 ml/min
7/13/2023 12:17 PM	01:11:08	6.56 pH	23.36 °C	775.77 µS/cm	0.02 mg/L	13.30 NTU	9.8 mV	14.10 ft	250.00 ml/min
7/13/2023 12:22 PM	01:16:08	6.57 pH	24.10 °C	773.97 µS/cm	0.02 mg/L	11.81 NTU	14.8 mV	14.10 ft	250.00 ml/min
7/13/2023 12:26 PM	01:20:29	6.57 pH	23.62 °C	771.90 µS/cm	0.02 mg/L	10.18 NTU	15.0 mV	14.10 ft	250.00 ml/min
7/13/2023 12:31 PM	01:25:29	6.57 pH	23.66 °C	776.24 µS/cm	0.02 mg/L	9.43 NTU	18.2 mV	14.10 ft	250.00 ml/min
7/13/2023 12:36 PM	01:30:29	6.57 pH	24.30 °C	779.12 µS/cm	0.02 mg/L	7.91 NTU	16.2 mV	14.10 ft	250.00 ml/min
7/13/2023 12:41 PM	01:35:29	6.57 pH	24.48 °C	779.77 µS/cm	0.02 mg/L	4.95 NTU	18.4 mV	14.10 ft	250.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-09	Grab.

Low-Flow Test Report:

Test Date / Time: 7/13/2023 1:16:15 PM
Project: GW6581
Operator Name: Alana Neely

Location Name: PT-10 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 18 ft** **Total Depth: 28 ft** **Initial Depth to Water: 14 ft**	**Pump Type: Peri** **Tubing Type: Poly** **Pump Intake From TOC: 23 ft** **Estimated Total Volume Pumped: 12 L** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min Final Draw Down: 0.3 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 884187**

Test Notes:
Five bottles: Full App III and IV and Geochem

Weather Conditions:
73-91 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	
7/13/2023 1:16 PM	00:00	7.05 pH	24.25 °C	808.38 µS/cm	0.31 mg/L	11.60 NTU	-135.4 mV	14.30 ft	200.00 ml/min
7/13/2023 1:21 PM	04:45	7.04 pH	22.90 °C	832.12 µS/cm	0.49 mg/L	20.60 NTU	-134.8 mV	14.30 ft	200.00 ml/min
7/13/2023 1:25 PM	09:02	7.05 pH	22.36 °C	827.40 µS/cm	0.12 mg/L	18.10 NTU	-142.1 mV	14.30 ft	200.00 ml/min
7/13/2023 1:30 PM	14:02	7.04 pH	21.87 °C	835.53 µS/cm	0.10 mg/L	13.20 NTU	-136.6 mV	14.30 ft	200.00 ml/min
7/13/2023 1:35 PM	19:02	7.03 pH	22.00 °C	831.33 µS/cm	0.08 mg/L	12.47 NTU	-182.4 mV	14.30 ft	200.00 ml/min
7/13/2023 1:40 PM	24:02	7.03 pH	22.23 °C	834.62 µS/cm	0.06 mg/L	10.64 NTU	-179.2 mV	14.30 ft	200.00 ml/min
7/13/2023 1:45 PM	29:02	7.02 pH	21.83 °C	837.40 µS/cm	0.05 mg/L	9.54 NTU	-126.6 mV	14.30 ft	200.00 ml/min
7/13/2023 1:50 PM	34:02	7.02 pH	22.13 °C	840.48 µS/cm	0.05 mg/L	8.72 NTU	-173.7 mV	14.30 ft	200.00 ml/min
7/13/2023 1:55 PM	39:02	7.02 pH	21.98 °C	834.18 µS/cm	0.04 mg/L	7.59 NTU	-122.1 mV	14.30 ft	200.00 ml/min
7/13/2023 2:00 PM	44:02	7.01 pH	21.89 °C	840.03 µS/cm	0.04 mg/L	6.56 NTU	-118.7 mV	14.30 ft	200.00 ml/min
7/13/2023 2:05 PM	49:02	7.01 pH	22.10 °C	840.92 µS/cm	0.03 mg/L	5.64 NTU	-163.8 mV	14.30 ft	200.00 ml/min
7/13/2023 2:10 PM	54:02	7.01 pH	21.95 °C	842.15 µS/cm	0.03 mg/L	4.94 NTU	-161.5 mV	14.30 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-10	Grab.

Low-Flow Test Report:

Test Date / Time: 8/9/2023 5:24:44 PM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: PT-07 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 38.6 ft** **Total Depth: 47.94 ft** **Initial Depth to Water: 25.05 ft**	**Pump Type: Peri** **Tubing Type: Poly** **Pump Intake From TOC: 43.8 ft** **Estimated Total Volume Pumped: 8 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.05 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850724**

Test Notes:
Five bottles: Baseline Sampling 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	
8/9/2023 5:24 PM	00:00	6.69 pH	22.70 °C	979.72 µS/cm	0.65 mg/L	6.30 NTU	-88.9 mV	25.10 ft	200.00 ml/min
8/9/2023 5:29 PM	05:00	6.73 pH	21.85 °C	986.58 µS/cm	0.43 mg/L	4.87 NTU	-89.0 mV	25.10 ft	200.00 ml/min
8/9/2023 5:34 PM	10:00	6.76 pH	21.55 °C	992.34 µS/cm	0.48 mg/L	4.83 NTU	-89.8 mV	25.10 ft	200.00 ml/min
8/9/2023 5:39 PM	15:00	6.78 pH	21.44 °C	993.38 µS/cm	0.33 mg/L	5.08 NTU	-107.7 mV	25.10 ft	200.00 ml/min
8/9/2023 5:44 PM	20:00	6.79 pH	21.42 °C	1,008.3 µS/cm	0.41 mg/L	1.91 NTU	-90.6 mV	25.10 ft	200.00 ml/min
8/9/2023 5:49 PM	25:00	6.80 pH	21.36 °C	1,010.3 µS/cm	0.30 mg/L	0.80 NTU	-90.8 mV	25.10 ft	200.00 ml/min
8/9/2023 5:54 PM	30:00	6.82 pH	21.19 °C	1,012.4 µS/cm	0.40 mg/L	0.18 NTU	-90.9 mV	25.10 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-07	Grab.

Low-Flow Test Report:

Test Date / Time: 8/9/2023 10:03:54 AM
Project: GP-Plant Hammond
Operator Name: Elisabeth McDonnell

Location Name: PT-08 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 28.8 ft** **Total Depth: 42.0 ft** **Initial Depth to Water: 23.6 ft**	**Pump Type: Bladder pump** **Tubing Type: Peri** **Pump Intake From TOC: 37.3 ft** **Estimated Total Volume Pumped: 8 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 160 ml/min** **Final Draw Down: 0.04 m**	**Instrument Used: Aqua TROLL 400** **Serial Number: 989630**

Test Notes:
Five bottles: Baseline Sampling 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	
8/9/2023 10:03 AM	00:00	6.80 pH	20.72 °C	943.04 µS/cm	2.15 mg/L	15.50 NTU	-57.8 mV	23.64 ft	160.00 ml/min
8/9/2023 10:08 AM	05:00	6.81 pH	20.71 °C	915.43 µS/cm	1.51 mg/L	10.90 NTU	-60.5 mV	23.63 ft	160.00 ml/min
8/9/2023 10:13 AM	10:00	6.81 pH	20.73 °C	905.45 µS/cm	1.62 mg/L	7.91 NTU	-61.7 mV	23.65 ft	160.00 ml/min
8/9/2023 10:18 AM	15:00	6.82 pH	20.59 °C	908.95 µS/cm	2.77 mg/L	4.08 NTU	-82.5 mV	23.64 ft	160.00 ml/min
8/9/2023 10:23 AM	20:00	6.82 pH	20.63 °C	911.77 µS/cm	1.38 mg/L	4.45 NTU	-84.8 mV	23.64 ft	160.00 ml/min
8/9/2023 10:28 AM	25:00	6.82 pH	20.57 °C	907.31 µS/cm	1.20 mg/L	4.04 NTU	-64.7 mV	23.63 ft	160.00 ml/min
8/9/2023 10:33 AM	30:00	6.83 pH	20.52 °C	905.19 µS/cm	0.97 mg/L	2.96 NTU	-85.5 mV	23.63 ft	160.00 ml/min
8/9/2023 10:38 AM	35:00	6.83 pH	20.58 °C	911.05 µS/cm	0.84 mg/L	3.40 NTU	-64.5 mV	23.63 ft	160.00 ml/min
8/9/2023 10:43 AM	40:00	6.82 pH	20.60 °C	909.15 µS/cm	0.94 mg/L	3.98 NTU	-84.4 mV	23.64 ft	160.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-08	Grab.
HAM-AP1-FD-06	Grab.

Low-Flow Test Report:

Test Date / Time: 8/9/2023 1:27:10 PM
Project: GP-Plant Hammond
Operator Name: Elisabeth McDonnell

Location Name: PT-09 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 28.8 ft** **Total Depth: 30.75 ft** **Initial Depth to Water: 14.99 ft**	**Pump Type: Peri** **Tubing Type: Poly** **Pump Intake From TOC: 26 ft** **Estimated Total Volume Pumped: 1.5 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0 m**	**Instrument Used: Aqua TROLL 400** **Serial Number: 989630**

Test Notes:
Five bottles: Baseline Sampling 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	
8/9/2023 1:27 PM	00:00	6.76 pH	21.93 °C	745.27 µS/cm	4.47 mg/L	2.02 NTU	56.2 mV	14.99 ft	200.00 ml/min
8/9/2023 1:32 PM	05:00	6.81 pH	21.68 °C	771.52 µS/cm	3.35 mg/L	1.11 NTU	52.3 mV	14.99 ft	200.00 ml/min
8/9/2023 1:37 PM	10:00	6.85 pH	21.44 °C	786.50 µS/cm	2.58 mg/L	1.46 NTU	28.7 mV	14.99 ft	200.00 ml/min
8/9/2023 1:42 PM	15:00	6.86 pH	21.30 °C	797.33 µS/cm	6.17 mg/L	2.12 NTU	16.0 mV	14.99 ft	200.00 ml/min
8/9/2023 1:47 PM	20:00	6.87 pH	21.28 °C	797.79 µS/cm	2.58 mg/L	2.86 NTU	19.9 mV	14.99 ft	200.00 ml/min
8/9/2023 1:52 PM	25:00	6.88 pH	21.32 °C	806.94 µS/cm	3.88 mg/L	3.70 NTU	15.9 mV	14.99 ft	200.00 ml/min
8/9/2023 1:57 PM	30:00	6.88 pH	21.25 °C	797.98 µS/cm	0.84 mg/L	3.86 NTU	11.7 mV	14.99 ft	200.00 ml/min
8/9/2023 2:02 PM	35:00	6.88 pH	21.20 °C	794.19 µS/cm	0.80 mg/L	3.31 NTU	10.9 mV	14.99 ft	200.00 ml/min
8/9/2023 2:07 PM	40:00	6.88 pH	21.03 °C	791.25 µS/cm	1.44 mg/L	2.06 NTU	10.4 mV	14.99 ft	200.00 ml/min
8/9/2023 2:12 PM	45:00	6.89 pH	20.96 °C	770.10 µS/cm	0.72 mg/L	1.72 NTU	9.1 mV	14.99 ft	200.00 ml/min
8/9/2023 2:17 PM	50:00	6.88 pH	20.97 °C	792.63 µS/cm	0.55 mg/L	0.98 NTU	9.9 mV	14.99 ft	200.00 ml/min
8/9/2023 2:22 PM	55:00	6.89 pH	21.06 °C	791.96 µS/cm	1.03 mg/L	1.51 NTU	1.0 mV	14.99 ft	200.00 ml/min
8/9/2023 2:27 PM	01:00:00	6.89 pH	21.29 °C	791.26 µS/cm	0.63 mg/L	0.62 NTU	12.2 mV	14.99 ft	200.00 ml/min
8/9/2023 2:32 PM	01:05:00	6.89 pH	21.71 °C	825.29 µS/cm	0.44 mg/L	0.44 NTU	14.1 mV	14.99 ft	200.00 ml/min
8/9/2023 2:37 PM	01:10:00	6.89 pH	21.59 °C	826.86 µS/cm	0.58 mg/L	0.56 NTU	14.4 mV	14.99 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-09	Grab.

Low-Flow Test Report:

Test Date / Time: 8/9/2023 12:22:52 PM
Project: GP-Plant Hammond
Operator Name: Elisabeth McDonnell

Location Name: PT-10 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 20 ft** **Total Depth: 31.75 ft** **Initial Depth to Water: 15.05 ft**	**Pump Type: Peri** **Tubing Type: Poly** **Pump Intake From TOC: 25 ft** **Estimated Total Volume Pumped: 5.8 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 160 ml/min** **Final Draw Down: 0.13 m**	**Instrument Used: Aqua TROLL 400** **Serial Number: 989630**

Test Notes:
Five bottles: Baseline Sampling 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	
8/9/2023 12:22 PM	00:00	7.14 pH	22.18 °C	811.17 µS/cm	1.15 mg/L	24.10 NTU	-75.4 mV	15.18 ft	160.00 ml/min
8/9/2023 12:27 PM	05:00	7.15 pH	22.04 °C	798.04 µS/cm	0.38 mg/L	16.60 NTU	-75.5 mV	15.18 ft	160.00 ml/min
8/9/2023 12:32 PM	10:00	7.16 pH	21.96 °C	800.28 µS/cm	0.37 mg/L	11.80 NTU	-99.1 mV	15.18 ft	160.00 ml/min
8/9/2023 12:37 PM	15:00	7.16 pH	22.00 °C	793.73 µS/cm	0.33 mg/L	4.09 NTU	-78.0 mV	15.18 ft	160.00 ml/min
8/9/2023 12:42 PM	20:00	7.17 pH	21.46 °C	790.02 µS/cm	0.24 mg/L	4.11 NTU	-101.9 mV	15.18 ft	160.00 ml/min
8/9/2023 12:47 PM	25:00	7.18 pH	21.86 °C	782.36 µS/cm	0.16 mg/L	2.36 NTU	-81.4 mV	15.18 ft	160.00 ml/min
8/9/2023 12:52 PM	30:00	7.18 pH	21.79 °C	770.46 µS/cm	0.12 mg/L	4.55 NTU	-80.9 mV	15.18 ft	160.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-10	Grab.

Calibration Forms

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Mana Neely | Date: 8/13/23 | Time (start): 0850 | Time (finish): 0910

smarTroll SN: 884187 | Turbidity Meter Type: LaMote 2020we | SN: 7009-1416

Weather Conditions: 73-91, 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)	222501 53 11/23	25.72	4490	4122.4	4487.6	+/- 5 %	(Yes) No	
pH (4)			4.00	4.02	4.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (4) check	–	–	4.00	–	–	+/- 0.1 SU	Yes No	
pH (7)	22168933 11/23	25.7	7.00	7.35	7.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (7) check	–	–	7.00	–	–	+/- 0.1 SU	Yes No	
pH (10)	21320202 12/23	25.5	10.00	10.3	10.0	+/- 0.1 SU	(Yes) No	
Mid-Day pH (10) check	–	–	10.00	–	–	+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/23	24.72	228	215.4	227.7	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	101.11%	100.00%	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0	0.20	0.06	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1.00	0.71	0.81	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			10.00	11.36	9.99	+/- 0.5 NTU	(Yes) No	

Geosyntec consultants

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	3.94	4.00	+/- 0.1 SU	(Yes) 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	(Yes) No	
Mid-Day pH (7) check	↓					+/- 0.1 SU	Yes No	
pH (10)	21320202 12/23	23.70	10.0	10.6	10.0	+/- 0.1 SU	(Yes) No	
Mid-Day pH (10) check	↓					+/- 0.1 SU	Yes No	
ORP (mV)	21390149 11/23	23.85	228	230.90	228	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)			100 %	102.36 %	100 %	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0.0	0.0	0.0	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1.0	1.0	1.0	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			10.0	11.1	10.4	+/- 0.5 NTU	(Yes) No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Thomas Kessler | Date: 8/9/23 | Time (start): 0800 | Time (finish): 0825

smarTroll SN: 850729 | Turbidity Meter Type: LaMotte 2020we | SN: 1475-4011

Weather Conditions: Sunny 75° | Facility and Unit: Plant Hammond | Project No.: GW6881

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	21.91	4490	4562	4490	+/- 5 %	(Yes) No	
pH (4)	11/23		4	4.04	4.0	+/- 0.1 SU	(Yes) No	
Mid-Day pH (4) check	↓	29	4	4.03	—	+/- 0.1 SU	(Yes) No	
pH (7)	2216893 11/23	22.77	~~7.06~~ 7.00	7.06	7.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (7) check	↓	29	7	6.98	—	+/- 0.1 SU	(Yes) No	
pH (10)	21380202 12/23	22.62	10.00	10.01	10.0	+/- 0.1 SU	(Yes) No	
Mid-Day pH (10) check	↓	29	10	9.91	—	+/- 0.1 SU	(Yes) No	
ORP (mV)	2276085 8/23		228	227.7	228	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)			100	99.08	100	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0	.53	0	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1	.56	.93	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			10	10.39	10.1	+/- 0.5 NTU	(Yes) No	

APPENDIX C

Injection Field Forms

Injection Point Nomenclature Legend

IP-##	Injection point (IP) (*as shown on Figure 2*)
IP-## (#)	Offset IP with the distance (in ft) offset from the original IP indicated within parentheses.
IP-##A	Magnesium oxide (MgO) IP
IP-##A (#)	Offset MgO IP with the indicated offset distance from the original IP indicated with parentheses.

Injection Log

Project Name: Plant Hammond AP- Corrective Measu **Date:** 09/25/2023 **Page** 1 **of** ___
Project Number: GN65S1G1 **Weather:** Sunny
Field Personnel: M. Sadhasivan **Activity:** DPT injection

Location: HG WC-8 Area **Start: Date** 09/25/20 **Time** 1415 **Finish: Date** ___ **Time** ___

Well ID	Start Time (hr:mm)	Stop Time (hr:mm)	Volume Injected (gal)	Injection Pressure (psi)	Flowrate (GPM)	Notes
IP-05 17-19ft	1415	1425	0	25psi	0.2	couldn't inject water
19-21ft	1450			0	~8/1.2gpm	
19-21 ft	1500	1545	~240	1.6	4.8	Batch over — Potable water
19-21ft	1610			0.9	4,3	
19-21ft	1620	1706	total ~492	1.0	4.4	Batch over.
09/26/2023.						
~~19-21ft~~						
21-23 ft	0929	1003	~108	-1.9	3.4	Potable water
21-23ft	1003	1156	total ~500	1.5	4.3	
23-25ft	~~15~~ 1206	1255	~250	3.2	5.2	
25-27ft	1303	1352	~~80~~ 250	0.6	5.3	
25-27	1400	1458	~250	1.2	5.5	
23-25	1500	1550	~250	2-9	5.9	
09/27/2023						
IP-08 19-21ft	1058	1130	~250	2.8	5.7	FeSO4 at 0.11 lbs per 1000 gal
19-21 ft	1130	1315	~~250~~ ~600 ms	4.0	5.9	
21-23ft	1315	1540	~850	4.0	5.5	
23-25ft	1540	1715	~~300~~ ms 500	3.9	6.4	
~~23-25~~ ms	09/28/2023			~~3.5ms~~	~~5.8ms~~	
23-25	0844	0950	350	3.5	5.8	
25-27	0950	1220	850	3.0	6.2	
IP-05 (2) 19-21	1300	1310	50	3.9	5.2	Stops injection due to
19-21	1341	1430	250	3.9	5.4	Rose un-threaded from
19-21	1430	1615	550	4.0	5.2	end cap
21-23	1615	1650	200	4.0	6.0	

Injection Log

Project Name: Plant Hammond AP-1 Corrective Measures **Date:** 09/29/2023 **Page** 2 **of** ___

Project Number: CAW058169 **Weather:** Sunny

Field Personnel: M. Sadhasivam **Activity:** DPT Injection

Location: HGWC-8 area **Start: Date**_____ **Time**_____ **Finish: Date**_____ **Time**_____

Well ID	Start Time (hr:mm)	Stop Time (hr:mm)	Volume Injected (gal)	Injection Pressure (psi)	Flowrate (GPM)	Notes
09/29/2023						
IP-05(2) 21-23	0828	0913	250	3.6	5.6	
21-23	0913	0958	250	4	5.6	
21-23	0958	1025	150	4	5.6	
23-25	1025	1058	100	4	3	
23-25	1058	1419	750	4	4.2	
25-27	1419	1459	250	4	6.2	
25-27	1459	1541	250	4	6	
25-27	1541	1627	250	4	5.5	
25-27	1627	1645	100	4	5.6	
IP-07 09/30/2023						
19-21	0853	0957	250	4	3.9	
19-21	0957	1116	250	4	3.2	
19-21	1116	1239	250	4	3	
19-21	1239	1312	100	4	3	
21-23	1312	1334	150	4	6.8	
21-23	1334	1412	250	4	6.6	
21-23	1412	1450	250	4	6.6	
21-23	1450	1521	200	4	6.5	
23-25	1521	1533	50	4	4.1	
23-25	1533	1637	250	4	3.9	
10/01/2023						
IP-07 23-25	0145	0834	250	4	5.1	
23-25	0834	0919	250	4	5.6	
23-25	0919	0928	50	4	5.6	
25-27	0928	1002	200	4	5.9	

Injection Log

Project Name: Plant Hammond AP-1 corrective measures **Date:** 10/1&2/2023 **Page** 3 **of** ___

Project Number: GW65816 **Weather:** Sunny

Field Personnel: M. Sadhasivam **Activity:** DPT injection

Location: HGWC-8 area **Start: Date** ___ **Time** ___ **Finish: Date** ___ **Time** ___

Well ID 10/01/2023	Start Time (hr:mm)	Stop Time (hr:mm)	Volume Injected (gal)	Injection Pressure (psi)	Flowrate (GPM)	Notes
IP-07 25-27	1002	1046	250	4	5.7	
25-27	1046	1132	250	4	5.5	
25-27	1132	1158	150	4	5.8	
IP-06 19-21	1238	1257	100	4	5.3	
19-21	1257	1406	250	4	3.6	
19-21	1406	1526	250	4	3.1	
19-21	1526	1650	250	4	2.9	
10/02/2023						
FP-06 21-23	0750	0839	250	4	5.1	
21-23	0839	0925	250	4	5.5	
21-23	0925	1009	250	4	5.7	
21-23	1009	1028	100	4	5.3	
23-25	1028	1116	150	4	3.1	
23-25	1116	1210	250	4	4.6	
23-25	1210	1305	250	4	4.5	
23-25	1305	1350	200	4	4.5	
25-27	1350	1407	50	4	2.9	
25-27	1407	1520	250	4	3.4	
25-27	1520	1630	250	4	3.6	
25-27	1630	1645	50	4	3.3	
10/03/2023						
EP-06 25-27	0823	0925	250	4	3.2	

Injection Log

Project Name: Plant Hammond AP-1 corrective measures **Date:** 10/04/2023 **Page** 1 **of** ___
Project Number: GWG 5816 **Weather:** Sunny
Field Personnel: M. Sadhasivan **Activity:** DPT injection.

Location: HGWC-13 area **Start: Date** 04 10/04/23 **Time** _____ **Finish: Date** _____ **Time** _____

Well ID	Start Time (hr:mm)	Stop Time (hr:mm)	Volume Injected (gal)	Injection Pressure (psi)	Flowrate (GPM)	Notes
IP-01(2)						
10/04/2023						
35-37ft	11:15	1400	238	11	1.4	
10/09/2023						
IP-01(3) 37-39	1339	1415	175	11	3.9	
39-41	1419	1453	175	10	4.5	
41-43	1520	1601	175	11	4.5	
43-45	1605	1633	55	11	1.5	
10/10/2023						
IP-04(2) 35-37	0911	0949	175	11	5.0	
37-39	0953	1028	175	11	5.0	
39-41	1033	1118	175	11	3.9	
41-43	1124	1515	175	11	0.8	
45-47	1526	1735	350	11	4.4	
10/11/2023						
IP-04(2) 47-49	0750	0914	350	11	5.0	
IP-03 33-35	1049	1143	175	11	3.4	
IP-03 33-35	1147	1310	175	11	2.1	
IP-03 35-37	1315	1424	350	7.0	5.0	
IP-03 36.5-38.5	1442	1520	175	1.5	5.0	
IP-03 36.5-38.5	1520	1606	175	1.1	5.0	
IP-03(2) 41-43	1720	1754	175	1.2	5.0	
10/12/2023						
IP-03(2) 41-43	0800	0838	175	1.0	4.9	
IP-03(2) 43-45	0845	0956	350	3.5	5.0	

Injection Log

Project Name: Plant Hammond AP-1 Corrective Measures **Date:** 10/12/2023 **Page** 2 of ___
Project Number: GW6581G **Weather:** Cloudy
Field Personnel: M. Sadhasivan **Activity:** DPT Injection

Location: HGWC-13 area **Start: Date** 10/12/23 **Time** ___ **Finish: Date** ___ **Time** ___

	Well ID	Start Time (hr:mm)	Stop Time (hr:mm)	Volume Injected (gal)	Injection Pressure (psi)	Flowrate (GPM)	Notes
IP-03(2)	45-47	1003	1113	350	3.0	5.0	
IP-03(2)	47-49	1120	1232	350	2.2	5.0	
IP-02	35-37	1317	1439	350	11	5.0	
IP-02	37-39	1445	1602	350	11	5.0	
IP-02	39-41	1618	1733	50	11	0.6	
	10/13/2023						
IP-02	41-43	0855	0955	350	11	3.5	
IP-02	43-45	1045	1207	175	11	2.2	
IP-02	43-45	1207	1250	175	11	3.6	
IP-02	45-47	1302	1415	350	3.8	4.6	
IP-02	47-49 ms	1420	1537	350	4	4.7	
	46.5-48.5						
IP-01(4)	33-35	1630	1726	175	11	3.0	
	10/14/2023						
IP-01(4)	33-35	0847	0931	175	11	4.0	
IP-01(4)	35-37	0942	1107	350	11	4.2	
IP-01(4)	37-39	1114	1248	350	11	4.2	
IP-01(4)	39-41	1254	1415	350	11	5.0	
IP-01(4)	41-43	1420	1547	50	11	0.6	
IP-01(4)	47-49	1604	1720	350	10	5.0	
	10/15/2023						
IP-01A	19-21	1148	1351	310	4.0	2.6	Daylighting
IP-01A	19-21	1457	1657	425	4.0	3.5	

Injection Log

Project Name: Plant Hammond Corrective measures Date: 10/16/2023 Page 3 of ___
Project Number: GW65816 Weather: Partly cloudy
Field Personnel: M. Sadhasivan Activity: IAPT injection

Location: HG WC - 3 area Start: Date 10/16/23 Time ___ Finish: Date ___ Time ___

Well ID	Start Time (hr:mm)	Stop Time (hr:mm)	Volume Injected (gal)	Injection Pressure (psi)	Flowrate (GPM)	Notes
IP-04AC 10/16/2023						
19-21	0741	0815	115	4.0	3.7	MgO
21-23	0815	0845	135	4.0	4.9	MgO
21-23	0845	0932	250	4.0	4.7	MgO
21-23	0932	1032	250	4.0	4.5	MgO
21-23	1032	1127	225	4.0	4.3	MgO
23-25	1127	1219	250	4.0	5.0	MgO
23-25	1219	1317	250	4.0	4.3	MgO
23-25	1317	1333	75	4.0	4.2	MgO
23-25	1524	1639	275	4.0	3.6	MgO + $FeSO_4$
25-27	1642	1732	265	3.9	4.9	$FeSO_4$
10/17/2023						
25-27	0739	0855	250	2.8	3.5	$FeSO_4$
25-27	0855	1014	250	2.5	3.0	$FeSO_4$
25-27	1014	1048	85	2.5	3.8	$FeSO_4$

Injectate Batch Preparation Log

Project Name: Plant Hammond AP-1 injections Page 1 of 1
Project Number: GW6581G Field Personnel: M. Sadhasivam
Date: 09/25/2023 Weather: Sunny

	Batch #	Tank Fill			FeSO4		Geochemical Parameters						Comments
		Start Time (hr:mm)	End Time (hr:mm)	Volume (gallons)	Time (hr:mm)	Amount (lb)	Time (hr:mm)	Temp (°C)	pH (SU)	Sp. Cond (µS/cm³)	DO (mg/L)	ORP (mV)	
09/25/23	Potable water	1100	1105	250	–	–	13:05	23.93	7.34	0.20	8.41	379.2	
09/25/23	Potable water	1550	1553	250	–	–	1555	25.01	7.66	0.19	7.86	562.0	
09/26/23	Potable water	0800	0820	500	–	–	0905	17.45	7.35	0.21	9.35	548.1	Batch 3 & 4
09/26/23	Potable water	1100	1115	500	–	–	1149	19.09	7.64	0.21	9.11	533.5	Batch 5 & 6
09/26/23	Potable water	1315	1330	500	–	–	1400	25.14	7.86	0.19	7.91	406.2	Batch 7 & 8
09/27/23	9	0945	0955	250	1015	0.0275	1020	19.94	8.61	0.65	8.61	122.5	IP-08 Batch 1 19-21
09/27/23	10	1115	1125	250	1125	0.0275	1130	20.51	8.52	0.83	8.52	81.2	IP-08 Batch 2 19-21
09/27/23	11	1150	1200	250	1200	0.0275	1208	20.02	8.25	0.66	8.71	545.7	IP-08 Batch 3 19-21
09/27/23	12	1245	1255	250	1256	0.0275	1258	19.82	8.27	0.48	8.75	621.4	IP-08 Batch 4 100 19- 150 21-
09/27/23	13	1340	1350	250	1350	0.0275	1351	19.80	8.24	0.44	8.98	543.6	IP-08 Batch 5 250 21-
09/27/23	16	1430	1440	250	1440	0.0275	1450	19.54	8.26	0.40	8.79	513.2	IP-08 Batch 6 250 21-
09/27/23	15	1540	1545	250	1545	0.0275	1551	18.96	8.31	0.42	8.94	200.4	IP-08 Batch 7 250 21-
09/27/23	16	1625	1630	250	1630	0.0275	1632	18.84	8.14	0.31	8.96	179.3	IP-08 Batch 8 250 23- → add 200
09/28/23	17	0820	0830	250	0830	0.0275	0841	17.88	7.42	0.22	9.02	146.3	IP-08 Batch 9 (23-25).
09/28/23	18	0925	0930	250	0930	0.0275	0935	18.11	7.55	0.22	8.98	79.9	IP-08 Batch 10
09/28/23	19	1000	1005	250	1005	0.0275	1011	18.58	7.63	0.22	8.94	72.5	IP-08 Batch 11
09/28/23	20	1045	1050	250	1050	0.0275	1054	18.59	7.66	0.22	9.20	122.6	IP-08 Batch 12
09/28/23	21	1135	1140	250	1140	0.0275	1146	19.13	7.71	0.22	9.17	136.9	IP-08 Batch 13
09/28/23	23	1420	1425	250	1425	0.0275	1430	20.73	7.93	0.21	8.34	108.9	IP-05(2) Batch 2 ←
09/28/23	22	1300	1305	250	1305	0.0275	1320	19.85	7.88	0.22	8.81	87.1	IP-05(2) Batch 1 ←
09/28/23	24	1500	1505	250	1505	0.0275	1520	21.06	7.93	0.21	8.56	125.0	IP-05(2) Batch 3
09/28/23	25	1550	1555	250	1601	0.0275	1621	23.67	7.85	0.21	7.87	123.9	IP-05(2) Batch 4
09/29/23	26	0815	0820	250	0820	0.0275	0827	17.84	7.19	0.22	8.93	123.7	IP-05(2) Batch 5

Injectate Batch Preparation Log

Project Name: Plant Hammond AP-1 injection Page 2 of ___
Project Number: GW658167 Field Personnel: M. Sadhasivan
Date: 09/29/2023 Weather Sunny

Date	Batch #	Tank Fill			FeSO4		Geochemical Parameters						Comments
		Start Time (hr:mm)	End Time (hr:mm)	Volume (gallons)	Time (hr:mm)	Amount (lb)	Time (hr:mm)	Temp (°C)	pH (SU)	Sp. Cond (µs/cm³)	DO (mg/L)	ORP (mV)	
09/24/23	27	0900	0905	250	0905	0.0275	0910	18.69	7.56	0.22	8.68	83.1	
09/29/23	28	0950	0955	250	0955	0.0275	1000	18.90	7.64	0.21	8.73	64.4	
09/29/23	29	1055	1100	250	1100	0.0275	1102	19.82	7.70	0.22	8.86	145.7	
09/29/23	30	1155	1158	250	1158	0.0275	1201	19.97	7.76	0.22	8.74	123.1	
09/29/23	31	1300	1305	250	1305	0.0275	1306	25.54	7.68	0.20	7.48	68.8	
09/29/23	32	1415	1420	250	1420	0.0275	1425	24.68	7.88	0.21	7.98	126.7	
09/29/23	33	1450	1500	250	1500	0.0275	1502	22.61	7.96	0.22	8.61	68.4	
09/29/23	34	1535	1540	250	1540	0.0275	1545	23.14	7.94	0.21	8.42	96.5	
09/29/23	35	1622	1625	100	1625	0.011	1629	23.41	7.65	0.22	8.71	61.2	
09/30/23	36	0835	0840	250	0840 ms 0837	0.0275	0842	17.38	7.47	0.22	9.00	96.2	
09/30/23	37	0750 1000	1000	250	1000	0.0275	1003	19.14	7.49	0.22	8.79	85.2	
09/30/23	38	1115 ms	1117	250	1117	0.0275	1119	24.31	7.51	0.20	7.11	105.8	
09/30/23	39	1237	1240	250	1240	0.0275	1242	23.16	7.48	0.21	8.61	97.6	
09/30/23	40	1335	1337	250	1337	0.0275	1341	25.43	7.63	0.18	6.14	104.5	
09/30/23	41	1414	1417	250	1417	0.0275	1420	24.76	7.54	0.21	7.21	103.2	
09/30/23	42	1448	1452	250	1452	0.0275	1454	23.34	7.86	0.21	8.08	143.2	
09/30/23	43	1533	1536	250	1536	0.0275	1540	23.41	7.68	0.22	8.16	121.3	
09/30/23													
10/01/23	44	0730	0735	250	0735	0.0275	0755	17.41	7.36	0.22	9.10	141.7	
10/01/23	45	0834	0836	250	0836	0.0275	0840	16.16	7.66	0.22	10.01	94.9	
10/01/23	46	0919	0922	250	0922	0.0275	0925	18.21	7.85	0.21	9.86	121.1	
10/01/23	47	1003	1005	250	1005	0.0275	1007	19.58	7.59	0.21	9.69	146.9	
10/01/23	48	1046	1048	250	1048	0.0275	1050	22.16	7.64	0.22	8.42	139.6	
10/01/23	49	1131	1134	250	1134	0.0275	1138	24.59	7.49	0.21	7.75	152.4	
	50	1230	1235	250	1235	0.0275	1301	24.10	7.70	0.20	7.76	151.6	

Injectate Batch Preparation Log

Project Name: Plant Hammond AR1 injections Page 3 of ___
Project Number: GW65816G Field Personnel: M. Sadhasivan
Date: 10/01/23 Weather Sunny

	Batch #	Tank Fill			FeSO4		Geochemical Parameters						Comments
		Start Time (hr:mm)	End Time (hr:mm)	Volume (gallons)	Time (hr:mm)	Amount (lb)	Time (hr:mm)	Temp (°C)	pH (SU)	Sp. Cond (µS/cm³)	DO (mg/L)	ORP (mV)	
10/01/23	51	1400	1405	250	1405	0.0275	1410	21.68	7.94	0.21	8.26	131.2	
10/01/23	52	1526	1529	250	1529	0.0275	1533	22.41	7.86	0.22	8.14	161.9	
	~~53 MS~~												
10/02/23	53	0740	0745	250	0745	0.0275	0800	17.25	7.46	0.22	8.73	132.4	
10/02/23	54	0830	0835	250	0835	0.0275	0850	18.09	7.61	0.22	8.85	147.5	
10/02/23	55	0924	0926	250	0926	0.0275	0930	19.69	7.32	0.21	9.68	125.5	
10/02/23	56	1010	1013	250	1013	0.0275	1015	22.90	7.67	0.20	7.87	116.3	
10/02/23	57	1115	1118	250	1118	0.0275	1121	23.41	7.81	0.21	9.61	126.9	
10/02/23	58	1202	1204	250	1204	0.0275	1208	21.98	7.78	0.21	8.29	133.4	
10/02/23	59	1304	1306	250	1306	0.0275	1310	23.61	7.86	0.22	9.58	146.7	
10/02/23	60	1403	1406	250	1406	0.0275	1410	23.78	7.55	0.22	8.16	155.5	
10/02/23	61	1515	1518	250	1518	0.0275	1525	23.42	7.48	0.22	9.66	104.6	
10/02/23	62	1625	1629	50	1629	0.0055	1632	23.62	7.66	0.21	9.11	122.3	
10/03/23	63	0755	0800	250	0800	0.0275	0800	16.64	7.64	0.22	9.44	158.8	
10/04/23	~~Backside water~~	0800	0805	250	-	—	0805	17.61	7.81	0.21	8.62	404.5	

Injectate Batch Preparation Log

Project Name: Plant Hammond AP-1 injections
Page 1 of ___
Project Number: GW6581G
Field Personnel: M. Sadhasivan
Date: 10/09/2023
Weather: Sunny

	Batch #	Tank Fill			FeSO4		Geochemical Parameters						Comments
		Start Time (hr:mm)	End Time (hr:mm)	Volume (gallons)	Time (hr:mm)	Amount (lb)	Time (hr:mm)	Temp (°C)	pH (SU)	Sp. Cond (µs/cm³)	DO (mg/L)	ORP (mV)	
10/09/2023	Potable	1250	1255	175	–	–	1305	15.21	7.31	0.21	8.61	303.6	
10/09/2023	Potable	1405	1407	175	–	–	1410	16.98	7.24	0.22	8.42	296.4	
10/09/2023	Potable	1510	1515	175	–	–	1520	18.26	7.16	0.21	7.96	288.7	
10/10/23	Potable	1601	1604	175	–	–	1600	19.31	7.21	0.21	8.14	404.4	
10/10/23	#1 IP-01(2)	0902	0906	175	0906	0.0292	0908	13.61	7.48	0.19	8.63	80.2	
10/10/23	#2	0945	0948	175	0948	0.0292	0950	16.82	7.51	0.20	8.96	121.6	
10/10/23	#3	1028	1031	175	1031	0.0292	1033	18.44	7.46	0.20	8.56	196.8	
10/10/23	#4	1118	1121	175	1121	0.0292	1130	19.68	7.49	0.20	8.43	123.6	
10/10/23	#5	1521	1524	175	1524	0.0292	1530	22.61	7.32	0.21	8.96	186.4	
10/10/23	#6	1652	1654	175	1654	0.0292	1655	23.78	7.48	0.22	8.12	141.3	
10/11/23	#7	0759	0802	175	0802	0.0292	0804	16.41	7.39	0.20	8.21	128.6	
10/11/23	#8	0835	0835	175	0835	0.0292	0837	17.68	7.56	0.20	7.96	153.6	
	IP-03												
10/11/23	#1	1044	1047	175	1047	0.0292	1051	18.71	7.44	0.20	8.33	129.6	
10/11/23	#2	1140	1145	175	1145	0.0292	1154	18.92	7.51	0.21	8.54	134.7	
10/11/23	#3	1310	1313	175	1313	0.0292	1317	19.01	7.53	0.20	7.96	102.9	
10/11/23	#4	1347	~~1349~~ 1440	175	~~1349~~ 1440	0.0292	1352	19.34	7.46	0.22	8.71	111.3	
10/11/23	#5	1437	~~1440~~ 1440	175	~~1440~~ 1440	0.0292	1445	19.51	7.37	0.19	7.88	127.4	
10/11/23	#6	1525	1530	175	1530	0.0292	1535	19.88	7.49	0.20	8.54	107.8	
10/11/23	#7	1710	1715	175	1715	0.0292	1720	20.71	7.50	0.21	8.31	143.6	
10/12/23	#8	0755	0757	175	0757	0.0292	0800	16.78	7.56	0.22	8.62	122.7	
10/12/23	#9	0838	0841	175	0841	0.0292	0843	16.96	7.48	0.21	7.99	135.4	
10/12/23	#10	0919	0921	175	0921	0.0292	0924	17.21	7.42	0.22	8.04	101.6	
10/12/23	#11	1000	1002	175	1002	0.0292	1005	17.48	7.49	0.20	8.36	86.9	

Injectate Batch Preparation Log

Project Name: Plant Hammond AP-1 Injection Page 2 of ___
Project Number: GW65816 Field Personnel: M. Sadhasivan
Date: 10/12/2023 Weather

	Batch #	Tank Fill			FeSO4		Geochemical Parameters						Comments
		Start Time (hr:mm)	End Time (hr:mm)	Volume (gallons)	Time (hr:mm)	Amount (lb)	Time (hr:mm)	Temp (°C)	pH (SU)	Sp. Cond (µs/cm³)	DO (mg/L)	ORP (mV)	
10/12/2023	#12	1033	1036	175	1036	0.0292	1038	18.26	7.48	0.20	8.65	86.7	
10/12/2023	#13	1116	1118	175	1118	0.0292	1120	18.91	7.66	0.21	7.98	103.4	
10/12/2023	#14	1153	1155	175	1155	0.0292	1200	18.74	7.50	0.20	8.32	99.8	
	IP-02										*		
10/12/2023	#1	1311	1314	175	1314	0.0292	1318	18.38	7.52	0.21	8.04	121.8	
10/12/2023	#2	1354	1357	175	1357	0.0292	1400	19.21	7.39	0.21	8.96	116.7	
10/12/2023	#3	1443	1445	175	1448	0.0292	1448	19.74	7.54	0.21	7.44	125.5	
10/12/2023	#4	1519	1521	175	1521	0.0292	1525	19.62	7.49	0.21	9.31	136.9	
10/12/2023	#5	1604	1606	175	1606	0.0292	1615	20.17	7.68	0.22	8.76	120.4	
10/13/2023	#6	0850	0854	250	0854	0.041	0900	16.24	7.42	0.19	7.21	103.6	
10/13/2023	#7	1040	1044	175	1044	0.0292	1047	17.18	7.55	0.20	8.62	139.4	
10/13/2023	#8	1203	1206	175	1206	0.0292	1210	17.63	7.39	0.20	9.38	146.8	
10/13/2023	#9	1258	1300	175	1300	0.0292	1304	18.04	7.44	0.22	9.16	121.1	
10/13/2023	#10	1327	1330	175	1330	0.0292	1335	18.96	7.46	0.20	7.24	111.7	
10/13/2023	#11	1415	1418	175	1418	0.0292	1424	19.42	7.52	0.19	8.96	102.9	
10/13/2023	#12	1454	1458	175	1458	0.0292	1502	19.31	7.38	0.18	8.54	136.4	
	IP-01(4)												
10/13/2023	#1 33-41	1625	1629	175	1629	0.0292	1632	18.98	7.51	0.19	8.66	124.5	
10/14/2023	#2	0750	0755	175	0755	0.0292	0800	16.81	7.44	0.20	7.84	125.6	
10/14/2023	#3 33-37	0940	0943	175	0943	0.0292	0947	17.28	7.38	0.20	7.71	133.6	
10/14/2023	#4	1024	1027	175	1027	0.0292	1030	17.96	7.52	0.22	8.89	139.8	
10/14/2023	#5 37-39	1110	1112	175	1112	0.0292	1115	18.54	7.56	0.19	7.42	146.7	
10/14/2023	#6	1203	1205	175	1205	0.0292	1210	19.61	7.49	0.21	8.36	140.4	
10/14/2023	#7 39-41	1258	1253	175	1253	0.0292	1300	20.21	7.50	0.20	8.41	127.9	
10/14/2023	#8	1330	1333	175	1333	0.0292	1335	20.78	7.36	0.19	8.44	119.6	

Injectate Batch Preparation Log

Project Name: Plant Hammond AP-1 injection Page 3 of ___
Project Number: GW65814 Field Personnel: M. Sadhasivan
Date: 10/14/12023 Weather Partly Cloudy

	Batch #	Tank Fill			FeSO4		Geochemical Parameters						Comments
		Start Time (hr:mm)	End Time (hr:mm)	Volume (gallons)	Time (hr:mm)	Amount (lb)	Time (hr:mm)	Temp (°C)	pH (SU)	Sp. Cond (µs/cm³)	DO (mg/L)	ORP (mV)	
10/14/2023	#9	1415	1420	175	1420	0.0892	1422	21.21	7.49	0.20	8.61	121.4	
10/14/2023	#10	1620	1625	260	1625	0.0433	1621	21.76	7.64	0.19	8.92	123.6	
	IP-08A												
10/15/2023	#1	1140	1145	250	1145	0.0275	1150	18.69	7.69	0.20	8.94	123.3	
10/15/2023	#2	1315	1320	250	1320	0.0275	1330	18.98	7.54	0.21	8.18	102.6	
10/15/2023	#3	1540	1545	250	1545	0.0275	1550	19.62	7.55	0.21	8.26	101.4	MgO injectate
10/16/2023	#6	0735	0740	250	0740	0.0275	0744	16.41	7.68	0.19	8.45	124.6	MgO
10/16/2023	#5	0840	0845	250	0845	0.0275	0849	16.72	7.74	0.20	8.94	131.6	MgO
10/16/2023	#6	0929	0932	250	0932	0.0275	0936	17.21	7.45	0.20	8.31	135.4	MgO
10/16/2023	#7	1025	1030	215	1030	0.0275	1034	18.61	7.96	0.20	8.04	146.7	MgO
10/16/2023	#8	1124	1127	250	1127	0.0275	1130	17.96	7.88	0.21	7.96	144.8	MgO
10/16/2023	#9	1215	1220	250	1220	0.0275	1225	17.42	7.85	0.20	7.45	148.6	MgO
10/16/2023	#10	1310	1315	250	1315	0.0275	1320	16.98	7.96	0.21	7.98	128.7	MgO
10/16/2023	#10a	1519	1520	125+175	1520	0.0275	1522	19.34	7.64	0.20	7.89	156.9	175 gallons with MgO + 125 gallons with FeSO4
10/16/2023	#11	1637	1640	250	1640	0.0275	1645	18.71	7.58	0.19	8.24	144.4	
10/17/2023	#12	0733	0737	250	0737	0.0275	0750	16.71	7.44	0.22	8.55	133.9	
10/17/2023	#13	0850	0854	250	0854	0.0275	0858	16.85	7.48	0.21	9.68	139.3	
10/17/2023	#14	1010	1015	85	1015	0.00935	1020	17.96	7.36	0.21	8.41	122.5	

Pilot Study Laboratory Analytical Results

July 2023

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

July 28, 2023

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

RE: Project: Hammond AP-1
Pace Project No.: 92677694

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory on July 17, 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
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

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

CERTIFICATIONS

Project: Hammond AP-1
Pace Project No.: 92677694

Pace Analytical Services Charlotte

South Carolina Laboratory ID: 99006
9800 Kincey 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

Pace Analytical Services Asheville

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

Pace Analytical Services Peachtree Corners

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

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

SAMPLE SUMMARY

Project: Hammond AP-1
Pace Project No.: 92677694

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92677694001	**HAM-HGWC-8**	Water	07/13/23 10:35	07/17/23 12:30
92677694002	**HAM-PT-09**	Water	07/13/23 12:47	07/17/23 12:30
92677694003	**HAM-PT-10**	Water	07/13/23 14:15	07/17/23 12:30
92677694004	**HAM-PT-07**	Water	07/13/23 16:22	07/17/23 12:30
92677694005	**HAM-PT-08**	Water	07/13/23 17:51	07/17/23 12:30
92677694006	**HAM-AP1-FD-01**	Water	07/13/23 00:00	07/17/23 12:30
92677694007	**HAM-AP1-FB-01**	Water	07/17/23 08:40	07/17/23 12:30
92677694008	**HAM-HGWC-13**	Water	07/17/23 11:47	07/17/23 12:30

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Hammond AP-1
Pace Project No.: 92677694

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92677694001	**HAM-HGWC-8**	EPA 6010D	MS	6
		EPA 6020B	CW1	12
		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
92677694002	**HAM-PT-09**	EPA 6010D	MS	6
		EPA 6020B	CW1	12
		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
92677694003	**HAM-PT-10**	EPA 6010D	MS	6
		EPA 6020B	CW1	12
		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
92677694004	**HAM-PT-07**	EPA 6010D	MS	6
		EPA 6020B	CW1	12
		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
92677694005	**HAM-PT-08**	EPA 6010D	MS	6
		EPA 6020B	CW1	12
		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
92677694006	**HAM-AP1-FD-01**	EPA 6010D	MS	6
		EPA 6020B	CW1	12

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: Hammond AP-1
Pace Project No.: 92677694

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
92677694007	**HAM-AP1-FB-01**	EPA 6010D	MS	6
		EPA 6020B	CW1	12
		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
92677694008	**HAM-HGWC-13**	EPA 6010D	MS	6
		EPA 6020B	CW1	12
		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-C = Pace Analytical Services - Charlotte
PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92677694

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92677694001	**HAM-HGWC-8**					
	Performed by	CUSTOMER			07/17/23 17:16	
	pH	6.65	Std. Units		07/17/23 17:16	
EPA 6010D	Manganese	0.28	mg/L	0.040	07/20/23 15:39	
EPA 6010D	Potassium	6.9	mg/L	0.50	07/20/23 15:39	
EPA 6010D	Sodium	8.8	mg/L	1.0	07/20/23 15:39	M1
EPA 6010D	Calcium	107	mg/L	1.0	07/20/23 15:39	M1
EPA 6010D	Magnesium	14.9	mg/L	0.050	07/20/23 15:39	M1
EPA 6010D	Iron	0.27	mg/L	0.040	07/25/23 15:53	
EPA 6020B	Barium	0.047	mg/L	0.0050	07/19/23 17:55	
EPA 6020B	Beryllium	0.000073J	mg/L	0.00050	07/19/23 17:55	
EPA 6020B	Boron	2.0	mg/L	0.20	07/21/23 16:37	
EPA 6020B	Cadmium	0.00031J	mg/L	0.00050	07/19/23 17:55	
EPA 6020B	Cobalt	0.0015J	mg/L	0.0050	07/19/23 17:55	
EPA 6020B	Lithium	0.0015J	mg/L	0.030	07/19/23 17:55	
EPA 6020B	Molybdenum	0.30	mg/L	0.010	07/19/23 17:55	
EPA 6020B	Thallium	0.00026J	mg/L	0.0010	07/19/23 17:55	
SM 2540C-2015	Total Dissolved Solids	513	mg/L	25.0	07/18/23 15:24	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	136	mg/L	5.0	07/19/23 19:16	
SM 2320B-2011	Alkalinity, Total as CaCO3	136	mg/L	5.0	07/19/23 19:16	
EPA 300.0 Rev 2.1 1993	Chloride	47.9	mg/L	1.0	07/19/23 03:12	
EPA 300.0 Rev 2.1 1993	Fluoride	0.49	mg/L	0.10	07/19/23 03:12	
EPA 300.0 Rev 2.1 1993	Sulfate	163	mg/L	3.0	07/19/23 09:10	
92677694002	**HAM-PT-09**					
	Performed by	CUSTOMER			07/17/23 17:16	
	pH	6.57	Std. Units		07/17/23 17:16	
EPA 6010D	Iron	0.33	mg/L	0.040	07/25/23 16:08	
EPA 6010D	Manganese	0.79	mg/L	0.040	07/20/23 15:59	
EPA 6010D	Potassium	6.8	mg/L	0.50	07/20/23 15:59	
EPA 6010D	Sodium	10.6	mg/L	1.0	07/20/23 15:59	
EPA 6010D	Calcium	110	mg/L	1.0	07/20/23 15:59	
EPA 6010D	Magnesium	15.6	mg/L	0.050	07/20/23 15:59	
EPA 6020B	Antimony	0.0027J	mg/L	0.0030	07/19/23 18:19	
EPA 6020B	Barium	0.053	mg/L	0.0050	07/19/23 18:19	
EPA 6020B	Beryllium	0.000077J	mg/L	0.00050	07/19/23 18:19	
EPA 6020B	Boron	2.1	mg/L	0.20	07/21/23 16:55	
EPA 6020B	Cobalt	0.0045J	mg/L	0.0050	07/19/23 18:19	
EPA 6020B	Lithium	0.0013J	mg/L	0.030	07/19/23 18:19	
EPA 6020B	Molybdenum	0.065	mg/L	0.010	07/19/23 18:19	
SM 2540C-2015	Total Dissolved Solids	534	mg/L	25.0	07/18/23 15:24	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	144	mg/L	5.0	07/19/23 19:26	
SM 2320B-2011	Alkalinity, Total as CaCO3	144	mg/L	5.0	07/19/23 19:26	
EPA 300.0 Rev 2.1 1993	Chloride	55.3	mg/L	1.0	07/19/23 03:27	
EPA 300.0 Rev 2.1 1993	Fluoride	0.24	mg/L	0.10	07/19/23 03:27	
EPA 300.0 Rev 2.1 1993	Sulfate	160	mg/L	3.0	07/19/23 09:53	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92677694

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92677694003	**HAM-PT-10**					
	Performed by	CUSTOMER			07/17/23 17:16	
	pH	7.01	Std. Units		07/17/23 17:16	
EPA 6010D	Manganese	3.5	mg/L	0.040	07/20/23 16:14	
EPA 6010D	Potassium	7.1	mg/L	0.50	07/20/23 16:14	
EPA 6010D	Sodium	10.5	mg/L	1.0	07/20/23 16:14	
EPA 6010D	Calcium	127	mg/L	1.0	07/20/23 16:14	
EPA 6010D	Magnesium	16.8	mg/L	0.050	07/20/23 16:14	
EPA 6010D	Iron	3.1	mg/L	0.040	07/25/23 16:12	
EPA 6020B	Barium	0.074	mg/L	0.0050	07/19/23 18:25	
EPA 6020B	Boron	2.2	mg/L	0.20	07/21/23 17:01	
EPA 6020B	Cobalt	0.0026J	mg/L	0.0050	07/19/23 18:25	
EPA 6020B	Lithium	0.0014J	mg/L	0.030	07/19/23 18:25	
EPA 6020B	Molybdenum	0.10	mg/L	0.010	07/19/23 18:25	
SM 2540C-2015	Total Dissolved Solids	557	mg/L	25.0	07/18/23 15:24	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	185	mg/L	5.0	07/20/23 16:41	
SM 2320B-2011	Alkalinity, Total as CaCO3	185	mg/L	5.0	07/20/23 16:41	
EPA 300.0 Rev 2.1 1993	Chloride	67.2	mg/L	1.0	07/19/23 04:10	
EPA 300.0 Rev 2.1 1993	Fluoride	0.33	mg/L	0.10	07/19/23 04:10	
EPA 300.0 Rev 2.1 1993	Sulfate	145	mg/L	3.0	07/19/23 10:07	
92677694004	**HAM-PT-07**					
	Performed by	CUSTOMER			07/17/23 17:16	
	pH	6.76	Std. Units		07/17/23 17:16	
EPA 6010D	Manganese	8.2	mg/L	0.040	07/20/23 16:19	
EPA 6010D	Potassium	6.0	mg/L	0.50	07/20/23 16:19	
EPA 6010D	Sodium	6.1	mg/L	1.0	07/20/23 16:19	
EPA 6010D	Calcium	168	mg/L	1.0	07/20/23 16:19	
EPA 6010D	Magnesium	18.5	mg/L	0.050	07/20/23 16:19	
EPA 6010D	Iron	23.8	mg/L	0.040	07/25/23 16:17	
EPA 6020B	Arsenic	0.34	mg/L	0.010	07/19/23 18:30	
EPA 6020B	Barium	0.056	mg/L	0.0050	07/19/23 18:30	
EPA 6020B	Beryllium	0.00012J	mg/L	0.00050	07/19/23 18:30	
EPA 6020B	Boron	1.0	mg/L	0.20	07/21/23 17:07	
EPA 6020B	Cobalt	0.13	mg/L	0.0050	07/19/23 18:30	
EPA 6020B	Lithium	0.060	mg/L	0.030	07/19/23 18:30	
EPA 6020B	Molybdenum	0.017	mg/L	0.010	07/19/23 18:30	
EPA 6020B	Thallium	0.00024J	mg/L	0.0010	07/19/23 18:30	
SM 2540C-2015	Total Dissolved Solids	808	mg/L	25.0	07/18/23 15:24	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	102	mg/L	5.0	07/20/23 16:53	
SM 2320B-2011	Alkalinity, Total as CaCO3	102	mg/L	5.0	07/20/23 16:53	
EPA 300.0 Rev 2.1 1993	Chloride	15.7	mg/L	1.0	07/19/23 04:24	
EPA 300.0 Rev 2.1 1993	Fluoride	0.36	mg/L	0.10	07/19/23 04:24	
EPA 300.0 Rev 2.1 1993	Sulfate	411	mg/L	9.0	07/19/23 10:21	
92677694005	**HAM-PT-08**					
	Performed by	CUSTOMER			07/17/23 17:17	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92677694

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92677694005	**HAM-PT-08**					
	pH	6.66	Std. Units		07/17/23 17:17	
EPA 6010D	Manganese	8.7	mg/L	0.040	07/20/23 16:24	
EPA 6010D	Potassium	6.0	mg/L	0.50	07/20/23 16:24	
EPA 6010D	Sodium	6.9	mg/L	1.0	07/20/23 16:24	
EPA 6010D	Calcium	161	mg/L	1.0	07/20/23 16:24	
EPA 6010D	Magnesium	18.9	mg/L	0.050	07/20/23 16:24	
EPA 6010D	Iron	24.2	mg/L	0.040	07/25/23 16:38	
EPA 6020B	Arsenic	0.33	mg/L	0.010	07/19/23 18:36	
EPA 6020B	Barium	0.051	mg/L	0.0050	07/19/23 18:36	
EPA 6020B	Beryllium	0.00011J	mg/L	0.00050	07/19/23 18:36	
EPA 6020B	Boron	1.0	mg/L	0.20	07/21/23 17:13	
EPA 6020B	Cobalt	0.031	mg/L	0.0050	07/19/23 18:36	
EPA 6020B	Lithium	0.065	mg/L	0.030	07/19/23 18:36	
EPA 6020B	Molybdenum	0.0079J	mg/L	0.010	07/19/23 18:36	
SM 2540C-2015	Total Dissolved Solids	734	mg/L	25.0	07/18/23 15:25	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	107	mg/L	5.0	07/20/23 17:03	
SM 2320B-2011	Alkalinity, Total as CaCO3	107	mg/L	5.0	07/20/23 17:03	
SM 4500-S2D-2011	Sulfide	0.036J	mg/L	0.10	07/20/23 03:42	
EPA 300.0 Rev 2.1 1993	Chloride	17.0	mg/L	1.0	07/19/23 04:38	
EPA 300.0 Rev 2.1 1993	Fluoride	0.36	mg/L	0.10	07/19/23 04:38	
EPA 300.0 Rev 2.1 1993	Sulfate	417	mg/L	8.0	07/19/23 12:00	
92677694006	**HAM-AP1-FD-01**					
EPA 6010D	Iron	24.6	mg/L	0.040	07/25/23 16:48	
EPA 6010D	Manganese	8.6	mg/L	0.040	07/20/23 16:29	
EPA 6010D	Potassium	6.4	mg/L	0.50	07/20/23 16:29	
EPA 6010D	Sodium	6.6	mg/L	1.0	07/20/23 16:29	
EPA 6010D	Calcium	180	mg/L	1.0	07/20/23 16:29	
EPA 6010D	Magnesium	19.6	mg/L	0.050	07/20/23 16:29	
EPA 6020B	Arsenic	0.34	mg/L	0.010	07/19/23 18:54	
EPA 6020B	Barium	0.057	mg/L	0.0050	07/19/23 18:54	
EPA 6020B	Beryllium	0.00011J	mg/L	0.00050	07/19/23 18:54	
EPA 6020B	Boron	0.99	mg/L	0.20	07/21/23 17:19	
EPA 6020B	Cobalt	0.14	mg/L	0.0050	07/19/23 18:54	
EPA 6020B	Lithium	0.060	mg/L	0.030	07/19/23 18:54	
EPA 6020B	Molybdenum	0.018	mg/L	0.010	07/19/23 18:54	
EPA 6020B	Thallium	0.00025J	mg/L	0.0010	07/19/23 18:54	
SM 2540C-2015	Total Dissolved Solids	804	mg/L	25.0	07/18/23 15:25	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	102	mg/L	5.0	07/20/23 17:12	
SM 2320B-2011	Alkalinity, Total as CaCO3	102	mg/L	5.0	07/20/23 17:12	
EPA 300.0 Rev 2.1 1993	Chloride	15.6	mg/L	1.0	07/19/23 04:53	
EPA 300.0 Rev 2.1 1993	Fluoride	0.31	mg/L	0.10	07/19/23 04:53	
EPA 300.0 Rev 2.1 1993	Sulfate	428	mg/L	9.0	07/19/23 12:56	
92677694008	**HAM-HGWC-13**					
	Performed by	CUSTOMER			07/17/23 17:17	
	pH	6.67	Std. Units		07/17/23 17:17	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92677694

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92677694008	**HAM-HGWC-13**					
EPA 6010D	Iron	7.2	mg/L	0.040	07/20/23 16:39	
EPA 6010D	Manganese	8.9	mg/L	0.040	07/20/23 16:39	
EPA 6010D	Potassium	6.0	mg/L	0.50	07/20/23 16:39	
EPA 6010D	Sodium	6.8	mg/L	1.0	07/20/23 16:39	
EPA 6010D	Calcium	179	mg/L	1.0	07/20/23 16:39	
EPA 6010D	Magnesium	19.5	mg/L	0.050	07/20/23 16:39	
EPA 6020B	Arsenic	0.63	mg/L	0.010	07/19/23 19:06	
EPA 6020B	Barium	0.056	mg/L	0.0050	07/19/23 19:06	
EPA 6020B	Beryllium	0.00012J	mg/L	0.00050	07/19/23 19:06	
EPA 6020B	Boron	1.0	mg/L	0.20	07/21/23 17:43	
EPA 6020B	Cobalt	0.018	mg/L	0.0050	07/19/23 19:06	
EPA 6020B	Lithium	0.048	mg/L	0.030	07/19/23 19:06	
EPA 6020B	Molybdenum	0.017	mg/L	0.010	07/19/23 19:06	
EPA 6020B	Thallium	0.00030J	mg/L	0.0010	07/19/23 19:06	
SM 2540C-2015	Total Dissolved Solids	817	mg/L	25.0	07/18/23 15:31	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	140	mg/L	5.0	07/20/23 17:26	
SM 2320B-2011	Alkalinity, Total as CaCO3	140	mg/L	5.0	07/20/23 17:26	
EPA 300.0 Rev 2.1 1993	Chloride	17.8	mg/L	1.0	07/19/23 05:50	
EPA 300.0 Rev 2.1 1993	Fluoride	0.32	mg/L	0.10	07/19/23 05:50	
EPA 300.0 Rev 2.1 1993	Sulfate	393	mg/L	8.0	07/19/23 13:10	M1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-HGWC-8 **Lab ID: 92677694001** Collected: 07/13/23 10:35 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		07/17/23 17:16		
pH	**6.65**	Std. Units			1		07/17/23 17:16		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Manganese	**0.28**	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 15:39	7439-96-5	
Potassium	**6.9**	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 15:39	7440-09-7	
Sodium	**8.8**	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 15:39	7440-23-5	M1
Calcium	**107**	mg/L	1.0	0.12	1	07/20/23 09:50	07/20/23 15:39	7440-70-2	M1
Magnesium	**14.9**	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 15:39	7439-95-4	M1
Iron	**0.27**	mg/L	0.040	0.025	1	07/20/23 09:50	07/25/23 15:53	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 17:55	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 17:55	7440-38-2	
Barium	**0.047**	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 17:55	7440-39-3	
Beryllium	**0.000073J**	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 17:55	7440-41-7	
Boron	**2.0**	mg/L	0.20	0.043	5	07/18/23 13:46	07/21/23 16:37	7440-42-8	
Cadmium	**0.00031J**	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 17:55	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 17:55	7440-47-3	
Cobalt	**0.0015J**	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 17:55	7440-48-4	
Lithium	**0.0015J**	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 17:55	7439-93-2	
Molybdenum	**0.30**	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 17:55	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 17:55	7782-49-2	
Thallium	**0.00026J**	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 17:55	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	07/27/23 12:00	07/27/23 14:51	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**513**	mg/L	25.0	25.0	1		07/18/23 15:24		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**136**	mg/L	5.0	5.0	1		07/19/23 19:16		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/19/23 19:16		
Alkalinity, Total as CaCO3	**136**	mg/L	5.0	5.0	1		07/19/23 19:16		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-HGWC-8 **Lab ID: 92677694001** Collected: 07/13/23 10:35 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 03:39	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**47.9**	mg/L	1.0	0.60	1		07/19/23 03:12	16887-00-6	
Fluoride	**0.49**	mg/L	0.10	0.050	1		07/19/23 03:12	16984-48-8	
Sulfate	**163**	mg/L	3.0	1.5	3		07/19/23 09:10	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-PT-09 **Lab ID: 92677694002** Collected: 07/13/23 12:47 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		07/17/23 17:16		
pH	**6.57**	Std. Units			1		07/17/23 17:16		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.33**	mg/L	0.040	0.025	1	07/20/23 09:50	07/25/23 16:08	7439-89-6	
Manganese	**0.79**	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 15:59	7439-96-5	
Potassium	**6.8**	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 15:59	7440-09-7	
Sodium	**10.6**	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 15:59	7440-23-5	
Calcium	**110**	mg/L	1.0	0.12	1	07/20/23 09:50	07/20/23 15:59	7440-70-2	
Magnesium	**15.6**	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 15:59	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.0027J**	mg/L	0.0030	0.0012	1	07/18/23 13:46	07/19/23 18:19	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 18:19	7440-38-2	
Barium	**0.053**	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 18:19	7440-39-3	
Beryllium	**0.000077J**	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 18:19	7440-41-7	
Boron	**2.1**	mg/L	0.20	0.043	5	07/18/23 13:46	07/21/23 16:55	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 18:19	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 18:19	7440-47-3	
Cobalt	**0.0045J**	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 18:19	7440-48-4	
Lithium	**0.0013J**	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 18:19	7439-93-2	
Molybdenum	**0.065**	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 18:19	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 18:19	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 18:19	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	07/27/23 12:00	07/27/23 14:53	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**534**	mg/L	25.0	25.0	1		07/18/23 15:24		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**144**	mg/L	5.0	5.0	1		07/19/23 19:26		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/19/23 19:26		
Alkalinity, Total as CaCO3	**144**	mg/L	5.0	5.0	1		07/19/23 19:26		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-PT-09 **Lab ID: 92677694002** Collected: 07/13/23 12:47 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 03:41	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**55.3**	mg/L	1.0	0.60	1		07/19/23 03:27	16887-00-6	
Fluoride	**0.24**	mg/L	0.10	0.050	1		07/19/23 03:27	16984-48-8	
Sulfate	**160**	mg/L	3.0	1.5	3		07/19/23 09:53	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-PT-10 **Lab ID: 92677694003** Collected: 07/13/23 14:15 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		07/17/23 17:16		
pH	**7.01**	Std. Units			1		07/17/23 17:16		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Manganese	**3.5**	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 16:14	7439-96-5	
Potassium	**7.1**	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 16:14	7440-09-7	
Sodium	**10.5**	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 16:14	7440-23-5	
Calcium	**127**	mg/L	1.0	0.12	1	07/20/23 09:50	07/20/23 16:14	7440-70-2	
Magnesium	**16.8**	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 16:14	7439-95-4	
Iron	**3.1**	mg/L	0.040	0.025	1	07/20/23 09:50	07/25/23 16:12	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 18:25	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 18:25	7440-38-2	
Barium	**0.074**	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 18:25	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 18:25	7440-41-7	
Boron	**2.2**	mg/L	0.20	0.043	5	07/18/23 13:46	07/21/23 17:01	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 18:25	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 18:25	7440-47-3	
Cobalt	**0.0026J**	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 18:25	7440-48-4	
Lithium	**0.0014J**	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 18:25	7439-93-2	
Molybdenum	**0.10**	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 18:25	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 18:25	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 18:25	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	07/27/23 12:00	07/27/23 15:09	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**557**	mg/L	25.0	25.0	1		07/18/23 15:24		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**185**	mg/L	5.0	5.0	1		07/20/23 16:41		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 16:41		
Alkalinity, Total as CaCO3	**185**	mg/L	5.0	5.0	1		07/20/23 16:41		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-PT-10 **Lab ID: 92677694003** Collected: 07/13/23 14:15 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 03:41	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**67.2**	mg/L	1.0	0.60	1		07/19/23 04:10	16887-00-6	
Fluoride	**0.33**	mg/L	0.10	0.050	1		07/19/23 04:10	16984-48-8	
Sulfate	**145**	mg/L	3.0	1.5	3		07/19/23 10:07	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-PT-07 **Lab ID: 92677694004** Collected: 07/13/23 16:22 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		07/17/23 17:16		
pH	**6.76**	Std. Units			1		07/17/23 17:16		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Manganese	**8.2**	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 16:19	7439-96-5	
Potassium	**6.0**	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 16:19	7440-09-7	
Sodium	**6.1**	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 16:19	7440-23-5	
Calcium	**168**	mg/L	1.0	0.12	1	07/20/23 09:50	07/20/23 16:19	7440-70-2	
Magnesium	**18.5**	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 16:19	7439-95-4	
Iron	**23.8**	mg/L	0.040	0.025	1	07/20/23 09:50	07/25/23 16:17	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 18:30	7440-36-0	
Arsenic	**0.34**	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 18:30	7440-38-2	
Barium	**0.056**	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 18:30	7440-39-3	
Beryllium	**0.00012J**	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 18:30	7440-41-7	
Boron	**1.0**	mg/L	0.20	0.043	5	07/18/23 13:46	07/21/23 17:07	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 18:30	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 18:30	7440-47-3	
Cobalt	**0.13**	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 18:30	7440-48-4	
Lithium	**0.060**	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 18:30	7439-93-2	
Molybdenum	**0.017**	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 18:30	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 18:30	7782-49-2	
Thallium	**0.00024J**	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 18:30	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	07/27/23 12:00	07/27/23 15:12	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**808**	mg/L	25.0	25.0	1		07/18/23 15:24		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**102**	mg/L	5.0	5.0	1		07/20/23 16:53		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 16:53		
Alkalinity, Total as CaCO3	**102**	mg/L	5.0	5.0	1		07/20/23 16:53		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-PT-07 **Lab ID: 92677694004** Collected: 07/13/23 16:22 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 03:42	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**15.7**	mg/L	1.0	0.60	1		07/19/23 04:24	16887-00-6	
Fluoride	**0.36**	mg/L	0.10	0.050	1		07/19/23 04:24	16984-48-8	
Sulfate	**411**	mg/L	9.0	4.5	9		07/19/23 10:21	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-PT-08 **Lab ID: 92677694005** Collected: 07/13/23 17:51 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		07/17/23 17:17		
pH	**6.66**	Std. Units			1		07/17/23 17:17		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Manganese	**8.7**	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 16:24	7439-96-5	
Potassium	**6.0**	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 16:24	7440-09-7	
Sodium	**6.9**	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 16:24	7440-23-5	
Calcium	**161**	mg/L	1.0	0.12	1	07/20/23 09:50	07/20/23 16:24	7440-70-2	
Magnesium	**18.9**	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 16:24	7439-95-4	
Iron	**24.2**	mg/L	0.040	0.025	1	07/20/23 09:50	07/25/23 16:38	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 18:36	7440-36-0	
Arsenic	**0.33**	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 18:36	7440-38-2	
Barium	**0.051**	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 18:36	7440-39-3	
Beryllium	**0.00011J**	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 18:36	7440-41-7	
Boron	**1.0**	mg/L	0.20	0.043	5	07/18/23 13:46	07/21/23 17:13	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 18:36	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 18:36	7440-47-3	
Cobalt	**0.031**	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 18:36	7440-48-4	
Lithium	**0.065**	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 18:36	7439-93-2	
Molybdenum	**0.0079J**	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 18:36	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 18:36	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 18:36	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	07/27/23 12:00	07/27/23 15:14	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**734**	mg/L	25.0	25.0	1		07/18/23 15:25		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**107**	mg/L	5.0	5.0	1		07/20/23 17:03		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 17:03		
Alkalinity, Total as CaCO3	**107**	mg/L	5.0	5.0	1		07/20/23 17:03		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-PT-08 **Lab ID: 92677694005** Collected: 07/13/23 17:51 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	**0.036J**	mg/L	0.10	0.022	1		07/20/23 03:42	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**17.0**	mg/L	1.0	0.60	1		07/19/23 04:38	16887-00-6	
Fluoride	**0.36**	mg/L	0.10	0.050	1		07/19/23 04:38	16984-48-8	
Sulfate	**417**	mg/L	8.0	4.0	8		07/19/23 12:00	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-AP1-FD-01 **Lab ID: 92677694006** Collected: 07/13/23 00:00 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**24.6**	mg/L	0.040	0.025	1	07/20/23 09:50	07/25/23 16:48	7439-89-6	
Manganese	**8.6**	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 16:29	7439-96-5	
Potassium	**6.4**	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 16:29	7440-09-7	
Sodium	**6.6**	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 16:29	7440-23-5	
Calcium	**180**	mg/L	1.0	0.12	1	07/20/23 09:50	07/20/23 16:29	7440-70-2	
Magnesium	**19.6**	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 16:29	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 18:54	7440-36-0	
Arsenic	**0.34**	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 18:54	7440-38-2	
Barium	**0.057**	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 18:54	7440-39-3	
Beryllium	**0.00011J**	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 18:54	7440-41-7	
Boron	**0.99**	mg/L	0.20	0.043	5	07/18/23 13:46	07/21/23 17:19	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 18:54	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 18:54	7440-47-3	
Cobalt	**0.14**	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 18:54	7440-48-4	
Lithium	**0.060**	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 18:54	7439-93-2	
Molybdenum	**0.018**	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 18:54	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 18:54	7782-49-2	
Thallium	**0.00025J**	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 18:54	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	07/27/23 12:00	07/27/23 15:17	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**804**	mg/L	25.0	25.0	1		07/18/23 15:25		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**102**	mg/L	5.0	5.0	1		07/20/23 17:12		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 17:12		
Alkalinity, Total as CaCO3	**102**	mg/L	5.0	5.0	1		07/20/23 17:12		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 03:42	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**15.6**	mg/L	1.0	0.60	1		07/19/23 04:53	16887-00-6	
Fluoride	**0.31**	mg/L	0.10	0.050	1		07/19/23 04:53	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-AP1-FD-01 **Lab ID: 92677694006** Collected: 07/13/23 00:00 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	**428**	mg/L	9.0	4.5	9		07/19/23 12:56	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-AP1-FB-01 **Lab ID: 92677694007** Collected: 07/17/23 08:40 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Manganese	ND	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 16:34	7439-96-5	
Potassium	ND	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 16:34	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 16:34	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	07/20/23 09:50	07/20/23 16:34	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 16:34	7439-95-4	
Iron	ND	mg/L	0.040	0.025	1	07/20/23 09:50	07/25/23 16:53	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 19:00	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 19:00	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 19:00	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 19:00	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	07/18/23 13:46	07/21/23 17:37	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 19:00	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 19:00	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 19:00	7440-48-4	
Lithium	ND	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 19:00	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 19:00	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 19:00	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 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	07/27/23 12:00	07/27/23 15:19	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		07/18/23 15:30		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 17:22		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 17:22		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		07/20/23 17:22		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 04:00	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		07/19/23 05:07	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		07/19/23 05:07	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-AP1-FB-01 **Lab ID: 92677694007** Collected: 07/17/23 08:40 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	ND	mg/L	1.0	0.50	1		07/19/23 05:07	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-HGWC-13 **Lab ID: 92677694008** Collected: 07/17/23 11:47 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		07/17/23 17:17		
pH	**6.67**	Std. Units			1		07/17/23 17:17		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**7.2**	mg/L	0.040	0.025	1	07/20/23 09:50	07/20/23 16:39	7439-89-6	
Manganese	**8.9**	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 16:39	7439-96-5	
Potassium	**6.0**	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 16:39	7440-09-7	
Sodium	**6.8**	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 16:39	7440-23-5	
Calcium	**179**	mg/L	1.0	0.12	1	07/20/23 09:50	07/20/23 16:39	7440-70-2	
Magnesium	**19.5**	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 16:39	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 19:06	7440-36-0	
Arsenic	**0.63**	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 19:06	7440-38-2	
Barium	**0.056**	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 19:06	7440-39-3	
Beryllium	**0.00012J**	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 19:06	7440-41-7	
Boron	**1.0**	mg/L	0.20	0.043	5	07/18/23 13:46	07/21/23 17:43	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 19:06	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 19:06	7440-47-3	
Cobalt	**0.018**	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 19:06	7440-48-4	
Lithium	**0.048**	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 19:06	7439-93-2	
Molybdenum	**0.017**	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 19:06	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 19:06	7782-49-2	
Thallium	**0.00030J**	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 19:06	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	07/27/23 12:00	07/27/23 15:22	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**817**	mg/L	25.0	25.0	1		07/18/23 15:31		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**140**	mg/L	5.0	5.0	1		07/20/23 17:26		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 17:26		
Alkalinity, Total as CaCO3	**140**	mg/L	5.0	5.0	1		07/20/23 17:26		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92677694

Sample: HAM-HGWC-13 **Lab ID: 92677694008** Collected: 07/17/23 11:47 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 04:00	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**17.8**	mg/L	1.0	0.60	1		07/19/23 05:50	16887-00-6	
Fluoride	**0.32**	mg/L	0.10	0.050	1		07/19/23 05:50	16984-48-8	
Sulfate	**393**	mg/L	8.0	4.0	8		07/19/23 13:10	14808-79-8	M1

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92677694

QC Batch: 787863
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92677694001, 92677694002, 92677694003, 92677694004, 92677694005, 92677694006, 92677694007, 92677694008

METHOD BLANK: 4084625 Matrix: Water
Associated Lab Samples: 92677694001, 92677694002, 92677694003, 92677694004, 92677694005, 92677694006, 92677694007, 92677694008

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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(704)875-9092

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92677694

QC Batch: 787489
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92677694001, 92677694002, 92677694003, 92677694004, 92677694005, 92677694006, 92677694007, 92677694008

METHOD BLANK: 4082463 Matrix: Water
Associated Lab Samples: 92677694001, 92677694002, 92677694003, 92677694004, 92677694005, 92677694006, 92677694007, 92677694008

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	
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	
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	92677694001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	109	110	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.11	104	106	75-125	2	20	
Barium	mg/L	0.047	0.1	0.1	0.16	0.16	114	113	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(704)875-9092

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92677694

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4082465 4082466

Parameter	Units	92677694001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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	
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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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92677694

QC Batch: 789561 | Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A | Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92677694001, 92677694002, 92677694003, 92677694004, 92677694005, 92677694006, 92677694007, 92677694008

METHOD BLANK: 4092350 Matrix: Water
Associated Lab Samples: 92677694001, 92677694002, 92677694003, 92677694004, 92677694005, 92677694006, 92677694007, 92677694008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	07/27/23 14:41	

LABORATORY CONTROL SAMPLE: 4092351

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: 4092352 4092353

Parameter	Units	92677694002 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	0.0021	0.0021	83	85	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92677694

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: 92677694001, 92677694002, 92677694003, 92677694004, 92677694005, 92677694006, 92677694007, 92677694008

METHOD BLANK: 4082157 Matrix: Water
Associated Lab Samples: 92677694001, 92677694002, 92677694003, 92677694004, 92677694005, 92677694006, 92677694007, 92677694008

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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REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
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(704)875-9092

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92677694

QC Batch: 787723
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92677694001, 92677694002

METHOD BLANK: 4083535 Matrix: Water
Associated Lab Samples: 92677694001, 92677694002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	07/19/23 16:09	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	07/19/23 16:09	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	07/19/23 16:09	

LABORATORY CONTROL SAMPLE: 4083536

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: 4083537

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	49.5	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4083538 4083539

Parameter	Units	92677420019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	48.7	50	50	102	103	106	108	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4083540 4083541

Parameter	Units	92677318002 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	330	50	50	390	394	120	129	80-120	1	25	M1

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REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
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(704)875-9092

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92677694

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: 92677694003, 92677694004, 92677694005, 92677694006, 92677694007, 92677694008

METHOD BLANK: 4085797 Matrix: Water
Associated Lab Samples: 92677694003, 92677694004, 92677694005, 92677694006, 92677694007, 92677694008

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 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	121	50	50	180	180	118	118	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4085802 4085803

Parameter	Units	92677753006 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	76.8	50	50	129	131	103	108	80-120	2	25	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92677694

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: 92677694001, 92677694002, 92677694003, 92677694004, 92677694005, 92677694006

METHOD BLANK: 4084741 Matrix: Water
Associated Lab Samples: 92677694001, 92677694002, 92677694003, 92677694004, 92677694005, 92677694006

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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.47	0.47	93	93	80-120	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4084745 4084746

Parameter	Units	92677696005 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	0.48	0.46	94	90	80-120	5	10	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92677694

QC Batch: 787903
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92677694007, 92677694008

METHOD BLANK: 4084747 Matrix: Water
Associated Lab Samples: 92677694007, 92677694008

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 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	0.53	0.54	105	108	80-120	3	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4084751 4084752

Parameter	Units	92677696012 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	0.43	0.47	84	93	80-120	10	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(704)875-9092

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92677694

QC Batch: 787373
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92677694001, 92677694002, 92677694003, 92677694004, 92677694005, 92677694006, 92677694007

METHOD BLANK: 4081842 Matrix: Water
Associated Lab Samples: 92677694001, 92677694002, 92677694003, 92677694004, 92677694005, 92677694006, 92677694007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	07/18/23 12:46	
Fluoride	mg/L	ND	0.10	0.050	07/18/23 12:46	
Sulfate	mg/L	ND	1.0	0.50	07/18/23 12:46	

LABORATORY CONTROL SAMPLE: 4081843

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.3	101	90-110	
Fluoride	mg/L	2.5	2.5	101	90-110	
Sulfate	mg/L	50	49.5	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4081844 4081845

Parameter	Units	92677589002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.9	50	50	54.1	54.7	102	104	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.7	2.7	107	107	90-110	0	10	
Sulfate	mg/L	25.2	50	50	75.9	76.5	101	103	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4081846 4081847

Parameter	Units	92677589020 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	21.6	50	50	60.3	60.3	78	77	90-110	0	10	M1
Fluoride	mg/L	0.37J	2.5	2.5	2.8J	3.2J	96	113	90-110		10	M1
Sulfate	mg/L	3080	50	50	3000	2940	-145	-278	90-110	2	10	M1

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REPORT OF LABORATORY ANALYSIS

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(704)875-9092

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92677694

QC Batch: 787377
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92677694008

METHOD BLANK: 4081859 Matrix: Water
Associated Lab Samples: 92677694008

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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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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REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: Hammond AP-1
Pace Project No.: 92677694

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.

Pace Analytical Services, LLC
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(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-1
Pace Project No.: 92677694

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92677694001	**HAM-HGWC-8**				
92677694002	**HAM-PT-09**				
92677694003	**HAM-PT-10**				
92677694004	**HAM-PT-07**				
92677694005	**HAM-PT-08**				
92677694008	**HAM-HGWC-13**				
92677694001	**HAM-HGWC-8**	EPA 3010A	787863	EPA 6010D	788067
92677694002	**HAM-PT-09**	EPA 3010A	787863	EPA 6010D	788067
92677694003	**HAM-PT-10**	EPA 3010A	787863	EPA 6010D	788067
92677694004	**HAM-PT-07**	EPA 3010A	787863	EPA 6010D	788067
92677694005	**HAM-PT-08**	EPA 3010A	787863	EPA 6010D	788067
92677694006	**HAM-AP1-FD-01**	EPA 3010A	787863	EPA 6010D	788067
92677694007	**HAM-AP1-FB-01**	EPA 3010A	787863	EPA 6010D	788067
92677694008	**HAM-HGWC-13**	EPA 3010A	787863	EPA 6010D	788067
92677694001	**HAM-HGWC-8**	EPA 3005A	787489	EPA 6020B	787561
92677694002	**HAM-PT-09**	EPA 3005A	787489	EPA 6020B	787561
92677694003	**HAM-PT-10**	EPA 3005A	787489	EPA 6020B	787561
92677694004	**HAM-PT-07**	EPA 3005A	787489	EPA 6020B	787561
92677694005	**HAM-PT-08**	EPA 3005A	787489	EPA 6020B	787561
92677694006	**HAM-AP1-FD-01**	EPA 3005A	787489	EPA 6020B	787561
92677694007	**HAM-AP1-FB-01**	EPA 3005A	787489	EPA 6020B	787561
92677694008	**HAM-HGWC-13**	EPA 3005A	787489	EPA 6020B	787561
92677694001	**HAM-HGWC-8**	EPA 7470A	789561	EPA 7470A	789666
92677694002	**HAM-PT-09**	EPA 7470A	789561	EPA 7470A	789666
92677694003	**HAM-PT-10**	EPA 7470A	789561	EPA 7470A	789666
92677694004	**HAM-PT-07**	EPA 7470A	789561	EPA 7470A	789666
92677694005	**HAM-PT-08**	EPA 7470A	789561	EPA 7470A	789666
92677694006	**HAM-AP1-FD-01**	EPA 7470A	789561	EPA 7470A	789666
92677694007	**HAM-AP1-FB-01**	EPA 7470A	789561	EPA 7470A	789666
92677694008	**HAM-HGWC-13**	EPA 7470A	789561	EPA 7470A	789666
92677694001	**HAM-HGWC-8**	SM 2540C-2015	787441		
92677694002	**HAM-PT-09**	SM 2540C-2015	787441		
92677694003	**HAM-PT-10**	SM 2540C-2015	787441		
92677694004	**HAM-PT-07**	SM 2540C-2015	787441		
92677694005	**HAM-PT-08**	SM 2540C-2015	787441		
92677694006	**HAM-AP1-FD-01**	SM 2540C-2015	787441		
92677694007	**HAM-AP1-FB-01**	SM 2540C-2015	787441		
92677694008	**HAM-HGWC-13**	SM 2540C-2015	787441		
92677694001	**HAM-HGWC-8**	SM 2320B-2011	787723		
92677694002	**HAM-PT-09**	SM 2320B-2011	787723		
92677694003	**HAM-PT-10**	SM 2320B-2011	788121		
92677694004	**HAM-PT-07**	SM 2320B-2011	788121		
92677694005	**HAM-PT-08**	SM 2320B-2011	788121		
92677694006	**HAM-AP1-FD-01**	SM 2320B-2011	788121		
92677694007	**HAM-AP1-FB-01**	SM 2320B-2011	788121		
92677694008	**HAM-HGWC-13**	SM 2320B-2011	788121		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-1
Pace Project No.: 92677694

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92677694001	**HAM-HGWC-8**	SM 4500-S2D-2011	787902		
92677694002	**HAM-PT-09**	SM 4500-S2D-2011	787902		
92677694003	**HAM-PT-10**	SM 4500-S2D-2011	787902		
92677694004	**HAM-PT-07**	SM 4500-S2D-2011	787902		
92677694005	**HAM-PT-08**	SM 4500-S2D-2011	787902		
92677694006	**HAM-AP1-FD-01**	SM 4500-S2D-2011	787902		
92677694007	**HAM-AP1-FB-01**	SM 4500-S2D-2011	787903		
92677694008	**HAM-HGWC-13**	SM 4500-S2D-2011	787903		
92677694001	**HAM-HGWC-8**	EPA 300.0 Rev 2.1 1993	787373		
92677694002	**HAM-PT-09**	EPA 300.0 Rev 2.1 1993	787373		
92677694003	**HAM-PT-10**	EPA 300.0 Rev 2.1 1993	787373		
92677694004	**HAM-PT-07**	EPA 300.0 Rev 2.1 1993	787373		
92677694005	**HAM-PT-08**	EPA 300.0 Rev 2.1 1993	787373		
92677694006	**HAM-AP1-FD-01**	EPA 300.0 Rev 2.1 1993	787373		
92677694007	**HAM-AP1-FB-01**	EPA 300.0 Rev 2.1 1993	787373		
92677694008	**HAM-HGWC-13**	EPA 300.0 Rev 2.1 1993	787377		

Pace ANALYTICAL SERVICES

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# : 92677694

92677694

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 A

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

Cooler Temp Corrected (°C): 6.5

Temp should be above freezing to 6°C

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

USDA Regulated Soil (☐ N/A, water sample)

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

Qualtrax ID: 69614

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

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

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

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

Project #

WO# : 92677694

PM: BV Due Date: 07/31/23

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			1	1																						
2		2	1			1	1																						
3		2	1			1	1																						
4		2	1			1	1																						
5		2	1			1	1																						
6		2	1			1	1																						
7		2	1			1	1																						
8		2	1			1	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.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of

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

Section B Required Project Information:
Report To: SCS Contacts
Copy To: Geosyntec Contacts
Task Code: HAM-CCR-CA-20230713
Purchase Order No.:
Project Name: Hammond AP-1
Project Number:

Section C Invoice Information:
Attention: Southern Co.
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Bonnie Vang
Pace Profile #: 10839- 16483-20

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

Site Location STATE: GA

Requested Analysis Filtered (Y/N)

Section D Required Client Information: SAMPLE ID (A-Z, 0-9 / , -) Sample IDs MUST BE UNIQUE	Valid Matrix Codes: MATRIX / CODE — DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Full App. III and IV metals	Major Ions (10839-21)	Boron and Cobalt	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 92677694
HAM-HGWC-8		WG	G	7/13/23	1035			21	5	X		X		X		ZnAc		N	X	X		N	001 pH = 6.65
HAM-PT-09		WG	G	7/13/23	1747			24	5	X		X		X		ZnAc		N	X	X		N	002 pH = 6.57
HAM-PT-10		WG	G	7/13/23	1415			22	5	X		X		X		ZnAc		N	X	X		N	003 pH = 7.01
HAM-PT-07		WG	G	7/13/23	1622			27	5	X		X		X		ZnAc		N	X	X		N	004 pH = 6.76
HAM-PT-08		WG	G	7/13/23	1751			24	5	X		X		X		ZnAc		N	X	X		N	005 pH = 6.66
HAM-AP1-FD-01		WG	G	7/13/23	0000			-	5	X		X		X		ZnAc		N	X	X		N	006 —
HAM-AP1-FB-01		WG	G	7/17/23	0840			-	5	X		X		X		ZnAc		N	X	X		N	007 —
HAM-AP HGWC-13		WG	G	7/17/23	1147			23	5	X		X		X		ZnAc		N	X	X		N	008 pH = 6.07
																		N					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Code: HAM-CCR-CA-20230713	Alana Neely / Geosyntec	7/17/23	1230	Ryan Williams / Pace	7/17/23	1230	
	Ryan Williams / Pace	7/18/23	1425		7/17	1425	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Alana Neely / Geosyntec Consultants, In
SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 7/17/23

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 invoices not paid within 30 days.

August 2023

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

August 25, 2023

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

RE: Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

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,

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

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

CERTIFICATIONS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

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

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

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92682397001	**HAM-PT-07**	Water	08/09/23 17:59	08/11/23 13:12
92682397002	**HAM-PT-08**	Water	08/09/23 10:50	08/11/23 13:12
92682397003	**HAM-PT-09**	Water	08/09/23 14:42	08/11/23 13:12
92682397004	**HAM-PT-10**	Water	08/09/23 13:05	08/11/23 13:12
92682397005	**HAM-MW-53**	Water	08/09/23 16:40	08/11/23 13:12
92682397006	**HAM-MW-54**	Water	08/09/23 16:51	08/11/23 13:12
92682397007	**HAM-AP1-FD-06**	Water	08/09/23 00:00	08/11/23 13:12
92682397008	**HAM-AP1-FB-06**	Water	08/09/23 16:50	08/11/23 13:12

Pace Analytical Services, LLC
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SAMPLE ANALYTE COUNT

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92682397001	**HAM-PT-07**	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
92682397002	**HAM-PT-08**	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	CDC	3
92682397003	**HAM-PT-09**	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	CDC	3
92682397004	**HAM-PT-10**	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
92682397005	**HAM-MW-53**	EPA 6020B	CW1	2
92682397006	**HAM-MW-54**	EPA 6020B	CW1	2
92682397007	**HAM-AP1-FD-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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SAMPLE ANALYTE COUNT

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92682397008	**HAM-AP1-FB-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

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

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92682397001	**HAM-PT-07**					
EPA 6010D	Iron	27.1	mg/L	0.040	08/18/23 21:03	
EPA 6010D	Manganese	7.6	mg/L	0.040	08/18/23 21:03	
EPA 6010D	Potassium	6.8	mg/L	0.50	08/18/23 21:03	
EPA 6010D	Sodium	7.2	mg/L	1.0	08/18/23 21:03	
EPA 6010D	Calcium	173	mg/L	1.0	08/18/23 21:03	
EPA 6010D	Magnesium	19.4	mg/L	0.050	08/18/23 21:03	
EPA 6020B	Arsenic	0.27	mg/L	0.010	08/22/23 16:32	
EPA 6020B	Barium	0.053	mg/L	0.0050	08/22/23 16:32	
EPA 6020B	Beryllium	0.000095J	mg/L	0.00050	08/22/23 16:32	
EPA 6020B	Boron	0.93	mg/L	0.040	08/23/23 13:17	
EPA 6020B	Cobalt	0.090	mg/L	0.0050	08/23/23 13:17	
EPA 6020B	Lithium	0.069	mg/L	0.030	08/23/23 13:17	
EPA 6020B	Molybdenum	0.012	mg/L	0.010	08/22/23 16:32	
EPA 6020B	Thallium	0.00022J	mg/L	0.0010	08/22/23 16:32	
SM 2540C-2015	Total Dissolved Solids	771	mg/L	25.0	08/15/23 16:56	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	116	mg/L	5.0	08/16/23 15:20	
SM 2320B-2011	Alkalinity, Total as CaCO3	116	mg/L	5.0	08/16/23 15:20	
EPA 300.0 Rev 2.1 1993	Chloride	13.5	mg/L	1.0	08/15/23 21:32	
EPA 300.0 Rev 2.1 1993	Fluoride	0.28	mg/L	0.10	08/15/23 21:32	
EPA 300.0 Rev 2.1 1993	Sulfate	339	mg/L	7.0	08/16/23 08:19	
92682397002	**HAM-PT-08**					
EPA 6010D	Iron	22.0	mg/L	0.040	08/18/23 21:13	
EPA 6010D	Manganese	6.8	mg/L	0.040	08/18/23 21:13	
EPA 6010D	Potassium	6.3	mg/L	0.50	08/18/23 21:13	
EPA 6010D	Sodium	6.8	mg/L	1.0	08/18/23 21:13	
EPA 6010D	Calcium	146	mg/L	1.0	08/18/23 21:13	
EPA 6010D	Magnesium	17.3	mg/L	0.050	08/18/23 21:13	
EPA 6020B	Arsenic	0.32	mg/L	0.010	08/22/23 16:39	
EPA 6020B	Barium	0.050	mg/L	0.0050	08/22/23 16:39	
EPA 6020B	Beryllium	0.000073J	mg/L	0.00050	08/22/23 16:39	
EPA 6020B	Boron	0.99	mg/L	0.040	08/23/23 13:23	
EPA 6020B	Cobalt	0.032	mg/L	0.0050	08/22/23 16:39	
EPA 6020B	Lithium	0.073	mg/L	0.030	08/23/23 13:23	
EPA 6020B	Molybdenum	0.0071J	mg/L	0.010	08/22/23 16:39	
SM 2540C-2015	Total Dissolved Solids	682	mg/L	25.0	08/15/23 16:57	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	118	mg/L	5.0	08/16/23 15:40	
SM 2320B-2011	Alkalinity, Total as CaCO3	118	mg/L	5.0	08/16/23 15:40	
EPA 300.0 Rev 2.1 1993	Chloride	14.5	mg/L	1.0	08/15/23 22:30	
EPA 300.0 Rev 2.1 1993	Fluoride	0.27	mg/L	0.10	08/15/23 22:30	
EPA 300.0 Rev 2.1 1993	Sulfate	290	mg/L	6.0	08/16/23 09:16	M1
92682397003	**HAM-PT-09**					
EPA 6010D	Iron	0.10	mg/L	0.040	08/18/23 21:18	
EPA 6010D	Manganese	0.51	mg/L	0.040	08/18/23 21:18	
EPA 6010D	Potassium	7.7	mg/L	0.50	08/18/23 21:18	
EPA 6010D	Sodium	10.3	mg/L	1.0	08/18/23 21:18	
EPA 6010D	Calcium	136	mg/L	1.0	08/18/23 21:18	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92682397003	**HAM-PT-09**					
EPA 6010D	Magnesium	18.2	mg/L	0.050	08/18/23 21:18	
EPA 6020B	Barium	0.057	mg/L	0.0050	08/22/23 16:43	
EPA 6020B	Boron	1.6	mg/L	0.40	08/23/23 19:25	
EPA 6020B	Cobalt	0.0028J	mg/L	0.0050	08/22/23 16:43	
EPA 6020B	Lithium	0.0017J	mg/L	0.030	08/22/23 16:43	
EPA 6020B	Molybdenum	0.21	mg/L	0.010	08/22/23 16:43	
SM 2540C-2015	Total Dissolved Solids	594	mg/L	25.0	08/15/23 16:57	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	150	mg/L	5.0	08/16/23 15:50	
SM 2320B-2011	Alkalinity, Total as CaCO3	150	mg/L	5.0	08/16/23 15:50	
EPA 300.0 Rev 2.1 1993	Chloride	47.5	mg/L	1.0	08/15/23 23:14	
EPA 300.0 Rev 2.1 1993	Fluoride	0.26	mg/L	0.10	08/15/23 23:14	
EPA 300.0 Rev 2.1 1993	Sulfate	188	mg/L	4.0	08/16/23 09:59	
92682397004	**HAM-PT-10**					
EPA 6010D	Iron	2.9	mg/L	0.040	08/23/23 21:33	
EPA 6010D	Manganese	3.1	mg/L	0.040	08/23/23 21:33	
EPA 6010D	Potassium	6.7	mg/L	0.50	08/23/23 21:33	M1
EPA 6010D	Sodium	9.4	mg/L	1.0	08/23/23 21:33	M1
EPA 6010D	Calcium	116	mg/L	1.0	08/23/23 21:33	M1
EPA 6010D	Magnesium	16.8	mg/L	0.050	08/23/23 21:33	M1
EPA 6020B	Barium	0.070	mg/L	0.0050	08/22/23 16:51	
EPA 6020B	Boron	2.1	mg/L	0.40	08/23/23 19:48	
EPA 6020B	Cobalt	0.0019J	mg/L	0.0050	08/22/23 16:51	
EPA 6020B	Lithium	0.0012J	mg/L	0.030	08/22/23 16:51	
EPA 6020B	Molybdenum	0.096	mg/L	0.010	08/22/23 16:51	
SM 2540C-2015	Total Dissolved Solids	553	mg/L	25.0	08/15/23 16:57	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	199	mg/L	5.0	08/16/23 16:00	
SM 2320B-2011	Alkalinity, Total as CaCO3	199	mg/L	5.0	08/16/23 16:00	
SM 4500-S2D-2011	Sulfide	0.045J	mg/L	0.10	08/15/23 06:30	
EPA 300.0 Rev 2.1 1993	Chloride	62.5	mg/L	1.0	08/15/23 23:42	
EPA 300.0 Rev 2.1 1993	Fluoride	0.27	mg/L	0.10	08/15/23 23:42	
EPA 300.0 Rev 2.1 1993	Sulfate	123	mg/L	3.0	08/16/23 10:27	
92682397005	**HAM-MW-53**					
EPA 6020B	Boron	1.5	mg/L	0.040	08/22/23 20:17	
EPA 6020B	Molybdenum	0.14	mg/L	0.010	08/22/23 20:17	
92682397006	**HAM-MW-54**					
EPA 6020B	Arsenic	0.085	mg/L	0.010	08/22/23 20:23	
EPA 6020B	Boron	0.45	mg/L	0.040	08/22/23 20:23	
92682397007	**HAM-AP1-FD-06**					
EPA 6010D	Iron	21.3	mg/L	0.040	08/23/23 21:54	
EPA 6010D	Manganese	6.8	mg/L	0.040	08/23/23 21:54	
EPA 6010D	Potassium	5.6	mg/L	0.50	08/23/23 21:54	
EPA 6010D	Sodium	6.3	mg/L	1.0	08/23/23 21:54	
EPA 6010D	Calcium	128	mg/L	1.0	08/23/23 21:54	
EPA 6010D	Magnesium	16.7	mg/L	0.050	08/23/23 21:54	
EPA 6020B	Arsenic	0.36	mg/L	0.010	08/22/23 20:29	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(704)875-9092

SUMMARY OF DETECTION

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92682397007	**HAM-AP1-FD-06**					
EPA 6020B	Barium	0.047	mg/L	0.0050	08/22/23 20:29	
EPA 6020B	Beryllium	0.000065J	mg/L	0.00050	08/22/23 20:29	
EPA 6020B	Boron	0.90	mg/L	0.040	08/22/23 20:29	
EPA 6020B	Cobalt	0.034	mg/L	0.0050	08/22/23 20:29	
EPA 6020B	Lithium	0.066	mg/L	0.030	08/22/23 20:29	
EPA 6020B	Molybdenum	0.0068J	mg/L	0.010	08/22/23 20:29	
SM 2540C-2015	Total Dissolved Solids	699	mg/L	25.0	08/15/23 16:57	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	111	mg/L	5.0	08/16/23 16:12	
SM 2320B-2011	Alkalinity, Total as CaCO3	111	mg/L	5.0	08/16/23 16:12	
EPA 300.0 Rev 2.1 1993	Chloride	14.6	mg/L	1.0	08/16/23 03:19	
EPA 300.0 Rev 2.1 1993	Fluoride	0.29	mg/L	0.10	08/16/23 03:19	
EPA 300.0 Rev 2.1 1993	Sulfate	293	mg/L	6.0	08/16/23 12:22	
92682397008	**HAM-AP1-FB-06**					
EPA 6020B	Boron	0.012J	mg/L	0.040	08/22/23 20:35	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Sample: HAM-PT-07 **Lab ID: 92682397001** Collected: 08/09/23 17:59 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**27.1**	mg/L	0.040	0.025	1	08/18/23 10:36	08/18/23 21:03	7439-89-6	
Manganese	**7.6**	mg/L	0.040	0.011	1	08/18/23 10:36	08/18/23 21:03	7439-96-5	
Potassium	**6.8**	mg/L	0.50	0.15	1	08/18/23 10:36	08/18/23 21:03	7440-09-7	
Sodium	**7.2**	mg/L	1.0	0.58	1	08/18/23 10:36	08/18/23 21:03	7440-23-5	
Calcium	**173**	mg/L	1.0	0.12	1	08/18/23 10:36	08/18/23 21:03	7440-70-2	
Magnesium	**19.4**	mg/L	0.050	0.012	1	08/18/23 10:36	08/18/23 21:03	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 16:32	7440-36-0	
Arsenic	**0.27**	mg/L	0.010	0.0037	1	08/16/23 14:27	08/22/23 16:32	7440-38-2	
Barium	**0.053**	mg/L	0.0050	0.00067	1	08/16/23 14:27	08/22/23 16:32	7440-39-3	
Beryllium	**0.000095J**	mg/L	0.00050	0.000054	1	08/16/23 14:27	08/22/23 16:32	7440-41-7	
Boron	**0.93**	mg/L	0.040	0.0086	1	08/16/23 14:27	08/23/23 13:17	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 14:27	08/22/23 16:32	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 14:27	08/23/23 13:17	7440-47-3	
Cobalt	**0.090**	mg/L	0.0050	0.00039	1	08/16/23 14:27	08/23/23 13:17	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 14:27	08/22/23 16:32	7439-92-1	
Lithium	**0.069**	mg/L	0.030	0.00073	1	08/16/23 14:27	08/23/23 13:17	7439-93-2	
Molybdenum	**0.012**	mg/L	0.010	0.00074	1	08/16/23 14:27	08/22/23 16:32	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/16/23 14:27	08/22/23 16:32	7782-49-2	
Thallium	**0.00022J**	mg/L	0.0010	0.00018	1	08/16/23 14:27	08/22/23 16:32	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/17/23 12:00	08/17/23 15:18	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**771**	mg/L	25.0	25.0	1		08/15/23 16:56		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**116**	mg/L	5.0	5.0	1		08/16/23 15:20		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 15:20		
Alkalinity, Total as CaCO3	**116**	mg/L	5.0	5.0	1		08/16/23 15:20		
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 06:29	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**13.5**	mg/L	1.0	0.60	1		08/15/23 21:32	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Sample: HAM-PT-07 **Lab ID: 92682397001** Collected: 08/09/23 17:59 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.28**	mg/L	0.10	0.050	1		08/15/23 21:32	16984-48-8	
Sulfate	**339**	mg/L	7.0	3.5	7		08/16/23 08:19	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Sample: HAM-PT-08 **Lab ID: 92682397002** Collected: 08/09/23 10:50 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**22.0**	mg/L	0.040	0.025	1	08/18/23 10:36	08/18/23 21:13	7439-89-6	
Manganese	**6.8**	mg/L	0.040	0.011	1	08/18/23 10:36	08/18/23 21:13	7439-96-5	
Potassium	**6.3**	mg/L	0.50	0.15	1	08/18/23 10:36	08/18/23 21:13	7440-09-7	
Sodium	**6.8**	mg/L	1.0	0.58	1	08/18/23 10:36	08/18/23 21:13	7440-23-5	
Calcium	**146**	mg/L	1.0	0.12	1	08/18/23 10:36	08/18/23 21:13	7440-70-2	
Magnesium	**17.3**	mg/L	0.050	0.012	1	08/18/23 10:36	08/18/23 21:13	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 16:39	7440-36-0	
Arsenic	**0.32**	mg/L	0.010	0.0037	1	08/16/23 14:27	08/22/23 16:39	7440-38-2	
Barium	**0.050**	mg/L	0.0050	0.00067	1	08/16/23 14:27	08/22/23 16:39	7440-39-3	
Beryllium	**0.000073J**	mg/L	0.00050	0.000054	1	08/16/23 14:27	08/22/23 16:39	7440-41-7	
Boron	**0.99**	mg/L	0.040	0.0086	1	08/16/23 14:27	08/23/23 13:23	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 14:27	08/22/23 16:39	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 14:27	08/22/23 16:39	7440-47-3	
Cobalt	**0.032**	mg/L	0.0050	0.00039	1	08/16/23 14:27	08/22/23 16:39	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 14:27	08/22/23 16:39	7439-92-1	
Lithium	**0.073**	mg/L	0.030	0.00073	1	08/16/23 14:27	08/23/23 13:23	7439-93-2	
Molybdenum	**0.0071J**	mg/L	0.010	0.00074	1	08/16/23 14:27	08/22/23 16:39	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/16/23 14:27	08/22/23 16:39	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/16/23 14:27	08/22/23 16:39	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/17/23 12:00	08/17/23 15:34	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**682**	mg/L	25.0	25.0	1		08/15/23 16:57		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**118**	mg/L	5.0	5.0	1		08/16/23 15:40		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 15:40		
Alkalinity, Total as CaCO3	**118**	mg/L	5.0	5.0	1		08/16/23 15:40		
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 06:29	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**14.5**	mg/L	1.0	0.60	1		08/15/23 22:30	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Sample: HAM-PT-08 **Lab ID: 92682397002** Collected: 08/09/23 10:50 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.27**	mg/L	0.10	0.050	1		08/15/23 22:30	16984-48-8	
Sulfate	**290**	mg/L	6.0	3.0	6		08/16/23 09:16	14808-79-8	M1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Sample: HAM-PT-09 **Lab ID: 92682397003** Collected: 08/09/23 14:42 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.10**	mg/L	0.040	0.025	1	08/18/23 10:36	08/18/23 21:18	7439-89-6	
Manganese	**0.51**	mg/L	0.040	0.011	1	08/18/23 10:36	08/18/23 21:18	7439-96-5	
Potassium	**7.7**	mg/L	0.50	0.15	1	08/18/23 10:36	08/18/23 21:18	7440-09-7	
Sodium	**10.3**	mg/L	1.0	0.58	1	08/18/23 10:36	08/18/23 21:18	7440-23-5	
Calcium	**136**	mg/L	1.0	0.12	1	08/18/23 10:36	08/18/23 21:18	7440-70-2	
Magnesium	**18.2**	mg/L	0.050	0.012	1	08/18/23 10:36	08/18/23 21:18	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 16:43	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/16/23 14:27	08/22/23 16:43	7440-38-2	
Barium	**0.057**	mg/L	0.0050	0.00067	1	08/16/23 14:27	08/22/23 16:43	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/16/23 14:27	08/22/23 16:43	7440-41-7	
Boron	**1.6**	mg/L	0.40	0.086	10	08/16/23 14:27	08/23/23 19:25	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 14:27	08/22/23 16:43	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 14:27	08/22/23 16:43	7440-47-3	
Cobalt	**0.0028J**	mg/L	0.0050	0.00039	1	08/16/23 14:27	08/22/23 16:43	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 14:27	08/22/23 16:43	7439-92-1	
Lithium	**0.0017J**	mg/L	0.030	0.00073	1	08/16/23 14:27	08/22/23 16:43	7439-93-2	
Molybdenum	**0.21**	mg/L	0.010	0.00074	1	08/16/23 14:27	08/22/23 16:43	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/16/23 14:27	08/22/23 16:43	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/16/23 14:27	08/22/23 16:43	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/17/23 12:00	08/17/23 15:37	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**594**	mg/L	25.0	25.0	1		08/15/23 16:57		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**150**	mg/L	5.0	5.0	1		08/16/23 15:50		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 15:50		
Alkalinity, Total as CaCO3	**150**	mg/L	5.0	5.0	1		08/16/23 15:50		
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 06:30	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**47.5**	mg/L	1.0	0.60	1		08/15/23 23:14	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Sample: HAM-PT-09 **Lab ID: 92682397003** Collected: 08/09/23 14:42 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.26**	mg/L	0.10	0.050	1		08/15/23 23:14	16984-48-8	
Sulfate	**188**	mg/L	4.0	2.0	4		08/16/23 09:59	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Sample: HAM-PT-10 **Lab ID: 92682397004** Collected: 08/09/23 13:05 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**2.9**	mg/L	0.040	0.025	1	08/23/23 12:06	08/23/23 21:33	7439-89-6	
Manganese	**3.1**	mg/L	0.040	0.011	1	08/23/23 12:06	08/23/23 21:33	7439-96-5	
Potassium	**6.7**	mg/L	0.50	0.15	1	08/23/23 12:06	08/23/23 21:33	7440-09-7	M1
Sodium	**9.4**	mg/L	1.0	0.58	1	08/23/23 12:06	08/23/23 21:33	7440-23-5	M1
Calcium	**116**	mg/L	1.0	0.12	1	08/23/23 12:06	08/23/23 21:33	7440-70-2	M1
Magnesium	**16.8**	mg/L	0.050	0.012	1	08/23/23 12:06	08/23/23 21:33	7439-95-4	M1
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.0012	1	08/16/23 14:27	08/22/23 16:51	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/16/23 14:27	08/22/23 16:51	7440-38-2	
Barium	**0.070**	mg/L	0.0050	0.00067	1	08/16/23 14:27	08/22/23 16:51	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/16/23 14:27	08/22/23 16:51	7440-41-7	
Boron	**2.1**	mg/L	0.40	0.086	10	08/16/23 14:27	08/23/23 19:48	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 14:27	08/22/23 16:51	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 14:27	08/22/23 16:51	7440-47-3	
Cobalt	**0.0019J**	mg/L	0.0050	0.00039	1	08/16/23 14:27	08/22/23 16:51	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 14:27	08/22/23 16:51	7439-92-1	
Lithium	**0.0012J**	mg/L	0.030	0.00073	1	08/16/23 14:27	08/22/23 16:51	7439-93-2	
Molybdenum	**0.096**	mg/L	0.010	0.00074	1	08/16/23 14:27	08/22/23 16:51	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/16/23 14:27	08/22/23 16:51	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/16/23 14:27	08/22/23 16:51	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 12:00	08/17/23 15:39	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**553**	mg/L	25.0	25.0	1		08/15/23 16:57		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**199**	mg/L	5.0	5.0	1		08/16/23 16:00		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 16:00		
Alkalinity, Total as CaCO3	**199**	mg/L	5.0	5.0	1		08/16/23 16:00		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	**0.045J**	mg/L	0.10	0.022	1		08/15/23 06:30	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**62.5**	mg/L	1.0	0.60	1		08/15/23 23:42	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Sample: HAM-PT-10 **Lab ID: 92682397004** Collected: 08/09/23 13:05 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.27**	mg/L	0.10	0.050	1		08/15/23 23:42	16984-48-8	
Sulfate	**123**	mg/L	3.0	1.5	3		08/16/23 10:27	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Sample: HAM-MW-53 **Lab ID: 92682397005** Collected: 08/09/23 16:40 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	**1.5**	mg/L	0.040	0.0086	1	08/17/23 10:25	08/22/23 20:17	7440-42-8	
Molybdenum	**0.14**	mg/L	0.010	0.00074	1	08/17/23 10:25	08/22/23 20:17	7439-98-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Sample: HAM-MW-54 **Lab ID: 92682397006** 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								
Arsenic	**0.085**	mg/L	0.010	0.0037	1	08/17/23 10:25	08/22/23 20:23	7440-38-2	
Boron	**0.45**	mg/L	0.040	0.0086	1	08/17/23 10:25	08/22/23 20:23	7440-42-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Sample: HAM-AP1-FD-06 **Lab ID: 92682397007** 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
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**21.3**	mg/L	0.040	0.025	1	08/23/23 12:06	08/23/23 21:54	7439-89-6	
Manganese	**6.8**	mg/L	0.040	0.011	1	08/23/23 12:06	08/23/23 21:54	7439-96-5	
Potassium	**5.6**	mg/L	0.50	0.15	1	08/23/23 12:06	08/23/23 21:54	7440-09-7	
Sodium	**6.3**	mg/L	1.0	0.58	1	08/23/23 12:06	08/23/23 21:54	7440-23-5	
Calcium	**128**	mg/L	1.0	0.12	1	08/23/23 12:06	08/23/23 21:54	7440-70-2	
Magnesium	**16.7**	mg/L	0.050	0.012	1	08/23/23 12:06	08/23/23 21:54	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.0012	1	08/17/23 10:25	08/22/23 20:29	7440-36-0	
Arsenic	**0.36**	mg/L	0.010	0.0037	1	08/17/23 10:25	08/22/23 20:29	7440-38-2	
Barium	**0.047**	mg/L	0.0050	0.00067	1	08/17/23 10:25	08/22/23 20:29	7440-39-3	
Beryllium	**0.000065J**	mg/L	0.00050	0.000054	1	08/17/23 10:25	08/22/23 20:29	7440-41-7	
Boron	**0.90**	mg/L	0.040	0.0086	1	08/17/23 10:25	08/22/23 20:29	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/17/23 10:25	08/22/23 20:29	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/17/23 10:25	08/23/23 17:24	7440-47-3	
Cobalt	**0.034**	mg/L	0.0050	0.00039	1	08/17/23 10:25	08/22/23 20:29	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/17/23 10:25	08/22/23 20:29	7439-92-1	
Lithium	**0.066**	mg/L	0.030	0.00073	1	08/17/23 10:25	08/22/23 20:29	7439-93-2	
Molybdenum	**0.0068J**	mg/L	0.010	0.00074	1	08/17/23 10:25	08/22/23 20:29	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/17/23 10:25	08/22/23 20:29	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/17/23 10:25	08/22/23 20:29	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/17/23 12:00	08/17/23 15:42	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**699**	mg/L	25.0	25.0	1		08/15/23 16:57		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**111**	mg/L	5.0	5.0	1		08/16/23 16:12		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 16:12		
Alkalinity, Total as CaCO3	**111**	mg/L	5.0	5.0	1		08/16/23 16:12		
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 06:31	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**14.6**	mg/L	1.0	0.60	1		08/16/23 03:19	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Sample: HAM-AP1-FD-06 **Lab ID: 92682397007** 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
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.29**	mg/L	0.10	0.050	1		08/16/23 03:19	16984-48-8	
Sulfate	**293**	mg/L	6.0	3.0	6		08/16/23 12:22	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Huntersville, NC 28078
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ANALYTICAL RESULTS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Sample: HAM-AP1-FB-06 **Lab ID: 92682397008** Collected: 08/09/23 16:50 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	ND	mg/L	0.040	0.025	1	08/23/23 12:06	08/23/23 21:59	7439-89-6	
Manganese	ND	mg/L	0.040	0.011	1	08/23/23 12:06	08/23/23 21:59	7439-96-5	
Potassium	ND	mg/L	0.50	0.15	1	08/23/23 12:06	08/23/23 21:59	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	08/23/23 12:06	08/23/23 21:59	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	08/23/23 12:06	08/23/23 21:59	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	08/23/23 12:06	08/23/23 21:59	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	08/17/23 10:25	08/22/23 20:35	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/17/23 10:25	08/22/23 20:35	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	08/17/23 10:25	08/22/23 20:35	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/17/23 10:25	08/22/23 20:35	7440-41-7	
Boron	**0.012J**	mg/L	0.040	0.0086	1	08/17/23 10:25	08/22/23 20:35	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/17/23 10:25	08/22/23 20:35	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/17/23 10:25	08/23/23 17:28	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/17/23 10:25	08/22/23 20:35	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/17/23 10:25	08/22/23 20:35	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/17/23 10:25	08/22/23 20:35	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/17/23 10:25	08/22/23 20:35	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/17/23 10:25	08/22/23 20:35	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/17/23 10:25	08/22/23 20:35	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/17/23 12:00	08/17/23 15:44	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		08/15/23 16:57		
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 16:22		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 16:22		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		08/16/23 16:22		
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 06:32	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		08/16/23 03:33	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Sample: HAM-AP1-FB-06 **Lab ID: 92682397008** Collected: 08/09/23 16:50 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		08/16/23 03:33	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		08/16/23 03:33	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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QUALITY CONTROL DATA

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

QC Batch: 793618
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92682397001, 92682397002, 92682397003

METHOD BLANK: 4112489 Matrix: Water
Associated Lab Samples: 92682397001, 92682397002, 92682397003

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	92682392001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

QC Batch: 795409
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92682397004, 92682397007, 92682397008

METHOD BLANK: 4121384 Matrix: Water
Associated Lab Samples: 92682397004, 92682397007, 92682397008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/23/23 21:12	
Iron	mg/L	ND	0.040	0.025	08/23/23 21:12	
Magnesium	mg/L	ND	0.050	0.012	08/23/23 21:12	
Manganese	mg/L	ND	0.040	0.011	08/23/23 21:12	
Potassium	mg/L	ND	0.50	0.15	08/23/23 21:12	
Sodium	mg/L	ND	1.0	0.58	08/23/23 21:12	

LABORATORY CONTROL SAMPLE: 4121385

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.93J	93	80-120	
Iron	mg/L	1	1.0	102	80-120	
Magnesium	mg/L	1	1.1	109	80-120	
Manganese	mg/L	1	1.0	105	80-120	
Potassium	mg/L	1	1.0	100	80-120	
Sodium	mg/L	1	1.1	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4121386 4121387

Parameter	Units	92682397004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	116	1	1	112	116	-370	-33	75-125	3	20	M1
Iron	mg/L	2.9	1	1	3.7	3.8	84	95	75-125	3	20	
Magnesium	mg/L	16.8	1	1	17.0	17.5	22	63	75-125	2	20	M1
Manganese	mg/L	3.1	1	1	4.0	4.0	83	90	75-125	2	20	
Potassium	mg/L	6.7	1	1	7.5	7.7	73	98	75-125	3	20	M1
Sodium	mg/L	9.4	1	1	9.9	10.3	54	92	75-125	4	20	M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

QC Batch: 794002
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92682397001, 92682397002, 92682397003, 92682397004

METHOD BLANK: 4114214 Matrix: Water
Associated Lab Samples: 92682397001, 92682397002, 92682397003, 92682397004

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	92682396010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.0014J	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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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(704)875-9092

QUALITY CONTROL DATA

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4114216 4114217

Parameter	Units	92682396010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.042	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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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

QC Batch: 794177
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92682397005, 92682397006, 92682397007, 92682397008

METHOD BLANK: 4115107 Matrix: Water
Associated Lab Samples: 92682397005, 92682397006, 92682397007, 92682397008

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 Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4115109 4115110

Parameter	Units	92681886001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.039	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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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

QC Batch: 794154
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92682397001, 92682397002, 92682397003, 92682397004, 92682397007, 92682397008

METHOD BLANK: 4115033 Matrix: Water
Associated Lab Samples: 92682397001, 92682397002, 92682397003, 92682397004, 92682397007, 92682397008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	08/17/23 15:13	

LABORATORY CONTROL SAMPLE: 4115034

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0023	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4115035 4115036

Parameter	Units	92682397001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0024	0.0024	94	94	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

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: 92682397001, 92682397002, 92682397003, 92682397004, 92682397007, 92682397008

METHOD BLANK: 4112841 Matrix: Water
Associated Lab Samples: 92682397001, 92682397002, 92682397003, 92682397004, 92682397007, 92682397008

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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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

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: 92682397001, 92682397002, 92682397003, 92682397004, 92682397007, 92682397008

METHOD BLANK: 4113632 Matrix: Water
Associated Lab Samples: 92682397001, 92682397002, 92682397003, 92682397004, 92682397007, 92682397008

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 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	464	50	50	487	487	47	46	80-120	0	25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4113637 4113638

Parameter	Units	92682175002 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	12.5	50	50	65.7	65.4	106	106	80-120	0	25	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

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: 92682397001, 92682397002, 92682397003, 92682397004, 92682397007, 92682397008

METHOD BLANK: 4111958 Matrix: Water
Associated Lab Samples: 92682397001, 92682397002, 92682397003, 92682397004, 92682397007, 92682397008

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 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	0.45	99	89	80-120	11	10	R1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4111962 4111963

Parameter	Units	92682397007 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	0.53	0.55	104	108	80-120	4	10	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

QC Batch: 793550
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92682397001

METHOD BLANK: 4112126 Matrix: Water
Associated Lab Samples: 92682397001

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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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

QC Batch: 793553
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92682397002, 92682397003, 92682397004, 92682397007, 92682397008

METHOD BLANK: 4112135 Matrix: Water
Associated Lab Samples: 92682397002, 92682397003, 92682397004, 92682397007, 92682397008

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	92682397002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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	92682398009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	13.6	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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REPORT OF LABORATORY ANALYSIS

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(704)875-9092

QUALIFIERS

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

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

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-1 (CCR-CA)
Pace Project No.: 92682397

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92682397001	**HAM-PT-07**	EPA 3010A	793618	EPA 6010D	794582
92682397002	**HAM-PT-08**	EPA 3010A	793618	EPA 6010D	794582
92682397003	**HAM-PT-09**	EPA 3010A	793618	EPA 6010D	794582
92682397004	**HAM-PT-10**	EPA 3010A	795409	EPA 6010D	795455
92682397007	**HAM-AP1-FD-06**	EPA 3010A	795409	EPA 6010D	795455
92682397008	**HAM-AP1-FB-06**	EPA 3010A	795409	EPA 6010D	795455
92682397001	**HAM-PT-07**	EPA 3005A	794002	EPA 6020B	794064
92682397002	**HAM-PT-08**	EPA 3005A	794002	EPA 6020B	794064
92682397003	**HAM-PT-09**	EPA 3005A	794002	EPA 6020B	794064
92682397004	**HAM-PT-10**	EPA 3005A	794002	EPA 6020B	794064
92682397005	**HAM-MW-53**	EPA 3005A	794177	EPA 6020B	794304
92682397006	**HAM-MW-54**	EPA 3005A	794177	EPA 6020B	794304
92682397007	**HAM-AP1-FD-06**	EPA 3005A	794177	EPA 6020B	794304
92682397008	**HAM-AP1-FB-06**	EPA 3005A	794177	EPA 6020B	794304
92682397001	**HAM-PT-07**	EPA 7470A	794154	EPA 7470A	794256
92682397002	**HAM-PT-08**	EPA 7470A	794154	EPA 7470A	794256
92682397003	**HAM-PT-09**	EPA 7470A	794154	EPA 7470A	794256
92682397004	**HAM-PT-10**	EPA 7470A	794154	EPA 7470A	794256
92682397007	**HAM-AP1-FD-06**	EPA 7470A	794154	EPA 7470A	794256
92682397008	**HAM-AP1-FB-06**	EPA 7470A	794154	EPA 7470A	794256
92682397001	**HAM-PT-07**	SM 2540C-2015	793700		
92682397002	**HAM-PT-08**	SM 2540C-2015	793700		
92682397003	**HAM-PT-09**	SM 2540C-2015	793700		
92682397004	**HAM-PT-10**	SM 2540C-2015	793700		
92682397007	**HAM-AP1-FD-06**	SM 2540C-2015	793700		
92682397008	**HAM-AP1-FB-06**	SM 2540C-2015	793700		
92682397001	**HAM-PT-07**	SM 2320B-2011	793896		
92682397002	**HAM-PT-08**	SM 2320B-2011	793896		
92682397003	**HAM-PT-09**	SM 2320B-2011	793896		
92682397004	**HAM-PT-10**	SM 2320B-2011	793896		
92682397007	**HAM-AP1-FD-06**	SM 2320B-2011	793896		
92682397008	**HAM-AP1-FB-06**	SM 2320B-2011	793896		
92682397001	**HAM-PT-07**	SM 4500-S2D-2011	793500		
92682397002	**HAM-PT-08**	SM 4500-S2D-2011	793500		
92682397003	**HAM-PT-09**	SM 4500-S2D-2011	793500		
92682397004	**HAM-PT-10**	SM 4500-S2D-2011	793500		
92682397007	**HAM-AP1-FD-06**	SM 4500-S2D-2011	793500		
92682397008	**HAM-AP1-FB-06**	SM 4500-S2D-2011	793500		
92682397001	**HAM-PT-07**	EPA 300.0 Rev 2.1 1993	793550		
92682397002	**HAM-PT-08**	EPA 300.0 Rev 2.1 1993	793553		
92682397003	**HAM-PT-09**	EPA 300.0 Rev 2.1 1993	793553		
92682397004	**HAM-PT-10**	EPA 300.0 Rev 2.1 1993	793553		
92682397007	**HAM-AP1-FD-06**	EPA 300.0 Rev 2.1 1993	793553		
92682397008	**HAM-AP1-FB-06**	EPA 300.0 Rev 2.1 1993	793553		

Pace ANALYTICAL SERVICES

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#: 92682397

92682397

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

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☐ No

Date/Initials Person Examining Contents: 8/11/23 TS

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ ~~None~~ ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☐ ~~N/A~~

Thermometer: ☑ ~~IR Gun~~ ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 3.1 **Correction Factor:** Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 3.1

Temp should be above freezing to 6°C

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

USDA Regulated Soil (☐ N/A, water sample)

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date: 8/14/23

Project Manager SRF Review: Date: 8/14/23

Qualtrax ID: 69614

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

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

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

***Check all unpreserved Nitrates for chlorine

Project # WO#:92682397

PM: BV Due Date: 08/28/23

CLIENT: 92-GR-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			1	1																						
2		2	1			1	1																						
3		2	1			1	1																						
4		2	1			1	1																						
5						1	1																						
6						1	1																						
7		2	1			1	1																						
8		2	1			1	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.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

Section A Required Client Information:

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

Section B Required Project Information:

Report To:	SCS Contacts
Copy To:	Geosyntec Contacts
Purchase Order No.:	
Project Name:	Hammond AP-1
Project Number:	

Section C Invoice Information:

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

REGULATORY AGENCY

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

Site Location STATE: GA

Section D Required Client Information

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

Valid Matrix Codes

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analysis Test: Chloride, Fluoride, Sulfate	Full App. III and IV metals	Major Ions (Profile 10839-2)	TDS	Boron and Molybdenum	Boron and Arsenic	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 92682397
1	HAM-PT-07	WG	G	8/9/2023	1759			21	5	3		1					1	N	X	X	X	X			N	001
2	HAM-PT-08	WG	G	8/9/2023	1050			21	5	3		1					1	N	X	X	X	X			N	002
3	HAM-PT-09	WG	G	8/9/2023	1442			22	5	3		1					1	N	X	X	X	X			N	003
4	HAM-PT-10	WG	G	8/9/2023	1305			22	5	3		1					1	N	X	X	X	X			N	004
5	HAM-MW-53	WG	G	8/9/2023	1640			20	1			1						N					X		N	005
6	HAM-MW-54	WG	G	8/9/2023	1651			23	1			1						N						X	N	006
7	HAM-AP1-FD-06	WG	G	8/9/2023	0000			22	5	3		1					1	N	X	X	X	X			N	007
8	HAM-AP1-FB-06	WQ	G	8/9/2023	1650	TK 8/9/2023		22	5	3		1					1	N	X	X	X	X			N	008
9																										Last Sample
10																										
11																										
12						TK 8/9/2023																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-CA-20230809	Thomas Kessler / Geosyntec	8/11/2023	1312	Ryan Williams / Pace	8/11/2023	1312	
	Ryan Williams / Pace	8/11/2023	1535	Elizabeth McDonnell	8/11/23	1535	

SAMPLER NAME AND SIGNATURE

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

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 08/09/2023

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.

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

September 12, 2023

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

RE: Project: Hammond AP-1
Pace Project No.: 92685665

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory on August 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 - 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.
Thomas Kessler, Geosyntec Consultants
Whitney Law, Geosyntec Consultants
Laura Midkiff, Southern Company
Caroline Nelson, Geosyntec

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

CERTIFICATIONS

Project: Hammond AP-1
Pace Project No.: 92685665

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

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Hammond AP-1
Pace Project No.: 92685665

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92685665001	**HAM-PT-09**	Water	08/30/23 12:08	08/31/23 08:54
92685665002	**HAM-PT-10**	Water	08/30/23 13:10	08/31/23 08:54

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

SAMPLE ANALYTE COUNT

Project: Hammond AP-1
Pace Project No.: 92685665

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92685665001	**HAM-PT-09**	EPA 6020B	CW1	2
92685665002	**HAM-PT-10**	EPA 6020B	CW1	2

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

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92685665

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92685665001	**HAM-PT-09**					
EPA 6020B	Boron	1.8	mg/L	0.040	09/09/23 17:03	
EPA 6020B	Molybdenum	0.23	mg/L	0.010	09/09/23 17:03	
92685665002	**HAM-PT-10**					
EPA 6020B	Boron	2.3	mg/L	0.040	09/09/23 17:11	
EPA 6020B	Molybdenum	0.096	mg/L	0.010	09/09/23 17:11	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92685665

Sample: HAM-PT-09 **Lab ID: 92685665001** Collected: 08/30/23 12:08 Received: 08/31/23 08:54 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	**1.8**	mg/L	0.040	0.0086	1	09/05/23 11:22	09/09/23 17:03	7440-42-8	
Molybdenum	**0.23**	mg/L	0.010	0.00074	1	09/05/23 11:22	09/09/23 17:03	7439-98-7	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92685665

Sample: HAM-PT-10 **Lab ID: 92685665002** Collected: 08/30/23 13:10 Received: 08/31/23 08:54 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	**2.3**	mg/L	0.040	0.0086	1	09/05/23 11:22	09/09/23 17:11	7440-42-8	
Molybdenum	**0.096**	mg/L	0.010	0.00074	1	09/05/23 11:22	09/09/23 17:11	7439-98-7	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92685665

QC Batch: 797729
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92685665001, 92685665002

METHOD BLANK: 4131985 Matrix: Water
Associated Lab Samples: 92685665001, 92685665002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Boron	mg/L	ND	0.040	0.0086	09/09/23 16:13	
Molybdenum	mg/L	ND	0.010	0.00074	09/09/23 16:13	

LABORATORY CONTROL SAMPLE: 4131986

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	mg/L	1	0.97	97	80-120	
Molybdenum	mg/L	0.1	0.095	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4131987 4131988

Parameter	Units	92683381053 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	mg/L	1.6	1	1	2.8	2.6	111	99	75-125	4	20	
Molybdenum	mg/L	0.019	0.1	0.1	0.13	0.12	106	105	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

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

QUALIFIERS

Project: Hammond AP-1
Pace Project No.: 92685665

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.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-1
Pace Project No.: 92685665

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92685665001	**HAM-PT-09**	EPA 3005A	797729	EPA 6020B	797807
92685665002	**HAM-PT-10**	EPA 3005A	797729	EPA 6020B	797807

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: of

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: GA Power	Report To: SCS Contacts	Attention: Southern Co.
Address: Atlanta, GA	Copy To: Geosyntec Contacts	Company Name:
		Address:
Email To: SCS Contacts	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: Hammond AP-1	Pace Project Manager: Bonnie Vang
Requested Due Date/TAT: 10 Day	Project Number:	Pace Profile #: 10839

REGULATORY AGENCY

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

Site Location STATE: GA

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information: SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX / CODE: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS	MATRIX CODE (See valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Boron and Molybdenum								Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																				Y/N	N	N	N	N	N	N				
1	HAM-PT-09		WG	G	8/30/23	1208			21	1			1								X								N	
2	HAM-PT-10		WG	G	8/30/23	1310			21	1			1								X								N	
3																														
4																														
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-CA [redacted] 20230880	Thomas Kessler/Geosyntec	8/31/23	0800	Tristan Orndorff/Geosyntec	8/31/23	0800	
	Tristan Orndorff/Geosyntec	8/31/23	0854	Ryan Williams/Pace	8/31/23	0854	
	Ryan Williams/Pace	8/31/23	1248	[signature] Pace	8/31/23	12 18	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Kessler

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 8/30/23

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

WO# : 92685665

92685665

...ms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

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

Pace ANALYTICAL SERVICES	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#: 92685665

PM: BV Due Date: 09/15/23

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: 8-31-23 JH

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ **Date:** _____

Project Manager SRF Review: _____ **Date:** _____

Pace ANALYTICAL SERVICES

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# : 92685665

PM: BV **Due Date: 09/15/23**

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

pH Adjustment Log for Preserved Samples

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

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

October 2023

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

October 06, 2023

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

RE: Project: Hammond AP-1
Pace Project No.: 92691444

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

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

CERTIFICATIONS

Project: Hammond AP-1
Pace Project No.: 92691444

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

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

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

SAMPLE SUMMARY

Project: Hammond AP-1
Pace Project No.: 92691444

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92691444001	**HAM-PT-09**	Water	10/03/23 19:35	10/04/23 10:10
92691444002	**HAM-PT-10**	Water	10/03/23 11:33	10/04/23 10:10

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Hammond AP-1
Pace Project No.: 92691444

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92691444001	**HAM-PT-09**	EPA 6020B	CW1	2
		EPA 300.0 Rev 2.1 1993	CDC	1
92691444002	**HAM-PT-10**	EPA 6020B	CW1	2
		EPA 300.0 Rev 2.1 1993	CDC	1

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

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92691444

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92691444001	**HAM-PT-09**					
EPA 6020B	Iron	0.35	mg/L	0.040	10/05/23 14:45	
EPA 6020B	Molybdenum	0.20	mg/L	0.010	10/05/23 14:45	
EPA 300.0 Rev 2.1 1993	Sulfate	53.9	mg/L	1.0	10/04/23 22:23	
92691444002	**HAM-PT-10**					
EPA 6020B	Iron	1.6	mg/L	0.040	10/05/23 15:04	
EPA 6020B	Molybdenum	0.16	mg/L	0.010	10/05/23 15:04	
EPA 300.0 Rev 2.1 1993	Sulfate	203	mg/L	4.0	10/04/23 23:22	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92691444

Sample: HAM-PT-09 **Lab ID: 92691444001** Collected: 10/03/23 19:35 Received: 10/04/23 10:10 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								
Iron	**0.35**	mg/L	0.040	0.030	1	10/05/23 09:16	10/05/23 14:45	7439-89-6	
Molybdenum	**0.20**	mg/L	0.010	0.00074	1	10/05/23 09:16	10/05/23 14:45	7439-98-7	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	**53.9**	mg/L	1.0	0.50	1		10/04/23 22:23	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92691444

Sample: HAM-PT-10 **Lab ID: 92691444002** Collected: 10/03/23 11:33 Received: 10/04/23 10:10 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								
Iron	**1.6**	mg/L	0.040	0.030	1	10/05/23 09:16	10/05/23 15:04	7439-89-6	
Molybdenum	**0.16**	mg/L	0.010	0.00074	1	10/05/23 09:16	10/05/23 15:04	7439-98-7	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	**203**	mg/L	4.0	2.0	4		10/04/23 23:22	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92691444

QC Batch: 804293
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92691444001, 92691444002

METHOD BLANK: 4165329 Matrix: Water
Associated Lab Samples: 92691444001, 92691444002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Iron	mg/L	ND	0.040	0.030	10/05/23 14:36	
Molybdenum	mg/L	ND	0.010	0.00074	10/05/23 14:36	

LABORATORY CONTROL SAMPLE: 4165330

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	mg/L	1	1.0	103	80-120	
Molybdenum	mg/L	0.1	0.10	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4165331 4165332

Parameter	Units	92691444001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	mg/L	0.35	1	1	1.4	1.5	105	118	75-125	9	20	
Molybdenum	mg/L	0.20	0.1	0.1	0.31	0.31	107	107	75-125	0	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-1
Pace Project No.: 92691444

QC Batch: 804218
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92691444001, 92691444002

METHOD BLANK: 4165129 Matrix: Water
Associated Lab Samples: 92691444001, 92691444002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	0.50	10/04/23 21:53	

LABORATORY CONTROL SAMPLE: 4165130

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	50	48.4	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4165131 4165132

Parameter	Units	92691489001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	2.7	50	50	48.8	51.6	92	98	90-110	6	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4165133 4165134

Parameter	Units	92691367007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	1.5	50	50	49.4	50.8	96	99	90-110	3	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Hammond AP-1
Pace Project No.: 92691444

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.

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(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-1
Pace Project No.: 92691444

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92691444001	**HAM-PT-09**	EPA 3005A	804293	EPA 6020B	804403
92691444002	**HAM-PT-10**	EPA 3005A	804293	EPA 6020B	804403
92691444001	**HAM-PT-09**	EPA 300.0 Rev 2.1 1993	804218		
92691444002	**HAM-PT-10**	EPA 300.0 Rev 2.1 1993	804218		

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

aboratory receiving samples:

Asheville ☐ **Eden** ☐ **Greenwood** ☐ **Huntersville** ☐ **Raleigh** ☐ **Mechanicsville** ☐ **Atlanta** ☑ **Kernersville** ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #:

WO# : 92691444

92691444

Courier: ☐ Commercial ☐ Fed Ex ☐ Pace ☐ UPS ☐ USPS ☐ Other:___ ☑ Client

Custody Seal Present? ☑ Yes ☐ No **Seals Intact?** ☑ Yes ☐ No

Date/Initials Person Examining Contents: 10-4-23 AK

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: 3.8 **Correction Factor:** Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 3.8

Temp should be above freezing to 6°C

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

USDA Regulated Soil (☐ N/A, water sample)

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

LIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ **Date:** _____

Project Manager SRF Review: _____ **Date:** _____

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

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

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

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

Project #

WO#: 92691444

PM: BV Due Date: 10/06/23

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																													
3																													
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

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

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

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: of

Section A Required Client Information:

Company:	GA Power
Address:	Atlanta, GA
Email To:	SCS Contacts
Phone:	Fax:
Requested Due Date/TAT:	48 hr

Section B Required Project Information:

Report To:	SCS Contacts
Copy To:	Geosyntec Contacts
Purchase Order No.:	
Project Name:	Hammond AP-1
Project Number:	

Section C Invoice Information:

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

REGULATORY AGENCY

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

Site Location STATE: GA

Section D Required Client Information

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

Valid Matrix Codes

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Analysis Test: Boron and Molybdenum, Total	Analysis Test: Boron, Dissolved, After Field Filtration	Analysis Test: Sulfate	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	HAM-PT-09	WG	G	10/03/2023	1935			21	2	1		1						N	X	X	X	N	001
2	HAM-PT-10	WG	G	10/03/2023	1133			21	2	1		1						N	X	X	X	N	002
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

Requested Analysis Filtered (Y/N)

Residual Chlorine (Y/N)

Pace Project No./ Lab I.D. 92691444

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-CA-20231003	Thomas Kessler / Geo	10/10/2023	1010	Ryan Williams / Pace	10/4/2023	1010	
	Ryan Williams / Pace	10/4/2023	1210		10-4	1210	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Kessler, Manasa Sadhasivan

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10/03/2023

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.

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

October 18, 2023

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

RE: Project: Hammond AP-1 CA Week 1
Pace Project No.: 92692726

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

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

CERTIFICATIONS

Project: Hammond AP-1 CA Week 1
Pace Project No.: 92692726

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

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

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
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SAMPLE SUMMARY

Project: Hammond AP-1 CA Week 1
Pace Project No.: 92692726

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92692726001	**HAM-PT-09**	Water	10/10/23 11:35	10/11/23 13:25
92692726002	**HAM-PT-10**	Water	10/10/23 13:39	10/11/23 13:25
92692726003	**HAM-AP1-EB-01**	Water	10/10/23 14:05	10/11/23 13:25
92692726004	**HAM-AP1-FB-01**	Water	10/10/23 14:00	10/11/23 13:25
92692726005	**HAM-AP1-FD-01**	Water	10/10/23 00:00	10/11/23 13:25

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SAMPLE ANALYTE COUNT

Project: Hammond AP-1 CA Week 1
Pace Project No.: 92692726

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92692726001	**HAM-PT-09**	EPA 6010D	DRB	5
		EPA 6020B	CW1	14
		EPA 7470A	VB	1
		SM 2320B-2011	SMS	3
		SM 2540C-2015	RVS	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92692726002	**HAM-PT-10**	EPA 6010D	DRB	5
		EPA 6020B	CW1	14
		EPA 7470A	VB	1
		SM 2320B-2011	SMS	3
		SM 2540C-2015	RVS	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92692726003	**HAM-AP1-EB-01**	EPA 6010D	DRB	5
		EPA 6020B	CW1	14
		EPA 7470A	VB	1
		SM 2320B-2011	SMS	3
		SM 2540C-2015	RVS	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92692726004	**HAM-AP1-FB-01**	EPA 6010D	DRB	5
		EPA 6020B	CW1	14
		EPA 7470A	VB	1
		SM 2320B-2011	SMS	3
		SM 2540C-2015	RVS	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92692726005	**HAM-AP1-FD-01**	EPA 6010D	DRB	5
		EPA 6020B	CW1	14
		EPA 7470A	VB	1
		SM 2320B-2011	SMS	3
		SM 2540C-2015	RVS	1
		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

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

SUMMARY OF DETECTION

Project: Hammond AP-1 CA Week 1
Pace Project No.: 92692726

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92692726001	**HAM-PT-09**					
EPA 6010D	Manganese	0.030J	mg/L	0.040	10/17/23 14:04	
EPA 6010D	Potassium	0.69	mg/L	0.50	10/17/23 14:04	
EPA 6010D	Sodium	0.69J	mg/L	1.0	10/17/23 14:04	
EPA 6010D	Calcium	11.0	mg/L	1.0	10/17/23 14:04	
EPA 6010D	Magnesium	1.9	mg/L	0.050	10/17/23 14:04	
EPA 6020B	Antimony	0.0017J	mg/L	0.0030	10/12/23 16:19	B
EPA 6020B	Barium	0.063	mg/L	0.0050	10/12/23 16:19	
EPA 6020B	Boron	0.61	mg/L	0.040	10/12/23 16:19	
EPA 6020B	Cobalt	0.00063J	mg/L	0.0050	10/12/23 16:19	
EPA 6020B	Iron	0.089	mg/L	0.040	10/12/23 16:19	
EPA 6020B	Lithium	0.0012J	mg/L	0.030	10/13/23 13:33	
EPA 6020B	Molybdenum	0.20	mg/L	0.010	10/12/23 16:19	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	112	mg/L	5.0	10/13/23 11:18	
SM 2320B-2011	Alkalinity, Total as CaCO3	112	mg/L	5.0	10/13/23 11:18	
SM 2540C-2015	Total Dissolved Solids	257	mg/L	25.0	10/12/23 23:56	
EPA 300.0 Rev 2.1 1993	Chloride	13.0	mg/L	1.0	10/12/23 22:08	
EPA 300.0 Rev 2.1 1993	Fluoride	0.38	mg/L	0.10	10/12/23 22:08	
EPA 300.0 Rev 2.1 1993	Sulfate	71.6	mg/L	1.0	10/12/23 22:08	
92692726002	**HAM-PT-10**					
EPA 6010D	Manganese	1.6	mg/L	0.20	10/17/23 14:14	
EPA 6010D	Potassium	6.1	mg/L	2.5	10/17/23 14:14	M1
EPA 6010D	Sodium	8.4	mg/L	5.0	10/17/23 14:14	M1
EPA 6010D	Calcium	125	mg/L	5.0	10/17/23 14:14	M1
EPA 6010D	Magnesium	16.7	mg/L	0.25	10/17/23 14:14	
EPA 6020B	Barium	0.076	mg/L	0.0050	10/12/23 16:35	
EPA 6020B	Boron	1.7	mg/L	0.040	10/12/23 16:35	
EPA 6020B	Cobalt	0.0022J	mg/L	0.0050	10/12/23 16:35	
EPA 6020B	Iron	1.6	mg/L	0.040	10/12/23 16:35	
EPA 6020B	Molybdenum	0.18	mg/L	0.010	10/12/23 16:35	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	166	mg/L	5.0	10/13/23 11:27	
SM 2320B-2011	Alkalinity, Total as CaCO3	166	mg/L	5.0	10/13/23 11:27	
SM 2540C-2015	Total Dissolved Solids	597	mg/L	25.0	10/12/23 23:56	
EPA 300.0 Rev 2.1 1993	Chloride	46.1	mg/L	1.0	10/12/23 22:22	
EPA 300.0 Rev 2.1 1993	Fluoride	0.30	mg/L	0.10	10/12/23 22:22	
EPA 300.0 Rev 2.1 1993	Sulfate	184	mg/L	4.0	10/13/23 00:29	
92692726003	**HAM-AP1-EB-01**					
EPA 6020B	Boron	0.011J	mg/L	0.040	10/12/23 16:43	
92692726004	**HAM-AP1-FB-01**					
EPA 6020B	Boron	0.0094J	mg/L	0.040	10/12/23 16:47	
92692726005	**HAM-AP1-FD-01**					
EPA 6010D	Manganese	0.15J	mg/L	0.20	10/17/23 15:00	
EPA 6010D	Potassium	4.1	mg/L	2.5	10/17/23 15:00	
EPA 6010D	Sodium	3.7J	mg/L	5.0	10/17/23 15:00	
EPA 6010D	Calcium	55.9	mg/L	5.0	10/17/23 15:00	
EPA 6010D	Magnesium	9.8	mg/L	0.25	10/17/23 15:00	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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SUMMARY OF DETECTION

Project: Hammond AP-1 CA Week 1
Pace Project No.: 92692726

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92692726005	**HAM-AP1-FD-01**					
EPA 6020B	Barium	0.067	mg/L	0.0050	10/12/23 17:09	
EPA 6020B	Boron	0.60	mg/L	0.040	10/12/23 17:09	
EPA 6020B	Cadmium	0.00012J	mg/L	0.00050	10/12/23 17:09	
EPA 6020B	Cobalt	0.00064J	mg/L	0.0050	10/12/23 17:09	
EPA 6020B	Iron	0.091	mg/L	0.040	10/12/23 17:09	
EPA 6020B	Molybdenum	0.21	mg/L	0.010	10/12/23 17:09	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	110	mg/L	5.0	10/13/23 11:46	
SM 2320B-2011	Alkalinity, Total as CaCO3	110	mg/L	5.0	10/13/23 11:46	
SM 2540C-2015	Total Dissolved Solids	255	mg/L	25.0	10/12/23 23:59	
EPA 300.0 Rev 2.1 1993	Chloride	13.0	mg/L	1.0	10/12/23 23:32	
EPA 300.0 Rev 2.1 1993	Fluoride	0.38	mg/L	0.10	10/12/23 23:32	
EPA 300.0 Rev 2.1 1993	Sulfate	71.5	mg/L	1.0	10/12/23 23:32	M1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1 CA Week 1
Pace Project No.: 92692726

Sample: HAM-PT-09 **Lab ID: 92692726001** Collected: 10/10/23 11:35 Received: 10/11/23 13:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Manganese	**0.030J**	mg/L	0.040	0.011	1	10/12/23 11:13	10/17/23 14:04	7439-96-5	
Potassium	**0.69**	mg/L	0.50	0.15	1	10/12/23 11:13	10/17/23 14:04	7440-09-7	
Sodium	**0.69J**	mg/L	1.0	0.58	1	10/12/23 11:13	10/17/23 14:04	7440-23-5	
Calcium	**11.0**	mg/L	1.0	0.12	1	10/12/23 11:13	10/17/23 14:04	7440-70-2	
Magnesium	**1.9**	mg/L	0.050	0.012	1	10/12/23 11:13	10/17/23 14:04	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.0017J**	mg/L	0.0030	0.0012	1	10/12/23 09:39	10/12/23 16:19	7440-36-0	B
Arsenic	ND	mg/L	0.010	0.0037	1	10/12/23 09:39	10/12/23 16:19	7440-38-2	
Barium	**0.063**	mg/L	0.0050	0.00067	1	10/12/23 09:39	10/12/23 16:19	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	10/12/23 09:39	10/12/23 16:19	7440-41-7	
Boron	**0.61**	mg/L	0.040	0.0086	1	10/12/23 09:39	10/12/23 16:19	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	10/12/23 09:39	10/12/23 16:19	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	10/12/23 09:39	10/12/23 16:19	7440-47-3	
Cobalt	**0.00063J**	mg/L	0.0050	0.00039	1	10/12/23 09:39	10/12/23 16:19	7440-48-4	
Iron	**0.089**	mg/L	0.040	0.030	1	10/12/23 09:39	10/12/23 16:19	7439-89-6	
Lead	ND	mg/L	0.0010	0.00012	1	10/12/23 09:39	10/12/23 16:19	7439-92-1	
Lithium	**0.0012J**	mg/L	0.030	0.00073	1	10/12/23 09:39	10/13/23 13:33	7439-93-2	
Molybdenum	**0.20**	mg/L	0.010	0.00074	1	10/12/23 09:39	10/12/23 16:19	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	10/12/23 09:39	10/12/23 16:19	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/12/23 09:39	10/12/23 16:19	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	10/12/23 14:25	10/12/23 17:55	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**112**	mg/L	5.0	5.0	1		10/13/23 11:18		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/13/23 11:18		
Alkalinity, Total as CaCO3	**112**	mg/L	5.0	5.0	1		10/13/23 11:18		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**257**	mg/L	25.0	25.0	1		10/12/23 23:56		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		10/13/23 03:00	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**13.0**	mg/L	1.0	0.60	1		10/12/23 22:08	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Hammond AP-1 CA Week 1
Pace Project No.: 92692726

Sample: HAM-PT-09 **Lab ID: 92692726001** Collected: 10/10/23 11:35 Received: 10/11/23 13:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.38**	mg/L	0.10	0.050	1		10/12/23 22:08	16984-48-8	
Sulfate	**71.6**	mg/L	1.0	0.50	1		10/12/23 22:08	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1 CA Week 1
Pace Project No.: 92692726

Sample: HAM-PT-10 **Lab ID: 92692726002** Collected: 10/10/23 13:39 Received: 10/11/23 13:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Manganese	**1.6**	mg/L	0.20	0.056	5	10/12/23 11:13	10/17/23 14:14	7439-96-5	
Potassium	**6.1**	mg/L	2.5	0.76	5	10/12/23 11:13	10/17/23 14:14	7440-09-7	M1
Sodium	**8.4**	mg/L	5.0	2.9	5	10/12/23 11:13	10/17/23 14:14	7440-23-5	M1
Calcium	**125**	mg/L	5.0	0.61	5	10/12/23 11:13	10/17/23 14:14	7440-70-2	M1
Magnesium	**16.7**	mg/L	0.25	0.059	5	10/12/23 11:13	10/17/23 14:14	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	10/12/23 09:39	10/12/23 16:35	7440-36-0	B
Arsenic	ND	mg/L	0.010	0.0037	1	10/12/23 09:39	10/12/23 16:35	7440-38-2	
Barium	**0.076**	mg/L	0.0050	0.00067	1	10/12/23 09:39	10/12/23 16:35	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	10/12/23 09:39	10/12/23 16:35	7440-41-7	
Boron	**1.7**	mg/L	0.040	0.0086	1	10/12/23 09:39	10/12/23 16:35	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	10/12/23 09:39	10/12/23 16:35	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	10/12/23 09:39	10/12/23 16:35	7440-47-3	
Cobalt	**0.0022J**	mg/L	0.0050	0.00039	1	10/12/23 09:39	10/12/23 16:35	7440-48-4	
Iron	**1.6**	mg/L	0.040	0.030	1	10/12/23 09:39	10/12/23 16:35	7439-89-6	
Lead	ND	mg/L	0.0010	0.00012	1	10/12/23 09:39	10/12/23 16:35	7439-92-1	
Lithium	ND	mg/L	0.30	0.0073	10	10/12/23 09:39	10/13/23 14:53	7439-93-2	D3
Molybdenum	**0.18**	mg/L	0.010	0.00074	1	10/12/23 09:39	10/12/23 16:35	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	10/12/23 09:39	10/12/23 16:35	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/12/23 09:39	10/12/23 16:35	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	10/12/23 14:25	10/12/23 17:58	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**166**	mg/L	5.0	5.0	1		10/13/23 11:27		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/13/23 11:27		
Alkalinity, Total as CaCO3	**166**	mg/L	5.0	5.0	1		10/13/23 11:27		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**597**	mg/L	25.0	25.0	1		10/12/23 23:56		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		10/13/23 03:00	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**46.1**	mg/L	1.0	0.60	1		10/12/23 22:22	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1 CA Week 1
Pace Project No.: 92692726

Sample: HAM-PT-10 **Lab ID: 92692726002** Collected: 10/10/23 13:39 Received: 10/11/23 13:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.30**	mg/L	0.10	0.050	1		10/12/23 22:22	16984-48-8	
Sulfate	**184**	mg/L	4.0	2.0	4		10/13/23 00:29	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1 CA Week 1
Pace Project No.: 92692726

Sample: HAM-AP1-EB-01 **Lab ID: 92692726003** Collected: 10/10/23 14:05 Received: 10/11/23 13:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Manganese	ND	mg/L	0.040	0.011	1	10/12/23 11:13	10/17/23 14:50	7439-96-5	
Potassium	ND	mg/L	0.50	0.15	1	10/12/23 11:13	10/17/23 14:50	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	10/12/23 11:13	10/17/23 14:50	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	10/12/23 11:13	10/17/23 14:50	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	10/12/23 11:13	10/17/23 14:50	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	10/12/23 09:39	10/12/23 16:43	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	10/12/23 09:39	10/12/23 16:43	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	10/12/23 09:39	10/12/23 16:43	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	10/12/23 09:39	10/12/23 16:43	7440-41-7	
Boron	**0.011J**	mg/L	0.040	0.0086	1	10/12/23 09:39	10/12/23 16:43	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	10/12/23 09:39	10/12/23 16:43	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	10/12/23 09:39	10/12/23 16:43	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	10/12/23 09:39	10/12/23 16:43	7440-48-4	
Iron	ND	mg/L	0.040	0.030	1	10/12/23 09:39	10/12/23 16:43	7439-89-6	
Lead	ND	mg/L	0.0010	0.00012	1	10/12/23 09:39	10/12/23 16:43	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	10/12/23 09:39	10/13/23 13:50	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	10/12/23 09:39	10/12/23 16:43	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	10/12/23 09:39	10/12/23 16:43	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/12/23 09:39	10/12/23 16:43	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	10/12/23 14:25	10/12/23 18:13	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/13/23 11:38		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/13/23 11:38		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		10/13/23 11:38		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		10/12/23 23:56		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		10/13/23 03:00	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		10/12/23 22:36	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1 CA Week 1
Pace Project No.: 92692726

Sample: HAM-AP1-EB-01 **Lab ID: 92692726003** Collected: 10/10/23 14:05 Received: 10/11/23 13:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		10/12/23 22:36	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		10/12/23 22:36	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1 CA Week 1
Pace Project No.: 92692726

Sample: HAM-AP1-FB-01 **Lab ID: 92692726004** Collected: 10/10/23 14:00 Received: 10/11/23 13:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Manganese	ND	mg/L	0.040	0.011	1	10/12/23 11:13	10/17/23 14:55	7439-96-5	
Potassium	ND	mg/L	0.50	0.15	1	10/12/23 11:13	10/17/23 14:55	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	10/12/23 11:13	10/17/23 14:55	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	10/12/23 11:13	10/17/23 14:55	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	10/12/23 11:13	10/17/23 14:55	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.0012	1	10/12/23 09:39	10/12/23 16:47	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	10/12/23 09:39	10/12/23 16:47	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	10/12/23 09:39	10/12/23 16:47	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	10/12/23 09:39	10/12/23 16:47	7440-41-7	
Boron	**0.0094J**	mg/L	0.040	0.0086	1	10/12/23 09:39	10/12/23 16:47	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	10/12/23 09:39	10/12/23 16:47	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	10/12/23 09:39	10/12/23 16:47	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	10/12/23 09:39	10/12/23 16:47	7440-48-4	
Iron	ND	mg/L	0.040	0.030	1	10/12/23 09:39	10/12/23 16:47	7439-89-6	
Lead	ND	mg/L	0.0010	0.00012	1	10/12/23 09:39	10/12/23 16:47	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	10/12/23 09:39	10/13/23 13:54	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	10/12/23 09:39	10/12/23 16:47	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	10/12/23 09:39	10/12/23 16:47	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/12/23 09:39	10/12/23 16:47	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	10/12/23 14:25	10/12/23 18:16	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/13/23 11:42		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/13/23 11:42		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		10/13/23 11:42		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		10/12/23 23:59		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		10/13/23 03:01	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		10/12/23 23:18	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Hammond AP-1 CA Week 1
Pace Project No.: 92692726

Sample: HAM-AP1-FB-01 **Lab ID: 92692726004** Collected: 10/10/23 14:00 Received: 10/11/23 13:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		10/12/23 23:18	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		10/12/23 23:18	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1 CA Week 1
Pace Project No.: 92692726

Sample: HAM-AP1-FD-01 **Lab ID: 92692726005** 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
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Manganese	**0.15J**	mg/L	0.20	0.056	5	10/12/23 11:13	10/17/23 15:00	7439-96-5	
Potassium	**4.1**	mg/L	2.5	0.76	5	10/12/23 11:13	10/17/23 15:00	7440-09-7	
Sodium	**3.7J**	mg/L	5.0	2.9	5	10/12/23 11:13	10/17/23 15:00	7440-23-5	
Calcium	**55.9**	mg/L	5.0	0.61	5	10/12/23 11:13	10/17/23 15:00	7440-70-2	
Magnesium	**9.8**	mg/L	0.25	0.059	5	10/12/23 11:13	10/17/23 15:00	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	10/12/23 09:39	10/12/23 17:09	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	10/12/23 09:39	10/12/23 17:09	7440-38-2	
Barium	**0.067**	mg/L	0.0050	0.00067	1	10/12/23 09:39	10/12/23 17:09	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	10/12/23 09:39	10/12/23 17:09	7440-41-7	
Boron	**0.60**	mg/L	0.040	0.0086	1	10/12/23 09:39	10/12/23 17:09	7440-42-8	
Cadmium	**0.00012J**	mg/L	0.00050	0.00011	1	10/12/23 09:39	10/12/23 17:09	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	10/12/23 09:39	10/12/23 17:09	7440-47-3	
Cobalt	**0.00064J**	mg/L	0.0050	0.00039	1	10/12/23 09:39	10/12/23 17:09	7440-48-4	
Iron	**0.091**	mg/L	0.040	0.030	1	10/12/23 09:39	10/12/23 17:09	7439-89-6	
Lead	ND	mg/L	0.0010	0.00012	1	10/12/23 09:39	10/12/23 17:09	7439-92-1	
Lithium	ND	mg/L	0.15	0.0036	5	10/12/23 09:39	10/13/23 14:34	7439-93-2	D3
Molybdenum	**0.21**	mg/L	0.010	0.00074	1	10/12/23 09:39	10/12/23 17:09	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	10/12/23 09:39	10/12/23 17:09	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/12/23 09:39	10/12/23 17:09	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	10/12/23 14:25	10/12/23 18:19	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**110**	mg/L	5.0	5.0	1		10/13/23 11:46		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/13/23 11:46		
Alkalinity, Total as CaCO3	**110**	mg/L	5.0	5.0	1		10/13/23 11:46		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**255**	mg/L	25.0	25.0	1		10/12/23 23:59		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		10/13/23 03:01	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**13.0**	mg/L	1.0	0.60	1		10/12/23 23:32	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1 CA Week 1
Pace Project No.: 92692726

Sample: HAM-AP1-FD-01 **Lab ID: 92692726005** 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
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.38**	mg/L	0.10	0.050	1		10/12/23 23:32	16984-48-8	
Sulfate	**71.5**	mg/L	1.0	0.50	1		10/12/23 23:32	14808-79-8	M1

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1 CA Week 1
Pace Project No.: 92692726

QC Batch: 805851
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92692726001, 92692726002, 92692726003, 92692726004, 92692726005

METHOD BLANK: 4172912 Matrix: Water
Associated Lab Samples: 92692726001, 92692726002, 92692726003, 92692726004, 92692726005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	10/17/23 13:53	
Magnesium	mg/L	ND	0.050	0.012	10/17/23 13:53	
Manganese	mg/L	ND	0.040	0.011	10/17/23 13:53	
Potassium	mg/L	ND	0.50	0.15	10/17/23 13:53	
Sodium	mg/L	ND	1.0	0.58	10/17/23 13:53	

LABORATORY CONTROL SAMPLE: 4172913

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.98J	98	80-120	
Magnesium	mg/L	1	1.0	102	80-120	
Manganese	mg/L	1	1.0	101	80-120	
Potassium	mg/L	1	0.99	99	80-120	
Sodium	mg/L	1	1.1	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4172914 4172915

Parameter	Units	92692726002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	125	1	1	123	126	-143	78	75-125	2	20	M1
Magnesium	mg/L	16.7	1	1	17.5	17.9	78	116	75-125	2	20	
Manganese	mg/L	1.6	1	1	2.6	2.6	95	97	75-125	1	20	
Potassium	mg/L	6.1	1	1	7.1	8.3	97	213	75-125	15	20	M1
Sodium	mg/L	8.4	1	1	9.5	10	107	157	75-125	5	20	M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1 CA Week 1
Pace Project No.: 92692726

QC Batch: 805814
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92692726001, 92692726002, 92692726003, 92692726004, 92692726005

METHOD BLANK: 4172758 Matrix: Water
Associated Lab Samples: 92692726001, 92692726002, 92692726003, 92692726004, 92692726005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.0025J	0.0030	0.0012	10/13/23 13:25	
Arsenic	mg/L	ND	0.010	0.0037	10/12/23 16:11	
Barium	mg/L	ND	0.0050	0.00067	10/12/23 16:11	
Beryllium	mg/L	ND	0.00050	0.000054	10/12/23 16:11	
Boron	mg/L	ND	0.040	0.0086	10/12/23 16:11	
Cadmium	mg/L	ND	0.00050	0.00011	10/12/23 16:11	
Chromium	mg/L	ND	0.0050	0.0011	10/12/23 16:11	
Cobalt	mg/L	ND	0.0050	0.00039	10/12/23 16:11	
Iron	mg/L	ND	0.040	0.030	10/12/23 16:11	
Lead	mg/L	ND	0.0010	0.00012	10/12/23 16:11	
Lithium	mg/L	ND	0.030	0.00073	10/13/23 13:25	
Molybdenum	mg/L	ND	0.010	0.00074	10/12/23 16:11	
Selenium	mg/L	ND	0.0050	0.0014	10/12/23 16:11	
Thallium	mg/L	ND	0.0010	0.00018	10/12/23 16:11	

LABORATORY CONTROL SAMPLE: 4172759

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	0.099	99	80-120	
Barium	mg/L	0.1	0.10	104	80-120	
Beryllium	mg/L	0.1	0.10	101	80-120	
Boron	mg/L	1	0.99	99	80-120	
Cadmium	mg/L	0.1	0.098	98	80-120	
Chromium	mg/L	0.1	0.097	97	80-120	
Cobalt	mg/L	0.1	0.098	98	80-120	
Iron	mg/L	1	0.98	98	80-120	
Lead	mg/L	0.1	0.098	98	80-120	
Lithium	mg/L	0.1	0.10	102	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	0.098	98	80-120	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1 CA Week 1
Pace Project No.: 92692726

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4172760 4172761

Parameter	Units	92692726001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.0017J	0.1	0.1	0.10	0.10	103	102	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	102	101	75-125	0	20	
Barium	mg/L	0.063	0.1	0.1	0.17	0.17	107	104	75-125	1	20	
Beryllium	mg/L	ND	0.1	0.1	0.093	0.093	93	93	75-125	0	20	
Boron	mg/L	0.61	1	1	1.6	1.6	97	99	75-125	2	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	0	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	101	75-125	1	20	
Cobalt	mg/L	0.00063J	0.1	0.1	0.10	0.10	102	101	75-125	1	20	
Iron	mg/L	0.089	1	1	1.1	1.1	102	101	75-125	1	20	
Lead	mg/L	ND	0.1	0.1	0.099	0.099	99	99	75-125	0	20	
Lithium	mg/L	0.0012J	0.1	0.1	0.095	0.093	93	92	75-125	1	20	
Molybdenum	mg/L	0.20	0.1	0.1	0.31	0.30	110	108	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	100	102	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.10	0.099	100	99	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1 CA Week 1
Pace Project No.: 92692726

QC Batch: 805935 | Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A | Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92692726001, 92692726002, 92692726003, 92692726004, 92692726005

METHOD BLANK: 4173569 Matrix: Water
Associated Lab Samples: 92692726001, 92692726002, 92692726003, 92692726004, 92692726005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	10/12/23 17:50	

LABORATORY CONTROL SAMPLE: 4173570

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0022	86	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4173571 4173572

Parameter	Units	92692726002 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	0.0022	88	83	75-125	5	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1 CA Week 1
Pace Project No.: 92692726

QC Batch: 806016
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92692726001, 92692726002, 92692726003, 92692726004, 92692726005

METHOD BLANK: 4174178 Matrix: Water
Associated Lab Samples: 92692726001, 92692726002, 92692726003, 92692726004, 92692726005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	10/13/23 10:59	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	10/13/23 10:59	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	10/13/23 10:59	

LABORATORY CONTROL SAMPLE: 4174179

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: 4174180

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: 4174181 4174182

Parameter	Units	92692080023 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	17.7	50	50	71.6	71.6	108	108	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4174183 4174184

Parameter	Units	92692080024 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	10.2	50	50	63.6	63.1	107	106	80-120	1	25	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1 CA Week 1
Pace Project No.: 92692726

QC Batch: 806055 | Analysis Method: SM 2540C-2015
QC Batch Method: SM 2540C-2015 | Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92692726001, 92692726002, 92692726003, 92692726004, 92692726005

METHOD BLANK: 4174305 Matrix: Water
Associated Lab Samples: 92692726001, 92692726002, 92692726003, 92692726004, 92692726005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	10/12/23 23:56	

LABORATORY CONTROL SAMPLE: 4174306

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	252	101	90-110	

SAMPLE DUPLICATE: 4174307

Parameter	Units	92692726001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	257	263	2	25	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1 CA Week 1
Pace Project No.: 92692726

QC Batch: 806052 | 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: 92692726001, 92692726002, 92692726003, 92692726004, 92692726005

METHOD BLANK: 4174295 Matrix: Water
Associated Lab Samples: 92692726001, 92692726002, 92692726003, 92692726004, 92692726005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	10/13/23 02:58	

LABORATORY CONTROL SAMPLE: 4174296

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4174297 4174298

Parameter	Units	92692818001 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	0.53	0.53	104	104	80-120	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4174299 4174300

Parameter	Units	92692818002 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	0.53	0.53	105	106	80-120	1	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1 CA Week 1
Pace Project No.: 92692726

QC Batch: 806014
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92692726001, 92692726002, 92692726003, 92692726004, 92692726005

METHOD BLANK: 4174170 Matrix: Water
Associated Lab Samples: 92692726001, 92692726002, 92692726003, 92692726004, 92692726005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	10/12/23 20:30	
Fluoride	mg/L	ND	0.10	0.050	10/12/23 20:30	
Sulfate	mg/L	ND	1.0	0.50	10/12/23 20:30	

LABORATORY CONTROL SAMPLE: 4174171

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.4	103	90-110	
Fluoride	mg/L	2.5	2.6	104	90-110	
Sulfate	mg/L	50	51.6	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4174172 4174173

Parameter	Units	92692726005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	13.0	50	50	63.1	64.9	100	104	90-110	3	10	
Fluoride	mg/L	0.38	2.5	2.5	2.8	2.9	97	100	90-110	3	10	
Sulfate	mg/L	71.5	50	50	113	114	83	85	90-110	1	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

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

QUALIFIERS

Project: Hammond AP-1 CA Week 1
Pace Project No.: 92692726

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
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-1 CA Week 1
Pace Project No.: 92692726

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92692726001	**HAM-PT-09**	EPA 3010A	805851	EPA 6010D	805946
92692726002	**HAM-PT-10**	EPA 3010A	805851	EPA 6010D	805946
92692726003	**HAM-AP1-EB-01**	EPA 3010A	805851	EPA 6010D	805946
92692726004	**HAM-AP1-FB-01**	EPA 3010A	805851	EPA 6010D	805946
92692726005	**HAM-AP1-FD-01**	EPA 3010A	805851	EPA 6010D	805946
92692726001	**HAM-PT-09**	EPA 3005A	805814	EPA 6020B	805919
92692726002	**HAM-PT-10**	EPA 3005A	805814	EPA 6020B	805919
92692726003	**HAM-AP1-EB-01**	EPA 3005A	805814	EPA 6020B	805919
92692726004	**HAM-AP1-FB-01**	EPA 3005A	805814	EPA 6020B	805919
92692726005	**HAM-AP1-FD-01**	EPA 3005A	805814	EPA 6020B	805919
92692726001	**HAM-PT-09**	EPA 7470A	805935	EPA 7470A	805958
92692726002	**HAM-PT-10**	EPA 7470A	805935	EPA 7470A	805958
92692726003	**HAM-AP1-EB-01**	EPA 7470A	805935	EPA 7470A	805958
92692726004	**HAM-AP1-FB-01**	EPA 7470A	805935	EPA 7470A	805958
92692726005	**HAM-AP1-FD-01**	EPA 7470A	805935	EPA 7470A	805958
92692726001	**HAM-PT-09**	SM 2320B-2011	806016		
92692726002	**HAM-PT-10**	SM 2320B-2011	806016		
92692726003	**HAM-AP1-EB-01**	SM 2320B-2011	806016		
92692726004	**HAM-AP1-FB-01**	SM 2320B-2011	806016		
92692726005	**HAM-AP1-FD-01**	SM 2320B-2011	806016		
92692726001	**HAM-PT-09**	SM 2540C-2015	806055		
92692726002	**HAM-PT-10**	SM 2540C-2015	806055		
92692726003	**HAM-AP1-EB-01**	SM 2540C-2015	806055		
92692726004	**HAM-AP1-FB-01**	SM 2540C-2015	806055		
92692726005	**HAM-AP1-FD-01**	SM 2540C-2015	806055		
92692726001	**HAM-PT-09**	SM 4500-S2D-2011	806052		
92692726002	**HAM-PT-10**	SM 4500-S2D-2011	806052		
92692726003	**HAM-AP1-EB-01**	SM 4500-S2D-2011	806052		
92692726004	**HAM-AP1-FB-01**	SM 4500-S2D-2011	806052		
92692726005	**HAM-AP1-FD-01**	SM 4500-S2D-2011	806052		
92692726001	**HAM-PT-09**	EPA 300.0 Rev 2.1 1993	806014		
92692726002	**HAM-PT-10**	EPA 300.0 Rev 2.1 1993	806014		
92692726003	**HAM-AP1-EB-01**	EPA 300.0 Rev 2.1 1993	806014		
92692726004	**HAM-AP1-FB-01**	EPA 300.0 Rev 2.1 1993	806014		
92692726005	**HAM-AP1-FD-01**	EPA 300.0 Rev 2.1 1993	806014		

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:

Company:	GA Power
Address:	Atlanta, GA
Email To:	SCS Contacts
Phone:	Fax:
Requested Due Date/TAT:	5 day 48 hr for Mo, Fe, Sulfate

Section B Required Project Information:

Report To:	SCS Contacts
Copy To:	Geosyntec Contacts
Purchase Order No.:	GPC82474-0001
Project Name:	Hammond AP-1
Project Number:	

Section C Invoice Information

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

REGULATORY AGENCY

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

Site Location STATE: GA

Section D Required Client Information

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

Valid Matrix Codes

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate	Full App. III and IV metals	Major Ions (Profile 10839-2)	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Requested Analysis Filtered (Y/N)	N	N	N	N		92692726
1	HAM-PT-09	WG	G	10/10/2023	1135			22	5	3		1					1		X	X	X	X	N	001
2	HAM-PT-10	WG	G	10/10/2023	1339			21	5	3		1					1		X	X	X	X	N	002
3	HAM-AP1-EB-01	WQ	G	10/10/2023	1405			22	5	3		1					1		X	X	X	X	N	003
4	HAM-AP1-FB-01	WQ	G	10/10/2023	1400			22	5	3		1					1		X	X	X	X	N	004
5	HAM-AP1-FD-01	WG	G	10/10/2023	0000			22	5	3		1					1		X	X	X	X	N	005
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-CA-20231010	Thomas Kessler/Geo	10/11/2023	1325	Ryan Williams/Pace	10/11/23	1325	
AP-1 CA Week 1	Ryan Williams/Pace	10/11/2023	1512		10-11	1512	

SAMPLER NAME AND SIGNATURE

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

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 10/10/23

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 invoices not paid within 30 days.

Pace ANALYTICAL SERVICES

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 ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace ☐ Other:

Custody Seal Present? ☑ Yes ☐ No **Seals Intact?** ☑ Yes ☐ No

Date/Initials Person Examining Contents: 10-11-23 AK

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: 5.6 **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): 5.6

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: **Date:**

Project Manager SRF Review: **Date:**

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

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

Project #

****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			1																							
2		2	1			1																							
3		2	1			1																							
4		2	1			1																							
5		2	1			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.

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

October 19, 2023

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

RE: Project: Hammond AP-1
Pace Project No.: 92693737

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory on October 17, 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

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

CERTIFICATIONS

Project: Hammond AP-1
Pace Project No.: 92693737

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

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

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Hammond AP-1
Pace Project No.: 92693737

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92693737001	**HAM-PT-07**	Water	10/15/23 09:25	10/17/23 12:14
92693737002	**HAM-PT-08**	Water	10/15/23 10:22	10/17/23 12:14

Pace Analytical Services, LLC
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(704)875-9092

SAMPLE ANALYTE COUNT

Project: Hammond AP-1
Pace Project No.: 92693737

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92693737001	**HAM-PT-07**	EPA 6020B	CW1	2
		EPA 300.0 Rev 2.1 1993	CDC	1
92693737002	**HAM-PT-08**	EPA 6020B	CW1	2
		EPA 300.0 Rev 2.1 1993	CDC	1

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

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92693737

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92693737001	**HAM-PT-07**					
EPA 6020B	Arsenic	0.30	mg/L	0.10	10/18/23 16:08	
EPA 6020B	Iron	33.5	mg/L	0.40	10/18/23 16:08	M1, R1
EPA 300.0 Rev 2.1 1993	Sulfate	243	mg/L	5.0	10/17/23 22:44	
92693737002	**HAM-PT-08**					
EPA 6020B	Arsenic	0.25	mg/L	0.10	10/18/23 16:42	
EPA 6020B	Iron	60.1	mg/L	0.40	10/18/23 16:42	
EPA 300.0 Rev 2.1 1993	Sulfate	147	mg/L	3.0	10/17/23 23:00	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92693737

Sample: HAM-PT-07 **Lab ID: 92693737001** Collected: 10/15/23 09:25 Received: 10/17/23 12:14 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								
Arsenic	**0.30**	mg/L	0.10	0.037	10	10/18/23 09:36	10/18/23 16:08	7440-38-2	
Iron	**33.5**	mg/L	0.40	0.30	10	10/18/23 09:36	10/18/23 16:08	7439-89-6	M1,R1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	**243**	mg/L	5.0	2.5	5		10/17/23 22:44	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92693737

Sample: HAM-PT-08 **Lab ID: 92693737002** Collected: 10/15/23 10:22 Received: 10/17/23 12:14 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								
Arsenic	**0.25**	mg/L	0.10	0.037	10	10/18/23 09:36	10/18/23 16:42	7440-38-2	
Iron	**60.1**	mg/L	0.40	0.30	10	10/18/23 09:36	10/18/23 16:42	7439-89-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	**147**	mg/L	3.0	1.5	3		10/17/23 23:00	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92693737

QC Batch: 807198
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92693737001, 92693737002

METHOD BLANK: 4179669 Matrix: Water
Associated Lab Samples: 92693737001, 92693737002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.010	0.0037	10/18/23 15:51	
Iron	mg/L	ND	0.040	0.030	10/18/23 15:51	

LABORATORY CONTROL SAMPLE: 4179670

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	0.1	0.10	101	80-120	
Iron	mg/L	1	1.0	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4179671 4179672

Parameter	Units	92693737001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	0.30	0.1	0.1	0.42	0.47	120	176	75-125	12	20	M1
Iron	mg/L	33.5	1	1	38.2	56.4	466	2280	75-125	38	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

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92693737

QC Batch: 807098
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92693737001, 92693737002

METHOD BLANK: 4179329 Matrix: Water
Associated Lab Samples: 92693737001, 92693737002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	0.50	10/17/23 21:30	

LABORATORY CONTROL SAMPLE: 4179330

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	50	49.6	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4179331 4179332

Parameter	Units	92693721008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	2.7	50	50	56.2	56.5	107	108	90-110	1	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Hammond AP-1
Pace Project No.: 92693737

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

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

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-1
Pace Project No.: 92693737

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92693737001	**HAM-PT-07**	EPA 3005A	807198	EPA 6020B	807293
92693737002	**HAM-PT-08**	EPA 3005A	807198	EPA 6020B	807293
92693737001	**HAM-PT-07**	EPA 300.0 Rev 2.1 1993	807098		
92693737002	**HAM-PT-08**	EPA 300.0 Rev 2.1 1993	807098		

Pace® Location Requested (City/State): Pace Analytical Charlotte, 9800 Kincey Ave. Suite 100, Huntersville, NC 28078

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

Scan QR Code for instructions

Company Name:	GA Power
Street Address:	241 Ralph McGill Blvd NE, Atlanta, GA 30308
Customer Project #:	
Project Name:	~~[struck through]~~ MS 10/17/2023 Hammond AP-1
Site Collection Info/Facility ID (as applicable):	
Contact/Report To:	Jurinko, Kristen
Phone #:	470-217-0008
E-Mail:	knjurink@southernco.com
Cc E-Mail:	
Invoice To:	
Invoice E-Mail:	
Purchase Order # (if applicable):	GPC82474-0001
Quote #:	
County / State origin of sample(s):	Georgia

Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET

Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other ______

Regulatory Program (DW, RCRA, etc.) as applicable:

Rush (Pre-approval required): [ ] 2 Day [ ] 3 day [ ] 5 day [✓] Other 48 hr

Date Results Requested:

DW PWSID # or WW Permit # as applicable:

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis:

Specify Container Size **: 3 | 3

Identify Container Preservative Type***: 2 | 1

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic 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 (SED), Sludge (SL), Caulk

Analysis Requested: 300.0-F, Cl, SO4 (MS 10/17/2023); ~~App III/IV Metals+Major ions~~ MS 10/17/2023 Arsenic and iron; ~~Sulfide~~ Sulfate MS 10/17/2023

Customer Sample ID	Matrix *	Comp / Grab	Collected Date	Collected Time	Composite End Date	Composite End Time	Res. Cl2	Plastic	Glass	300.0-F, Cl, SO4	Arsenic and iron	Sulfate	Sample Comment
Extra 1	WT									X	X	X	
HAM-AP1-EB-01	WT									X	X	X	
HAM-AP1-FB-01	WT									X	X	X	
HAM-AP1-FD-01	WT									X	X	X	
HAM-PT-07	~~WT~~ WG (MS 10/17/2023)	Grab	10/15/2023	0925			N	2		X	X	X	
HAM-PT-08	~~WT~~ WG (MS 10/17/2023)	Grab	10/15/2023	1022			N	2		X	X	X	
HAM-PT-09	WT									X	X	X	
HAM-PT-10	WT									X	X	X	

MS 10/17/2023

Lab Use Only: Proj. Mgr: Bonnie Vang; AcctNum / Client ID: ; Table #: ; Profile / Template: 16483-20; Prelog / Bottle Ord. ID: 1146825

Preservation non-conformance identified for sample.

WO#: 92693737

92693737

Customer Remarks / Special Conditions / Possible Hazards:
Performance Monitoring: B, Sulfate, As, Mo.
Major Ions: Fe, ~~Mg, Sulfide.~~
MS 10/17/2023
Task code HAM-CCR-CA-20231015

Collected By:
Printed Name: MANASA SADHASIVAN
Signature: Manasa

Additional Instructions from Pace®:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
MANASA SADHASIVAN / GEOSYNTEC	10/17/2023 / 1214	[signature] Pace	10/17/23 1214
[signature] Pace	10/17/23 1631	[signature] PACE	10/17/23 1631

Tracking Number:

Delivered by: [ ] In-Person [ ] Courier [ ] FedEX [ ] UPS [ ] Other

Page: 1 of 1

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

ENV-FRM-CORQ-0019_v01_082123 ©

Pace ANALYTICAL SERVICES

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#: 92693737

PM: BV **Due Date: 10/19/23**

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		1				1																							
2		1				1																							
3						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.

Page 1 of 14

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#: 92693737

PM: BV **Due Date: 10/19/23**

CLIENT: 92- GP-HAM

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

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☐ No

Date/Initials Person Examining Contents: 10-17-23 JC

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ **Date:** _____

Project Manager SRF Review: _____ **Date:** _____

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

November 06, 2023

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

RE: Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory on October 18, 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
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

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

CERTIFICATIONS

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

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

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

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92694019001	**HAM-PT-07**	Water	10/17/23 13:54	10/18/23 12:10
92694019002	**HAM-PT-08**	Water	10/17/23 12:05	10/18/23 12:10
92694019003	**HAM-PT-09**	Water	10/17/23 16:17	10/18/23 12:10
92694019004	**HAM-PT-10**	Water	10/17/23 14:27	10/18/23 12:10
92694019005	**HAM-AP1-EB-01**	Water	10/17/23 15:30	10/18/23 12:10
92694019006	**HAM-AP1-FB-01**	Water	10/17/23 15:25	10/18/23 12:10
92694019007	**HAM-AP1-FD-01**	Water	10/17/23 00:00	10/18/23 12:10

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92694019001	**HAM-PT-07**	EPA 6010D	DRB, EJH1	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
92694019002	**HAM-PT-08**	EPA 6010D	DRB, EJH1	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
92694019003	**HAM-PT-09**	EPA 6020B	CW1	3
		EPA 300.0 Rev 2.1 1993	CDC	1
92694019004	**HAM-PT-10**	EPA 6020B	CW1	3
		EPA 300.0 Rev 2.1 1993	CDC	1
92694019005	**HAM-AP1-EB-01**	EPA 6010D	DRB, EJH1	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
92694019006	**HAM-AP1-FB-01**	EPA 6010D	DRB, EJH1	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
92694019007	**HAM-AP1-FD-01**	EPA 6010D	DRB, EJH1	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3

REPORT OF LABORATORY ANALYSIS

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(704)875-9092

SAMPLE ANALYTE COUNT

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		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

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

SUMMARY OF DETECTION

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92694019001	**HAM-PT-07**					
EPA 6010D	Iron	18.1	mg/L	0.040	10/25/23 18:32	
EPA 6010D	Manganese	5.9	mg/L	0.040	10/25/23 18:32	
EPA 6010D	Sodium	6.8	mg/L	1.0	10/25/23 18:32	
EPA 6010D	Calcium	151	mg/L	1.0	10/25/23 18:32	
EPA 6010D	Potassium	5.5	mg/L	0.50	10/27/23 17:52	
EPA 6010D	Magnesium	17.9	mg/L	0.050	10/27/23 17:52	
EPA 6020B	Arsenic	0.23	mg/L	0.010	10/24/23 19:46	
EPA 6020B	Barium	0.092	mg/L	0.0050	10/24/23 19:46	
EPA 6020B	Beryllium	0.00014J	mg/L	0.00050	11/01/23 15:57	
EPA 6020B	Boron	1.1	mg/L	0.040	11/01/23 15:57	
EPA 6020B	Cobalt	0.068	mg/L	0.0050	10/24/23 19:46	
EPA 6020B	Lead	0.00029J	mg/L	0.0010	10/24/23 19:46	
EPA 6020B	Lithium	0.062	mg/L	0.030	11/01/23 15:57	
EPA 6020B	Molybdenum	0.011	mg/L	0.010	10/24/23 19:46	
EPA 6020B	Thallium	0.00026J	mg/L	0.0010	10/24/23 19:46	
SM 2540C-2015	Total Dissolved Solids	677	mg/L	25.0	10/19/23 17:05	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	120	mg/L	5.0	10/20/23 21:16	
SM 2320B-2011	Alkalinity, Total as CaCO3	120	mg/L	5.0	10/20/23 21:16	
EPA 300.0 Rev 2.1 1993	Chloride	15.3	mg/L	1.0	10/19/23 23:09	
EPA 300.0 Rev 2.1 1993	Fluoride	0.35	mg/L	0.10	10/19/23 23:09	
EPA 300.0 Rev 2.1 1993	Sulfate	306	mg/L	7.0	10/20/23 11:50	
92694019002	**HAM-PT-08**					
EPA 6010D	Potassium	4.6	mg/L	0.50	10/27/23 17:57	
EPA 6010D	Magnesium	10.6	mg/L	0.050	10/27/23 17:57	
EPA 6010D	Iron	6.5	mg/L	0.040	10/25/23 18:38	
EPA 6010D	Manganese	2.9	mg/L	0.040	10/25/23 18:38	
EPA 6010D	Sodium	4.8	mg/L	1.0	10/25/23 18:38	
EPA 6010D	Calcium	88.0	mg/L	1.0	10/25/23 18:38	M1
EPA 6020B	Antimony	0.00062J	mg/L	0.0030	11/01/23 15:28	
EPA 6020B	Arsenic	0.19	mg/L	0.010	11/01/23 15:28	
EPA 6020B	Barium	0.039	mg/L	0.0050	11/01/23 15:28	
EPA 6020B	Boron	0.51	mg/L	0.040	11/01/23 15:28	
EPA 6020B	Cobalt	0.018	mg/L	0.0050	11/01/23 15:28	
EPA 6020B	Lithium	0.022J	mg/L	0.030	11/01/23 15:28	
EPA 6020B	Molybdenum	0.020	mg/L	0.010	11/01/23 15:28	
SM 2540C-2015	Total Dissolved Solids	378	mg/L	25.0	10/19/23 17:07	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	106	mg/L	5.0	10/20/23 21:25	
SM 2320B-2011	Alkalinity, Total as CaCO3	106	mg/L	5.0	10/20/23 21:25	
EPA 300.0 Rev 2.1 1993	Chloride	10.8	mg/L	1.0	10/20/23 00:28	
EPA 300.0 Rev 2.1 1993	Fluoride	0.30	mg/L	0.10	10/20/23 00:28	
EPA 300.0 Rev 2.1 1993	Sulfate	146	mg/L	3.0	10/20/23 12:04	
92694019003	**HAM-PT-09**					
EPA 6020B	Boron	0.23	mg/L	0.040	11/01/23 15:44	
EPA 6020B	Iron	0.040	mg/L	0.040	11/01/23 15:44	
EPA 6020B	Molybdenum	0.27	mg/L	0.010	11/01/23 15:44	
EPA 300.0 Rev 2.1 1993	Sulfate	25.2	mg/L	1.0	10/20/23 00:42	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92694019004	**HAM-PT-10**					
EPA 6020B	Boron	1.3	mg/L	0.040	11/01/23 15:48	
EPA 6020B	Iron	0.84	mg/L	0.040	11/01/23 15:48	
EPA 6020B	Molybdenum	0.21	mg/L	0.010	11/01/23 15:48	
EPA 300.0 Rev 2.1 1993	Sulfate	122	mg/L	3.0	10/20/23 12:18	
92694019007	**HAM-AP1-FD-01**					
EPA 6010D	Iron	17.8	mg/L	0.040	10/25/23 19:19	
EPA 6010D	Manganese	5.9	mg/L	0.040	10/25/23 19:19	
EPA 6010D	Calcium	148	mg/L	1.0	10/25/23 19:19	
EPA 6010D	Potassium	5.4	mg/L	0.50	10/27/23 18:23	
EPA 6010D	Sodium	6.5	mg/L	1.0	10/27/23 18:23	
EPA 6010D	Magnesium	17.8	mg/L	0.050	10/27/23 18:23	
EPA 6020B	Arsenic	0.24	mg/L	0.010	11/01/23 16:22	
EPA 6020B	Barium	0.093	mg/L	0.0050	11/01/23 16:22	
EPA 6020B	Beryllium	0.00010J	mg/L	0.00050	11/03/23 18:08	
EPA 6020B	Boron	1.1	mg/L	0.040	11/03/23 18:08	
EPA 6020B	Cobalt	0.065	mg/L	0.0050	11/01/23 16:22	
EPA 6020B	Lithium	0.064	mg/L	0.030	11/03/23 18:08	
EPA 6020B	Molybdenum	0.012	mg/L	0.010	11/01/23 16:22	
SM 2540C-2015	Total Dissolved Solids	666	mg/L	25.0	10/19/23 17:07	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	119	mg/L	5.0	10/20/23 21:43	
SM 2320B-2011	Alkalinity, Total as CaCO3	119	mg/L	5.0	10/20/23 21:43	
EPA 300.0 Rev 2.1 1993	Chloride	15.2	mg/L	1.0	10/20/23 01:38	
EPA 300.0 Rev 2.1 1993	Fluoride	0.30	mg/L	0.10	10/20/23 01:38	
EPA 300.0 Rev 2.1 1993	Sulfate	304	mg/L	7.0	10/20/23 12:32	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(704)875-9092

ANALYTICAL RESULTS

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

Sample: HAM-PT-07 **Lab ID: 92694019001** Collected: 10/17/23 13:54 Received: 10/18/23 12:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**18.1**	mg/L	0.040	0.025	1	10/25/23 12:18	10/25/23 18:32	7439-89-6	
Manganese	**5.9**	mg/L	0.040	0.011	1	10/25/23 12:18	10/25/23 18:32	7439-96-5	
Sodium	**6.8**	mg/L	1.0	0.58	1	10/25/23 12:18	10/25/23 18:32	7440-23-5	
Calcium	**151**	mg/L	1.0	0.12	1	10/25/23 12:18	10/25/23 18:32	7440-70-2	
Potassium	**5.5**	mg/L	0.50	0.15	1	10/25/23 12:18	10/27/23 17:52	7440-09-7	
Magnesium	**17.9**	mg/L	0.050	0.012	1	10/25/23 12:18	10/27/23 17:52	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.0012	1	10/23/23 12:02	10/24/23 19:46	7440-36-0	
Arsenic	**0.23**	mg/L	0.010	0.0037	1	10/23/23 12:02	10/24/23 19:46	7440-38-2	
Barium	**0.092**	mg/L	0.0050	0.00067	1	10/23/23 12:02	10/24/23 19:46	7440-39-3	
Beryllium	**0.00014J**	mg/L	0.00050	0.000094	1	10/23/23 12:02	11/01/23 15:57	7440-41-7	
Boron	**1.1**	mg/L	0.040	0.012	1	10/23/23 12:02	11/01/23 15:57	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	10/23/23 12:02	10/24/23 19:46	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	10/23/23 12:02	10/24/23 19:46	7440-47-3	
Cobalt	**0.068**	mg/L	0.0050	0.00039	1	10/23/23 12:02	10/24/23 19:46	7440-48-4	
Lead	**0.00029J**	mg/L	0.0010	0.00012	1	10/23/23 12:02	10/24/23 19:46	7439-92-1	
Lithium	**0.062**	mg/L	0.030	0.0016	1	10/23/23 12:02	11/01/23 15:57	7439-93-2	
Molybdenum	**0.011**	mg/L	0.010	0.00074	1	10/23/23 12:02	10/24/23 19:46	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	10/23/23 12:02	10/24/23 19:46	7782-49-2	
Thallium	**0.00026J**	mg/L	0.0010	0.00018	1	10/23/23 12:02	10/24/23 19:46	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	10/23/23 12:30	10/23/23 14:35	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**677**	mg/L	25.0	25.0	1		10/19/23 17:05		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**120**	mg/L	5.0	5.0	1		10/20/23 21:16		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/20/23 21:16		
Alkalinity, Total as CaCO3	**120**	mg/L	5.0	5.0	1		10/20/23 21:16		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		10/21/23 02:09	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**15.3**	mg/L	1.0	0.60	1		10/19/23 23:09	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

Sample: HAM-PT-07 **Lab ID: 92694019001** Collected: 10/17/23 13:54 Received: 10/18/23 12:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.35**	mg/L	0.10	0.050	1		10/19/23 23:09	16984-48-8	
Sulfate	**306**	mg/L	7.0	3.5	7		10/20/23 11:50	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

Sample: HAM-PT-08 **Lab ID: 92694019002** Collected: 10/17/23 12:05 Received: 10/18/23 12:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Potassium	**4.6**	mg/L	0.50	0.15	1	10/25/23 12:18	10/27/23 17:57	7440-09-7	
Magnesium	**10.6**	mg/L	0.050	0.012	1	10/25/23 12:18	10/27/23 17:57	7439-95-4	
Iron	**6.5**	mg/L	0.040	0.025	1	10/25/23 12:18	10/25/23 18:38	7439-89-6	
Manganese	**2.9**	mg/L	0.040	0.011	1	10/25/23 12:18	10/25/23 18:38	7439-96-5	
Sodium	**4.8**	mg/L	1.0	0.58	1	10/25/23 12:18	10/25/23 18:38	7440-23-5	
Calcium	**88.0**	mg/L	1.0	0.12	1	10/25/23 12:18	10/25/23 18:38	7440-70-2	M1
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00062J**	mg/L	0.0030	0.00054	1	10/21/23 11:13	11/01/23 15:28	7440-36-0	
Arsenic	**0.19**	mg/L	0.010	0.00084	1	10/21/23 11:13	11/01/23 15:28	7440-38-2	
Barium	**0.039**	mg/L	0.0050	0.00047	1	10/21/23 11:13	11/01/23 15:28	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	10/21/23 11:13	11/01/23 15:28	7440-41-7	
Boron	**0.51**	mg/L	0.040	0.012	1	10/21/23 11:13	11/01/23 15:28	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	10/21/23 11:13	11/01/23 15:28	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	10/21/23 11:13	11/01/23 15:28	7440-47-3	
Cobalt	**0.018**	mg/L	0.0050	0.00032	1	10/21/23 11:13	11/01/23 15:28	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	10/21/23 11:13	11/01/23 15:28	7439-92-1	
Lithium	**0.022J**	mg/L	0.030	0.0016	1	10/21/23 11:13	11/01/23 15:28	7439-93-2	
Molybdenum	**0.020**	mg/L	0.010	0.00062	1	10/21/23 11:13	11/01/23 15:28	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	10/21/23 11:13	11/01/23 15:28	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	10/21/23 11:13	11/01/23 15:28	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	10/23/23 12:30	10/23/23 14:38	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**378**	mg/L	25.0	25.0	1		10/19/23 17:07		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**106**	mg/L	5.0	5.0	1		10/20/23 21:25		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/20/23 21:25		
Alkalinity, Total as CaCO3	**106**	mg/L	5.0	5.0	1		10/20/23 21:25		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		10/21/23 02:10	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**10.8**	mg/L	1.0	0.60	1		10/20/23 00:28	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

Sample: HAM-PT-08 **Lab ID: 92694019002** Collected: 10/17/23 12:05 Received: 10/18/23 12:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.30**	mg/L	0.10	0.050	1		10/20/23 00:28	16984-48-8	
Sulfate	**146**	mg/L	3.0	1.5	3		10/20/23 12:04	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

Sample: HAM-PT-09 **Lab ID: 92694019003** Collected: 10/17/23 16:17 Received: 10/18/23 12:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Boron	**0.23**	mg/L	0.040	0.012	1	10/21/23 11:13	11/01/23 15:44	7440-42-8	
Iron	**0.040**	mg/L	0.040	0.0075	1	10/21/23 11:13	11/01/23 15:44	7439-89-6	
Molybdenum	**0.27**	mg/L	0.010	0.00062	1	10/21/23 11:13	11/01/23 15:44	7439-98-7	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	**25.2**	mg/L	1.0	0.50	1		10/20/23 00:42	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

Sample: HAM-PT-10 **Lab ID: 92694019004** Collected: 10/17/23 14:27 Received: 10/18/23 12:10 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	**1.3**	mg/L	0.040	0.012	1	10/21/23 11:13	11/01/23 15:48	7440-42-8	
Iron	**0.84**	mg/L	0.040	0.0075	1	10/21/23 11:13	11/01/23 15:48	7439-89-6	
Molybdenum	**0.21**	mg/L	0.010	0.00062	1	10/21/23 11:13	11/01/23 15:48	7439-98-7	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	**122**	mg/L	3.0	1.5	3		10/20/23 12:18	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

Sample: HAM-AP1-EB-01 **Lab ID: 92694019005** Collected: 10/17/23 15:30 Received: 10/18/23 12:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	ND	mg/L	0.040	0.025	1	10/25/23 12:18	10/25/23 19:09	7439-89-6	
Manganese	ND	mg/L	0.040	0.011	1	10/25/23 12:18	10/25/23 19:09	7439-96-5	
Potassium	ND	mg/L	0.50	0.15	1	10/25/23 12:18	10/25/23 19:09	7440-09-7	
Calcium	ND	mg/L	1.0	0.12	1	10/25/23 12:18	10/25/23 19:09	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	10/25/23 12:18	10/25/23 19:09	7439-95-4	
Sodium	ND	mg/L	1.0	0.58	1	10/25/23 12:18	10/27/23 18:12	7440-23-5	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	10/21/23 11:13	11/01/23 15:56	7440-36-0	
Arsenic	ND	mg/L	0.010	0.00084	1	10/21/23 11:13	11/01/23 15:56	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	10/21/23 11:13	11/01/23 15:56	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	10/21/23 11:13	11/01/23 15:56	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	10/21/23 11:13	11/01/23 15:56	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	10/21/23 11:13	11/01/23 15:56	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	10/21/23 11:13	11/01/23 15:56	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	10/21/23 11:13	11/01/23 15:56	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	10/21/23 11:13	11/01/23 15:56	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	10/21/23 11:13	11/01/23 15:56	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	10/21/23 11:13	11/01/23 15:56	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	10/21/23 11:13	11/01/23 15:56	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	10/21/23 11:13	11/01/23 15:56	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	10/23/23 12:30	10/23/23 14:40	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		10/19/23 17:07		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/20/23 21:34		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/20/23 21:34		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		10/20/23 21:34		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		10/21/23 02:10	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		10/20/23 01:10	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

Sample: HAM-AP1-EB-01 **Lab ID: 92694019005** Collected: 10/17/23 15:30 Received: 10/18/23 12:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		10/20/23 01:10	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		10/20/23 01:10	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

Sample: HAM-AP1-FB-01 **Lab ID: 92694019006** Collected: 10/17/23 15:25 Received: 10/18/23 12:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	ND	mg/L	0.040	0.025	1	10/25/23 12:18	10/25/23 19:14	7439-89-6	
Manganese	ND	mg/L	0.040	0.011	1	10/25/23 12:18	10/25/23 19:14	7439-96-5	
Sodium	ND	mg/L	1.0	0.58	1	10/25/23 12:18	10/25/23 19:14	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	10/25/23 12:18	10/25/23 19:14	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	10/25/23 12:18	10/25/23 19:14	7439-95-4	
Potassium	ND	mg/L	0.50	0.15	1	10/25/23 12:18	10/27/23 18:18	7440-09-7	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	10/21/23 11:13	11/01/23 16:18	7440-36-0	
Arsenic	ND	mg/L	0.010	0.00084	1	10/21/23 11:13	11/01/23 16:18	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	10/21/23 11:13	11/01/23 16:18	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	10/21/23 11:13	11/01/23 16:18	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	10/21/23 11:13	11/01/23 16:18	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	10/21/23 11:13	11/01/23 16:18	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	10/21/23 11:13	11/01/23 16:18	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	10/21/23 11:13	11/01/23 16:18	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	10/21/23 11:13	11/01/23 16:18	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	10/21/23 11:13	11/01/23 16:18	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	10/21/23 11:13	11/01/23 16:18	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	10/21/23 11:13	11/01/23 16:18	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	10/21/23 11:13	11/01/23 16:18	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	10/23/23 12:30	10/23/23 14:43	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		10/19/23 17:07		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/20/23 21:39		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/20/23 21:39		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		10/20/23 21:39		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		10/21/23 02:10	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		10/20/23 01:24	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

Sample: HAM-AP1-FB-01 **Lab ID: 92694019006** Collected: 10/17/23 15:25 Received: 10/18/23 12:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		10/20/23 01:24	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		10/20/23 01:24	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

Sample: HAM-AP1-FD-01 **Lab ID: 92694019007** Collected: 10/17/23 00:00 Received: 10/18/23 12:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**17.8**	mg/L	0.040	0.025	1	10/25/23 12:18	10/25/23 19:19	7439-89-6	
Manganese	**5.9**	mg/L	0.040	0.011	1	10/25/23 12:18	10/25/23 19:19	7439-96-5	
Calcium	**148**	mg/L	1.0	0.12	1	10/25/23 12:18	10/25/23 19:19	7440-70-2	
Potassium	**5.4**	mg/L	0.50	0.15	1	10/25/23 12:18	10/27/23 18:23	7440-09-7	
Sodium	**6.5**	mg/L	1.0	0.58	1	10/25/23 12:18	10/27/23 18:23	7440-23-5	
Magnesium	**17.8**	mg/L	0.050	0.012	1	10/25/23 12:18	10/27/23 18:23	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	10/21/23 11:13	11/01/23 16:22	7440-36-0	
Arsenic	**0.24**	mg/L	0.010	0.00084	1	10/21/23 11:13	11/01/23 16:22	7440-38-2	
Barium	**0.093**	mg/L	0.0050	0.00047	1	10/21/23 11:13	11/01/23 16:22	7440-39-3	
Beryllium	**0.00010J**	mg/L	0.00050	0.000094	1	10/21/23 11:13	11/03/23 18:08	7440-41-7	
Boron	**1.1**	mg/L	0.040	0.012	1	10/21/23 11:13	11/03/23 18:08	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	10/21/23 11:13	11/01/23 16:22	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	10/21/23 11:13	11/01/23 16:22	7440-47-3	
Cobalt	**0.065**	mg/L	0.0050	0.00032	1	10/21/23 11:13	11/01/23 16:22	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	10/21/23 11:13	11/01/23 16:22	7439-92-1	
Lithium	**0.064**	mg/L	0.030	0.0016	1	10/21/23 11:13	11/03/23 18:08	7439-93-2	
Molybdenum	**0.012**	mg/L	0.010	0.00062	1	10/21/23 11:13	11/01/23 16:22	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	10/21/23 11:13	11/01/23 16:22	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	10/21/23 11:13	11/01/23 16:22	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	10/23/23 12:30	10/23/23 14:45	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**666**	mg/L	25.0	25.0	1		10/19/23 17:07		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**119**	mg/L	5.0	5.0	1		10/20/23 21:43		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/20/23 21:43		
Alkalinity, Total as CaCO3	**119**	mg/L	5.0	5.0	1		10/20/23 21:43		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		10/21/23 02:11	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**15.2**	mg/L	1.0	0.60	1		10/20/23 01:38	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

Sample: HAM-AP1-FD-01 **Lab ID: 92694019007** Collected: 10/17/23 00:00 Received: 10/18/23 12:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.30**	mg/L	0.10	0.050	1		10/20/23 01:38	16984-48-8	
Sulfate	**304**	mg/L	7.0	3.5	7		10/20/23 12:32	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

QC Batch: 808667
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92694019001, 92694019002, 92694019005, 92694019006, 92694019007

METHOD BLANK: 4187264 Matrix: Water
Associated Lab Samples: 92694019001, 92694019002, 92694019005, 92694019006, 92694019007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	10/25/23 18:22	
Iron	mg/L	ND	0.040	0.025	10/25/23 18:22	
Magnesium	mg/L	ND	0.050	0.012	10/25/23 18:22	
Manganese	mg/L	ND	0.040	0.011	10/25/23 18:22	
Potassium	mg/L	ND	0.50	0.15	10/25/23 18:22	
Sodium	mg/L	ND	1.0	0.58	10/25/23 18:22	

LABORATORY CONTROL SAMPLE: 4187265

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.99J	99	80-120	
Iron	mg/L	1	1.0	103	80-120	
Magnesium	mg/L	1	1.1	112	80-120	
Manganese	mg/L	1	1.0	104	80-120	
Potassium	mg/L	1	1.0	100	80-120	
Sodium	mg/L	1	1.0	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4187984 4187985

Parameter	Units	92694019002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	88.0	1	1	90.7	89.3	270	131	75-125	2	20	
Iron	mg/L	6.5	1	1	7.2	7.1	71	60	75-125	2	20	
Magnesium	mg/L	10.6	1	1	11.5	11.4	90	78	75-125	1	20	
Manganese	mg/L	2.9	1	1	3.7	3.7	82	77	75-125	1	20	
Potassium	mg/L	4.6	1	1	5.4	5.3	76	69	75-125	1	20	
Sodium	mg/L	4.8	1	1	5.5	5.5	76	72	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

QC Batch: 808042
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92694019002, 92694019003, 92694019004, 92694019005, 92694019006, 92694019007

METHOD BLANK: 4184097 Matrix: Water
Associated Lab Samples: 92694019002, 92694019003, 92694019004, 92694019005, 92694019006, 92694019007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00054	11/01/23 15:20	
Arsenic	mg/L	ND	0.010	0.00084	11/01/23 15:20	
Barium	mg/L	ND	0.0050	0.00047	11/01/23 15:20	
Beryllium	mg/L	ND	0.00050	0.000094	11/01/23 15:20	
Boron	mg/L	ND	0.040	0.012	11/01/23 15:20	
Cadmium	mg/L	ND	0.00050	0.00010	11/01/23 15:20	
Chromium	mg/L	ND	0.0050	0.0019	11/01/23 15:20	
Cobalt	mg/L	ND	0.0050	0.00032	11/01/23 15:20	
Iron	mg/L	ND	0.040	0.0075	11/01/23 15:20	
Lead	mg/L	ND	0.0010	0.00016	11/01/23 15:20	
Lithium	mg/L	ND	0.030	0.0016	11/01/23 15:20	
Molybdenum	mg/L	ND	0.010	0.00062	11/01/23 15:20	
Selenium	mg/L	ND	0.0050	0.00096	11/01/23 15:20	
Thallium	mg/L	ND	0.0010	0.00038	11/01/23 15:20	

LABORATORY CONTROL SAMPLE: 4184098

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	108	80-120	
Arsenic	mg/L	0.1	0.10	101	80-120	
Barium	mg/L	0.1	0.10	101	80-120	
Beryllium	mg/L	0.1	0.11	106	80-120	
Boron	mg/L	1	1.0	102	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Iron	mg/L	1	1.0	103	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	0.11	109	80-120	
Selenium	mg/L	0.1	0.10	103	80-120	
Thallium	mg/L	0.1	0.097	97	80-120	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4184099 4184100

Parameter	Units	92694019002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00062J	0.1	0.1	0.10	0.11	103	105	75-125	2	20	
Arsenic	mg/L	0.19	0.1	0.1	0.30	0.30	102	106	75-125	1	20	
Barium	mg/L	0.039	0.1	0.1	0.15	0.15	108	109	75-125	1	20	
Beryllium	mg/L	ND	0.1	0.1	0.076	0.078	76	78	75-125	2	20	
Boron	mg/L	0.51	1	1	1.3	1.3	79	83	75-125	3	20	
Cadmium	mg/L	ND	0.1	0.1	0.099	0.11	99	106	75-125	6	20	
Chromium	mg/L	ND	0.1	0.1	0.085	0.087	85	86	75-125	2	20	
Cobalt	mg/L	0.018	0.1	0.1	0.10	0.11	86	87	75-125	2	20	
Iron	mg/L	4.8	1	1	5.9	5.9	107	108	75-125	0	20	
Lead	mg/L	ND	0.1	0.1	0.098	0.10	98	100	75-125	2	20	
Lithium	mg/L	0.022J	0.1	0.1	0.11	0.11	83	85	75-125	2	20	
Molybdenum	mg/L	0.020	0.1	0.1	0.12	0.12	101	103	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.11	0.11	109	111	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.10	0.10	101	103	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

QC Batch: 808188
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92694019001

METHOD BLANK: 4184607 Matrix: Water
Associated Lab Samples: 92694019001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.0012	10/24/23 18:03	
Arsenic	mg/L	ND	0.010	0.0037	10/24/23 18:03	
Barium	mg/L	ND	0.0050	0.00067	10/24/23 18:03	
Beryllium	mg/L	ND	0.00050	0.000094	10/24/23 18:03	
Boron	mg/L	ND	0.040	0.012	10/24/23 18:03	
Cadmium	mg/L	ND	0.00050	0.00011	10/24/23 18:03	
Chromium	mg/L	ND	0.0050	0.0011	10/24/23 18:03	
Cobalt	mg/L	ND	0.0050	0.00039	10/24/23 18:03	
Lead	mg/L	ND	0.0010	0.00012	10/24/23 18:03	
Lithium	mg/L	ND	0.030	0.0016	10/24/23 18:03	
Molybdenum	mg/L	ND	0.010	0.00074	10/24/23 18:03	
Selenium	mg/L	ND	0.0050	0.0014	10/24/23 18:03	
Thallium	mg/L	ND	0.0010	0.00018	10/24/23 18:03	

LABORATORY CONTROL SAMPLE: 4184608

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	106	80-120	
Arsenic	mg/L	0.1	0.10	101	80-120	
Barium	mg/L	0.1	0.10	103	80-120	
Beryllium	mg/L	0.1	0.11	110	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	103	80-120	
Cobalt	mg/L	0.1	0.10	103	80-120	
Lead	mg/L	0.1	0.11	105	80-120	
Lithium	mg/L	0.1	0.10	104	80-120	
Molybdenum	mg/L	0.1	0.11	107	80-120	
Selenium	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.1	0.10	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4184609 4184610

Parameter	Units	92693117001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	104	105	75-125	0	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4184609 4184610

Parameter	Units	92693117001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	ND	0.1	0.1	0.16	0.16	109	111	75-125	1	20	
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	0	20	
Boron	mg/L	ND	1	1	0.78	0.79	77	77	75-125	1	20	
Cadmium	mg/L	ND	0.1	0.1	0.098	0.10	98	100	75-125	2	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	103	75-125	0	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	101	103	75-125	1	20	
Lead	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	1	20	
Lithium	mg/L	ND	0.1	0.1	0.077	0.078	77	78	75-125	1	20	
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.11	108	108	75-125	0	20	
Selenium	mg/L	ND	0.1	0.1	0.098	0.10	98	100	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.11	0.11	107	106	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

QC Batch: 808146 | Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A | Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92694019001, 92694019002, 92694019005, 92694019006, 92694019007

METHOD BLANK: 4184430 Matrix: Water
Associated Lab Samples: 92694019001, 92694019002, 92694019005, 92694019006, 92694019007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	10/23/23 14:11	

LABORATORY CONTROL SAMPLE: 4184431

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4184432 4184433

Parameter	Units	92693117009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0022	0.0019	87	74	75-125	16	20	M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

QC Batch: 807658 | 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: 92694019001, 92694019002, 92694019005, 92694019006, 92694019007

METHOD BLANK: 4182234 Matrix: Water
Associated Lab Samples: 92694019001, 92694019002, 92694019005, 92694019006, 92694019007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	10/19/23 17:02	

LABORATORY CONTROL SAMPLE: 4182235

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	386	96	80-120	

SAMPLE DUPLICATE: 4182236

Parameter	Units	92693883001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	957	962	1	10	

SAMPLE DUPLICATE: 4182237

Parameter	Units	92694019001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	677	672	1	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

QC Batch: 807943
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92694019001, 92694019002, 92694019005, 92694019006, 92694019007

METHOD BLANK: 4183579 Matrix: Water
Associated Lab Samples: 92694019001, 92694019002, 92694019005, 92694019006, 92694019007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	10/20/23 20:06	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	10/20/23 20:06	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	10/20/23 20:06	

LABORATORY CONTROL SAMPLE: 4183580

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.4	101	80-120	

LABORATORY CONTROL SAMPLE: 4183581

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: 4183582 4183583

Parameter	Units	92693396012 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	<5.0	50	50	50.9	51.3	101	102	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4183584 4183585

Parameter	Units	92693396013 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	23.3	50	50	71.9	72.0	97	97	80-120	0	25	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

QC Batch: 808007
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92694019001, 92694019002, 92694019005, 92694019006, 92694019007

METHOD BLANK: 4184007 Matrix: Water
Associated Lab Samples: 92694019001, 92694019002, 92694019005, 92694019006, 92694019007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	10/21/23 02:07	

LABORATORY CONTROL SAMPLE: 4184008

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: 4184009 4184010

Parameter	Units	92694100001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.52	0.53	103	106	80-120	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4184011 4184012

Parameter	Units	92694100002 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	0.53	0.53	105	105	80-120	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

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

QUALITY CONTROL DATA

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

QC Batch: 807689
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92694019001, 92694019002, 92694019003, 92694019004, 92694019005, 92694019006, 92694019007

METHOD BLANK: 4182604 Matrix: Water
Associated Lab Samples: 92694019001, 92694019002, 92694019003, 92694019004, 92694019005, 92694019006, 92694019007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	10/19/23 21:33	
Fluoride	mg/L	ND	0.10	0.050	10/19/23 21:33	
Sulfate	mg/L	ND	1.0	0.50	10/19/23 21:33	

LABORATORY CONTROL SAMPLE: 4182605

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	49.4	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4182606 4182607

Parameter	Units	92693798001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	179	50	50	223	224	88	91	90-110	1	10	M1
Fluoride	mg/L	6.5	2.5	2.5	7.8	8.8	52	93	90-110	12	10	M1,R1
Sulfate	mg/L	629	50	50	673	677	88	97	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4182608 4182609

Parameter	Units	92694107002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	5.3	50	50	54.9	55.9	99	101	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.6	100	102	90-110	2	10	
Sulfate	mg/L	ND	50	50	48.9	49.9	97	99	90-110	2	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

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

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-1 Week 2
Pace Project No.: 92694019

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92694019001	**HAM-PT-07**	EPA 3010A	808667	EPA 6010D	808804
92694019002	**HAM-PT-08**	EPA 3010A	808667	EPA 6010D	808804
92694019005	**HAM-AP1-EB-01**	EPA 3010A	808667	EPA 6010D	808804
92694019006	**HAM-AP1-FB-01**	EPA 3010A	808667	EPA 6010D	808804
92694019007	**HAM-AP1-FD-01**	EPA 3010A	808667	EPA 6010D	808804
92694019001	**HAM-PT-07**	EPA 3005A	808188	EPA 6020B	808251
92694019002	**HAM-PT-08**	EPA 3005A	808042	EPA 6020B	808061
92694019003	**HAM-PT-09**	EPA 3005A	808042	EPA 6020B	808061
92694019004	**HAM-PT-10**	EPA 3005A	808042	EPA 6020B	808061
92694019005	**HAM-AP1-EB-01**	EPA 3005A	808042	EPA 6020B	808061
92694019006	**HAM-AP1-FB-01**	EPA 3005A	808042	EPA 6020B	808061
92694019007	**HAM-AP1-FD-01**	EPA 3005A	808042	EPA 6020B	808061
92694019001	**HAM-PT-07**	EPA 7470A	808146	EPA 7470A	808193
92694019002	**HAM-PT-08**	EPA 7470A	808146	EPA 7470A	808193
92694019005	**HAM-AP1-EB-01**	EPA 7470A	808146	EPA 7470A	808193
92694019006	**HAM-AP1-FB-01**	EPA 7470A	808146	EPA 7470A	808193
92694019007	**HAM-AP1-FD-01**	EPA 7470A	808146	EPA 7470A	808193
92694019001	**HAM-PT-07**	SM 2540C-2015	807658		
92694019002	**HAM-PT-08**	SM 2540C-2015	807658		
92694019005	**HAM-AP1-EB-01**	SM 2540C-2015	807658		
92694019006	**HAM-AP1-FB-01**	SM 2540C-2015	807658		
92694019007	**HAM-AP1-FD-01**	SM 2540C-2015	807658		
92694019001	**HAM-PT-07**	SM 2320B-2011	807943		
92694019002	**HAM-PT-08**	SM 2320B-2011	807943		
92694019005	**HAM-AP1-EB-01**	SM 2320B-2011	807943		
92694019006	**HAM-AP1-FB-01**	SM 2320B-2011	807943		
92694019007	**HAM-AP1-FD-01**	SM 2320B-2011	807943		
92694019001	**HAM-PT-07**	SM 4500-S2D-2011	808007		
92694019002	**HAM-PT-08**	SM 4500-S2D-2011	808007		
92694019005	**HAM-AP1-EB-01**	SM 4500-S2D-2011	808007		
92694019006	**HAM-AP1-FB-01**	SM 4500-S2D-2011	808007		
92694019007	**HAM-AP1-FD-01**	SM 4500-S2D-2011	808007		
92694019001	**HAM-PT-07**	EPA 300.0 Rev 2.1 1993	807689		
92694019002	**HAM-PT-08**	EPA 300.0 Rev 2.1 1993	807689		
92694019003	**HAM-PT-09**	EPA 300.0 Rev 2.1 1993	807689		
92694019004	**HAM-PT-10**	EPA 300.0 Rev 2.1 1993	807689		
92694019005	**HAM-AP1-EB-01**	EPA 300.0 Rev 2.1 1993	807689		
92694019006	**HAM-AP1-FB-01**	EPA 300.0 Rev 2.1 1993	807689		
92694019007	**HAM-AP1-FD-01**	EPA 300.0 Rev 2.1 1993	807689		

REPORT OF LABORATORY ANALYSIS

CHAIN-OF-CUSTODY / Analytical Request Document

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

Pace Analytical

Page: 1 of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To	Geosyntec Contacts	Company Name:	
				Address:	
Email To:	SCS Contacts	Purchase Order No.:	GPC82474-0001	Pace Quote Reference:	
Phone:	Fax:	Project Name	Hammond AP-1	Pace Project Manager:	Bonnie Vang
Requested Due Date/TAT:	5 day 48 hr for Mo, Fe, Sulfate	Project Number:		Pace Profile #:	10839

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☑ OTHER CCR

Site Location STATE: GA

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX / CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOIL/SOLID SL OIL OL WIPE WP AIR AR OTHER OT TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate	Full App. III and IV metals	Major Ions (Profile 10839-2)	TDS	Boron, Molybdenum, Iron	Sulfate	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																				N	N	N	N	N	N			92694019
1	HAM-PT-07		WG	G	10/17/2023	1354			21	6	4		1					1		X	X	X	X				N	2 unpres. 250 mL bottles for TDS 001
2	HAM-PT-08		WG	G	10/17/2023	1205			19	6	4		1					1		X	X	X	X				N	2 unpres. 250 mL bottles for TDS 002
3	HAM-PT-09		WG	G	10/17/2023	1817			21	2	1		1											X	X		N	003
4	HAM-PT-10		WG	G	10/17/2023	1427			20	2	1		1											X	X		N	004
5	HAM-AP1-EB-01		WQ	G	10/17/2023	1530			20	5	3		1					1		X	X	X	X				N	005
6	HAM-AP1-FB-01		WQ	G	10/17/2023	1525			20	5	3		1					1		X	X	X	X				N	006
7	HAM-AP1-FD-01		WG	G	10/17/2023	0000			20	6	4		1					1		X	X	X	X				N	2 unpres. 250 mL bottles for TDS 007
8																												
9																												
10																												
11																												
12																												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-CA-20231017	[signature] – Geosyntec	10-18	12:10	Ryan William / Pace	10/18/2023	1210	
	Ryan William / Pace	10/18/23	1500				

SAMPLER NAME AND SIGNATURE

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

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10/17/23

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 invoices not paid within 30 days.

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

aboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Ga Power

Project #:

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

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☑ No

Date/Initials Person Examining Contents: 10-18-23 JCC

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 730

Type of Ice: ☑ Wet ☐ Blue ☐ None

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

OMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

ENT NOTIFICATION/RESOLUTION

erson contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ **Date:** _____

Project Manager SRF Review: _____ **Date:** _____

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 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		4				1	1																						
2		4				1	1																						
3		1				1	1																						
4		1				1	1																						
5		1	2			1	1																						
6		2	1			1	1																						
7		4				1	1																						
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.

Laboratory Analytical Results for October 17, 24 and 31, 2023 pending

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

SAMPLE ACKNOWLEDGMENT

Samples Submitted By: Georgia Power- Hammond
Client Project ID: Hammond AP-1
Client PO#: GPC82474-0001

Pace Project Manager: Bonnie Vang
Phone 704-977-0968
bonnie.vang@pacelabs.com
Pace Analytical Project ID: 92695422
Samples Received: October 25, 2023 12:16 PM
Estimated Completion: November 08, 2023

CC: Anthony Szwast,Caroline Nelson,Christine Hug,Kip Gray,Kristen Jurinko,Laura Midkiff,Thomas Kessler,Whitney Law

Customer Sample ID	Pace Analytical Lab ID	Matrix	Date/Time Collected	Method
HAM-PT-07	92695422001	Water	10/24/23 11:05	300.0 IC Anions 6020 MET ICPMS Metals Digestion Charge Sample Disposal
HAM-PT-08	92695422002	Water	10/24/23 14:17	300.0 IC Anions 6020 MET ICPMS Metals Digestion Charge Sample Disposal
HAM-PT-09	92695422003	Water	10/24/23 16:15	2320B Alkalinity 2540C Total Dissolved Solids 300.0 IC Anions 4500S2D Sulfide Water 6010D ATL ICP 6020 MET ICPMS 7470 Mercury Metals Digestion Charge Sample Disposal
HAM-PT-10	92695422004	Water	10/24/23 17:15	2320B Alkalinity 2540C Total Dissolved Solids 300.0 IC Anions 4500S2D Sulfide Water 6010D ATL ICP 6020 MET ICPMS 7470 Mercury Metals Digestion Charge Sample Disposal
HAM-AP1-EB-01	92695422005	Water	10/24/23 18:35	2320B Alkalinity 2540C Total Dissolved Solids 300.0 IC Anions 4500S2D Sulfide Water 6010D ATL ICP 6020 MET ICPMS 7470 Mercury Metals Digestion Charge Sample Disposal
HAM-AP1-FB-01	92695422006	Water	10/24/23 18:25	2320B Alkalinity 2540C Total Dissolved Solids 300.0 IC Anions 4500S2D Sulfide Water 6010D ATL ICP

Please contact your project manager if you recognize any discrepancy in this form or have any questions about your project.

Thank you for choosing Pace Analytical Services, LLC.

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

SAMPLE ACKNOWLEDGMENT

Samples Submitted By: Georgia Power- Hammond
Client Project ID: Hammond AP-1
Client PO#: GPC82474-0001

Pace Project Manager: Bonnie Vang
Phone 704-977-0968
bonnie.vang@pacelabs.com
Pace Analytical Project ID: 92695422
Samples Received: October 25, 2023 12:16 PM
Estimated Completion: November 08, 2023

CC: Anthony Szwast,Caroline Nelson,Christine Hug,Kip Gray,Kristen Jurinko,Laura Midkiff,Thomas Kessler,Whitney Law

Customer Sample ID	Pace Analytical Lab ID	Matrix	Date/Time Collected	Method
HAM-PT-07	92695422001	Water	10/24/23 11:05	300.0 IC Anions 6020 MET ICPMS Metals Digestion Charge Sample Disposal
HAM-PT-08	92695422002	Water	10/24/23 14:17	300.0 IC Anions 6020 MET ICPMS Metals Digestion Charge Sample Disposal
HAM-PT-09	92695422003	Water	10/24/23 16:15	2320B Alkalinity 2540C Total Dissolved Solids 300.0 IC Anions 4500S2D Sulfide Water 6010D ATL ICP 6020 MET ICPMS 7470 Mercury Metals Digestion Charge Sample Disposal
HAM-PT-10	92695422004	Water	10/24/23 17:15	2320B Alkalinity 2540C Total Dissolved Solids 300.0 IC Anions 4500S2D Sulfide Water 6010D ATL ICP 6020 MET ICPMS 7470 Mercury Metals Digestion Charge Sample Disposal
HAM-AP1-EB-01	92695422005	Water	10/24/23 18:35	2320B Alkalinity 2540C Total Dissolved Solids 300.0 IC Anions 4500S2D Sulfide Water 6010D ATL ICP 6020 MET ICPMS 7470 Mercury Metals Digestion Charge Sample Disposal
HAM-AP1-FB-01	92695422006	Water	10/24/23 18:25	2320B Alkalinity 2540C Total Dissolved Solids 300.0 IC Anions 4500S2D Sulfide Water 6010D ATL ICP

Please contact your project manager if you recognize any discrepancy in this form or have any questions about your project.

Confidentiality Statement: The Parties agree that they will take all reasonable precautions to prevent the unauthorized disclosure of any proprietary or confidential information of each other and that they will not disclose such information except to those employees, subcontractors, or agents who have expressly agreed to maintain confidentiality.

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SAMPLE ACKNOWLEDGMENT

Customer Sample ID	Pace Analytical Lab ID	Matrix	Date/Time Collected	Method
HAM-AP1-FD-01	92695422007	Water	10/24/23 00:00	6020 MET ICPMS 7470 Mercury Metals Digestion Charge Sample Disposal 2320B Alkalinity 2540C Total Dissolved Solids 300.0 IC Anions 4500S2D Sulfide Water 6010D ATL ICP 6020 MET ICPMS 7470 Mercury Metals Digestion Charge Sample Disposal

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SAMPLE ACKNOWLEDGMENT

Samples Submitted By: Georgia Power- Hammond
Client Project ID: Hammond AP-1
Client PO#: GPC82474-0001

Pace Project Manager: Bonnie Vang
Phone 704-977-0968
bonnie.vang@pacelabs.com
Pace Analytical Project ID: 92696318
Samples Received: November 1, 2023 12:05 PM
Estimated Completion: November 15, 2023

CC: Anthony Szwast,Caroline Nelson,Christine Hug,Kip Gray,Kristen Jurinko,Laura Midkiff,Thomas Kessler,Whitney Law

Customer Sample ID	Pace Analytical Lab ID	Matrix	Date/Time Collected	Method
HAM-PT-07	92696318001	Water	10/31/23 11:51	2320B Alkalinity 2540C Total Dissolved Solids 300.0 IC Anions 4500S2D Sulfide Water 6010D ATL ICP 6020 MET ICPMS 7470 Mercury Metals Digestion Charge Sample Disposal
HAM-PT-08	92696318002	Water	10/31/23 15:31	2320B Alkalinity 2540C Total Dissolved Solids 300.0 IC Anions 4500S2D Sulfide Water 6010D ATL ICP 6020 MET ICPMS 7470 Mercury Metals Digestion Charge Sample Disposal
HAM-PT-09	92696318003	Water	10/31/23 16:07	300.0 IC Anions 6020 MET ICPMS Metals Digestion Charge Sample Disposal
HAM-PT-10	92696318004	Water	10/31/23 13:12	300.0 IC Anions 6020 MET ICPMS Metals Digestion Charge Sample Disposal
HAM-AP1-EB-01	92696318005	Water	10/31/23 17:00	2320B Alkalinity 2540C Total Dissolved Solids 300.0 IC Anions 4500S2D Sulfide Water 6010D ATL ICP 6020 MET ICPMS 7470 Mercury Metals Digestion Charge Sample Disposal
HAM-AP1-FB-01	92696318006	Water	10/31/23 16:45	2320B Alkalinity 2540C Total Dissolved Solids 300.0 IC Anions 4500S2D Sulfide Water 6010D ATL ICP

Please contact your project manager if you recognize any discrepancy in this form or have any questions about your project.

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SAMPLE ACKNOWLEDGMENT

Customer Sample ID	Pace Analytical Lab ID	Matrix	Date/Time Collected	Method
HAM-AP1-FD-01	92696318007	Water	10/31/23 00:00	6020 MET ICPMS 7470 Mercury Metals Digestion Charge Sample Disposal 2320B Alkalinity 2540C Total Dissolved Solids 300.0 IC Anions 4500S2D Sulfide Water 6010D ATL ICP 6020 MET ICPMS 7470 Mercury Metals Digestion Charge Sample Disposal

Please contact your project manager if you recognize any discrepancy in this form or have any questions about your project.

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December 06, 2023

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

RE: Project: Hammond AP-1
Pace Project No.: 92695422

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

Pace Analytical Services, LLC
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CERTIFICATIONS

Project: Hammond AP-1
Pace Project No.: 92695422

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

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

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Hammond AP-1
Pace Project No.: 92695422

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92695422001	**HAM-PT-07**	Water	10/24/23 11:05	10/25/23 12:16
92695422002	**HAM-PT-08**	Water	10/24/23 14:17	10/25/23 12:16
92695422003	**HAM-PT-09**	Water	10/24/23 16:15	10/25/23 12:16
92695422004	**HAM-PT-10**	Water	10/24/23 17:15	10/25/23 12:16
92695422005	**HAM-AP1-EB-01**	Water	10/24/23 18:35	10/25/23 12:16
92695422006	**HAM-AP1-FB-01**	Water	10/24/23 18:25	10/25/23 12:16
92695422007	**HAM-AP1-FD-01**	Water	10/24/23 00:00	10/25/23 12:16

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SAMPLE ANALYTE COUNT

Project: Hammond AP-1
Pace Project No.: 92695422

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92695422001	**HAM-PT-07**	EPA 6020B	CW1	3
		EPA 300.0 Rev 2.1 1993	JCM	3
92695422002	**HAM-PT-08**	EPA 6020B	CW1	3
		EPA 300.0 Rev 2.1 1993	JCM	3
92695422003	**HAM-PT-09**	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
92695422004	**HAM-PT-10**	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
92695422005	**HAM-AP1-EB-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
92695422006	**HAM-AP1-FB-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
92695422007	**HAM-AP1-FD-01**	EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Hammond AP-1
Pace Project No.: 92695422

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		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

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SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92695422

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92695422001	**HAM-PT-07**					
EPA 6020B	Arsenic	0.31	mg/L	0.10	11/07/23 20:09	
EPA 6020B	Boron	1.1	mg/L	0.40	11/07/23 20:09	
EPA 6020B	Iron	18.5	mg/L	0.40	11/07/23 20:09	
EPA 300.0 Rev 2.1 1993	Chloride	15.7	mg/L	1.0	10/28/23 16:53	
EPA 300.0 Rev 2.1 1993	Fluoride	0.38	mg/L	0.10	10/28/23 16:53	
EPA 300.0 Rev 2.1 1993	Sulfate	299	mg/L	7.0	10/29/23 00:56	
92695422002	**HAM-PT-08**					
EPA 6020B	Arsenic	0.28	mg/L	0.10	11/07/23 20:13	
EPA 6020B	Boron	1.1	mg/L	0.40	11/07/23 20:13	
EPA 6020B	Iron	8.0	mg/L	0.40	11/07/23 20:13	
EPA 300.0 Rev 2.1 1993	Chloride	17.6	mg/L	1.0	10/28/23 17:07	
EPA 300.0 Rev 2.1 1993	Fluoride	0.30	mg/L	0.10	10/28/23 17:07	
EPA 300.0 Rev 2.1 1993	Sulfate	238	mg/L	5.0	10/29/23 01:10	
92695422003	**HAM-PT-09**					
EPA 6010D	Iron	0.40	mg/L	0.040	11/10/23 13:34	
EPA 6010D	Manganese	0.076	mg/L	0.040	11/10/23 13:34	
EPA 6010D	Potassium	3.8	mg/L	0.50	11/10/23 13:34	
EPA 6010D	Sodium	4.1	mg/L	1.0	11/10/23 13:34	
EPA 6010D	Calcium	56.2	mg/L	1.0	11/10/23 13:34	M1
EPA 6010D	Magnesium	13.7	mg/L	0.050	11/10/23 13:34	
EPA 6020B	Barium	0.079	mg/L	0.0050	11/07/23 20:17	
EPA 6020B	Boron	0.50	mg/L	0.040	11/07/23 20:17	
EPA 6020B	Cobalt	0.00054J	mg/L	0.0050	11/07/23 20:17	
EPA 6020B	Molybdenum	0.25	mg/L	0.010	11/07/23 20:17	
SM 2540C-2015	Total Dissolved Solids	246	mg/L	25.0	10/27/23 17:56	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	115	mg/L	5.0	11/01/23 17:42	
SM 2320B-2011	Alkalinity, Total as CaCO3	115	mg/L	5.0	11/01/23 17:42	
EPA 300.0 Rev 2.1 1993	Chloride	14.2	mg/L	1.0	10/28/23 17:47	
EPA 300.0 Rev 2.1 1993	Fluoride	0.46	mg/L	0.10	10/28/23 17:47	
EPA 300.0 Rev 2.1 1993	Sulfate	69.3	mg/L	1.0	10/28/23 17:47	
92695422004	**HAM-PT-10**					
EPA 6010D	Iron	0.91	mg/L	0.040	11/10/23 13:53	
EPA 6010D	Manganese	0.95	mg/L	0.040	11/10/23 13:53	
EPA 6010D	Potassium	7.0	mg/L	0.50	11/10/23 13:53	
EPA 6010D	Sodium	7.3	mg/L	1.0	11/10/23 13:53	
EPA 6010D	Calcium	90.6	mg/L	1.0	11/10/23 13:53	
EPA 6010D	Magnesium	12.1	mg/L	0.050	11/10/23 13:53	
EPA 6020B	Arsenic	0.00085J	mg/L	0.010	11/07/23 20:21	
EPA 6020B	Barium	0.056	mg/L	0.0050	11/07/23 20:21	
EPA 6020B	Boron	1.3	mg/L	0.040	11/07/23 20:21	
EPA 6020B	Cobalt	0.0016J	mg/L	0.0050	11/07/23 20:21	
EPA 6020B	Lithium	0.0016J	mg/L	0.030	11/07/23 20:21	
EPA 6020B	Molybdenum	0.22	mg/L	0.010	11/07/23 20:21	
SM 2540C-2015	Total Dissolved Solids	402	mg/L	25.0	10/27/23 17:57	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	141	mg/L	5.0	11/01/23 17:51	
SM 2320B-2011	Alkalinity, Total as CaCO3	141	mg/L	5.0	11/01/23 17:51	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92695422

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92695422004	**HAM-PT-10**					
EPA 300.0 Rev 2.1 1993	Chloride	31.7	mg/L	1.0	10/28/23 18:27	
EPA 300.0 Rev 2.1 1993	Fluoride	0.34	mg/L	0.10	10/28/23 18:27	
EPA 300.0 Rev 2.1 1993	Sulfate	102	mg/L	2.0	10/29/23 01:54	
92695422007	**HAM-AP1-FD-01**					
EPA 6010D	Iron	0.27	mg/L	0.040	11/10/23 14:17	
EPA 6010D	Manganese	0.076	mg/L	0.040	11/10/23 14:17	
EPA 6010D	Potassium	3.8	mg/L	0.50	11/10/23 14:17	
EPA 6010D	Sodium	4.1	mg/L	1.0	11/10/23 14:17	
EPA 6010D	Calcium	55.6	mg/L	1.0	11/10/23 14:17	
EPA 6010D	Magnesium	13.7	mg/L	0.050	11/10/23 14:17	
EPA 6020B	Barium	0.075	mg/L	0.0050	11/07/23 20:45	
EPA 6020B	Boron	0.48	mg/L	0.040	11/07/23 20:45	
EPA 6020B	Cadmium	0.00010J	mg/L	0.00050	11/07/23 20:45	
EPA 6020B	Cobalt	0.00056J	mg/L	0.0050	11/07/23 20:45	
EPA 6020B	Molybdenum	0.24	mg/L	0.010	11/07/23 20:45	
SM 2540C-2015	Total Dissolved Solids	273	mg/L	25.0	10/27/23 17:57	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	113	mg/L	5.0	11/01/23 18:20	
SM 2320B-2011	Alkalinity, Total as CaCO3	113	mg/L	5.0	11/01/23 18:20	
EPA 300.0 Rev 2.1 1993	Chloride	14.0	mg/L	1.0	10/28/23 19:08	
EPA 300.0 Rev 2.1 1993	Fluoride	0.42	mg/L	0.10	10/28/23 19:08	
EPA 300.0 Rev 2.1 1993	Sulfate	68.3	mg/L	1.0	10/28/23 19:08	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92695422

Sample: HAM-PT-07 **Lab ID: 92695422001** Collected: 10/24/23 11:05 Received: 10/25/23 12:16 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								
Arsenic	**0.31**	mg/L	0.10	0.0084	10	10/30/23 13:17	11/07/23 20:09	7440-38-2	
Boron	**1.1**	mg/L	0.40	0.12	10	10/30/23 13:17	11/07/23 20:09	7440-42-8	
Iron	**18.5**	mg/L	0.40	0.075	10	10/30/23 13:17	11/07/23 20:09	7439-89-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**15.7**	mg/L	1.0	0.60	1		10/28/23 16:53	16887-00-6	
Fluoride	**0.38**	mg/L	0.10	0.050	1		10/28/23 16:53	16984-48-8	
Sulfate	**299**	mg/L	7.0	3.5	7		10/29/23 00:56	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92695422

Sample: HAM-PT-08 **Lab ID: 92695422002** Collected: 10/24/23 14:17 Received: 10/25/23 12:16 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								
Arsenic	**0.28**	mg/L	0.10	0.0084	10	10/30/23 13:17	11/07/23 20:13	7440-38-2	
Boron	**1.1**	mg/L	0.40	0.12	10	10/30/23 13:17	11/07/23 20:13	7440-42-8	
Iron	**8.0**	mg/L	0.40	0.075	10	10/30/23 13:17	11/07/23 20:13	7439-89-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**17.6**	mg/L	1.0	0.60	1		10/28/23 17:07	16887-00-6	
Fluoride	**0.30**	mg/L	0.10	0.050	1		10/28/23 17:07	16984-48-8	
Sulfate	**238**	mg/L	5.0	2.5	5		10/29/23 01:10	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92695422

Sample: HAM-PT-09 **Lab ID: 92695422003** Collected: 10/24/23 16:15 Received: 10/25/23 12:16 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.40**	mg/L	0.040	0.025	1	11/03/23 16:00	11/10/23 13:34	7439-89-6	
Manganese	**0.076**	mg/L	0.040	0.011	1	11/03/23 16:00	11/10/23 13:34	7439-96-5	
Potassium	**3.8**	mg/L	0.50	0.15	1	11/03/23 16:00	11/10/23 13:34	7440-09-7	
Sodium	**4.1**	mg/L	1.0	0.58	1	11/03/23 16:00	11/10/23 13:34	7440-23-5	
Calcium	**56.2**	mg/L	1.0	0.12	1	11/03/23 16:00	11/10/23 13:34	7440-70-2	M1
Magnesium	**13.7**	mg/L	0.050	0.012	1	11/03/23 16:00	11/10/23 13:34	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	10/30/23 13:17	11/07/23 20:17	7440-36-0	
Arsenic	ND	mg/L	0.010	0.00084	1	10/30/23 13:17	11/07/23 20:17	7440-38-2	
Barium	**0.079**	mg/L	0.0050	0.00047	1	10/30/23 13:17	11/07/23 20:17	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	10/30/23 13:17	11/07/23 20:17	7440-41-7	
Boron	**0.50**	mg/L	0.040	0.012	1	10/30/23 13:17	11/07/23 20:17	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	10/30/23 13:17	11/07/23 20:17	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	10/30/23 13:17	11/07/23 20:17	7440-47-3	
Cobalt	**0.00054J**	mg/L	0.0050	0.00032	1	10/30/23 13:17	11/07/23 20:17	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	10/30/23 13:17	11/07/23 20:17	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	10/30/23 13:17	11/07/23 20:17	7439-93-2	
Molybdenum	**0.25**	mg/L	0.010	0.00062	1	10/30/23 13:17	11/07/23 20:17	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	10/30/23 13:17	11/07/23 20:17	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	10/30/23 13:17	11/07/23 20:17	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	11/06/23 11:30	11/06/23 13:11	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**246**	mg/L	25.0	25.0	1		10/27/23 17:56		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**115**	mg/L	5.0	5.0	1		11/01/23 17:42		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/01/23 17:42		
Alkalinity, Total as CaCO3	**115**	mg/L	5.0	5.0	1		11/01/23 17:42		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		10/31/23 06:12	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**14.2**	mg/L	1.0	0.60	1		10/28/23 17:47	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92695422

Sample: HAM-PT-09 **Lab ID: 92695422003** Collected: 10/24/23 16:15 Received: 10/25/23 12:16 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.46**	mg/L	0.10	0.050	1		10/28/23 17:47	16984-48-8	
Sulfate	**69.3**	mg/L	1.0	0.50	1		10/28/23 17:47	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92695422

Sample: HAM-PT-10 **Lab ID: 92695422004** Collected: 10/24/23 17:15 Received: 10/25/23 12:16 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.91**	mg/L	0.040	0.025	1	11/03/23 16:00	11/10/23 13:53	7439-89-6	
Manganese	**0.95**	mg/L	0.040	0.011	1	11/03/23 16:00	11/10/23 13:53	7439-96-5	
Potassium	**7.0**	mg/L	0.50	0.15	1	11/03/23 16:00	11/10/23 13:53	7440-09-7	
Sodium	**7.3**	mg/L	1.0	0.58	1	11/03/23 16:00	11/10/23 13:53	7440-23-5	
Calcium	**90.6**	mg/L	1.0	0.12	1	11/03/23 16:00	11/10/23 13:53	7440-70-2	
Magnesium	**12.1**	mg/L	0.050	0.012	1	11/03/23 16:00	11/10/23 13:53	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	10/30/23 13:17	11/07/23 20:21	7440-36-0	
Arsenic	**0.00085J**	mg/L	0.010	0.00084	1	10/30/23 13:17	11/07/23 20:21	7440-38-2	
Barium	**0.056**	mg/L	0.0050	0.00047	1	10/30/23 13:17	11/07/23 20:21	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	10/30/23 13:17	11/07/23 20:21	7440-41-7	
Boron	**1.3**	mg/L	0.040	0.012	1	10/30/23 13:17	11/07/23 20:21	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	10/30/23 13:17	11/07/23 20:21	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	10/30/23 13:17	11/07/23 20:21	7440-47-3	
Cobalt	**0.0016J**	mg/L	0.0050	0.00032	1	10/30/23 13:17	11/07/23 20:21	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	10/30/23 13:17	11/07/23 20:21	7439-92-1	
Lithium	**0.0016J**	mg/L	0.030	0.0016	1	10/30/23 13:17	11/07/23 20:21	7439-93-2	
Molybdenum	**0.22**	mg/L	0.010	0.00062	1	10/30/23 13:17	11/07/23 20:21	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	10/30/23 13:17	11/07/23 20:21	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	10/30/23 13:17	11/07/23 20:21	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	11/06/23 11:30	11/06/23 13:13	7439-97-6	M1,R1
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**402**	mg/L	25.0	25.0	1		10/27/23 17:57		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**141**	mg/L	5.0	5.0	1		11/01/23 17:51		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/01/23 17:51		
Alkalinity, Total as CaCO3	**141**	mg/L	5.0	5.0	1		11/01/23 17:51		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		10/31/23 06:13	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**31.7**	mg/L	1.0	0.60	1		10/28/23 18:27	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92695422

Sample: HAM-PT-10 **Lab ID: 92695422004** Collected: 10/24/23 17:15 Received: 10/25/23 12:16 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.34**	mg/L	0.10	0.050	1		10/28/23 18:27	16984-48-8	
Sulfate	**102**	mg/L	2.0	1.0	2		10/29/23 01:54	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92695422

Sample: HAM-AP1-EB-01 **Lab ID: 92695422005** Collected: 10/24/23 18:35 Received: 10/25/23 12:16 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	ND	mg/L	0.040	0.025	1	11/03/23 16:00	11/10/23 13:58	7439-89-6	
Manganese	ND	mg/L	0.040	0.011	1	11/03/23 16:00	11/10/23 13:58	7439-96-5	
Potassium	ND	mg/L	0.50	0.15	1	11/03/23 16:00	11/10/23 13:58	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	11/03/23 16:00	11/10/23 13:58	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	11/03/23 16:00	11/10/23 13:58	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	11/03/23 16:00	11/10/23 13:58	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	10/30/23 13:17	11/07/23 20:29	7440-36-0	
Arsenic	ND	mg/L	0.010	0.00084	1	10/30/23 13:17	11/07/23 20:29	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	10/30/23 13:17	11/07/23 20:29	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	10/30/23 13:17	11/07/23 20:29	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	10/30/23 13:17	11/07/23 20:29	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	10/30/23 13:17	11/07/23 20:29	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	10/30/23 13:17	11/07/23 20:29	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	10/30/23 13:17	11/07/23 20:29	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	10/30/23 13:17	11/07/23 20:29	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	10/30/23 13:17	11/07/23 20:29	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	10/30/23 13:17	11/07/23 20:29	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	10/30/23 13:17	11/07/23 20:29	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	10/30/23 13:17	11/07/23 20:29	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	11/06/23 11:30	11/06/23 13:30	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		10/27/23 17:57		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/01/23 18:02		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/01/23 18:02		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		11/01/23 18:02		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		10/31/23 06:14	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		10/28/23 15:46	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92695422

Sample: HAM-AP1-EB-01 **Lab ID: 92695422005** Collected: 10/24/23 18:35 Received: 10/25/23 12:16 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		10/28/23 15:46	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		10/28/23 15:46	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92695422

Sample: HAM-AP1-FB-01 **Lab ID: 92695422006** Collected: 10/24/23 18:25 Received: 10/25/23 12:16 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	ND	mg/L	0.040	0.025	1	11/03/23 16:00	11/10/23 14:12	7439-89-6	
Manganese	ND	mg/L	0.040	0.011	1	11/03/23 16:00	11/10/23 14:12	7439-96-5	
Potassium	ND	mg/L	0.50	0.15	1	11/03/23 16:00	11/10/23 14:12	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	11/03/23 16:00	11/10/23 14:12	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	11/03/23 16:00	11/10/23 14:12	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	11/03/23 16:00	11/10/23 14:12	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	10/30/23 13:17	11/07/23 20:41	7440-36-0	
Arsenic	ND	mg/L	0.010	0.00084	1	10/30/23 13:17	11/07/23 20:41	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	10/30/23 13:17	11/07/23 20:41	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	10/30/23 13:17	11/07/23 20:41	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	10/30/23 13:17	11/07/23 20:41	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	10/30/23 13:17	11/07/23 20:41	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	10/30/23 13:17	11/07/23 20:41	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	10/30/23 13:17	11/07/23 20:41	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	10/30/23 13:17	11/07/23 20:41	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	10/30/23 13:17	11/07/23 20:41	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	10/30/23 13:17	11/07/23 20:41	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	10/30/23 13:17	11/07/23 20:41	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	10/30/23 13:17	11/07/23 20:41	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	11/06/23 11:30	11/06/23 13:32	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		10/27/23 17:57		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/01/23 18:06		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/01/23 18:06		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		11/01/23 18:06		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		10/31/23 06:14	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		10/28/23 16:00	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92695422

Sample: HAM-AP1-FB-01 **Lab ID: 92695422006** Collected: 10/24/23 18:25 Received: 10/25/23 12:16 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		10/28/23 16:00	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		10/28/23 16:00	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92695422

Sample: HAM-AP1-FD-01 **Lab ID: 92695422007** 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
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.27**	mg/L	0.040	0.025	1	11/03/23 16:00	11/10/23 14:17	7439-89-6	
Manganese	**0.076**	mg/L	0.040	0.011	1	11/03/23 16:00	11/10/23 14:17	7439-96-5	
Potassium	**3.8**	mg/L	0.50	0.15	1	11/03/23 16:00	11/10/23 14:17	7440-09-7	
Sodium	**4.1**	mg/L	1.0	0.58	1	11/03/23 16:00	11/10/23 14:17	7440-23-5	
Calcium	**55.6**	mg/L	1.0	0.12	1	11/03/23 16:00	11/10/23 14:17	7440-70-2	
Magnesium	**13.7**	mg/L	0.050	0.012	1	11/03/23 16:00	11/10/23 14:17	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	10/30/23 13:17	11/07/23 20:45	7440-36-0	
Arsenic	ND	mg/L	0.010	0.00084	1	10/30/23 13:17	11/07/23 20:45	7440-38-2	
Barium	**0.075**	mg/L	0.0050	0.00047	1	10/30/23 13:17	11/07/23 20:45	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	10/30/23 13:17	11/07/23 20:45	7440-41-7	
Boron	**0.48**	mg/L	0.040	0.012	1	10/30/23 13:17	11/07/23 20:45	7440-42-8	
Cadmium	**0.00010J**	mg/L	0.00050	0.00010	1	10/30/23 13:17	11/07/23 20:45	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	10/30/23 13:17	11/07/23 20:45	7440-47-3	
Cobalt	**0.00056J**	mg/L	0.0050	0.00032	1	10/30/23 13:17	11/07/23 20:45	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	10/30/23 13:17	11/07/23 20:45	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	10/30/23 13:17	11/07/23 20:45	7439-93-2	
Molybdenum	**0.24**	mg/L	0.010	0.00062	1	10/30/23 13:17	11/07/23 20:45	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	10/30/23 13:17	11/07/23 20:45	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	10/30/23 13:17	11/07/23 20:45	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	11/06/23 11:30	11/06/23 13:35	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**273**	mg/L	25.0	25.0	1		10/27/23 17:57		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**113**	mg/L	5.0	5.0	1		11/01/23 18:20		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/01/23 18:20		
Alkalinity, Total as CaCO3	**113**	mg/L	5.0	5.0	1		11/01/23 18:20		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		10/31/23 06:14	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**14.0**	mg/L	1.0	0.60	1		10/28/23 19:08	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92695422

Sample: HAM-AP1-FD-01 **Lab ID: 92695422007** 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
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.42**	mg/L	0.10	0.050	1		10/28/23 19:08	16984-48-8	
Sulfate	**68.3**	mg/L	1.0	0.50	1		10/28/23 19:08	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92695422

QC Batch: 810854
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92695422003, 92695422004, 92695422005, 92695422006, 92695422007

METHOD BLANK: 4198107 Matrix: Water
Associated Lab Samples: 92695422003, 92695422004, 92695422005, 92695422006, 92695422007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	11/10/23 13:22	
Iron	mg/L	ND	0.040	0.025	11/10/23 13:22	
Magnesium	mg/L	ND	0.050	0.012	11/10/23 13:22	
Manganese	mg/L	ND	0.040	0.011	11/10/23 13:22	
Potassium	mg/L	ND	0.50	0.15	11/10/23 13:22	
Sodium	mg/L	ND	1.0	0.58	11/10/23 13:22	

LABORATORY CONTROL SAMPLE: 4198108

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	100	80-120	
Iron	mg/L	1	1.0	102	80-120	
Magnesium	mg/L	1	1.1	108	80-120	
Manganese	mg/L	1	1.0	101	80-120	
Potassium	mg/L	1	1.2	115	80-120	
Sodium	mg/L	1	1.2	116	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4198109 4198110

Parameter	Units	92695422003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	56.2	1	1	55.9	57.8	-21	160	75-125	3	20	M1
Iron	mg/L	0.40	1	1	1.3	1.4	89	96	75-125	6	20	
Magnesium	mg/L	13.7	1	1	14.6	14.8	86	110	75-125	2	20	
Manganese	mg/L	0.076	1	1	1.1	1.1	97	100	75-125	2	20	
Potassium	mg/L	3.8	1	1	5.0	5.1	117	124	75-125	2	20	
Sodium	mg/L	4.1	1	1	5.2	5.3	112	118	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92695422

QC Batch: 809740
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92695422001, 92695422002, 92695422003, 92695422004, 92695422005, 92695422006, 92695422007

METHOD BLANK: 4192374 Matrix: Water
Associated Lab Samples: 92695422001, 92695422002, 92695422003, 92695422004, 92695422005, 92695422006, 92695422007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00054	11/07/23 19:05	
Arsenic	mg/L	ND	0.010	0.00084	11/07/23 19:05	
Barium	mg/L	ND	0.0050	0.00047	11/07/23 19:05	
Beryllium	mg/L	ND	0.00050	0.000094	11/07/23 19:05	
Boron	mg/L	ND	0.040	0.012	11/07/23 19:05	
Cadmium	mg/L	ND	0.00050	0.00010	11/07/23 19:05	
Chromium	mg/L	ND	0.0050	0.0019	11/07/23 19:05	
Cobalt	mg/L	ND	0.0050	0.00032	11/07/23 19:05	
Iron	mg/L	ND	0.040	0.0075	11/07/23 19:05	
Lead	mg/L	ND	0.0010	0.00016	11/07/23 19:05	
Lithium	mg/L	ND	0.030	0.0016	11/07/23 19:05	
Molybdenum	mg/L	ND	0.010	0.00062	11/07/23 19:05	
Selenium	mg/L	ND	0.0050	0.00096	11/07/23 19:05	
Thallium	mg/L	ND	0.0010	0.00038	11/07/23 19:05	

LABORATORY CONTROL SAMPLE: 4192375

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	0.098	98	80-120	
Barium	mg/L	0.1	0.093	93	80-120	
Beryllium	mg/L	0.1	0.10	101	80-120	
Boron	mg/L	1	0.99	99	80-120	
Cadmium	mg/L	0.1	0.097	97	80-120	
Chromium	mg/L	0.1	0.097	97	80-120	
Cobalt	mg/L	0.1	0.097	97	80-120	
Iron	mg/L	1	0.97	97	80-120	
Lead	mg/L	0.1	0.096	96	80-120	
Lithium	mg/L	0.1	0.098	98	80-120	
Molybdenum	mg/L	0.1	0.098	98	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	
Thallium	mg/L	0.1	0.095	95	80-120	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92695422

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4192376 4192377

Parameter	Units	92695189001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	107	105	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.11	0.11	107	108	75-125	1	20	
Barium	mg/L	0.096	0.1	0.1	0.19	0.19	93	94	75-125	1	20	
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	1	20	
Boron	mg/L	2.5	1	1	3.4	3.4	91	89	75-125	1	20	
Cadmium	mg/L	ND	0.1	0.1	0.097	0.097	97	97	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.11	108	108	75-125	0	20	
Cobalt	mg/L	0.0044J	0.1	0.1	0.11	0.11	105	104	75-125	1	20	
Iron	mg/L	0.10J	1	1	1.2	1.1	105	104	75-125	1	20	
Lead	mg/L	ND	0.1	0.1	0.095	0.093	95	93	75-125	2	20	
Lithium	mg/L	ND	0.1	0.1	0.11J	0.11J	107	105	75-125		20	
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.11	108	107	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.11	0.11	109	102	75-125	6	20	
Thallium	mg/L	ND	0.1	0.1	0.094	0.093	93	92	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92695422

QC Batch: 811152 | Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A | Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92695422003, 92695422004, 92695422005, 92695422006, 92695422007

METHOD BLANK: 4199578 Matrix: Water
Associated Lab Samples: 92695422003, 92695422004, 92695422005, 92695422006, 92695422007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	11/06/23 13:05	

LABORATORY CONTROL SAMPLE: 4199579

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4199580 4199581

Parameter	Units	92695422004 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	0.0038	0.0025	152	100	75-125	41	20	M1,R1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92695422

QC Batch: 809392
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92695422003, 92695422004, 92695422005, 92695422006, 92695422007

METHOD BLANK: 4191113 Matrix: Water
Associated Lab Samples: 92695422003, 92695422004, 92695422005, 92695422006, 92695422007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	10/27/23 17:54	

LABORATORY CONTROL SAMPLE: 4191114

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	422	106	80-120	

SAMPLE DUPLICATE: 4191115

Parameter	Units	92695061001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	122	103	17	10	D6

SAMPLE DUPLICATE: 4191116

Parameter	Units	92695478001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92695422

QC Batch: 810246
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92695422003, 92695422004, 92695422005, 92695422006, 92695422007

METHOD BLANK: 4195003 Matrix: Water
Associated Lab Samples: 92695422003, 92695422004, 92695422005, 92695422006, 92695422007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	11/01/23 15:09	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	11/01/23 15:09	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	11/01/23 15:09	

LABORATORY CONTROL SAMPLE: 4195004

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.5	101	80-120	

LABORATORY CONTROL SAMPLE: 4195005

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: 4195006 4195007

Parameter	Units	92695422007 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	113	50	50	162	167	99	109	80-120	3	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4195008 4195009

Parameter	Units	92695478001 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	51.8	52.2	99	100	80-120	1	25	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92695422

QC Batch: 809864
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92695422003, 92695422004, 92695422005, 92695422006, 92695422007

METHOD BLANK: 4193045 Matrix: Water
Associated Lab Samples: 92695422003, 92695422004, 92695422005, 92695422006, 92695422007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	10/31/23 06:08	

LABORATORY CONTROL SAMPLE: 4193046

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: 4193047 4193048

Parameter	Units	92695338008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.46	0.49	92	97	80-120	5	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4193049 4193050

Parameter	Units	92695416002 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	0.57	0.56	114	113	80-120	1	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92695422

QC Batch: 809559
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92695422001, 92695422002, 92695422003, 92695422004, 92695422005, 92695422006, 92695422007

METHOD BLANK: 4191808 Matrix: Water
Associated Lab Samples: 92695422001, 92695422002, 92695422003, 92695422004, 92695422005, 92695422006, 92695422007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	10/28/23 14:52	
Fluoride	mg/L	ND	0.10	0.050	10/28/23 14:52	
Sulfate	mg/L	ND	1.0	0.50	10/28/23 14:52	

LABORATORY CONTROL SAMPLE: 4191809

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	2.6	104	90-110	
Sulfate	mg/L	50	51.6	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4191810 4191811

Parameter	Units	92691615001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	158	50	50	202	202	89	89	90-110	0	10	M1
Fluoride	mg/L	18.8	2.5	2.5	20.9	20.9	86	85	90-110	0	10	M1
Sulfate	mg/L	1350	50	50	1390	1390	80	69	90-110	0	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4191812 4191813

Parameter	Units	92695422004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	31.7	50	50	85.2	86.3	107	109	90-110	1	10	
Fluoride	mg/L	0.34	2.5	2.5	3.0	3.0	105	108	90-110	2	10	
Sulfate	mg/L	102	50	50	152	152	100	100	90-110	0	10	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Hammond AP-1
Pace Project No.: 92695422

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-1
Pace Project No.: 92695422

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92695422003	**HAM-PT-09**	EPA 3010A	810854	EPA 6010D	810992
92695422004	**HAM-PT-10**	EPA 3010A	810854	EPA 6010D	810992
92695422005	**HAM-AP1-EB-01**	EPA 3010A	810854	EPA 6010D	810992
92695422006	**HAM-AP1-FB-01**	EPA 3010A	810854	EPA 6010D	810992
92695422007	**HAM-AP1-FD-01**	EPA 3010A	810854	EPA 6010D	810992
92695422001	**HAM-PT-07**	EPA 3005A	809740	EPA 6020B	809832
92695422002	**HAM-PT-08**	EPA 3005A	809740	EPA 6020B	809832
92695422003	**HAM-PT-09**	EPA 3005A	809740	EPA 6020B	809832
92695422004	**HAM-PT-10**	EPA 3005A	809740	EPA 6020B	809832
92695422005	**HAM-AP1-EB-01**	EPA 3005A	809740	EPA 6020B	809832
92695422006	**HAM-AP1-FB-01**	EPA 3005A	809740	EPA 6020B	809832
92695422007	**HAM-AP1-FD-01**	EPA 3005A	809740	EPA 6020B	809832
92695422003	**HAM-PT-09**	EPA 7470A	811152	EPA 7470A	811235
92695422004	**HAM-PT-10**	EPA 7470A	811152	EPA 7470A	811235
92695422005	**HAM-AP1-EB-01**	EPA 7470A	811152	EPA 7470A	811235
92695422006	**HAM-AP1-FB-01**	EPA 7470A	811152	EPA 7470A	811235
92695422007	**HAM-AP1-FD-01**	EPA 7470A	811152	EPA 7470A	811235
92695422003	**HAM-PT-09**	SM 2540C-2015	809392		
92695422004	**HAM-PT-10**	SM 2540C-2015	809392		
92695422005	**HAM-AP1-EB-01**	SM 2540C-2015	809392		
92695422006	**HAM-AP1-FB-01**	SM 2540C-2015	809392		
92695422007	**HAM-AP1-FD-01**	SM 2540C-2015	809392		
92695422003	**HAM-PT-09**	SM 2320B-2011	810246		
92695422004	**HAM-PT-10**	SM 2320B-2011	810246		
92695422005	**HAM-AP1-EB-01**	SM 2320B-2011	810246		
92695422006	**HAM-AP1-FB-01**	SM 2320B-2011	810246		
92695422007	**HAM-AP1-FD-01**	SM 2320B-2011	810246		
92695422003	**HAM-PT-09**	SM 4500-S2D-2011	809864		
92695422004	**HAM-PT-10**	SM 4500-S2D-2011	809864		
92695422005	**HAM-AP1-EB-01**	SM 4500-S2D-2011	809864		
92695422006	**HAM-AP1-FB-01**	SM 4500-S2D-2011	809864		
92695422007	**HAM-AP1-FD-01**	SM 4500-S2D-2011	809864		
92695422001	**HAM-PT-07**	EPA 300.0 Rev 2.1 1993	809559		
92695422002	**HAM-PT-08**	EPA 300.0 Rev 2.1 1993	809559		
92695422003	**HAM-PT-09**	EPA 300.0 Rev 2.1 1993	809559		
92695422004	**HAM-PT-10**	EPA 300.0 Rev 2.1 1993	809559		
92695422005	**HAM-AP1-EB-01**	EPA 300.0 Rev 2.1 1993	809559		
92695422006	**HAM-AP1-FB-01**	EPA 300.0 Rev 2.1 1993	809559		
92695422007	**HAM-AP1-FD-01**	EPA 300.0 Rev 2.1 1993	809559		

REPORT OF LABORATORY ANALYSIS

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: Duke 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: 10-25-23 JCC

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer:

☐ IR Gun ID: 232 **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?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered? 10-25-23 JCC	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: W				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

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

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

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

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

Project #

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

Pace Analytical
www.pacelabs.com

Page: 1 of 1

Section A Required Client Information		Section B Required Project Information		Section C Invoice Information	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co
Address:	Atlanta, GA	Copy To:	Geosyntec Contacts	Company Name:	
				Address:	
Email To:	SCS Contacts	Purchase Order No.:	GPC82474-0001	Pace Quote Reference:	
Phone:	Fax:	Project Name:	Hammond AP-1	Pace Project Manager:	Bonnie Vang
Requested Due Date/TAT:	6 day	Project Number:		Pace Profile #:	10839

REGULATORY AGENCY

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

Site Location STATE: GA

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information: SAMPLE ID (A-Z, 0-9 /) Sample IDs MUST BE UNIQUE	Valid Matrix Codes: MATRIX / CODE — DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END DATE	COLLECTED COMPOSITE END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate	Full App. III and IV metals	Major Ions (Profile 10839-2)	TDS	Arsenic, Boron, Iron	Sulfate	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 92695422
1	HAM-PT-07		WG	G	10/24/2023	1105	--	--	21	2	1		1						N	N	N	N	N	N	N	001
2	HAM-PT-08		WG	G	10/24/2023	1417	--	--	19	2	1		1										N	N	N	002
3	HAM-PT-09		WG	G	10/24/2023	1615	--	--	21	5	3		1					1		X	X	X	X			N	003
4	HAM-PT-10		WG	G	10/24/2023	1715	--	--	20	5	3		1					1		X	X	X	X			N	004
5	HAM-AP1-EB-01		WQ	G	10/24/2023	1635	--	--	20	5	3		1					1		X	X	X	X			N	005
6	HAM-AP1-FB-01		WQ	G	10/24/2023	1625	--	--	20	5	3		1					1		X	X	X	X			N	006
7	HAM-AP1-FD-01		WG	G	10/24/2023	0000	--	--	20	5	3		1					1		X	X	X	X			N	007
8																											
9																											
10																											
11																											
12																											

@ 10/24/23

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 Williams / Pace	10/25/23	1216	
	Ryan Williams / Pace	10/25/23	1405		10/25/23	1405	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Alex Brown / Geosyntec Consultants, Inc.

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 10/24/23

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

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

November 14, 2023

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

RE: Project: Hammond AP-1
Pace Project No.: 92696318

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory on November 01, 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
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

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

CERTIFICATIONS

Project: Hammond AP-1
Pace Project No.: 92696318

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

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

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Hammond AP-1
Pace Project No.: 92696318

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92696318001	**HAM-PT-07**	Water	10/31/23 11:51	11/01/23 12:05
92696318002	**HAM-PT-08**	Water	10/31/23 15:31	11/01/23 12:05
92696318003	**HAM-PT-09**	Water	10/31/23 16:07	11/01/23 12:05
92696318004	**HAM-PT-10**	Water	10/31/23 13:12	11/01/23 12:05
92696318005	**HAM-AP1-EB-01**	Water	10/31/23 17:00	11/01/23 12:05
92696318006	**HAM-AP1-FB-01**	Water	10/31/23 16:45	11/01/23 12:05
92696318007	**HAM-AP1-FD-01**	Water	10/31/23 00:00	11/01/23 12:05

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Hammond AP-1
Pace Project No.: 92696318

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92696318001	**HAM-PT-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
		EPA 300.0 Rev 2.1 1993	CDC	3
92696318002	**HAM-PT-08**	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	CDC	3
92696318003	**HAM-PT-09**	EPA 6020B	CW1	3
		EPA 300.0 Rev 2.1 1993	CDC	1
92696318004	**HAM-PT-10**	EPA 6020B	CW1	3
		EPA 300.0 Rev 2.1 1993	CDC	1
92696318005	**HAM-AP1-EB-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	CDC	3
92696318006	**HAM-AP1-FB-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	CDC	3
92696318007	**HAM-AP1-FD-01**	EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Hammond AP-1
Pace Project No.: 92696318

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		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

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

SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92696318

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92696318001	**HAM-PT-07**					
EPA 6010D	Iron	20.0	mg/L	0.040	11/10/23 14:22	
EPA 6010D	Manganese	5.1	mg/L	0.040	11/10/23 14:22	
EPA 6010D	Potassium	6.9	mg/L	0.50	11/10/23 14:22	
EPA 6010D	Sodium	7.6	mg/L	1.0	11/10/23 14:22	
EPA 6010D	Calcium	144	mg/L	1.0	11/10/23 14:22	
EPA 6010D	Magnesium	17.9	mg/L	0.050	11/10/23 14:22	
EPA 6020B	Arsenic	0.34	mg/L	0.010	11/08/23 19:46	M1
EPA 6020B	Barium	0.073	mg/L	0.0050	11/08/23 19:46	
EPA 6020B	Beryllium	0.00023J	mg/L	0.00050	11/08/23 19:46	
EPA 6020B	Boron	1.1	mg/L	0.040	11/08/23 19:46	
EPA 6020B	Cobalt	0.081	mg/L	0.0050	11/08/23 19:46	
EPA 6020B	Lithium	0.065	mg/L	0.030	11/08/23 19:46	
EPA 6020B	Molybdenum	0.014	mg/L	0.010	11/08/23 19:46	
SM 2540C-2015	Total Dissolved Solids	630	mg/L	25.0	11/02/23 18:02	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	138	mg/L	5.0	11/02/23 17:24	
SM 2320B-2011	Alkalinity, Total as CaCO3	138	mg/L	5.0	11/02/23 17:24	
EPA 300.0 Rev 2.1 1993	Chloride	16.5	mg/L	1.0	11/02/23 03:59	
EPA 300.0 Rev 2.1 1993	Fluoride	0.36	mg/L	0.10	11/02/23 03:59	
EPA 300.0 Rev 2.1 1993	Sulfate	291	mg/L	6.0	11/02/23 07:55	
92696318002	**HAM-PT-08**					
EPA 6010D	Iron	5.8	mg/L	0.040	11/10/23 14:27	
EPA 6010D	Manganese	2.4	mg/L	0.040	11/10/23 14:27	
EPA 6010D	Potassium	6.0	mg/L	0.50	11/10/23 14:27	
EPA 6010D	Sodium	8.5	mg/L	1.0	11/10/23 14:27	
EPA 6010D	Calcium	115	mg/L	1.0	11/10/23 14:27	
EPA 6010D	Magnesium	14.7	mg/L	0.050	11/10/23 14:27	
EPA 6020B	Antimony	0.00079J	mg/L	0.0030	11/08/23 20:02	
EPA 6020B	Arsenic	0.17	mg/L	0.010	11/08/23 20:02	
EPA 6020B	Barium	0.051	mg/L	0.0050	11/08/23 20:02	
EPA 6020B	Beryllium	0.00017J	mg/L	0.00050	11/08/23 20:02	
EPA 6020B	Boron	1.1	mg/L	0.040	11/08/23 20:02	
EPA 6020B	Cobalt	0.026	mg/L	0.0050	11/08/23 20:02	
EPA 6020B	Lead	0.00019J	mg/L	0.0010	11/08/23 20:02	
EPA 6020B	Lithium	0.013J	mg/L	0.030	11/08/23 20:02	
EPA 6020B	Molybdenum	0.024	mg/L	0.010	11/08/23 20:02	
SM 2540C-2015	Total Dissolved Solids	484	mg/L	25.0	11/02/23 18:02	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	126	mg/L	5.0	11/02/23 17:35	
SM 2320B-2011	Alkalinity, Total as CaCO3	126	mg/L	5.0	11/02/23 17:35	
EPA 300.0 Rev 2.1 1993	Chloride	21.3	mg/L	1.0	11/02/23 04:14	
EPA 300.0 Rev 2.1 1993	Fluoride	0.24	mg/L	0.10	11/02/23 04:14	
EPA 300.0 Rev 2.1 1993	Sulfate	210	mg/L	4.0	11/02/23 08:09	
92696318003	**HAM-PT-09**					
EPA 6020B	Boron	0.71	mg/L	0.040	11/08/23 20:19	
EPA 6020B	Iron	0.067	mg/L	0.040	11/08/23 20:19	
EPA 6020B	Molybdenum	0.22	mg/L	0.010	11/08/23 20:19	
EPA 300.0 Rev 2.1 1993	Sulfate	107	mg/L	2.0	11/02/23 09:23	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92696318

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92696318004	**HAM-PT-10**					
EPA 6020B	Boron	1.1	mg/L	0.040	11/08/23 20:23	
EPA 6020B	Iron	0.66	mg/L	0.040	11/08/23 20:23	
EPA 6020B	Molybdenum	0.19	mg/L	0.010	11/08/23 20:23	
EPA 300.0 Rev 2.1 1993	Sulfate	108	mg/L	2.0	11/02/23 09:38	
92696318005	**HAM-AP1-EB-01**					
EPA 6020B	Boron	0.016J	mg/L	0.040	11/08/23 20:27	
92696318007	**HAM-AP1-FD-01**					
EPA 6010D	Iron	20.6	mg/L	0.040	11/10/23 14:46	
EPA 6010D	Manganese	5.4	mg/L	0.040	11/10/23 14:46	
EPA 6010D	Potassium	6.9	mg/L	0.50	11/10/23 14:46	
EPA 6010D	Sodium	7.6	mg/L	1.0	11/10/23 14:46	
EPA 6010D	Calcium	145	mg/L	1.0	11/10/23 14:46	
EPA 6010D	Magnesium	17.8	mg/L	0.050	11/10/23 14:46	
EPA 6020B	Arsenic	0.34	mg/L	0.010	11/08/23 20:35	
EPA 6020B	Barium	0.067	mg/L	0.0050	11/08/23 20:35	
EPA 6020B	Beryllium	0.000096J	mg/L	0.00050	11/08/23 20:35	
EPA 6020B	Boron	1.1	mg/L	0.040	11/08/23 20:35	
EPA 6020B	Cobalt	0.081	mg/L	0.0050	11/08/23 20:35	
EPA 6020B	Lithium	0.067	mg/L	0.030	11/08/23 20:35	
EPA 6020B	Molybdenum	0.013	mg/L	0.010	11/08/23 20:35	
SM 2540C-2015	Total Dissolved Solids	633	mg/L	25.0	11/02/23 18:06	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	139	mg/L	5.0	11/02/23 17:54	
SM 2320B-2011	Alkalinity, Total as CaCO3	139	mg/L	5.0	11/02/23 17:54	
EPA 300.0 Rev 2.1 1993	Chloride	16.5	mg/L	1.0	11/02/23 05:58	
EPA 300.0 Rev 2.1 1993	Fluoride	0.37	mg/L	0.10	11/02/23 05:58	
EPA 300.0 Rev 2.1 1993	Sulfate	292	mg/L	6.0	11/02/23 09:52	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92696318

Sample: HAM-PT-07 **Lab ID: 92696318001** Collected: 10/31/23 11:51 Received: 11/01/23 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**20.0**	mg/L	0.040	0.025	1	11/03/23 16:00	11/10/23 14:22	7439-89-6	
Manganese	**5.1**	mg/L	0.040	0.011	1	11/03/23 16:00	11/10/23 14:22	7439-96-5	
Potassium	**6.9**	mg/L	0.50	0.15	1	11/03/23 16:00	11/10/23 14:22	7440-09-7	
Sodium	**7.6**	mg/L	1.0	0.58	1	11/03/23 16:00	11/10/23 14:22	7440-23-5	
Calcium	**144**	mg/L	1.0	0.12	1	11/03/23 16:00	11/10/23 14:22	7440-70-2	
Magnesium	**17.9**	mg/L	0.050	0.012	1	11/03/23 16:00	11/10/23 14:22	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	11/02/23 11:18	11/08/23 19:46	7440-36-0	
Arsenic	**0.34**	mg/L	0.010	0.00084	1	11/02/23 11:18	11/08/23 19:46	7440-38-2	M1
Barium	**0.073**	mg/L	0.0050	0.00047	1	11/02/23 11:18	11/08/23 19:46	7440-39-3	
Beryllium	**0.00023J**	mg/L	0.00050	0.000094	1	11/02/23 11:18	11/08/23 19:46	7440-41-7	
Boron	**1.1**	mg/L	0.040	0.012	1	11/02/23 11:18	11/08/23 19:46	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	11/02/23 11:18	11/08/23 19:46	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	11/02/23 11:18	11/08/23 19:46	7440-47-3	
Cobalt	**0.081**	mg/L	0.0050	0.00032	1	11/02/23 11:18	11/08/23 19:46	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	11/02/23 11:18	11/08/23 19:46	7439-92-1	
Lithium	**0.065**	mg/L	0.030	0.0016	1	11/02/23 11:18	11/08/23 19:46	7439-93-2	
Molybdenum	**0.014**	mg/L	0.010	0.00062	1	11/02/23 11:18	11/08/23 19:46	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	11/02/23 11:18	11/08/23 19:46	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	11/02/23 11:18	11/08/23 19:46	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	11/06/23 11:30	11/06/23 13:37	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**630**	mg/L	25.0	25.0	1		11/02/23 18:02		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**138**	mg/L	5.0	5.0	1		11/02/23 17:24		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/02/23 17:24		
Alkalinity, Total as CaCO3	**138**	mg/L	5.0	5.0	1		11/02/23 17:24		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		11/04/23 02:45	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**16.5**	mg/L	1.0	0.60	1		11/02/23 03:59	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92696318

Sample: HAM-PT-07 **Lab ID: 92696318001** Collected: 10/31/23 11:51 Received: 11/01/23 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.36**	mg/L	0.10	0.050	1		11/02/23 03:59	16984-48-8	
Sulfate	**291**	mg/L	6.0	3.0	6		11/02/23 07:55	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92696318

Sample: HAM-PT-08 **Lab ID: 92696318002** Collected: 10/31/23 15:31 Received: 11/01/23 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**5.8**	mg/L	0.040	0.025	1	11/03/23 16:00	11/10/23 14:27	7439-89-6	
Manganese	**2.4**	mg/L	0.040	0.011	1	11/03/23 16:00	11/10/23 14:27	7439-96-5	
Potassium	**6.0**	mg/L	0.50	0.15	1	11/03/23 16:00	11/10/23 14:27	7440-09-7	
Sodium	**8.5**	mg/L	1.0	0.58	1	11/03/23 16:00	11/10/23 14:27	7440-23-5	
Calcium	**115**	mg/L	1.0	0.12	1	11/03/23 16:00	11/10/23 14:27	7440-70-2	
Magnesium	**14.7**	mg/L	0.050	0.012	1	11/03/23 16:00	11/10/23 14:27	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00079J**	mg/L	0.0030	0.00054	1	11/02/23 11:18	11/08/23 20:02	7440-36-0	
Arsenic	**0.17**	mg/L	0.010	0.00084	1	11/02/23 11:18	11/08/23 20:02	7440-38-2	
Barium	**0.051**	mg/L	0.0050	0.00047	1	11/02/23 11:18	11/08/23 20:02	7440-39-3	
Beryllium	**0.00017J**	mg/L	0.00050	0.000094	1	11/02/23 11:18	11/08/23 20:02	7440-41-7	
Boron	**1.1**	mg/L	0.040	0.012	1	11/02/23 11:18	11/08/23 20:02	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	11/02/23 11:18	11/08/23 20:02	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	11/02/23 11:18	11/08/23 20:02	7440-47-3	
Cobalt	**0.026**	mg/L	0.0050	0.00032	1	11/02/23 11:18	11/08/23 20:02	7440-48-4	
Lead	**0.00019J**	mg/L	0.0010	0.00016	1	11/02/23 11:18	11/08/23 20:02	7439-92-1	
Lithium	**0.013J**	mg/L	0.030	0.0016	1	11/02/23 11:18	11/08/23 20:02	7439-93-2	
Molybdenum	**0.024**	mg/L	0.010	0.00062	1	11/02/23 11:18	11/08/23 20:02	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	11/02/23 11:18	11/08/23 20:02	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	11/02/23 11:18	11/08/23 20:02	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	11/06/23 11:30	11/06/23 13:40	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**484**	mg/L	25.0	25.0	1		11/02/23 18:02		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**126**	mg/L	5.0	5.0	1		11/02/23 17:35		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/02/23 17:35		
Alkalinity, Total as CaCO3	**126**	mg/L	5.0	5.0	1		11/02/23 17:35		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		11/04/23 02:47	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**21.3**	mg/L	1.0	0.60	1		11/02/23 04:14	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92696318

Sample: HAM-PT-08 **Lab ID: 92696318002** Collected: 10/31/23 15:31 Received: 11/01/23 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.24**	mg/L	0.10	0.050	1		11/02/23 04:14	16984-48-8	
Sulfate	**210**	mg/L	4.0	2.0	4		11/02/23 08:09	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92696318

Sample: HAM-PT-09 **Lab ID: 92696318003** Collected: 10/31/23 16:07 Received: 11/01/23 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Boron	**0.71**	mg/L	0.040	0.012	1	11/02/23 11:18	11/08/23 20:19	7440-42-8	
Iron	**0.067**	mg/L	0.040	0.0075	1	11/02/23 11:18	11/08/23 20:19	7439-89-6	
Molybdenum	**0.22**	mg/L	0.010	0.00062	1	11/02/23 11:18	11/08/23 20:19	7439-98-7	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	**107**	mg/L	2.0	1.0	2		11/02/23 09:23	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92696318

Sample: HAM-PT-10 **Lab ID: 92696318004** Collected: 10/31/23 13:12 Received: 11/01/23 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Boron	**1.1**	mg/L	0.040	0.012	1	11/02/23 11:18	11/08/23 20:23	7440-42-8	
Iron	**0.66**	mg/L	0.040	0.0075	1	11/02/23 11:18	11/08/23 20:23	7439-89-6	
Molybdenum	**0.19**	mg/L	0.010	0.00062	1	11/02/23 11:18	11/08/23 20:23	7439-98-7	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	**108**	mg/L	2.0	1.0	2		11/02/23 09:38	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92696318

Sample: HAM-AP1-EB-01 **Lab ID: 92696318005** Collected: 10/31/23 17:00 Received: 11/01/23 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	ND	mg/L	0.040	0.025	1	11/03/23 16:00	11/10/23 14:37	7439-89-6	
Manganese	ND	mg/L	0.040	0.011	1	11/03/23 16:00	11/10/23 14:37	7439-96-5	
Potassium	ND	mg/L	0.50	0.15	1	11/03/23 16:00	11/10/23 14:37	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	11/03/23 16:00	11/10/23 14:37	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	11/03/23 16:00	11/10/23 14:37	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	11/03/23 16:00	11/10/23 14:37	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	11/02/23 11:18	11/08/23 20:27	7440-36-0	
Arsenic	ND	mg/L	0.010	0.00084	1	11/02/23 11:18	11/08/23 20:27	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	11/02/23 11:18	11/08/23 20:27	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	11/02/23 11:18	11/08/23 20:27	7440-41-7	
Boron	**0.016J**	mg/L	0.040	0.012	1	11/02/23 11:18	11/08/23 20:27	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	11/02/23 11:18	11/08/23 20:27	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	11/02/23 11:18	11/08/23 20:27	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	11/02/23 11:18	11/08/23 20:27	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	11/02/23 11:18	11/08/23 20:27	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	11/02/23 11:18	11/08/23 20:27	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	11/02/23 11:18	11/08/23 20:27	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	11/02/23 11:18	11/08/23 20:27	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	11/02/23 11:18	11/08/23 20:27	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	11/06/23 11:30	11/06/23 13:43	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		11/02/23 18:03		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/02/23 17:45		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/02/23 17:45		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		11/02/23 17:45		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		11/04/23 02:47	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		11/02/23 00:17	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92696318

Sample: HAM-AP1-EB-01 **Lab ID: 92696318005** Collected: 10/31/23 17:00 Received: 11/01/23 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		11/02/23 00:17	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		11/02/23 00:17	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92696318

Sample: HAM-AP1-FB-01 **Lab ID: 92696318006** Collected: 10/31/23 16:45 Received: 11/01/23 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	ND	mg/L	0.040	0.025	1	11/03/23 16:00	11/10/23 14:42	7439-89-6	
Manganese	ND	mg/L	0.040	0.011	1	11/03/23 16:00	11/10/23 14:42	7439-96-5	
Potassium	ND	mg/L	0.50	0.15	1	11/03/23 16:00	11/10/23 14:42	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	11/03/23 16:00	11/10/23 14:42	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	11/03/23 16:00	11/10/23 14:42	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	11/03/23 16:00	11/10/23 14:42	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	11/02/23 11:18	11/08/23 20:31	7440-36-0	
Arsenic	ND	mg/L	0.010	0.00084	1	11/02/23 11:18	11/08/23 20:31	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	11/02/23 11:18	11/08/23 20:31	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	11/02/23 11:18	11/08/23 20:31	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	11/02/23 11:18	11/08/23 20:31	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	11/02/23 11:18	11/08/23 20:31	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	11/02/23 11:18	11/08/23 20:31	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	11/02/23 11:18	11/08/23 20:31	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	11/02/23 11:18	11/08/23 20:31	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	11/02/23 11:18	11/08/23 20:31	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	11/02/23 11:18	11/08/23 20:31	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	11/02/23 11:18	11/08/23 20:31	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	11/02/23 11:18	11/08/23 20:31	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	11/06/23 11:30	11/06/23 13:45	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		11/02/23 18:06		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/02/23 17:49		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/02/23 17:49		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		11/02/23 17:49		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		11/04/23 02:47	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		11/02/23 00:32	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92696318

Sample: HAM-AP1-FB-01 **Lab ID: 92696318006** Collected: 10/31/23 16:45 Received: 11/01/23 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		11/02/23 00:32	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		11/02/23 00:32	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92696318

Sample: HAM-AP1-FD-01 **Lab ID: 92696318007** Collected: 10/31/23 00:00 Received: 11/01/23 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**20.6**	mg/L	0.040	0.025	1	11/03/23 16:00	11/10/23 14:46	7439-89-6	
Manganese	**5.4**	mg/L	0.040	0.011	1	11/03/23 16:00	11/10/23 14:46	7439-96-5	
Potassium	**6.9**	mg/L	0.50	0.15	1	11/03/23 16:00	11/10/23 14:46	7440-09-7	
Sodium	**7.6**	mg/L	1.0	0.58	1	11/03/23 16:00	11/10/23 14:46	7440-23-5	
Calcium	**145**	mg/L	1.0	0.12	1	11/03/23 16:00	11/10/23 14:46	7440-70-2	
Magnesium	**17.8**	mg/L	0.050	0.012	1	11/03/23 16:00	11/10/23 14:46	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	11/02/23 11:18	11/08/23 20:35	7440-36-0	
Arsenic	**0.34**	mg/L	0.010	0.00084	1	11/02/23 11:18	11/08/23 20:35	7440-38-2	
Barium	**0.067**	mg/L	0.0050	0.00047	1	11/02/23 11:18	11/08/23 20:35	7440-39-3	
Beryllium	**0.000096J**	mg/L	0.00050	0.000094	1	11/02/23 11:18	11/08/23 20:35	7440-41-7	
Boron	**1.1**	mg/L	0.040	0.012	1	11/02/23 11:18	11/08/23 20:35	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	11/02/23 11:18	11/08/23 20:35	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	11/02/23 11:18	11/08/23 20:35	7440-47-3	
Cobalt	**0.081**	mg/L	0.0050	0.00032	1	11/02/23 11:18	11/08/23 20:35	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	11/02/23 11:18	11/08/23 20:35	7439-92-1	
Lithium	**0.067**	mg/L	0.030	0.0016	1	11/02/23 11:18	11/08/23 20:35	7439-93-2	
Molybdenum	**0.013**	mg/L	0.010	0.00062	1	11/02/23 11:18	11/08/23 20:35	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	11/02/23 11:18	11/08/23 20:35	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	11/02/23 11:18	11/08/23 20:35	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	11/06/23 11:30	11/06/23 13:48	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**633**	mg/L	25.0	25.0	1		11/02/23 18:06		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**139**	mg/L	5.0	5.0	1		11/02/23 17:54		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/02/23 17:54		
Alkalinity, Total as CaCO3	**139**	mg/L	5.0	5.0	1		11/02/23 17:54		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		11/04/23 02:48	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**16.5**	mg/L	1.0	0.60	1		11/02/23 05:58	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92696318

Sample: HAM-AP1-FD-01 **Lab ID: 92696318007** Collected: 10/31/23 00:00 Received: 11/01/23 12:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.37**	mg/L	0.10	0.050	1		11/02/23 05:58	16984-48-8	
Sulfate	**292**	mg/L	6.0	3.0	6		11/02/23 09:52	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(704)875-9092

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92696318

QC Batch: 810854 | Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A | Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92696318001, 92696318002, 92696318005, 92696318006, 92696318007

METHOD BLANK: 4198107 Matrix: Water
Associated Lab Samples: 92696318001, 92696318002, 92696318005, 92696318006, 92696318007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	11/10/23 13:22	
Iron	mg/L	ND	0.040	0.025	11/10/23 13:22	
Magnesium	mg/L	ND	0.050	0.012	11/10/23 13:22	
Manganese	mg/L	ND	0.040	0.011	11/10/23 13:22	
Potassium	mg/L	ND	0.50	0.15	11/10/23 13:22	
Sodium	mg/L	ND	1.0	0.58	11/10/23 13:22	

LABORATORY CONTROL SAMPLE: 4198108

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	100	80-120	
Iron	mg/L	1	1.0	102	80-120	
Magnesium	mg/L	1	1.1	108	80-120	
Manganese	mg/L	1	1.0	101	80-120	
Potassium	mg/L	1	1.2	115	80-120	
Sodium	mg/L	1	1.2	116	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4198109 4198110

Parameter	Units	92695422003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	56.2	1	1	55.9	57.8	-21	160	75-125	3	20	M1
Iron	mg/L	0.40	1	1	1.3	1.4	89	96	75-125	6	20	
Magnesium	mg/L	13.7	1	1	14.6	14.8	86	110	75-125	2	20	
Manganese	mg/L	0.076	1	1	1.1	1.1	97	100	75-125	2	20	
Potassium	mg/L	3.8	1	1	5.0	5.1	117	124	75-125	2	20	
Sodium	mg/L	4.1	1	1	5.2	5.3	112	118	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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(704)875-9092

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92696318

QC Batch: 810547
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92696318001, 92696318002, 92696318003, 92696318004, 92696318005, 92696318006, 92696318007

METHOD BLANK: 4196254 Matrix: Water
Associated Lab Samples: 92696318001, 92696318002, 92696318003, 92696318004, 92696318005, 92696318006, 92696318007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00054	11/08/23 19:37	
Arsenic	mg/L	ND	0.010	0.00084	11/08/23 19:37	
Barium	mg/L	ND	0.0050	0.00047	11/08/23 19:37	
Beryllium	mg/L	ND	0.00050	0.000094	11/08/23 19:37	
Boron	mg/L	ND	0.040	0.012	11/08/23 19:37	
Cadmium	mg/L	ND	0.00050	0.00010	11/08/23 19:37	
Chromium	mg/L	ND	0.0050	0.0019	11/08/23 19:37	
Cobalt	mg/L	ND	0.0050	0.00032	11/08/23 19:37	
Iron	mg/L	ND	0.040	0.0075	11/08/23 19:37	
Lead	mg/L	ND	0.0010	0.00016	11/08/23 19:37	
Lithium	mg/L	ND	0.030	0.0016	11/08/23 19:37	
Molybdenum	mg/L	ND	0.010	0.00062	11/08/23 19:37	
Selenium	mg/L	ND	0.0050	0.00096	11/08/23 19:37	
Thallium	mg/L	ND	0.0010	0.00038	11/08/23 19:37	

LABORATORY CONTROL SAMPLE: 4196255

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	0.11	111	80-120	
Barium	mg/L	0.1	0.10	105	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	104	80-120	
Chromium	mg/L	0.1	0.098	98	80-120	
Cobalt	mg/L	0.1	0.097	97	80-120	
Iron	mg/L	1	0.96	96	80-120	
Lead	mg/L	0.1	0.10	102	80-120	
Lithium	mg/L	0.1	0.10	104	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.11	113	80-120	
Thallium	mg/L	0.1	0.10	103	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(704)875-9092

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92696318

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4196256 4196257

Parameter	Units	92696318001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	104	104	75-125	0	20	
Arsenic	mg/L	0.34	0.1	0.1	0.46	0.48	122	142	75-125	4	20	M1
Barium	mg/L	0.073	0.1	0.1	0.17	0.17	102	102	75-125	0	20	
Beryllium	mg/L	0.00023J	0.1	0.1	0.089	0.087	89	87	75-125	2	20	
Boron	mg/L	1.1	1	1	1.9	1.9	83	86	75-125	1	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.096	101	96	75-125	5	20	
Chromium	mg/L	ND	0.1	0.1	0.091	0.086	90	86	75-125	5	20	
Cobalt	mg/L	0.081	0.1	0.1	0.17	0.17	92	86	75-125	4	20	
Iron	mg/L	17.4	1	1	18.4	17.8	101	41	75-125	3	20	
Lead	mg/L	ND	0.1	0.1	0.090	0.088	90	88	75-125	2	20	
Lithium	mg/L	0.065	0.1	0.1	0.15	0.15	84	84	75-125	0	20	
Molybdenum	mg/L	0.014	0.1	0.1	0.11	0.11	97	97	75-125	0	20	
Selenium	mg/L	ND	0.1	0.1	0.11	0.11	106	109	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.094	0.092	94	91	75-125	3	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92696318

QC Batch: 811152 | Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A | Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92696318001, 92696318002, 92696318005, 92696318006, 92696318007

METHOD BLANK: 4199578 Matrix: Water
Associated Lab Samples: 92696318001, 92696318002, 92696318005, 92696318006, 92696318007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	11/06/23 13:05	

LABORATORY CONTROL SAMPLE: 4199579

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4199580 4199581

Parameter	Units	92695422004 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	0.0038	0.0025	152	100	75-125	41	20	M1,R1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92696318

QC Batch: 810542
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92696318001, 92696318002, 92696318005, 92696318006, 92696318007

METHOD BLANK: 4196241 Matrix: Water
Associated Lab Samples: 92696318001, 92696318002, 92696318005, 92696318006, 92696318007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	11/02/23 18:00	

LABORATORY CONTROL SAMPLE: 4196242

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	403	101	80-120	

SAMPLE DUPLICATE: 4196244

Parameter	Units	92696318005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		10	

SAMPLE DUPLICATE: 4197308

Parameter	Units	92696235001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	810	814	0	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(704)875-9092

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92696318

QC Batch: 810566 | Analysis Method: SM 2320B-2011
QC Batch Method: SM 2320B-2011 | Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92696318001, 92696318002, 92696318005, 92696318006, 92696318007

METHOD BLANK: 4196343 Matrix: Water
Associated Lab Samples: 92696318001, 92696318002, 92696318005, 92696318006, 92696318007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	11/02/23 17:01	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	11/02/23 17:01	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	11/02/23 17:01	

LABORATORY CONTROL SAMPLE: 4196344

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

LABORATORY CONTROL SAMPLE: 4196345

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: 4196346 4196347

Parameter	Units	92695650004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	48.1	50	50	97.8	100	99	104	80-120	2	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4196348 4196349

Parameter	Units	92696291001 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	30.1	50	50	80.1	80.3	100	100	80-120	0	25	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92696318

QC Batch: 811017
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92696318001, 92696318002, 92696318005, 92696318006, 92696318007

METHOD BLANK: 4199225 Matrix: Water
Associated Lab Samples: 92696318001, 92696318002, 92696318005, 92696318006, 92696318007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	11/04/23 02:44	

LABORATORY CONTROL SAMPLE: 4199226

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: 4199227 4199228

Parameter	Units	92696318001 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	0.56	0.56	112	112	80-120	0	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92696318

QC Batch: 810436
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92696318001, 92696318002, 92696318003, 92696318004, 92696318005, 92696318006, 92696318007

METHOD BLANK: 4195954 Matrix: Water
Associated Lab Samples: 92696318001, 92696318002, 92696318003, 92696318004, 92696318005, 92696318006, 92696318007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	11/01/23 23:48	
Fluoride	mg/L	ND	0.10	0.050	11/01/23 23:48	
Sulfate	mg/L	ND	1.0	0.50	11/01/23 23:48	

LABORATORY CONTROL SAMPLE: 4195955

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	2.7	109	90-110	
Sulfate	mg/L	50	52.2	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4195956 4195957

Parameter	Units	92696280001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L		50	50	66.9	68.6	99	102	90-110	2	10	
Fluoride	mg/L	2.2	2.5	2.5	4.5	4.6	92	96	90-110	2	10	
Sulfate	mg/L	249	50	50	299	307	100	117	90-110	3	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4195958 4195959

Parameter	Units	92696318002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	21.3	50	50	71.8	73.0	101	103	90-110	2	10	
Fluoride	mg/L	0.24	2.5	2.5	2.7	2.7	97	99	90-110	2	10	
Sulfate	mg/L	210	50	50	259	256	97	92	90-110	1	10	

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REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Hammond AP-1
Pace Project No.: 92696318

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

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

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-1
Pace Project No.: 92696318

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92696318001	**HAM-PT-07**	EPA 3010A	810854	EPA 6010D	810992
92696318002	**HAM-PT-08**	EPA 3010A	810854	EPA 6010D	810992
92696318005	**HAM-AP1-EB-01**	EPA 3010A	810854	EPA 6010D	810992
92696318006	**HAM-AP1-FB-01**	EPA 3010A	810854	EPA 6010D	810992
92696318007	**HAM-AP1-FD-01**	EPA 3010A	810854	EPA 6010D	810992
92696318001	**HAM-PT-07**	EPA 3005A	810547	EPA 6020B	810682
92696318002	**HAM-PT-08**	EPA 3005A	810547	EPA 6020B	810682
92696318003	**HAM-PT-09**	EPA 3005A	810547	EPA 6020B	810682
92696318004	**HAM-PT-10**	EPA 3005A	810547	EPA 6020B	810682
92696318005	**HAM-AP1-EB-01**	EPA 3005A	810547	EPA 6020B	810682
92696318006	**HAM-AP1-FB-01**	EPA 3005A	810547	EPA 6020B	810682
92696318007	**HAM-AP1-FD-01**	EPA 3005A	810547	EPA 6020B	810682
92696318001	**HAM-PT-07**	EPA 7470A	811152	EPA 7470A	811235
92696318002	**HAM-PT-08**	EPA 7470A	811152	EPA 7470A	811235
92696318005	**HAM-AP1-EB-01**	EPA 7470A	811152	EPA 7470A	811235
92696318006	**HAM-AP1-FB-01**	EPA 7470A	811152	EPA 7470A	811235
92696318007	**HAM-AP1-FD-01**	EPA 7470A	811152	EPA 7470A	811235
92696318001	**HAM-PT-07**	SM 2540C-2015	810542		
92696318002	**HAM-PT-08**	SM 2540C-2015	810542		
92696318005	**HAM-AP1-EB-01**	SM 2540C-2015	810542		
92696318006	**HAM-AP1-FB-01**	SM 2540C-2015	810542		
92696318007	**HAM-AP1-FD-01**	SM 2540C-2015	810542		
92696318001	**HAM-PT-07**	SM 2320B-2011	810566		
92696318002	**HAM-PT-08**	SM 2320B-2011	810566		
92696318005	**HAM-AP1-EB-01**	SM 2320B-2011	810566		
92696318006	**HAM-AP1-FB-01**	SM 2320B-2011	810566		
92696318007	**HAM-AP1-FD-01**	SM 2320B-2011	810566		
92696318001	**HAM-PT-07**	SM 4500-S2D-2011	811017		
92696318002	**HAM-PT-08**	SM 4500-S2D-2011	811017		
92696318005	**HAM-AP1-EB-01**	SM 4500-S2D-2011	811017		
92696318006	**HAM-AP1-FB-01**	SM 4500-S2D-2011	811017		
92696318007	**HAM-AP1-FD-01**	SM 4500-S2D-2011	811017		
92696318001	**HAM-PT-07**	EPA 300.0 Rev 2.1 1993	810436		
92696318002	**HAM-PT-08**	EPA 300.0 Rev 2.1 1993	810436		
92696318003	**HAM-PT-09**	EPA 300.0 Rev 2.1 1993	810436		
92696318004	**HAM-PT-10**	EPA 300.0 Rev 2.1 1993	810436		
92696318005	**HAM-AP1-EB-01**	EPA 300.0 Rev 2.1 1993	810436		
92696318006	**HAM-AP1-FB-01**	EPA 300.0 Rev 2.1 1993	810436		
92696318007	**HAM-AP1-FD-01**	EPA 300.0 Rev 2.1 1993	810436		

REPORT OF LABORATORY ANALYSIS

CHAIN-OF-CUSTODY / Analytical Request Document

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

Pace Analytical
www.pacelabs.com

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Geosyntec Contacts	Company Name:	
				Address:	
Email To:	SCS Contacts	Purchase Order No.:	GPC82474-0001	Pace Quote Reference:	
Phone:	Fax:	Project Name:	Hammond AP-1	Pace Project Manager:	Bonnie Vang
Requested Due Date/TAT:	5 day	Project Number:		Pace Profile #:	10839

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☑ OTHER CCR

Site Location STATE: GA

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	Valid Matrix Codes: MATRIX / CODE — DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate	Full App. III and IV metals	Major Ions (Profile 10839-2):	TDS	Boron, Iron, Molybdenum	Sulfate	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																				N	N	N	N	N	N		
1	HAM-PT-07		WG	G	10/31/2023	1151			21	5	3		1					1		X	X	X	X			N	001
2	HAM-PT-08		WG	G	10/31/2023	1531			19	5	3		1					1		X	X	X	X			N	002
3	HAM-PT-09		WG	G	10/31/2023	1607			21	2	1		1											X	X	N	003
4	HAM-PT-10		WG	G	10/31/2023	1312			20	2	1		1											X	X	N	004
5	HAM-AP1-EB-01		WQ	G	10/31/2023	1700			20	5	3		1					1		X	X	X	X			N	005
6	HAM-AP1-FB-01		WQ	G	10/31/2023	1645			20	5	3		1					1		X	X	X	X			N	006
7	HAM-AP1-FD-01		WG	G	10/31/2023	0000			20	5	3		1					1		X	X	X	X			N	007
8																											
9																											
10																											
11																											
12																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-CA-20231031	Zain Webb / Geosyntec	11/1/23	1205	Ryan Williams / Pace	11/1/23	1205	
	Ryan Williams / Pace	11/1/23	1415	[illegible] / PACE	11/1/23	1417	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Zain Webb, Elisabeth Russell / Geosyntec Consultants, Inc.

SIGNATURE of SAMPLER: Zain Webb — DATE Signed (MM/DD/YY): 10/01/2023

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.

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

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☑ No

Date/Initials Person Examining Contents: 11-1-23 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: 4.1 **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): 4.2

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ **Date:** _____

Project Manager SRF Review: _____ **Date:** _____

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

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

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

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

Project #

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

November 2023

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

November 27, 2023

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

RE: Project: Hammond AP-1
Pace Project No.: 92697629

Dear Kristen Jurinko:

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

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

Pace Analytical Services, LLC
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CERTIFICATIONS

Project: Hammond AP-1
Pace Project No.: 92697629

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

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

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Hammond AP-1
Pace Project No.: 92697629

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92697629001	**HAM-PT-07**	Water	11/07/23 15:38	11/08/23 14:03
92697629002	**HAM-PT-08**	Water	11/07/23 13:10	11/08/23 14:03
92697629003	**HAM-AP1-EB-01**	Water	11/07/23 16:34	11/08/23 14:03
92697629004	**HAM-AP1-FB-01**	Water	11/07/23 16:27	11/08/23 14:03
92697629005	**HAM-AP1-FD-01**	Water	11/07/23 00:00	11/08/23 14:03

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: Hammond AP-1
Pace Project No.: 92697629

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92697629001	**HAM-PT-07**	EPA 6020B	CW1	3
		EPA 300.0 Rev 2.1 1993	CDC	1
92697629002	**HAM-PT-08**	EPA 6020B	CW1	3
		EPA 300.0 Rev 2.1 1993	CDC	1
92697629003	**HAM-AP1-EB-01**	EPA 6020B	CW1	3
		EPA 300.0 Rev 2.1 1993	CDC	1
92697629004	**HAM-AP1-FB-01**	EPA 6020B	CW1	3
		EPA 300.0 Rev 2.1 1993	CDC	1
92697629005	**HAM-AP1-FD-01**	EPA 6020B	CW1	3
		EPA 300.0 Rev 2.1 1993	CDC	1

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

Pace Analytical Services, LLC
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(704)875-9092

SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92697629

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92697629001	**HAM-PT-07**					
EPA 6020B	Arsenic	0.33	mg/L	0.010	11/21/23 13:28	
EPA 6020B	Boron	1.1	mg/L	0.040	11/21/23 13:28	
EPA 6020B	Iron	4.0	mg/L	0.20	11/22/23 15:25	
EPA 300.0 Rev 2.1 1993	Sulfate	287	mg/L	6.0	11/14/23 08:59	
92697629002	**HAM-PT-08**					
EPA 6020B	Arsenic	0.24	mg/L	0.010	11/21/23 13:32	
EPA 6020B	Boron	1.0	mg/L	0.040	11/21/23 13:32	
EPA 6020B	Iron	5.7	mg/L	0.040	11/21/23 13:32	
EPA 300.0 Rev 2.1 1993	Sulfate	273	mg/L	6.0	11/14/23 09:14	
92697629003	**HAM-AP1-EB-01**					
EPA 6020B	Boron	0.033J	mg/L	0.040	11/21/23 13:48	
92697629004	**HAM-AP1-FB-01**					
EPA 6020B	Boron	0.013J	mg/L	0.040	11/21/23 13:53	
92697629005	**HAM-AP1-FD-01**					
EPA 6020B	Arsenic	0.26	mg/L	0.010	11/21/23 14:13	
EPA 6020B	Boron	1.1	mg/L	0.040	11/21/23 14:13	
EPA 6020B	Iron	6.0	mg/L	0.040	11/21/23 14:13	
EPA 300.0 Rev 2.1 1993	Sulfate	255	mg/L	5.0	11/15/23 04:06	

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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92697629

Sample: HAM-PT-07 **Lab ID: 92697629001** Collected: 11/07/23 15:38 Received: 11/08/23 14:03 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								
Arsenic	**0.33**	mg/L	0.010	0.00084	1	11/17/23 12:30	11/21/23 13:28	7440-38-2	
Boron	**1.1**	mg/L	0.040	0.012	1	11/17/23 12:30	11/21/23 13:28	7440-42-8	
Iron	**4.0**	mg/L	0.20	0.037	5	11/17/23 12:30	11/22/23 15:25	7439-89-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	**287**	mg/L	6.0	3.0	6		11/14/23 08:59	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92697629

Sample: HAM-PT-08 **Lab ID: 92697629002** Collected: 11/07/23 13:10 Received: 11/08/23 14:03 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								
Arsenic	**0.24**	mg/L	0.010	0.00084	1	11/17/23 12:30	11/21/23 13:32	7440-38-2	
Boron	**1.0**	mg/L	0.040	0.012	1	11/17/23 12:30	11/21/23 13:32	7440-42-8	
Iron	**5.7**	mg/L	0.040	0.0075	1	11/17/23 12:30	11/21/23 13:32	7439-89-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	**273**	mg/L	6.0	3.0	6		11/14/23 09:14	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92697629

Sample: HAM-AP1-EB-01 **Lab ID: 92697629003** Collected: 11/07/23 16:34 Received: 11/08/23 14:03 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								
Arsenic	ND	mg/L	0.010	0.00084	1	11/17/23 12:30	11/22/23 15:29	7440-38-2	
Boron	**0.033J**	mg/L	0.040	0.012	1	11/17/23 12:30	11/21/23 13:48	7440-42-8	
Iron	ND	mg/L	0.040	0.0075	1	11/17/23 12:30	11/21/23 13:48	7439-89-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	ND	mg/L	1.0	0.50	1		11/13/23 23:47	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92697629

Sample: HAM-AP1-FB-01 **Lab ID: 92697629004** Collected: 11/07/23 16:27 Received: 11/08/23 14:03 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								
Arsenic	ND	mg/L	0.010	0.00084	1	11/17/23 12:30	11/22/23 15:33	7440-38-2	
Boron	**0.013J**	mg/L	0.040	0.012	1	11/17/23 12:30	11/21/23 13:53	7440-42-8	
Iron	ND	mg/L	0.040	0.0075	1	11/17/23 12:30	11/21/23 13:53	7439-89-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	ND	mg/L	1.0	0.50	1		11/14/23 00:02	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92697629

Sample: HAM-AP1-FD-01 **Lab ID: 92697629005** Collected: 11/07/23 00:00 Received: 11/08/23 14:03 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								
Arsenic	**0.26**	mg/L	0.010	0.00084	1	11/17/23 12:30	11/21/23 14:13	7440-38-2	
Boron	**1.1**	mg/L	0.040	0.012	1	11/17/23 12:30	11/21/23 14:13	7440-42-8	
Iron	**6.0**	mg/L	0.040	0.0075	1	11/17/23 12:30	11/21/23 14:13	7439-89-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	**255**	mg/L	5.0	2.5	5		11/15/23 04:06	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92697629

QC Batch: 814093
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92697629001, 92697629002, 92697629003, 92697629004, 92697629005

METHOD BLANK: 4214778 Matrix: Water
Associated Lab Samples: 92697629001, 92697629002, 92697629003, 92697629004, 92697629005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.010	0.00084	11/22/23 15:17	
Boron	mg/L	ND	0.040	0.012	11/21/23 13:15	
Iron	mg/L	ND	0.040	0.0075	11/21/23 13:15	

LABORATORY CONTROL SAMPLE: 4214779

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	0.1	0.10	100	80-120	
Boron	mg/L	1	1.1	108	80-120	
Iron	mg/L	1	1.0	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4214780 4214781

Parameter	Units	92697629002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	0.24	0.1	0.1	0.36	0.35	117	113	75-125	1	20	
Boron	mg/L	1.0	1	1	2.0	2.0	98	96	75-125	1	20	
Iron	mg/L	5.7	1	1	6.7	6.6	101	85	75-125	2	20	

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92697629

QC Batch: 812941
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92697629001, 92697629002, 92697629003, 92697629004

METHOD BLANK: 4209281 Matrix: Water
Associated Lab Samples: 92697629001, 92697629002, 92697629003, 92697629004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	0.50	11/13/23 23:18	

LABORATORY CONTROL SAMPLE: 4209282

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	50	51.3	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4209283 4209284

Parameter	Units	92698094008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	ND	50	50	54.2	54.7	108	109	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4209407 4209408

Parameter	Units	92697629002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	273	50	50	323	324	99	101	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

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92697629

QC Batch: 813004
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92697629005

METHOD BLANK: 4209515 Matrix: Water
Associated Lab Samples: 92697629005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	0.50	11/14/23 12:38	

LABORATORY CONTROL SAMPLE: 4209516

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	50	51.7	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4209517 4209518

Parameter	Units	92698355001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	6.9	50	50	56.7	57.9	100	102	90-110	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4209519 4209520

Parameter	Units	92698017008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	87.3	50	50	129	129	83	83	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-1
Pace Project No.: 92697629

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

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

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-1
Pace Project No.: 92697629

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92697629001	**HAM-PT-07**	EPA 3005A	814093	EPA 6020B	814408
92697629002	**HAM-PT-08**	EPA 3005A	814093	EPA 6020B	814408
92697629003	**HAM-AP1-EB-01**	EPA 3005A	814093	EPA 6020B	814408
92697629004	**HAM-AP1-FB-01**	EPA 3005A	814093	EPA 6020B	814408
92697629005	**HAM-AP1-FD-01**	EPA 3005A	814093	EPA 6020B	814408
92697629001	**HAM-PT-07**	EPA 300.0 Rev 2.1 1993	812941		
92697629002	**HAM-PT-08**	EPA 300.0 Rev 2.1 1993	812941		
92697629003	**HAM-AP1-EB-01**	EPA 300.0 Rev 2.1 1993	812941		
92697629004	**HAM-AP1-FB-01**	EPA 300.0 Rev 2.1 1993	812941		
92697629005	**HAM-AP1-FD-01**	EPA 300.0 Rev 2.1 1993	813004		

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

aboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO# : 92697629

92697629

Courier: ☐ Commercial ☑ Pace ☐ Fed Ex ☐ UPS ☐ USPS ☐ Other: ☐ Client

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☑ No

Date/Initials Person Examining Contents: JG 11/8/23

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Thermometer: ☑ IR Gun ID: 230

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 2.6 **Correction Factor:** Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 2.6

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☐ No	☑ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☑ No	☐ N/A	8.
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: WG/WQ	☑ Yes	☐ No	☐ N/A	9.
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

LIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ **Date:** _____

Project Manager SRF Review: _____ **Date:** _____

ualtrax ID: 69614

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

***Check all unpreserved Nitrates for chlorine

Project # **WO# : 92697629**

PM: BV Due Date: 11/27/23

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		1				1																							
2		1				1																							
3		1				1																							
4		1				1																							
5		1				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.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

Section A Required Client Information:

Company	GA Power
Address	Atlanta, GA
Email To	SCS Contacts
Phone	Fax
Requested Due Date/TAT:	5 day

Section B Required Project Information

Report To	SCS Contacts
Copy To	Geosyntec Contacts
Purchase Order No.	GPC82474-0001
Project Name	Hammond AP-1
Project Number	

Section C Invoice Information

Attention	Southern Co
Company Name	
Address	
Pace Quote Reference	
Pace Project Manager	Bonnie Vang
Pace Profile #	10839

REGULATORY AGENCY

NPDES | GROUND WATER | DRINKING WATER
UST | RCRA | OTHER CCR

Site Location STATE: GA

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Arsenic, Boron, Iron	Sulfate	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	HAM-PT-07	WG	G	11/07/2023	1538				2	1		1						N	X	X	N	92497029
2	HAM-PT-08	WG	G	11/07/2023	1310				2	1		1						N	X	X	N	
3	HAM-AP1-EB-01	WQ	G	11/07/2023	1634				2	1		1						N	X	X	N	
4	HAM-AP1-FB-01	WQ	G	11/07/2023	1627			ZW	2	1		1						N	X	X	N	
5	HAM-AP1-FD-01	WG	G	11/07/2023	0000				2	1		1						N	X	X	N	
6																						
7																						
8																						
9				ZW																		
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-CA-20231107	Zain Webb / Geosyntec	11/08/23	2:03	Ryan Williams / Pace	11/4/2023	1403	
	Ryan Williams / Pace	11/4/2023	1510	/ Pace	11/8/23	15:10	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Zain Webb / Geosyntec Consultants, Inc.

SIGNATURE of SAMPLER: Zain Webb — DATE Signed (MM/DD/YY): 11-8-2023

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

F-ALL-Q-020rev.07, 15-Feb-2007

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

December 04, 2023

Kristen Jurinko
Southern Company
241 Ralph McGill Blvd NE
Bin 10160
Atlanta, GA 30308

RE: Project: Hammond AP-1
Pace Project No.: 92698920

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory on November 15, 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

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: Hammond AP-1
Pace Project No.: 92698920

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Laboratory ID: 99030
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners
110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001
Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
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SAMPLE SUMMARY

Project: Hammond AP-1
Pace Project No.: 92698920

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92698920001	**HAM-PT-09**	Water	11/14/23 18:03	11/15/23 13:06
92698920002	**HAM-PT-10**	Water	11/14/23 14:25	11/15/23 13:06
92698920003	**HAM-AP1-EB-01**	Water	11/14/23 19:33	11/15/23 13:06
92698920004	**HAM-AP1-FB-01**	Water	11/14/23 19:25	11/15/23 13:06
92698920005	**HAM-AP1-FD-01**	Water	11/14/23 00:00	11/15/23 13:06

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SAMPLE ANALYTE COUNT

Project: Hammond AP-1
Pace Project No.: 92698920

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92698920001	**HAM-PT-09**	EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	KDF1	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92698920002	**HAM-PT-10**	EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	KDF1	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92698920003	**HAM-AP1-EB-01**	EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	KDF1	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92698920004	**HAM-AP1-FB-01**	EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	KDF1	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92698920005	**HAM-AP1-FD-01**	EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	KDF1	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

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92698920

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92698920001	**HAM-PT-09**					
EPA 6010D	Manganese	0.23	mg/L	0.040	11/21/23 13:28	
EPA 6010D	Potassium	4.9	mg/L	0.50	11/21/23 13:28	M1
EPA 6010D	Sodium	6.9	mg/L	1.0	11/21/23 13:28	M1
EPA 6010D	Calcium	111	mg/L	1.0	11/21/23 13:28	M1
EPA 6010D	Magnesium	18.9	mg/L	0.050	11/21/23 13:28	M1
EPA 6020B	Barium	0.10	mg/L	0.0050	11/29/23 20:55	
EPA 6020B	Boron	1.2	mg/L	0.040	11/30/23 15:51	
EPA 6020B	Cadmium	0.00011J	mg/L	0.00050	11/29/23 20:55	
EPA 6020B	Cobalt	0.0013J	mg/L	0.0050	11/29/23 20:55	
EPA 6020B	Molybdenum	0.20	mg/L	0.010	11/29/23 20:55	
SM 2540C-2015	Total Dissolved Solids	491	mg/L	25.0	11/17/23 13:32	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	133	mg/L	5.0	11/22/23 12:06	
SM 2320B-2011	Alkalinity, Total as CaCO3	133	mg/L	5.0	11/22/23 12:06	
EPA 300.0 Rev 2.1 1993	Chloride	38.5	mg/L	1.0	11/17/23 03:18	
EPA 300.0 Rev 2.1 1993	Fluoride	0.35	mg/L	0.10	11/17/23 03:18	
EPA 300.0 Rev 2.1 1993	Sulfate	179	mg/L	4.0	11/17/23 15:01	
92698920002	**HAM-PT-10**					
EPA 6010D	Iron	0.56	mg/L	0.040	11/21/23 13:47	
EPA 6010D	Manganese	0.82	mg/L	0.040	11/21/23 13:47	
EPA 6010D	Potassium	6.6	mg/L	0.50	11/21/23 13:47	
EPA 6010D	Sodium	7.1	mg/L	1.0	11/21/23 13:47	
EPA 6010D	Calcium	119	mg/L	1.0	11/21/23 13:47	
EPA 6010D	Magnesium	15.3	mg/L	0.050	11/21/23 13:47	
EPA 6020B	Barium	0.061	mg/L	0.0050	11/29/23 21:11	
EPA 6020B	Boron	1.3	mg/L	0.040	11/30/23 16:03	
EPA 6020B	Cobalt	0.0024J	mg/L	0.0050	11/29/23 21:11	
EPA 6020B	Lithium	0.0022J	mg/L	0.030	11/30/23 16:03	
EPA 6020B	Molybdenum	0.19	mg/L	0.010	11/29/23 21:11	
SM 2540C-2015	Total Dissolved Solids	516	mg/L	25.0	11/17/23 13:32	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	136	mg/L	5.0	11/22/23 12:15	
SM 2320B-2011	Alkalinity, Total as CaCO3	136	mg/L	5.0	11/22/23 12:15	
EPA 300.0 Rev 2.1 1993	Chloride	43.3	mg/L	1.0	11/17/23 04:03	
EPA 300.0 Rev 2.1 1993	Fluoride	0.35	mg/L	0.10	11/17/23 04:03	
EPA 300.0 Rev 2.1 1993	Sulfate	184	mg/L	4.0	11/17/23 15:46	
92698920003	**HAM-AP1-EB-01**					
SM 2540C-2015	Total Dissolved Solids	40.0	mg/L	25.0	11/17/23 13:32	
92698920005	**HAM-AP1-FD-01**					
EPA 6010D	Iron	0.60	mg/L	0.040	11/21/23 14:20	
EPA 6010D	Manganese	0.84	mg/L	0.040	11/21/23 14:20	
EPA 6010D	Potassium	6.7	mg/L	0.50	11/21/23 14:20	
EPA 6010D	Sodium	7.2	mg/L	1.0	11/21/23 14:20	
EPA 6010D	Calcium	121	mg/L	1.0	11/21/23 14:20	
EPA 6010D	Magnesium	15.6	mg/L	0.050	11/21/23 14:20	
EPA 6020B	Barium	0.060	mg/L	0.0050	11/29/23 21:35	
EPA 6020B	Boron	1.2	mg/L	0.040	11/30/23 16:07	
EPA 6020B	Cobalt	0.0023J	mg/L	0.0050	11/29/23 21:35	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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(704)875-9092

SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92698920

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92698920005	**HAM-AP1-FD-01**					
EPA 6020B	Lithium	0.0021J	mg/L	0.030	11/30/23 16:07	
EPA 6020B	Molybdenum	0.18	mg/L	0.010	11/29/23 21:35	
SM 2540C-2015	Total Dissolved Solids	496	mg/L	25.0	11/17/23 13:33	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	138	mg/L	5.0	11/22/23 12:34	
SM 2320B-2011	Alkalinity, Total as CaCO3	138	mg/L	5.0	11/22/23 12:34	
EPA 300.0 Rev 2.1 1993	Chloride	43.3	mg/L	1.0	11/17/23 04:49	
EPA 300.0 Rev 2.1 1993	Fluoride	0.35	mg/L	0.10	11/17/23 04:49	
EPA 300.0 Rev 2.1 1993	Sulfate	182	mg/L	4.0	11/17/23 16:01	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92698920

Sample: HAM-PT-09 **Lab ID: 92698920001** Collected: 11/14/23 18:03 Received: 11/15/23 13:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	ND	mg/L	0.040	0.025	1	11/20/23 14:55	11/21/23 13:28	7439-89-6	
Manganese	**0.23**	mg/L	0.040	0.011	1	11/20/23 14:55	11/21/23 13:28	7439-96-5	
Potassium	**4.9**	mg/L	0.50	0.15	1	11/20/23 14:55	11/21/23 13:28	7440-09-7	M1
Sodium	**6.9**	mg/L	1.0	0.58	1	11/20/23 14:55	11/21/23 13:28	7440-23-5	M1
Calcium	**111**	mg/L	1.0	0.12	1	11/20/23 14:55	11/21/23 13:28	7440-70-2	M1
Magnesium	**18.9**	mg/L	0.050	0.012	1	11/20/23 14:55	11/21/23 13:28	7439-95-4	M1
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	11/28/23 10:12	11/29/23 20:55	7440-36-0	
Arsenic	ND	mg/L	0.010	0.00084	1	11/28/23 10:12	11/29/23 20:55	7440-38-2	
Barium	**0.10**	mg/L	0.0050	0.00047	1	11/28/23 10:12	11/29/23 20:55	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	11/28/23 10:12	11/30/23 15:51	7440-41-7	
Boron	**1.2**	mg/L	0.040	0.012	1	11/28/23 10:12	11/30/23 15:51	7440-42-8	
Cadmium	**0.00011J**	mg/L	0.00050	0.00010	1	11/28/23 10:12	11/29/23 20:55	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	11/28/23 10:12	11/29/23 20:55	7440-47-3	
Cobalt	**0.0013J**	mg/L	0.0050	0.00032	1	11/28/23 10:12	11/29/23 20:55	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	11/28/23 10:12	11/29/23 20:55	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	11/28/23 10:12	11/30/23 15:51	7439-93-2	
Molybdenum	**0.20**	mg/L	0.010	0.00062	1	11/28/23 10:12	11/29/23 20:55	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	11/28/23 10:12	11/29/23 20:55	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	11/28/23 10:12	11/29/23 20:55	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	11/30/23 10:30	11/30/23 13:13	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**491**	mg/L	25.0	25.0	1		11/17/23 13:32		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**133**	mg/L	5.0	5.0	1		11/22/23 12:06		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/22/23 12:06		
Alkalinity, Total as CaCO3	**133**	mg/L	5.0	5.0	1		11/22/23 12:06		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		11/18/23 03:24	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**38.5**	mg/L	1.0	0.60	1		11/17/23 03:18	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92698920

Sample: HAM-PT-09 **Lab ID: 92698920001** Collected: 11/14/23 18:03 Received: 11/15/23 13:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.35**	mg/L	0.10	0.050	1		11/17/23 03:18	16984-48-8	
Sulfate	**179**	mg/L	4.0	2.0	4		11/17/23 15:01	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92698920

Sample: HAM-PT-10 **Lab ID: 92698920002** Collected: 11/14/23 14:25 Received: 11/15/23 13:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.56**	mg/L	0.040	0.025	1	11/20/23 14:55	11/21/23 13:47	7439-89-6	
Manganese	**0.82**	mg/L	0.040	0.011	1	11/20/23 14:55	11/21/23 13:47	7439-96-5	
Potassium	**6.6**	mg/L	0.50	0.15	1	11/20/23 14:55	11/21/23 13:47	7440-09-7	
Sodium	**7.1**	mg/L	1.0	0.58	1	11/20/23 14:55	11/21/23 13:47	7440-23-5	
Calcium	**119**	mg/L	1.0	0.12	1	11/20/23 14:55	11/21/23 13:47	7440-70-2	
Magnesium	**15.3**	mg/L	0.050	0.012	1	11/20/23 14:55	11/21/23 13:47	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	11/28/23 10:12	11/29/23 21:11	7440-36-0	
Arsenic	ND	mg/L	0.010	0.00084	1	11/28/23 10:12	11/29/23 21:11	7440-38-2	
Barium	**0.061**	mg/L	0.0050	0.00047	1	11/28/23 10:12	11/29/23 21:11	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	11/28/23 10:12	11/30/23 16:03	7440-41-7	
Boron	**1.3**	mg/L	0.040	0.012	1	11/28/23 10:12	11/30/23 16:03	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	11/28/23 10:12	11/29/23 21:11	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	11/28/23 10:12	11/29/23 21:11	7440-47-3	
Cobalt	**0.0024J**	mg/L	0.0050	0.00032	1	11/28/23 10:12	11/29/23 21:11	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	11/28/23 10:12	11/29/23 21:11	7439-92-1	
Lithium	**0.0022J**	mg/L	0.030	0.0016	1	11/28/23 10:12	11/30/23 16:03	7439-93-2	
Molybdenum	**0.19**	mg/L	0.010	0.00062	1	11/28/23 10:12	11/29/23 21:11	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	11/28/23 10:12	11/29/23 21:11	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	11/28/23 10:12	11/29/23 21:11	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	11/30/23 10:30	11/30/23 13:16	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**516**	mg/L	25.0	25.0	1		11/17/23 13:32		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**136**	mg/L	5.0	5.0	1		11/22/23 12:15		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/22/23 12:15		
Alkalinity, Total as CaCO3	**136**	mg/L	5.0	5.0	1		11/22/23 12:15		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		11/18/23 03:24	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**43.3**	mg/L	1.0	0.60	1		11/17/23 04:03	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92698920

Sample: HAM-PT-10 **Lab ID: 92698920002** Collected: 11/14/23 14:25 Received: 11/15/23 13:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.35**	mg/L	0.10	0.050	1		11/17/23 04:03	16984-48-8	
Sulfate	**184**	mg/L	4.0	2.0	4		11/17/23 15:46	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92698920

Sample: HAM-AP1-EB-01 **Lab ID: 92698920003** Collected: 11/14/23 19:33 Received: 11/15/23 13:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	ND	mg/L	0.040	0.025	1	11/20/23 14:55	11/21/23 14:11	7439-89-6	
Manganese	ND	mg/L	0.040	0.011	1	11/20/23 14:55	11/21/23 14:11	7439-96-5	
Potassium	ND	mg/L	0.50	0.15	1	11/20/23 14:55	11/21/23 14:11	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	11/20/23 14:55	11/21/23 14:11	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	11/20/23 14:55	11/21/23 14:11	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	11/20/23 14:55	11/21/23 14:11	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	11/28/23 10:12	11/29/23 21:19	7440-36-0	
Arsenic	ND	mg/L	0.010	0.00084	1	11/28/23 10:12	11/29/23 21:19	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	11/28/23 10:12	11/29/23 21:19	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	11/28/23 10:12	11/29/23 21:19	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	11/28/23 10:12	11/29/23 21:19	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	11/28/23 10:12	11/29/23 21:19	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	11/28/23 10:12	11/29/23 21:19	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	11/28/23 10:12	11/29/23 21:19	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	11/28/23 10:12	11/29/23 21:19	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	11/28/23 10:12	11/29/23 21:19	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	11/28/23 10:12	11/29/23 21:19	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	11/28/23 10:12	11/29/23 21:19	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	11/28/23 10:12	11/29/23 21:19	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	11/30/23 10:30	11/30/23 13:26	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**40.0**	mg/L	25.0	25.0	1		11/17/23 13:32		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/22/23 12:25		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/22/23 12:25		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		11/22/23 12:25		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		11/18/23 03:25	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		11/17/23 18:46	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92698920

Sample: HAM-AP1-EB-01 **Lab ID: 92698920003** Collected: 11/14/23 19:33 Received: 11/15/23 13:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		11/17/23 18:46	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		11/17/23 18:46	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92698920

Sample: HAM-AP1-FB-01 **Lab ID: 92698920004** Collected: 11/14/23 19:25 Received: 11/15/23 13:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	ND	mg/L	0.040	0.025	1	11/20/23 14:55	11/21/23 14:16	7439-89-6	
Manganese	ND	mg/L	0.040	0.011	1	11/20/23 14:55	11/21/23 14:16	7439-96-5	
Potassium	ND	mg/L	0.50	0.15	1	11/20/23 14:55	11/21/23 14:16	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	11/20/23 14:55	11/21/23 14:16	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	11/20/23 14:55	11/21/23 14:16	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	11/20/23 14:55	11/21/23 14:16	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	11/28/23 10:12	11/29/23 21:23	7440-36-0	
Arsenic	ND	mg/L	0.010	0.00084	1	11/28/23 10:12	11/29/23 21:23	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	11/28/23 10:12	11/29/23 21:23	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	11/28/23 10:12	11/29/23 21:23	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	11/28/23 10:12	11/29/23 21:23	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	11/28/23 10:12	11/29/23 21:23	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	11/28/23 10:12	11/29/23 21:23	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	11/28/23 10:12	11/29/23 21:23	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	11/28/23 10:12	11/29/23 21:23	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	11/28/23 10:12	11/29/23 21:23	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	11/28/23 10:12	11/29/23 21:23	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	11/28/23 10:12	11/29/23 21:23	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	11/28/23 10:12	11/29/23 21:23	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	11/30/23 10:30	11/30/23 13:29	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		11/17/23 13:33		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/22/23 12:29		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/22/23 12:29		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		11/22/23 12:29		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		11/18/23 03:25	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		11/17/23 19:01	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92698920

Sample: HAM-AP1-FB-01 **Lab ID: 92698920004** Collected: 11/14/23 19:25 Received: 11/15/23 13:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		11/17/23 19:01	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		11/17/23 19:01	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92698920

Sample: HAM-AP1-FD-01 **Lab ID: 92698920005** Collected: 11/14/23 00:00 Received: 11/15/23 13:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.60**	mg/L	0.040	0.025	1	11/20/23 14:55	11/21/23 14:20	7439-89-6	
Manganese	**0.84**	mg/L	0.040	0.011	1	11/20/23 14:55	11/21/23 14:20	7439-96-5	
Potassium	**6.7**	mg/L	0.50	0.15	1	11/20/23 14:55	11/21/23 14:20	7440-09-7	
Sodium	**7.2**	mg/L	1.0	0.58	1	11/20/23 14:55	11/21/23 14:20	7440-23-5	
Calcium	**121**	mg/L	1.0	0.12	1	11/20/23 14:55	11/21/23 14:20	7440-70-2	
Magnesium	**15.6**	mg/L	0.050	0.012	1	11/20/23 14:55	11/21/23 14:20	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	11/28/23 10:12	11/29/23 21:35	7440-36-0	
Arsenic	ND	mg/L	0.010	0.00084	1	11/28/23 10:12	11/29/23 21:35	7440-38-2	
Barium	**0.060**	mg/L	0.0050	0.00047	1	11/28/23 10:12	11/29/23 21:35	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	11/28/23 10:12	11/30/23 16:07	7440-41-7	
Boron	**1.2**	mg/L	0.040	0.012	1	11/28/23 10:12	11/30/23 16:07	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	11/28/23 10:12	11/29/23 21:35	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	11/28/23 10:12	11/29/23 21:35	7440-47-3	
Cobalt	**0.0023J**	mg/L	0.0050	0.00032	1	11/28/23 10:12	11/29/23 21:35	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	11/28/23 10:12	11/29/23 21:35	7439-92-1	
Lithium	**0.0021J**	mg/L	0.030	0.0016	1	11/28/23 10:12	11/30/23 16:07	7439-93-2	
Molybdenum	**0.18**	mg/L	0.010	0.00062	1	11/28/23 10:12	11/29/23 21:35	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	11/28/23 10:12	11/29/23 21:35	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	11/28/23 10:12	11/29/23 21:35	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	11/30/23 10:30	11/30/23 13:31	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**496**	mg/L	25.0	25.0	1		11/17/23 13:33		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**138**	mg/L	5.0	5.0	1		11/22/23 12:34		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/22/23 12:34		
Alkalinity, Total as CaCO3	**138**	mg/L	5.0	5.0	1		11/22/23 12:34		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		11/18/23 03:25	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**43.3**	mg/L	1.0	0.60	1		11/17/23 04:49	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92698920

Sample: HAM-AP1-FD-01 **Lab ID: 92698920005** Collected: 11/14/23 00:00 Received: 11/15/23 13:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.35**	mg/L	0.10	0.050	1		11/17/23 04:49	16984-48-8	
Sulfate	**182**	mg/L	4.0	2.0	4		11/17/23 16:01	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92698920

QC Batch: 814536
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92698920001, 92698920002, 92698920003, 92698920004, 92698920005

METHOD BLANK: 4217035 Matrix: Water
Associated Lab Samples: 92698920001, 92698920002, 92698920003, 92698920004, 92698920005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	11/21/23 13:18	
Iron	mg/L	ND	0.040	0.025	11/21/23 13:18	
Magnesium	mg/L	ND	0.050	0.012	11/21/23 13:18	
Manganese	mg/L	ND	0.040	0.011	11/21/23 13:18	
Potassium	mg/L	ND	0.50	0.15	11/21/23 13:18	
Sodium	mg/L	ND	1.0	0.58	11/21/23 13:18	

LABORATORY CONTROL SAMPLE: 4217036

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	101	80-120	
Iron	mg/L	1	1.0	102	80-120	
Magnesium	mg/L	1	1.0	100	80-120	
Manganese	mg/L	1	0.98	98	80-120	
Potassium	mg/L	1	1.0	104	80-120	
Sodium	mg/L	1	0.99J	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4217037 4217038

Parameter	Units	92698920001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	111	1	1	115	112	428	172	75-125	2	20	M1
Iron	mg/L	ND	1	1	1.0	1.0	103	102	75-125	2	20	
Magnesium	mg/L	18.9	1	1	20.7	20.2	180	129	75-125	3	20	M1
Manganese	mg/L	0.23	1	1	1.2	1.2	100	98	75-125	1	20	
Potassium	mg/L	4.9	1	1	6.3	6.0	136	108	75-125	5	20	M1
Sodium	mg/L	6.9	1	1	8.3	8.0	134	108	75-125	3	20	M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92698920

QC Batch: 815690
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92698920001, 92698920002, 92698920003, 92698920004, 92698920005

METHOD BLANK: 4221994 Matrix: Water
Associated Lab Samples: 92698920001, 92698920002, 92698920003, 92698920004, 92698920005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00054	11/29/23 20:48	
Arsenic	mg/L	ND	0.010	0.00084	11/29/23 20:48	
Barium	mg/L	ND	0.0050	0.00047	11/29/23 20:48	
Beryllium	mg/L	ND	0.00050	0.000094	11/29/23 20:48	
Boron	mg/L	ND	0.040	0.012	11/29/23 20:48	
Cadmium	mg/L	ND	0.00050	0.00010	11/29/23 20:48	
Chromium	mg/L	ND	0.0050	0.0019	11/29/23 20:48	
Cobalt	mg/L	ND	0.0050	0.00032	11/29/23 20:48	
Lead	mg/L	ND	0.0010	0.00016	11/29/23 20:48	
Lithium	mg/L	ND	0.030	0.0016	11/29/23 20:48	
Molybdenum	mg/L	ND	0.010	0.00062	11/29/23 20:48	
Selenium	mg/L	ND	0.0050	0.00096	11/29/23 20:48	
Thallium	mg/L	ND	0.0010	0.00038	11/29/23 20:48	

LABORATORY CONTROL SAMPLE: 4221995

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	113	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	112	80-120	
Boron	mg/L	1	1.1	107	80-120	
Cadmium	mg/L	0.1	0.10	103	80-120	
Chromium	mg/L	0.1	0.11	108	80-120	
Cobalt	mg/L	0.1	0.11	108	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Lithium	mg/L	0.1	0.10	104	80-120	
Molybdenum	mg/L	0.1	0.11	110	80-120	
Selenium	mg/L	0.1	0.10	103	80-120	
Thallium	mg/L	0.1	0.094	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4221996 4221997

Parameter	Units	92698920001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	111	115	75-125	3	20	
Arsenic	mg/L	ND	0.1	0.1	0.11	0.11	105	106	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92698920

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4221996 4221997

Parameter	Units	92698920001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.10	0.1	0.1	0.19	0.20	90	93	75-125	1	20	
Beryllium	mg/L	ND	0.1	0.1	0.091	0.095	91	95	75-125	4	20	
Boron	mg/L	1.2	1	1	2.0	2.0	87	88	75-125	0	20	
Cadmium	mg/L	0.00011J	0.1	0.1	0.10	0.10	100	103	75-125	3	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.11	108	107	75-125	1	20	
Cobalt	mg/L	0.0013J	0.1	0.1	0.11	0.11	105	106	75-125	0	20	
Lead	mg/L	ND	0.1	0.1	0.091	0.092	91	92	75-125	1	20	
Lithium	mg/L	ND	0.1	0.1	0.099	0.10	97	101	75-125	4	20	
Molybdenum	mg/L	0.20	0.1	0.1	0.29	0.28	87	83	75-125	2	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.11	105	106	75-125	1	20	
Thallium	mg/L	ND	0.1	0.1	0.089	0.091	89	91	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92698920

QC Batch: 816279 | Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A | Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92698920001, 92698920002, 92698920003, 92698920004, 92698920005

METHOD BLANK: 4225100 Matrix: Water
Associated Lab Samples: 92698920001, 92698920002, 92698920003, 92698920004, 92698920005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	11/30/23 13:08	

LABORATORY CONTROL SAMPLE: 4225101

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4225104 4225105

Parameter	Units	92698920002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0024	0.0024	97	97	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92698920

QC Batch: 814083
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92698920001, 92698920002, 92698920003, 92698920004, 92698920005

METHOD BLANK: 4214606 Matrix: Water
Associated Lab Samples: 92698920001, 92698920002, 92698920003, 92698920004, 92698920005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	11/17/23 13:28	

LABORATORY CONTROL SAMPLE: 4214607

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	436	109	80-120	

SAMPLE DUPLICATE: 4214608

Parameter	Units	92698763001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	147	86.0	52	10	D6

SAMPLE DUPLICATE: 4214609

Parameter	Units	92699231001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	460	460	0	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92698920

QC Batch: 815013
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92698920001, 92698920002, 92698920003, 92698920004, 92698920005

METHOD BLANK: 4219224 Matrix: Water
Associated Lab Samples: 92698920001, 92698920002, 92698920003, 92698920004, 92698920005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	11/22/23 10:39	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	11/22/23 10:39	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	11/22/23 10:39	

LABORATORY CONTROL SAMPLE: 4219225

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.3	103	80-120	

LABORATORY CONTROL SAMPLE: 4219226

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.3	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4219227 4219228

Parameter	Units	92698654001 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	139	50	50	181	187	85	97	80-120	3	25	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92698920

QC Batch: 814252 — 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: 92698920001, 92698920002, 92698920003, 92698920004, 92698920005

METHOD BLANK: 4216083 — Matrix: Water
Associated Lab Samples: 92698920001, 92698920002, 92698920003, 92698920004, 92698920005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	11/18/23 03:15	

LABORATORY CONTROL SAMPLE: 4216084

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.50	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4216085 4216086

Parameter	Units	92698519001 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	102	107	80-120	4	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4216087 4216088

Parameter	Units	92698654006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.52	0.52	104	104	80-120	0	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92698920

QC Batch: 813934
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92698920001, 92698920002, 92698920003, 92698920004, 92698920005

METHOD BLANK: 4214098 Matrix: Water
Associated Lab Samples: 92698920001, 92698920002, 92698920003, 92698920004, 92698920005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	11/17/23 18:02	
Fluoride	mg/L	ND	0.10	0.050	11/17/23 18:02	
Sulfate	mg/L	ND	1.0	0.50	11/17/23 18:02	

LABORATORY CONTROL SAMPLE: 4214099

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	2.6	104	90-110	
Sulfate	mg/L	50	53.1	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4214100 4214101

Parameter	Units	92699019011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1.7	50	50	52.0	53.1	101	103	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	2.4	2.5	94	96	90-110	3	10	
Sulfate	mg/L	8.6	50	50	59.4	60.5	102	104	90-110	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4214102 4214103

Parameter	Units	92698920001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	38.5	50	50	88.2	89.4	99	102	90-110	1	10	
Fluoride	mg/L	0.35	2.5	2.5	2.7	2.8	96	98	90-110	2	10	
Sulfate	mg/L	179	50	50	225	227	91	96	90-110	1	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: Hammond AP-1
Pace Project No.: 92698920

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.

Pace Analytical Services, LLC
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-1
Pace Project No.: 92698920

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92698920001	**HAM-PT-09**	EPA 3010A	814536	EPA 6010D	814604
92698920002	**HAM-PT-10**	EPA 3010A	814536	EPA 6010D	814604
92698920003	**HAM-AP1-EB-01**	EPA 3010A	814536	EPA 6010D	814604
92698920004	**HAM-AP1-FB-01**	EPA 3010A	814536	EPA 6010D	814604
92698920005	**HAM-AP1-FD-01**	EPA 3010A	814536	EPA 6010D	814604
92698920001	**HAM-PT-09**	EPA 3005A	815690	EPA 6020B	815855
92698920002	**HAM-PT-10**	EPA 3005A	815690	EPA 6020B	815855
92698920003	**HAM-AP1-EB-01**	EPA 3005A	815690	EPA 6020B	815855
92698920004	**HAM-AP1-FB-01**	EPA 3005A	815690	EPA 6020B	815855
92698920005	**HAM-AP1-FD-01**	EPA 3005A	815690	EPA 6020B	815855
92698920001	**HAM-PT-09**	EPA 7470A	816279	EPA 7470A	816391
92698920002	**HAM-PT-10**	EPA 7470A	816279	EPA 7470A	816391
92698920003	**HAM-AP1-EB-01**	EPA 7470A	816279	EPA 7470A	816391
92698920004	**HAM-AP1-FB-01**	EPA 7470A	816279	EPA 7470A	816391
92698920005	**HAM-AP1-FD-01**	EPA 7470A	816279	EPA 7470A	816391
92698920001	**HAM-PT-09**	SM 2540C-2015	814083		
92698920002	**HAM-PT-10**	SM 2540C-2015	814083		
92698920003	**HAM-AP1-EB-01**	SM 2540C-2015	814083		
92698920004	**HAM-AP1-FB-01**	SM 2540C-2015	814083		
92698920005	**HAM-AP1-FD-01**	SM 2540C-2015	814083		
92698920001	**HAM-PT-09**	SM 2320B-2011	815013		
92698920002	**HAM-PT-10**	SM 2320B-2011	815013		
92698920003	**HAM-AP1-EB-01**	SM 2320B-2011	815013		
92698920004	**HAM-AP1-FB-01**	SM 2320B-2011	815013		
92698920005	**HAM-AP1-FD-01**	SM 2320B-2011	815013		
92698920001	**HAM-PT-09**	SM 4500-S2D-2011	814252		
92698920002	**HAM-PT-10**	SM 4500-S2D-2011	814252		
92698920003	**HAM-AP1-EB-01**	SM 4500-S2D-2011	814252		
92698920004	**HAM-AP1-FB-01**	SM 4500-S2D-2011	814252		
92698920005	**HAM-AP1-FD-01**	SM 4500-S2D-2011	814252		
92698920001	**HAM-PT-09**	EPA 300.0 Rev 2.1 1993	813934		
92698920002	**HAM-PT-10**	EPA 300.0 Rev 2.1 1993	813934		
92698920003	**HAM-AP1-EB-01**	EPA 300.0 Rev 2.1 1993	813934		
92698920004	**HAM-AP1-FB-01**	EPA 300.0 Rev 2.1 1993	813934		
92698920005	**HAM-AP1-FD-01**	EPA 300.0 Rev 2.1 1993	813934		

REPORT OF LABORATORY ANALYSIS

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

aboratory receiving samples:

Asheville ☐ **Eden** ☐ **Greenwood** ☐ **Huntersville** ☐ **Raleigh** ☐ **Mechanicsville** ☐ **Atlanta** ☑ **Kernersville** ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO# : 92698920

92698920

Courier: ☐ Commercial ☑ Pace ☐ Fed Ex ☐ UPS ☐ USPS ☐ Other:____ ☐ Client

Custody Seal Present? ☐ Yes ☐ No **Seals Intact?** ☐ Yes ☑ No

Date/Initials Person Examining Contents: 1-15-23 JC

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☐ IR Gun ID: 730 **Type of Ice:** ☑ Wet ☐ Blue ☐ None

Cooler Temp: 4.0 **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): 4.0

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?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☑ Yes	☐ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: W	☑ Yes	☐ No	☐ N/A	9.
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ **Date:** _____

Project Manager SRF Review: _____ **Date:** _____

Pace ANALYTICAL SERVICES

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#: 92698920

PM: BV Due Date: 12/01/23

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			1	1																						
2		2	1			1	1																						
3		2	1			1	1																						
4		2	1			1	1																						
5		2	1			1	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.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: GA Power	Report To: SCS Contacts	Attention: Southern Co.
Address: Atlanta, GA	Copy To: Geosyntec Contacts	Company Name:
		Address:
Email To: SCS Contacts	Purchase Order No.: GPC82474-0001	Pace Quote Reference:
Phone: Fax:	Project Name: Hammond AP-1	Pace Project Manager: Bonnie Vang
Requested Due Date/TAT: 5 day	Project Number:	Pace Profile #: 10839

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER CCR

Site Location STATE: GA

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information: SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	Valid Matrix Codes: MATRIX / CODE (DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate	Full App. III and IV metals	Major Ions (Profile 10839-2)	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																				Y/N	N	N	N	N		
1	HAM-PT-09		WG	G	11/14/2023	1803				5	3		1					1		x	x	x	x	N	01
2	HAM-PT-10		WG	G	11/14/2023	1425				5	3		1					1		x	x	x	x	N	02
3	HAM-AP1-EB-01		WQ	G	11/14/2023	1933				5	3		1					1		x	x	x	x	N	03
4	HAM-AP1-FB-01		WQ	G	11/14/2023	1925				5	3		1					1		x	x	x	x	N	04
5	HAM-AP1-FD-01		WG	G	11/14/2023	0000				5	3		1					1		x	x	x	x	N	05
6																									
7																									
8																									
9				ZW																					
10																									
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-CA-20231114	Zain Webb / Geosyntec	11/15/23	1306	Ryan Williams / Pace	11/15/23	1306	
	Ryan Williams / Pace	11/15/23	1405	Jee / PACE	11/15/23	1405	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Zain Webb / Geosyntec Consultants, Inc.

SIGNATURE of SAMPLER: Zain Webb DATE Signed (MM/DD/YY): 11-15-23

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 invoices not paid within 30 days.

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

December 08, 2023

Kristen Jurinko
Southern Company
241 Ralph McGill Blvd NE
Bin 10160
Atlanta, GA 30308

RE: Project: Hammond AP-1
Pace Project No.: 92700191

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

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: Hammond AP-1
Pace Project No.: 92700191

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Laboratory ID: 99030
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners
110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001
Virginia Certification #: 460204

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Hammond AP-1
Pace Project No.: 92700191

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92700191001	**HAM-PT-07**	Water	11/21/23 12:20	11/22/23 13:20
92700191002	**HAM-PT-8**	Water	11/21/23 14:45	11/22/23 13:20
92700191003	**HAM-AP1-EB-01**	Water	11/21/23 16:03	11/22/23 13:20
92700191004	**HAM-AP1-FB-01**	Water	11/21/23 16:20	11/22/23 13:20

Pace Analytical Services, LLC
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SAMPLE ANALYTE COUNT

Project: Hammond AP-1
Pace Project No.: 92700191

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92700191001	**HAM-PT-07**	EPA 6010D	DRB	6
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92700191002	**HAM-PT-8**	EPA 6010D	DRB	6
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92700191003	**HAM-AP1-EB-01**	EPA 6010D	DRB	6
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92700191004	**HAM-AP1-FB-01**	EPA 6010D	DRB	6
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3

PASI-A = Pace Analytical Services - Asheville
PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SUMMARY OF DETECTION

Project: Hammond AP-1
Pace Project No.: 92700191

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92700191001	**HAM-PT-07**					
EPA 6010D	Iron	17.7	mg/L	0.040	12/05/23 11:05	M1
EPA 6010D	Manganese	4.5	mg/L	0.040	12/04/23 21:31	
EPA 6010D	Potassium	6.4	mg/L	0.50	12/04/23 21:31	M1
EPA 6010D	Sodium	7.0	mg/L	1.0	12/04/23 21:31	M1
EPA 6010D	Calcium	121	mg/L	1.0	12/04/23 21:31	M1
EPA 6010D	Magnesium	15.1	mg/L	0.050	12/04/23 21:31	M1
EPA 6020B	Arsenic	0.34	mg/L	0.010	12/06/23 13:41	
EPA 6020B	Barium	0.058	mg/L	0.0050	12/06/23 13:41	
EPA 6020B	Beryllium	0.00014J	mg/L	0.00050	12/06/23 13:41	
EPA 6020B	Boron	1.0	mg/L	0.040	12/06/23 13:41	
EPA 6020B	Cobalt	0.085	mg/L	0.0050	12/06/23 13:41	
EPA 6020B	Lithium	0.060	mg/L	0.030	12/06/23 13:41	
EPA 6020B	Molybdenum	0.015	mg/L	0.010	12/06/23 13:41	
SM 2540C-2015	Total Dissolved Solids	566	mg/L	25.0	11/28/23 12:19	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	138	mg/L	5.0	11/30/23 18:49	
SM 2320B-2011	Alkalinity, Total as CaCO3	138	mg/L	5.0	11/30/23 18:49	
EPA 300.0 Rev 2.1 1993	Chloride	17.6	mg/L	1.0	11/25/23 18:25	
EPA 300.0 Rev 2.1 1993	Fluoride	0.36	mg/L	0.10	11/25/23 18:25	
EPA 300.0 Rev 2.1 1993	Sulfate	248	mg/L	5.0	11/26/23 00:06	M1
92700191002	**HAM-PT-8**					
EPA 6010D	Iron	6.7	mg/L	0.040	12/05/23 11:20	
EPA 6010D	Manganese	3.5	mg/L	0.040	12/04/23 21:50	
EPA 6010D	Potassium	5.9	mg/L	0.50	12/04/23 21:50	
EPA 6010D	Sodium	7.0	mg/L	1.0	12/04/23 21:50	
EPA 6010D	Calcium	125	mg/L	1.0	12/04/23 21:50	
EPA 6010D	Magnesium	14.4	mg/L	0.050	12/04/23 21:50	
EPA 6020B	Arsenic	0.28	mg/L	0.010	12/06/23 13:45	
EPA 6020B	Barium	0.051	mg/L	0.0050	12/06/23 13:45	
EPA 6020B	Boron	1.1	mg/L	0.040	12/06/23 13:45	
EPA 6020B	Cobalt	0.028	mg/L	0.0050	12/06/23 13:45	
EPA 6020B	Lithium	0.026J	mg/L	0.030	12/06/23 13:45	
EPA 6020B	Molybdenum	0.032	mg/L	0.010	12/06/23 13:45	
SM 2540C-2015	Total Dissolved Solids	545	mg/L	25.0	11/28/23 12:20	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	144	mg/L	5.0	11/30/23 19:14	
SM 2320B-2011	Alkalinity, Total as CaCO3	144	mg/L	5.0	11/30/23 19:14	
EPA 300.0 Rev 2.1 1993	Chloride	18.9	mg/L	1.0	11/25/23 19:07	
EPA 300.0 Rev 2.1 1993	Fluoride	0.32	mg/L	0.10	11/25/23 19:07	
EPA 300.0 Rev 2.1 1993	Sulfate	247	mg/L	5.0	11/26/23 00:49	
92700191003	**HAM-AP1-EB-01**					
EPA 6010D	Iron	0.062	mg/L	0.040	12/05/23 11:25	
EPA 6020B	Antimony	0.0011J	mg/L	0.0030	12/06/23 14:02	
EPA 6020B	Boron	0.029J	mg/L	0.040	12/06/23 14:02	
SM 2540C-2015	Total Dissolved Solids	120	mg/L	25.0	11/28/23 12:20	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92700191

Sample: HAM-PT-07 **Lab ID: 92700191001** Collected: 11/21/23 12:20 Received: 11/22/23 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**17.7**	mg/L	0.040	0.025	1	11/29/23 13:50	12/05/23 11:05	7439-89-6	M1
Manganese	**4.5**	mg/L	0.040	0.011	1	11/29/23 13:50	12/04/23 21:31	7439-96-5	
Potassium	**6.4**	mg/L	0.50	0.15	1	11/29/23 13:50	12/04/23 21:31	7440-09-7	M1
Sodium	**7.0**	mg/L	1.0	0.58	1	11/29/23 13:50	12/04/23 21:31	7440-23-5	M1
Calcium	**121**	mg/L	1.0	0.12	1	11/29/23 13:50	12/04/23 21:31	7440-70-2	M1
Magnesium	**15.1**	mg/L	0.050	0.012	1	11/29/23 13:50	12/04/23 21:31	7439-95-4	M1
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	12/04/23 11:17	12/06/23 13:41	7440-36-0	
Arsenic	**0.34**	mg/L	0.010	0.00084	1	12/04/23 11:17	12/06/23 13:41	7440-38-2	
Barium	**0.058**	mg/L	0.0050	0.00047	1	12/04/23 11:17	12/06/23 13:41	7440-39-3	
Beryllium	**0.00014J**	mg/L	0.00050	0.000094	1	12/04/23 11:17	12/06/23 13:41	7440-41-7	
Boron	**1.0**	mg/L	0.040	0.012	1	12/04/23 11:17	12/06/23 13:41	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	12/04/23 11:17	12/06/23 13:41	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	12/04/23 11:17	12/06/23 13:41	7440-47-3	
Cobalt	**0.085**	mg/L	0.0050	0.00032	1	12/04/23 11:17	12/06/23 13:41	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	12/04/23 11:17	12/06/23 13:41	7439-92-1	
Lithium	**0.060**	mg/L	0.030	0.0016	1	12/04/23 11:17	12/06/23 13:41	7439-93-2	
Molybdenum	**0.015**	mg/L	0.010	0.00062	1	12/04/23 11:17	12/06/23 13:41	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	12/04/23 11:17	12/06/23 13:41	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	12/04/23 11:17	12/06/23 13:41	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	12/04/23 16:00	12/05/23 10:17	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**566**	mg/L	25.0	25.0	1		11/28/23 12:19		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**138**	mg/L	5.0	5.0	1		11/30/23 18:49		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/30/23 18:49		
Alkalinity, Total as CaCO3	**138**	mg/L	5.0	5.0	1		11/30/23 18:49		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		11/23/23 04:31	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**17.6**	mg/L	1.0	0.60	1		11/25/23 18:25	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92700191

Sample: HAM-PT-07 **Lab ID: 92700191001** Collected: 11/21/23 12:20 Received: 11/22/23 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.36**	mg/L	0.10	0.050	1		11/25/23 18:25	16984-48-8	
Sulfate	**248**	mg/L	5.0	2.5	5		11/26/23 00:06	14808-79-8	M1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92700191

Sample: HAM-PT-8 **Lab ID: 92700191002** Collected: 11/21/23 14:45 Received: 11/22/23 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**6.7**	mg/L	0.040	0.025	1	11/29/23 13:50	12/05/23 11:20	7439-89-6	
Manganese	**3.5**	mg/L	0.040	0.011	1	11/29/23 13:50	12/04/23 21:50	7439-96-5	
Potassium	**5.9**	mg/L	0.50	0.15	1	11/29/23 13:50	12/04/23 21:50	7440-09-7	
Sodium	**7.0**	mg/L	1.0	0.58	1	11/29/23 13:50	12/04/23 21:50	7440-23-5	
Calcium	**125**	mg/L	1.0	0.12	1	11/29/23 13:50	12/04/23 21:50	7440-70-2	
Magnesium	**14.4**	mg/L	0.050	0.012	1	11/29/23 13:50	12/04/23 21:50	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	12/04/23 11:17	12/06/23 13:45	7440-36-0	
Arsenic	**0.28**	mg/L	0.010	0.00084	1	12/04/23 11:17	12/06/23 13:45	7440-38-2	
Barium	**0.051**	mg/L	0.0050	0.00047	1	12/04/23 11:17	12/06/23 13:45	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	12/04/23 11:17	12/06/23 13:45	7440-41-7	
Boron	**1.1**	mg/L	0.040	0.012	1	12/04/23 11:17	12/06/23 13:45	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	12/04/23 11:17	12/06/23 13:45	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	12/04/23 11:17	12/06/23 13:45	7440-47-3	
Cobalt	**0.028**	mg/L	0.0050	0.00032	1	12/04/23 11:17	12/06/23 13:45	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	12/04/23 11:17	12/06/23 13:45	7439-92-1	
Lithium	**0.026J**	mg/L	0.030	0.0016	1	12/04/23 11:17	12/06/23 13:45	7439-93-2	
Molybdenum	**0.032**	mg/L	0.010	0.00062	1	12/04/23 11:17	12/06/23 13:45	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	12/04/23 11:17	12/06/23 13:45	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	12/04/23 11:17	12/06/23 13:45	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	12/04/23 16:00	12/05/23 10:20	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**545**	mg/L	25.0	25.0	1		11/28/23 12:20		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**144**	mg/L	5.0	5.0	1		11/30/23 19:14		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/30/23 19:14		
Alkalinity, Total as CaCO3	**144**	mg/L	5.0	5.0	1		11/30/23 19:14		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		11/23/23 04:31	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**18.9**	mg/L	1.0	0.60	1		11/25/23 19:07	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92700191

Sample: HAM-PT-8 **Lab ID: 92700191002** Collected: 11/21/23 14:45 Received: 11/22/23 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.32**	mg/L	0.10	0.050	1		11/25/23 19:07	16984-48-8	
Sulfate	**247**	mg/L	5.0	2.5	5		11/26/23 00:49	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92700191

Sample: HAM-AP1-EB-01 **Lab ID: 92700191003** Collected: 11/21/23 16:03 Received: 11/22/23 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.062**	mg/L	0.040	0.025	1	11/29/23 13:50	12/05/23 11:25	7439-89-6	
Manganese	ND	mg/L	0.040	0.011	1	11/29/23 13:50	12/04/23 21:55	7439-96-5	
Potassium	ND	mg/L	0.50	0.15	1	11/29/23 13:50	12/04/23 21:55	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	11/29/23 13:50	12/04/23 21:55	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	11/29/23 13:50	12/04/23 21:55	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	11/29/23 13:50	12/04/23 21:55	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.0011J**	mg/L	0.0030	0.00054	1	12/04/23 11:17	12/06/23 14:02	7440-36-0	
Arsenic	ND	mg/L	0.010	0.00084	1	12/04/23 11:17	12/06/23 14:02	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	12/04/23 11:17	12/06/23 14:02	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	12/04/23 11:17	12/06/23 14:02	7440-41-7	
Boron	**0.029J**	mg/L	0.040	0.012	1	12/04/23 11:17	12/06/23 14:02	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	12/04/23 11:17	12/06/23 14:02	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	12/04/23 11:17	12/06/23 14:02	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	12/04/23 11:17	12/06/23 14:02	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	12/04/23 11:17	12/06/23 14:02	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	12/04/23 11:17	12/06/23 14:02	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	12/04/23 11:17	12/06/23 14:02	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	12/04/23 11:17	12/06/23 14:02	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	12/04/23 11:17	12/06/23 14:02	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	12/04/23 16:00	12/05/23 10:23	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**120**	mg/L	25.0	25.0	1		11/28/23 12:20		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/30/23 20:03		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/30/23 20:03		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		11/30/23 20:03		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		11/23/23 04:32	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		11/25/23 13:41	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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(704)875-9092

ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92700191

Sample: HAM-AP1-EB-01 **Lab ID: 92700191003** Collected: 11/21/23 16:03 Received: 11/22/23 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		11/25/23 13:41	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		11/25/23 13:41	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92700191

Sample: HAM-AP1-FB-01 **Lab ID: 92700191004** Collected: 11/21/23 16:20 Received: 11/22/23 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Manganese	ND	mg/L	0.040	0.011	1	11/29/23 13:50	12/04/23 22:00	7439-96-5	
Potassium	ND	mg/L	0.50	0.15	1	11/29/23 13:50	12/04/23 22:00	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	11/29/23 13:50	12/04/23 22:00	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	11/29/23 13:50	12/04/23 22:00	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	11/29/23 13:50	12/04/23 22:00	7439-95-4	
Iron	ND	mg/L	0.040	0.025	1	11/29/23 13:50	12/05/23 11:30	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	0.00054	1	12/04/23 11:17	12/06/23 14:06	7440-36-0	
Arsenic	ND	mg/L	0.010	0.00084	1	12/04/23 11:17	12/06/23 14:06	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	12/04/23 11:17	12/06/23 14:06	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	12/04/23 11:17	12/06/23 14:06	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	12/04/23 11:17	12/06/23 14:06	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	12/04/23 11:17	12/06/23 14:06	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	12/04/23 11:17	12/06/23 14:06	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	12/04/23 11:17	12/06/23 14:06	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	12/04/23 11:17	12/06/23 14:06	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	12/04/23 11:17	12/06/23 14:06	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	12/04/23 11:17	12/06/23 14:06	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	12/04/23 11:17	12/06/23 14:06	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	12/04/23 11:17	12/06/23 14:06	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	12/04/23 16:00	12/05/23 10:25	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		11/28/23 12:20		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/30/23 20:07		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/30/23 20:07		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		11/30/23 20:07		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		11/23/23 04:33	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		11/25/23 13:55	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Hammond AP-1
Pace Project No.: 92700191

Sample: HAM-AP1-FB-01 **Lab ID: 92700191004** Collected: 11/21/23 16:20 Received: 11/22/23 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		11/25/23 13:55	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		11/25/23 13:55	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92700191

QC Batch: 816107
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92700191001, 92700191002, 92700191003, 92700191004

METHOD BLANK: 4224079 Matrix: Water
Associated Lab Samples: 92700191001, 92700191002, 92700191003, 92700191004

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	92700191001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92700191

QC Batch: 817033
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92700191001, 92700191002, 92700191003, 92700191004

METHOD BLANK: 4228731 Matrix: Water
Associated Lab Samples: 92700191001, 92700191002, 92700191003, 92700191004

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 Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	104	101	75-125	3	20	
Arsenic	mg/L	0.28	0.1	0.1	0.39	0.39	104	101	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92700191

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4228733 4228734

Parameter	Units	92700191002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.051	0.1	0.1	0.16	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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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92700191

QC Batch: 816979
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92700191001, 92700191002, 92700191003, 92700191004

METHOD BLANK: 4228480 Matrix: Water
Associated Lab Samples: 92700191001, 92700191002, 92700191003, 92700191004

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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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92700191

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: 92700191001, 92700191002, 92700191003, 92700191004

METHOD BLANK: 4221243 Matrix: Water
Associated Lab Samples: 92700191001, 92700191002, 92700191003, 92700191004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	11/28/23 12:18	

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	

SAMPLE DUPLICATE: 4221245

Parameter	Units	92700191001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	566	566	0	10	

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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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92700191

QC Batch: 816336
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92700191001, 92700191002

METHOD BLANK: 4225336 Matrix: Water
Associated Lab Samples: 92700191001, 92700191002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	11/30/23 15:34	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	11/30/23 15:34	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	11/30/23 15:34	

LABORATORY CONTROL SAMPLE: 4225337

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: 4225338

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.0	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4225339 4225340

Parameter	Units	92700191001 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	138	50	50	193	194	110	112	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4226089 4226090

Parameter	Units	92700200001 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	82.8	50	50	133	135	101	104	80-120	1	25	

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QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92700191

QC Batch: 816475
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92700191003, 92700191004

METHOD BLANK: 4226050 Matrix: Water
Associated Lab Samples: 92700191003, 92700191004

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-1
Pace Project No.: 92700191

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: 92700191001, 92700191002, 92700191003, 92700191004

METHOD BLANK: 4220627 Matrix: Water
Associated Lab Samples: 92700191001, 92700191002, 92700191003, 92700191004

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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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Hammond AP-1
Pace Project No.: 92700191

QC Batch: 815300
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92700191001, 92700191002, 92700191003, 92700191004

METHOD BLANK: 4220718 Matrix: Water
Associated Lab Samples: 92700191001, 92700191002, 92700191003, 92700191004

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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	11.1	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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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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REPORT OF LABORATORY ANALYSIS

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(704)875-9092

QUALIFIERS

Project: Hammond AP-1
Pace Project No.: 92700191

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-1
Pace Project No.: 92700191

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92700191001	**HAM-PT-07**	EPA 3010A	816107	EPA 6010D	816179
92700191002	**HAM-PT-8**	EPA 3010A	816107	EPA 6010D	816179
92700191003	**HAM-AP1-EB-01**	EPA 3010A	816107	EPA 6010D	816179
92700191004	**HAM-AP1-FB-01**	EPA 3010A	816107	EPA 6010D	816179
92700191001	**HAM-PT-07**	EPA 3005A	817033	EPA 6020B	817133
92700191002	**HAM-PT-8**	EPA 3005A	817033	EPA 6020B	817133
92700191003	**HAM-AP1-EB-01**	EPA 3005A	817033	EPA 6020B	817133
92700191004	**HAM-AP1-FB-01**	EPA 3005A	817033	EPA 6020B	817133
92700191001	**HAM-PT-07**	EPA 7470A	816979	EPA 7470A	817223
92700191002	**HAM-PT-8**	EPA 7470A	816979	EPA 7470A	817223
92700191003	**HAM-AP1-EB-01**	EPA 7470A	816979	EPA 7470A	817223
92700191004	**HAM-AP1-FB-01**	EPA 7470A	816979	EPA 7470A	817223
92700191001	**HAM-PT-07**	SM 2540C-2015	815475		
92700191002	**HAM-PT-8**	SM 2540C-2015	815475		
92700191003	**HAM-AP1-EB-01**	SM 2540C-2015	815475		
92700191004	**HAM-AP1-FB-01**	SM 2540C-2015	815475		
92700191001	**HAM-PT-07**	SM 2320B-2011	816336		
92700191002	**HAM-PT-8**	SM 2320B-2011	816336		
92700191003	**HAM-AP1-EB-01**	SM 2320B-2011	816475		
92700191004	**HAM-AP1-FB-01**	SM 2320B-2011	816475		
92700191001	**HAM-PT-07**	SM 4500-S2D-2011	815251		
92700191002	**HAM-PT-8**	SM 4500-S2D-2011	815251		
92700191003	**HAM-AP1-EB-01**	SM 4500-S2D-2011	815251		
92700191004	**HAM-AP1-FB-01**	SM 4500-S2D-2011	815251		
92700191001	**HAM-PT-07**	EPA 300.0 Rev 2.1 1993	815300		
92700191002	**HAM-PT-8**	EPA 300.0 Rev 2.1 1993	815300		
92700191003	**HAM-AP1-EB-01**	EPA 300.0 Rev 2.1 1993	815300		
92700191004	**HAM-AP1-FB-01**	EPA 300.0 Rev 2.1 1993	815300		

Pace ANALYTICAL SERVICES	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# : 92700191

92700191

Courier: ☐ Commercial ☐ FedEx ☑ Pace ☐ UPS ☐ USPS ☐ Other:____ ☐ Client

Custody Seal Present? ☑ Yes ☐ No **Seals Intact?** ☑ Yes ☐ No

Date/Initials Person Examining Contents: 11-22-23 JCL

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 730 **Type of Ice:** ☑ Wet ☐ Blue ☐ None

Cooler Temp: 3.3 **Correction Factor:** Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 3.3

Temp should be above freezing to 6°C

☐ Samples out of temp criteria Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☐ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: W				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ **Date:** _____

Project Manager SRF Review: _____ **Date:** _____

Pace ANALYTICAL SERVICES	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#: 92700191

PM: BV Due Date: 12/08/23

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			1	1																						
2		2	1			1	1																						
3		2	1			1	1																						
4		2	1			1	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.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately

Page: of

Section A — Required Client Information:

Company:	GA Power
Address:	Atlanta, GA
Email To:	SCS Contacts
Phone:	Fax:
Requested Due Date/TAT:	5 day

Section B — Required Project Information:

Report To:	SCS Contacts
Copy To:	Geosyntec Contacts
Purchase Order No.:	GPC82474-0001
Project Name:	Hammond AP-1
Project Number:	

Section C — Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Bonnie Vang
Pace Profile #:	10839

REGULATORY AGENCY

NPDES / GROUND WATER / DRINKING WATER / UST / RCRA / ✓ OTHER CCR

Site Location STATE: GA

Section D — Required Client Information

Valid Matrix Codes: MATRIX / CODE — DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	TIME	COMPOSITE END/GRAB DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate (N)	Full App. III and IV metals (N)	Major Ions (Profile 10839-2) (N)	TDS (N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 92700191
1	HAM-PT-07	WG	G	11/21/2023	12:20			19	5	3		1					1		X	X	X	X	N	001
2	HAM-PT-8	WG	G	11/21/2023	14:45			19	5	3		1					1		X	X	X	X	N	002
3	HAM-AP1-EB-01	WQ	G	11/21/2023	16:03			19	5	3		1					1		X	X	X	X	N	003
4	HAM-AP1-FB-01	WQ	G	11/21/2023	16:20			19	5	3		1					1		X	X	X	X	N	004
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

(Rows 5–12 struck through, initialed "EJR 11/21/23")

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-CA-20231121	Elisabeth Russell / Geosyntec	11/21/23	1145	[signature] / SGS [illegible]	11/21	7:45	
	[signature] / [illegible]	11/21	1320	Ryan Williams / Pace	11/22/23	1326	
	Ryan Williams / Pace	11/22/23	1420	[signature]	11/22/23	1420	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Elisabeth Russell / Geosyntec Consultants, Inc.

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 11/21/23

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 invoices not paid within 30 days

Pilot Study Field Sampling Forms

July 2023

Low-Flow Test Report:

Test Date / Time: 7/13/2023 3:37:26 PM
Project: GW6581
Operator Name: Alana Neely

Location Name: PT-07 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 38.6 ft** **Total Depth: 48.6 ft** **Initial Depth to Water: 25.3 ft**	**Pump Type: Peri** **Tubing Type: Poly** **Pump Intake From TOC: 43.6 ft** **Estimated Total Volume Pumped: 9 L** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 884187**

Test Notes:
Five bottles: Full App III and IV and Geochem

Weather Conditions:
73-91 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	+/- 5	+/- 10	+/- 0.3	
7/13/2023 3:37 PM	00:00	6.80 pH	28.25 °C	1,056.0 µS/cm	1.39 mg/L	21.70 NTU	-108.6 mV	25.30 ft	200.00 ml/min
7/13/2023 3:42 PM	05:00	6.81 pH	26.88 °C	1,079.0 µS/cm	0.68 mg/L	21.30 NTU	-111.1 mV	25.30 ft	200.00 ml/min
7/13/2023 3:47 PM	10:00	6.82 pH	26.52 °C	1,072.1 µS/cm	0.49 mg/L	18.70 NTU	-127.0 mV	25.30 ft	200.00 ml/min
7/13/2023 3:52 PM	15:00	6.80 pH	27.35 °C	1,080.9 µS/cm	0.48 mg/L	16.00 NTU	-128.2 mV	25.30 ft	200.00 ml/min
7/13/2023 3:57 PM	20:00	6.77 pH	27.44 °C	979.74 µS/cm	0.41 mg/L	9.81 NTU	-113.5 mV	25.30 ft	200.00 ml/min
7/13/2023 4:02 PM	25:00	6.76 pH	27.85 °C	1,068.5 µS/cm	0.35 mg/L	9.08 NTU	-126.8 mV	25.30 ft	200.00 ml/min
7/13/2023 4:07 PM	30:00	6.76 pH	27.68 °C	1,061.0 µS/cm	0.32 mg/L	6.69 NTU	-111.9 mV	25.30 ft	200.00 ml/min
7/13/2023 4:12 PM	35:00	6.75 pH	27.81 °C	1,069.4 µS/cm	0.29 mg/L	6.01 NTU	-125.6 mV	25.30 ft	200.00 ml/min
7/13/2023 4:17 PM	40:00	6.76 pH	27.26 °C	1,064.5 µS/cm	0.30 mg/L	4.91 NTU	-111.0 mV	25.30 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-07	Grab.

HAM-AP1-FD-01	Grab.

Low-Flow Test Report:

Test Date / Time: 7/13/2023 5:11:34 PM
Project: GW6581
Operator Name: Alana Neely

Location Name: PT-08 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 33 ft** **Total Depth: 43 ft** **Initial Depth to Water: 22.2 ft**	**Pump Type: Peri** **Tubing Type: Poly** **Pump Intake From TOC: 38 ft** **Estimated Total Volume Pumped: 8 L** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min Final Draw Down: 0.1 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 884187**

Test Notes:
Five bottles: Full App III and IV and Geochem
Weather Conditions:
73-91 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	+/- 5	+/- 10	+/- 0.3	
7/13/2023 5:11 PM	00:00	6.70 pH	26.09 °C	930.24 µS/cm	0.88 mg/L	20.20 NTU	-77.5 mV	22.30 ft	200.00 ml/min
7/13/2023 5:16 PM	05:00	6.68 pH	24.72 °C	960.77 µS/cm	1.07 mg/L	19.70 NTU	-81.4 mV	22.30 ft	200.00 ml/min
7/13/2023 5:21 PM	10:00	6.67 pH	24.21 °C	962.53 µS/cm	0.13 mg/L	24.30 NTU	-101.1 mV	22.30 ft	200.00 ml/min
7/13/2023 5:26 PM	15:00	6.66 pH	24.14 °C	972.51 µS/cm	0.11 mg/L	22.50 NTU	-107.9 mV	22.30 ft	200.00 ml/min
7/13/2023 5:31 PM	20:00	6.67 pH	24.49 °C	1,002.9 µS/cm	0.10 mg/L	8.59 NTU	-124.8 mV	22.30 ft	200.00 ml/min
7/13/2023 5:36 PM	25:00	6.68 pH	24.12 °C	999.67 µS/cm	0.08 mg/L	6.25 NTU	-115.1 mV	22.30 ft	200.00 ml/min
7/13/2023 5:41 PM	30:00	6.66 pH	24.79 °C	1,007.2 µS/cm	0.09 mg/L	7.11 NTU	-116.7 mV	22.30 ft	200.00 ml/min
7/13/2023 5:46 PM	35:00	6.66 pH	24.53 °C	1,007.1 µS/cm	0.09 mg/L	4.41 NTU	-124.9 mV	22.30 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-08	Grab.

Low-Flow Test Report:

Test Date / Time: 7/13/2023 11:06:04 AM
Project: GW6581
Operator Name: Alana Neely

Location Name: PT-09 **Well Diameter: 2 in Casing** **Type: PVC** **Screen Length: 10 ft** **Top of Screen: 18.5 ft** **Total Depth: 28.5 ft** **Initial Depth to Water: 14 ft**	**Pump Type: Peri** **Tubing Type: Poly** **Pump Intake From TOC: 23.5 ft** **Estimated Total Volume Pumped: 25.25 L** **Flow Cell Volume: 90 ml** **Final Flow Rate: 250 ml/min Final Draw Down: 0.1 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 884187**

Test Notes:
Five bottles: Full App III and IV and Geochem

Weather Conditions:
73-91 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	+/- 5	+/- 10	+/- 0.3	
7/13/2023 11:06 AM	00:00	6.47 pH	23.91 °C	730.32 µS/cm	0.18 mg/L	3.55 NTU	32.8 mV	14.10 ft	250.00 ml/min
7/13/2023 11:07 AM	01:07	6.52 pH	23.22 °C	743.74 µS/cm	0.15 mg/L	-	11.4 mV	14.10 ft	250.00 ml/min
7/13/2023 11:12 AM	06:07	6.56 pH	22.23 °C	753.03 µS/cm	0.09 mg/L	2.51 NTU	6.0 mV	14.10 ft	250.00 ml/min
7/13/2023 11:17 AM	11:07	6.57 pH	22.47 °C	754.10 µS/cm	0.06 mg/L	2.49 NTU	3.4 mV	14.10 ft	250.00 ml/min
7/13/2023 11:22 AM	16:07	6.57 pH	22.10 °C	764.27 µS/cm	0.05 mg/L	4.55 NTU	-9.5 mV	14.10 ft	250.00 ml/min
7/13/2023 11:27 AM	21:07	6.58 pH	22.12 °C	768.51 µS/cm	0.04 mg/L	3.98 NTU	-12.2 mV	14.10 ft	250.00 ml/min
7/13/2023 11:32 AM	26:08	6.42 pH	22.27 °C	729.76 µS/cm	0.04 mg/L	4.56 NTU	4.1 mV	14.10 ft	250.00 ml/min
7/13/2023 11:37 AM	31:08	6.57 pH	22.45 °C	763.33 µS/cm	0.03 mg/L	10.50 NTU	3.6 mV	14.10 ft	250.00 ml/min
7/13/2023 11:42 AM	36:08	6.56 pH	22.99 °C	768.69 µS/cm	0.03 mg/L	16.20 NTU	-19.3 mV	14.10 ft	250.00 ml/min
7/13/2023 11:47 AM	41:08	6.45 pH	23.29 °C	723.65 µS/cm	0.03 mg/L	16.60 NTU	6.2 mV	14.10 ft	250.00 ml/min
7/13/2023 11:52 AM	46:08	6.54 pH	23.37 °C	768.73 µS/cm	0.04 mg/L	16.00 NTU	14.3 mV	14.10 ft	250.00 ml/min
7/13/2023 11:57 AM	51:08	6.56 pH	23.35 °C	767.51 µS/cm	0.03 mg/L	18.00 NTU	12.2 mV	14.10 ft	250.00 ml/min
7/13/2023 12:02 PM	56:08	6.56 pH	23.59 °C	770.87 µS/cm	0.02 mg/L	16.30 NTU	3.5 mV	14.10 ft	250.00 ml/min

7/13/2023 12:07 PM	01:01:08	6.56 pH	23.26 °C	771.12 µS/cm	0.02 mg/L	20.10 NTU	5.6 mV	14.10 ft	250.00 ml/min
7/13/2023 12:12 PM	01:06:08	6.56 pH	23.45 °C	773.37 µS/cm	0.02 mg/L	16.70 NTU	7.1 mV	14.10 ft	250.00 ml/min
7/13/2023 12:17 PM	01:11:08	6.56 pH	23.36 °C	775.77 µS/cm	0.02 mg/L	13.30 NTU	9.8 mV	14.10 ft	250.00 ml/min
7/13/2023 12:22 PM	01:16:08	6.57 pH	24.10 °C	773.97 µS/cm	0.02 mg/L	11.81 NTU	14.8 mV	14.10 ft	250.00 ml/min
7/13/2023 12:26 PM	01:20:29	6.57 pH	23.62 °C	771.90 µS/cm	0.02 mg/L	10.18 NTU	15.0 mV	14.10 ft	250.00 ml/min
7/13/2023 12:31 PM	01:25:29	6.57 pH	23.66 °C	776.24 µS/cm	0.02 mg/L	9.43 NTU	18.2 mV	14.10 ft	250.00 ml/min
7/13/2023 12:36 PM	01:30:29	6.57 pH	24.30 °C	779.12 µS/cm	0.02 mg/L	7.91 NTU	16.2 mV	14.10 ft	250.00 ml/min
7/13/2023 12:41 PM	01:35:29	6.57 pH	24.48 °C	779.77 µS/cm	0.02 mg/L	4.95 NTU	18.4 mV	14.10 ft	250.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-09	Grab.

Low-Flow Test Report:

Test Date / Time: 7/13/2023 1:16:15 PM
Project: GW6581
Operator Name: Alana Neely

Location Name: PT-10 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 18 ft** **Total Depth: 28 ft** **Initial Depth to Water: 14 ft**	**Pump Type: Peri** **Tubing Type: Poly** **Pump Intake From TOC: 23 ft** **Estimated Total Volume Pumped: 12 L** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min Final Draw Down: 0.3 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 884187**

Test Notes:
Five bottles: Full App III and IV and Geochem

Weather Conditions:
73-91 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	+/- 5	+/- 10	+/- 0.3	
7/13/2023 1:16 PM	00:00	7.05 pH	24.25 °C	808.38 µS/cm	0.31 mg/L	11.60 NTU	-135.4 mV	14.30 ft	200.00 ml/min
7/13/2023 1:21 PM	04:45	7.04 pH	22.90 °C	832.12 µS/cm	0.49 mg/L	20.60 NTU	-134.8 mV	14.30 ft	200.00 ml/min
7/13/2023 1:25 PM	09:02	7.05 pH	22.36 °C	827.40 µS/cm	0.12 mg/L	18.10 NTU	-142.1 mV	14.30 ft	200.00 ml/min
7/13/2023 1:30 PM	14:02	7.04 pH	21.87 °C	835.53 µS/cm	0.10 mg/L	13.20 NTU	-136.6 mV	14.30 ft	200.00 ml/min
7/13/2023 1:35 PM	19:02	7.03 pH	22.00 °C	831.33 µS/cm	0.08 mg/L	12.47 NTU	-182.4 mV	14.30 ft	200.00 ml/min
7/13/2023 1:40 PM	24:02	7.03 pH	22.23 °C	834.62 µS/cm	0.06 mg/L	10.64 NTU	-179.2 mV	14.30 ft	200.00 ml/min
7/13/2023 1:45 PM	29:02	7.02 pH	21.83 °C	837.40 µS/cm	0.05 mg/L	9.54 NTU	-126.6 mV	14.30 ft	200.00 ml/min
7/13/2023 1:50 PM	34:02	7.02 pH	22.13 °C	840.48 µS/cm	0.05 mg/L	8.72 NTU	-173.7 mV	14.30 ft	200.00 ml/min
7/13/2023 1:55 PM	39:02	7.02 pH	21.98 °C	834.18 µS/cm	0.04 mg/L	7.59 NTU	-122.1 mV	14.30 ft	200.00 ml/min
7/13/2023 2:00 PM	44:02	7.01 pH	21.89 °C	840.03 µS/cm	0.04 mg/L	6.56 NTU	-118.7 mV	14.30 ft	200.00 ml/min
7/13/2023 2:05 PM	49:02	7.01 pH	22.10 °C	840.92 µS/cm	0.03 mg/L	5.64 NTU	-163.8 mV	14.30 ft	200.00 ml/min
7/13/2023 2:10 PM	54:02	7.01 pH	21.95 °C	842.15 µS/cm	0.03 mg/L	4.94 NTU	-161.5 mV	14.30 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-10	Grab.

August 2023

Low-Flow Test Report:

Test Date / Time: 8/9/2023 5:24:44 PM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: PT-07 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 38.6 ft** **Total Depth: 47.94 ft** **Initial Depth to Water: 25.05 ft**	**Pump Type: Peri** **Tubing Type: Poly** **Pump Intake From TOC: 43.8 ft** **Estimated Total Volume Pumped: 8 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.05 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850724**

Test Notes:
Five bottles: Baseline Sampling 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	
8/9/2023 5:24 PM	00:00	6.69 pH	22.70 °C	979.72 µS/cm	0.65 mg/L	6.30 NTU	-88.9 mV	25.10 ft	200.00 ml/min
8/9/2023 5:29 PM	05:00	6.73 pH	21.85 °C	986.58 µS/cm	0.43 mg/L	4.87 NTU	-89.0 mV	25.10 ft	200.00 ml/min
8/9/2023 5:34 PM	10:00	6.76 pH	21.55 °C	992.34 µS/cm	0.48 mg/L	4.83 NTU	-89.8 mV	25.10 ft	200.00 ml/min
8/9/2023 5:39 PM	15:00	6.78 pH	21.44 °C	993.38 µS/cm	0.33 mg/L	5.08 NTU	-107.7 mV	25.10 ft	200.00 ml/min
8/9/2023 5:44 PM	20:00	6.79 pH	21.42 °C	1,008.3 µS/cm	0.41 mg/L	1.91 NTU	-90.6 mV	25.10 ft	200.00 ml/min
8/9/2023 5:49 PM	25:00	6.80 pH	21.36 °C	1,010.3 µS/cm	0.30 mg/L	0.80 NTU	-90.8 mV	25.10 ft	200.00 ml/min
8/9/2023 5:54 PM	30:00	6.82 pH	21.19 °C	1,012.4 µS/cm	0.40 mg/L	0.18 NTU	-90.9 mV	25.10 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-07	Grab.

Low-Flow Test Report:

Test Date / Time: 8/9/2023 10:03:54 AM
Project: GP-Plant Hammond
Operator Name: Elisabeth McDonnell

Location Name: PT-08 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 28.8 ft** **Total Depth: 42.0 ft** **Initial Depth to Water: 23.6 ft**	**Pump Type: Bladder pump** **Tubing Type: Peri** **Pump Intake From TOC: 37.3 ft** **Estimated Total Volume Pumped: 8 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 160 ml/min** **Final Draw Down: 0.04 m**	**Instrument Used: Aqua TROLL 400** **Serial Number: 989630**

Test Notes:
Five bottles: Baseline Sampling 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	
8/9/2023 10:03 AM	00:00	6.80 pH	20.72 °C	943.04 µS/cm	2.15 mg/L	15.50 NTU	-57.8 mV	23.64 ft	160.00 ml/min
8/9/2023 10:08 AM	05:00	6.81 pH	20.71 °C	915.43 µS/cm	1.51 mg/L	10.90 NTU	-60.5 mV	23.63 ft	160.00 ml/min
8/9/2023 10:13 AM	10:00	6.81 pH	20.73 °C	905.45 µS/cm	1.62 mg/L	7.91 NTU	-61.7 mV	23.65 ft	160.00 ml/min
8/9/2023 10:18 AM	15:00	6.82 pH	20.59 °C	908.95 µS/cm	2.77 mg/L	4.08 NTU	-82.5 mV	23.64 ft	160.00 ml/min
8/9/2023 10:23 AM	20:00	6.82 pH	20.63 °C	911.77 µS/cm	1.38 mg/L	4.45 NTU	-84.8 mV	23.64 ft	160.00 ml/min
8/9/2023 10:28 AM	25:00	6.82 pH	20.57 °C	907.31 µS/cm	1.20 mg/L	4.04 NTU	-64.7 mV	23.63 ft	160.00 ml/min
8/9/2023 10:33 AM	30:00	6.83 pH	20.52 °C	905.19 µS/cm	0.97 mg/L	2.96 NTU	-85.5 mV	23.63 ft	160.00 ml/min
8/9/2023 10:38 AM	35:00	6.83 pH	20.58 °C	911.05 µS/cm	0.84 mg/L	3.40 NTU	-64.5 mV	23.63 ft	160.00 ml/min
8/9/2023 10:43 AM	40:00	6.82 pH	20.60 °C	909.15 µS/cm	0.94 mg/L	3.98 NTU	-84.4 mV	23.64 ft	160.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-08	Grab.
HAM-AP1-FD-06	Grab.

Low-Flow Test Report:

Test Date / Time: 8/9/2023 1:27:10 PM
Project: GP-Plant Hammond
Operator Name: Elisabeth McDonnell

Location Name: PT-09 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 28.8 ft** **Total Depth: 30.75 ft** **Initial Depth to Water: 14.99 ft**	**Pump Type: Peri** **Tubing Type: Poly** **Pump Intake From TOC: 26 ft** **Estimated Total Volume Pumped: 1.5 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0 m**	**Instrument Used: Aqua TROLL 400** **Serial Number: 989630**

Test Notes:
Five bottles: Baseline Sampling 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	
8/9/2023 1:27 PM	00:00	6.76 pH	21.93 °C	745.27 µS/cm	4.47 mg/L	2.02 NTU	56.2 mV	14.99 ft	200.00 ml/min
8/9/2023 1:32 PM	05:00	6.81 pH	21.68 °C	771.52 µS/cm	3.35 mg/L	1.11 NTU	52.3 mV	14.99 ft	200.00 ml/min
8/9/2023 1:37 PM	10:00	6.85 pH	21.44 °C	786.50 µS/cm	2.58 mg/L	1.46 NTU	28.7 mV	14.99 ft	200.00 ml/min
8/9/2023 1:42 PM	15:00	6.86 pH	21.30 °C	797.33 µS/cm	6.17 mg/L	2.12 NTU	16.0 mV	14.99 ft	200.00 ml/min
8/9/2023 1:47 PM	20:00	6.87 pH	21.28 °C	797.79 µS/cm	2.58 mg/L	2.86 NTU	19.9 mV	14.99 ft	200.00 ml/min
8/9/2023 1:52 PM	25:00	6.88 pH	21.32 °C	806.94 µS/cm	3.88 mg/L	3.70 NTU	15.9 mV	14.99 ft	200.00 ml/min
8/9/2023 1:57 PM	30:00	6.88 pH	21.25 °C	797.98 µS/cm	0.84 mg/L	3.86 NTU	11.7 mV	14.99 ft	200.00 ml/min
8/9/2023 2:02 PM	35:00	6.88 pH	21.20 °C	794.19 µS/cm	0.80 mg/L	3.31 NTU	10.9 mV	14.99 ft	200.00 ml/min
8/9/2023 2:07 PM	40:00	6.88 pH	21.03 °C	791.25 µS/cm	1.44 mg/L	2.06 NTU	10.4 mV	14.99 ft	200.00 ml/min
8/9/2023 2:12 PM	45:00	6.89 pH	20.96 °C	770.10 µS/cm	0.72 mg/L	1.72 NTU	9.1 mV	14.99 ft	200.00 ml/min
8/9/2023 2:17 PM	50:00	6.88 pH	20.97 °C	792.63 µS/cm	0.55 mg/L	0.98 NTU	9.9 mV	14.99 ft	200.00 ml/min
8/9/2023 2:22 PM	55:00	6.89 pH	21.06 °C	791.96 µS/cm	1.03 mg/L	1.51 NTU	1.0 mV	14.99 ft	200.00 ml/min
8/9/2023 2:27 PM	01:00:00	6.89 pH	21.29 °C	791.26 µS/cm	0.63 mg/L	0.62 NTU	12.2 mV	14.99 ft	200.00 ml/min
8/9/2023 2:32 PM	01:05:00	6.89 pH	21.71 °C	825.29 µS/cm	0.44 mg/L	0.44 NTU	14.1 mV	14.99 ft	200.00 ml/min
8/9/2023 2:37 PM	01:10:00	6.89 pH	21.59 °C	826.86 µS/cm	0.58 mg/L	0.56 NTU	14.4 mV	14.99 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-09	Grab.

Low-Flow Test Report:

Test Date / Time: 8/9/2023 12:22:52 PM
Project: GP-Plant Hammond
Operator Name: Elisabeth McDonnell

Location Name: PT-10 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 20 ft** **Total Depth: 31.75 ft** **Initial Depth to Water: 15.05 ft**	**Pump Type: Peri** **Tubing Type: Poly** **Pump Intake From TOC: 25 ft** **Estimated Total Volume Pumped: 5.8 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 160 ml/min** **Final Draw Down: 0.13 m**	**Instrument Used: Aqua TROLL 400** **Serial Number: 989630**

Test Notes:
Five bottles: Baseline Sampling 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	
8/9/2023 12:22 PM	00:00	7.14 pH	22.18 °C	811.17 µS/cm	1.15 mg/L	24.10 NTU	-75.4 mV	15.18 ft	160.00 ml/min
8/9/2023 12:27 PM	05:00	7.15 pH	22.04 °C	798.04 µS/cm	0.38 mg/L	16.60 NTU	-75.5 mV	15.18 ft	160.00 ml/min
8/9/2023 12:32 PM	10:00	7.16 pH	21.96 °C	800.28 µS/cm	0.37 mg/L	11.80 NTU	-99.1 mV	15.18 ft	160.00 ml/min
8/9/2023 12:37 PM	15:00	7.16 pH	22.00 °C	793.73 µS/cm	0.33 mg/L	4.09 NTU	-78.0 mV	15.18 ft	160.00 ml/min
8/9/2023 12:42 PM	20:00	7.17 pH	21.46 °C	790.02 µS/cm	0.24 mg/L	4.11 NTU	-101.9 mV	15.18 ft	160.00 ml/min
8/9/2023 12:47 PM	25:00	7.18 pH	21.86 °C	782.36 µS/cm	0.16 mg/L	2.36 NTU	-81.4 mV	15.18 ft	160.00 ml/min
8/9/2023 12:52 PM	30:00	7.18 pH	21.79 °C	770.46 µS/cm	0.12 mg/L	4.55 NTU	-80.9 mV	15.18 ft	160.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-10	Grab.

Low-Flow Test Report:

Test Date / Time: 8/9/2023 3:28:27 PM
Project: GP-Plant Hammond
Operator Name: Elisabeth McDonnelll

Location Name: MW-53 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 26.6 ft** **Total Depth: 36.35 ft** **Initial Depth to Water: 16.0 ft**	**Pump Type: Peri** **Tubing Type: Poly** **Pump Intake From TOC: 31.6 ft** **Estimated Total Volume Pumped: 15 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.08 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 989630**

Test Notes:
One bottle: Boron and Molybdenum

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	
8/9/2023 3:28 PM	00:00	6.58 pH	21.50 °C	811.88 µS/cm	1.19 mg/L	4.93 NTU	46.9 mV	16.07 ft	200.00 ml/min
8/9/2023 3:33 PM	05:00	6.63 pH	21.32 °C	834.15 µS/cm	0.84 mg/L	3.37 NTU	46.6 mV	16.08 ft	200.00 ml/min
8/9/2023 3:38 PM	10:00	6.63 pH	21.42 °C	836.69 µS/cm	1.03 mg/L	1.67 NTU	47.1 mV	16.06 ft	200.00 ml/min
8/9/2023 3:43 PM	15:00	6.64 pH	21.24 °C	839.10 µS/cm	0.93 mg/L	1.01 NTU	58.2 mV	16.07 ft	200.00 ml/min
8/9/2023 3:48 PM	20:00	6.63 pH	21.28 °C	836.21 µS/cm	0.84 mg/L	0.45 NTU	47.3 mV	16.07 ft	200.00 ml/min
8/9/2023 3:53 PM	25:00	6.63 pH	20.90 °C	837.24 µS/cm	0.54 mg/L	0.78 NTU	59.3 mV	16.07 ft	200.00 ml/min
8/9/2023 3:58 PM	30:00	6.63 pH	21.19 °C	835.68 µS/cm	1.45 mg/L	0.29 NTU	60.3 mV	16.08 ft	200.00 ml/min
8/9/2023 4:03 PM	35:00	6.64 pH	21.06 °C	833.61 µS/cm	0.78 mg/L	0.04 NTU	60.1 mV	16.08 ft	200.00 ml/min
8/9/2023 4:08 PM	40:00	6.63 pH	21.03 °C	828.43 µS/cm	1.29 mg/L	0.00 NTU	60.7 mV	16.08 ft	200.00 ml/min
8/9/2023 4:13 PM	45:00	6.63 pH	20.94 °C	827.95 µS/cm	0.65 mg/L	0.04 NTU	60.6 mV	16.08 ft	200.00 ml/min
8/9/2023 4:18 PM	50:00	6.63 pH	20.17 °C	756.61 µS/cm	2.48 mg/L	0.00 NTU	49.0 mV	16.07 ft	200.00 ml/min
8/9/2023 4:23 PM	55:00	6.65 pH	19.90 °C	754.42 µS/cm	1.81 mg/L	0.00 NTU	48.3 mV	16.08 ft	200.00 ml/min
8/9/2023 4:28 PM	01:00:00	6.63 pH	19.72 °C	846.76 µS/cm	0.35 mg/L	0.00 NTU	59.5 mV	16.08 ft	200.00 ml/min
8/9/2023 4:33 PM	01:05:00	6.63 pH	19.64 °C	847.37 µS/cm	0.29 mg/L	0.01 NTU	47.3 mV	16.07 ft	200.00 ml/min
8/9/2023 4:38 PM	01:10:00	6.63 pH	19.60 °C	848.27 µS/cm	0.24 mg/L		57.3 mV	16.08 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-MW-53	Grab.

Low-Flow Test Report:

Test Date / Time: 8/9/2023 3:26:03 PM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: MW-54 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 28.3 ft** **Total Depth: 38.30 ft** **Initial Depth to Water: 24.15 ft**	**Pump Type: Peri** **Tubing Type: Poly** **Pump Intake From TOC: 33.3 ft** **Estimated Total Volume Pumped: 9 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 0.1ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850724**

Test Notes:
One bottle: Boron and Arsenic

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 3:26 PM	00:00	5.01 pH	26.69 °C	329.38 µS/cm	1.73 mg/L	5.12 NTU	171.8 mV	24.25 ft	100.00 ml/min
8/9/2023 3:31 PM	05:00	4.98 pH	25.95 °C	330.64 µS/cm	1.70 mg/L	6.87 NTU	149.1 mV	24.25 ft	100.00 ml/min
8/9/2023 3:36 PM	10:00	4.99 pH	25.33 °C	330.08 µS/cm	1.65 mg/L	6.29 NTU	185.3 mV	24.25 ft	100.00 ml/min
8/9/2023 3:41 PM	15:00	5.02 pH	24.97 °C	332.29 µS/cm	1.57 mg/L	5.76 NTU	180.6 mV	24.25 ft	100.00 ml/min
8/9/2023 3:46 PM	20:00	5.03 pH	24.61 °C	330.02 µS/cm	1.53 mg/L	6.69 NTU	176.5 mV	24.25 ft	100.00 ml/min
8/9/2023 3:51 PM	25:00	5.10 pH	23.90 °C	331.08 µS/cm	1.45 mg/L	4.98 NTU	172.1 mV	24.25 ft	100.00 ml/min
8/9/2023 3:56 PM	30:00	5.18 pH	23.88 °C	334.85 µS/cm	1.41 mg/L	4.23 NTU	132.1 mV	24.25 ft	100.00 ml/min
8/9/2023 4:01 PM	35:00	5.31 pH	23.56 °C	342.94 µS/cm	1.32 mg/L	4.00 NTU	158.5 mV	24.25 ft	100.00 ml/min
8/9/2023 4:06 PM	40:00	5.50 pH	23.74 °C	361.26 µS/cm	1.20 mg/L	3.98 NTU	152.1 mV	24.25 ft	100.00 ml/min
8/9/2023 4:11 PM	45:00	5.67 pH	23.43 °C	382.99 µS/cm	1.07 mg/L	3.50 NTU	112.1 mV	24.25 ft	100.00 ml/min
8/9/2023 4:16 PM	50:00	5.80 pH	23.60 °C	406.33 µS/cm	0.95 mg/L	3.57 NTU	136.0 mV	24.25 ft	100.00 ml/min
8/9/2023 4:21 PM	55:00	5.89 pH	23.28 °C	422.58 µS/cm	0.86 mg/L	1.33 NTU	132.8 mV	24.25 ft	100.00 ml/min
8/9/2023 4:26 PM	01:00:00	5.98 pH	23.21 °C	439.54 µS/cm	0.78 mg/L	1.25 NTU	99.6 mV	24.25 ft	100.00 ml/min

8/9/2023 4:31 PM	01:05:00	6.04 pH	23.07 °C	456.26 µS/cm	0.73 mg/L	1.31 NTU	124.2 mV	24.25 ft	100.00 ml/min
8/9/2023 4:36 PM	01:10:00	6.10 pH	23.02 °C	466.92 µS/cm	0.68 mg/L	1.12 NTU	95.3 mV	24.25 ft	100.00 ml/min
8/9/2023 4:41 PM	01:15:00	6.15 pH	22.89 °C	476.56 µS/cm	0.63 mg/L	0.86 NTU	118.0 mV	24.25 ft	100.00 ml/min
8/9/2023 4:46 PM	01:20:00	6.18 pH	22.86 °C	488.16 µS/cm	0.60 mg/L	0.36 NTU	117.5 mV	24.25 ft	100.00 ml/min

Samples

Sample ID:	Description:
HAM-MW-54	Grab.

Low-Flow Test Report:

Test Date / Time: 8/30/2023 10:28:30 AM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: PT-09 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 20.75 ft** **Total Depth: 30.75 ft** **Initial Depth to Water: 15.2 ft**	**Pump Type: Peristaltic** **Tubing Type: Poly** **Pump Intake From TOC: 26 ft** **Estimated Total Volume Pumped: 20 L** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.05 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883561**

Test Notes:
One bottle, Molybdenum.

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	
8/30/2023 10:28 AM	00:00	7.10 pH	21.38 °C	793.73 µS/cm	0.29 mg/L		-17.9 mV	15.43 ft	200.00 ml/min
8/30/2023 10:33 AM	05:00	7.37 pH	20.77 °C	791.57 µS/cm	0.47 mg/L	106.10 NTU	-57.9 mV	15.43 ft	200.00 ml/min
8/30/2023 10:38 AM	10:00	7.70 pH	20.66 °C	801.96 µS/cm	0.81 mg/L	100.50 NTU	-58.3 mV	15.25 ft	200.00 ml/min
8/30/2023 10:43 AM	15:00	7.95 pH	20.66 °C	805.08 µS/cm	0.69 mg/L	103.10 NTU	-86.4 mV	15.25 ft	200.00 ml/min
8/30/2023 10:48 AM	20:00	8.20 pH	20.57 °C	828.44 µS/cm	0.24 mg/L	50.90 NTU	-163.5 mV	15.25 ft	200.00 ml/min
8/30/2023 10:53 AM	25:00	8.42 pH	20.50 °C	827.43 µS/cm	0.15 mg/L	41.70 NTU	-116.6 mV	15.25 ft	200.00 ml/min
8/30/2023 10:58 AM	30:00	8.57 pH	20.45 °C	827.24 µS/cm	0.13 mg/L	36.30 NTU	-112.2 mV	15.25 ft	200.00 ml/min
8/30/2023 11:03 AM	35:00	8.67 pH	20.48 °C	827.07 µS/cm	0.13 mg/L	29.60 NTU	-123.4 mV	15.25 ft	200.00 ml/min
8/30/2023 11:08 AM	40:00	8.74 pH	20.47 °C	818.91 µS/cm	0.28 mg/L	25.70 NTU	-112.5 mV	15.25 ft	200.00 ml/min
8/30/2023 11:13 AM	45:00	8.80 pH	20.51 °C	828.84 µS/cm	0.43 mg/L	23.10 NTU	-129.4 mV	15.25 ft	200.00 ml/min
8/30/2023 11:18 AM	50:00	8.83 pH	20.52 °C	828.02 µS/cm	0.45 mg/L	20.20 NTU	-128.4 mV	15.25 ft	200.00 ml/min
8/30/2023 11:23 AM	55:00	8.85 pH	20.59 °C	830.92 µS/cm	0.40 mg/L	18.90 NTU	-125.5 mV	15.25 ft	200.00 ml/min
8/30/2023 11:28 AM	01:00:00	8.87 pH	20.62 °C	830.18 µS/cm	0.36 mg/L	14.60 NTU	-89.4 mV	15.25 ft	200.00 ml/min

8/30/2023 11:33 AM	01:05:00	8.88 pH	20.66 °C	828.01 µS/cm	0.33 mg/L	12.10 NTU	-121.5 mV	15.25 ft	200.00 ml/min
8/30/2023 11:38 AM	01:10:00	8.89 pH	20.61 °C	832.73 µS/cm	0.55 mg/L	11.70 NTU	-185.0 mV	15.25 ft	200.00 ml/min
8/30/2023 11:43 AM	01:15:00	8.90 pH	20.70 °C	832.29 µS/cm	0.52 mg/L	9.95 NTU	-119.7 mV	15.25 ft	200.00 ml/min
8/30/2023 11:48 AM	01:20:00	8.92 pH	20.80 °C	824.85 µS/cm	0.47 mg/L	9.24 NTU	-180.2 mV	15.25 ft	200.00 ml/min
8/30/2023 11:53 AM	01:25:00	8.92 pH	20.68 °C	825.93 µS/cm	0.39 mg/L	9.00 NTU	-108.5 mV	15.25 ft	200.00 ml/min
8/30/2023 11:58 AM	01:30:00	8.94 pH	20.68 °C	831.57 µS/cm	0.29 mg/L	6.83 NTU	-110.8 mV	15.25 ft	200.00 ml/min
8/30/2023 12:03 PM	01:35:00	8.94 pH	21.02 °C	829.44 µS/cm	0.23 mg/L	4.27 NTU	-111.8 mV	15.25 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-09	Grab

Low-Flow Test Report:

Test Date / Time: 8/30/2023 12:34:29 PM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: PT-10 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 21.75 ft** **Total Depth: 31.75 ft** **Initial Depth to Water: 15.35 ft**	**Pump Type: Peristaltic** **Tubing Type: Poly** **Pump Intake From TOC: 26.75 ft** **Estimated Total Volume Pumped: 7 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.15 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883561**

Test Notes:
One bottle, Molybdenum.

Weather Conditions:
Cloudy, 78 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/30/2023 12:34 PM	00:00	9.06 pH	23.12 °C	792.49 µS/cm	0.38 mg/L	42.20 NTU	-184.4 mV	15.50 ft	200.00 ml/min
8/30/2023 12:39 PM	05:00	9.10 pH	21.49 °C	808.79 µS/cm	0.23 mg/L	17.20 NTU	-258.0 mV	15.50 ft	200.00 ml/min
8/30/2023 12:44 PM	10:00	9.11 pH	21.16 °C	808.42 µS/cm	0.21 mg/L	12.70 NTU	-258.0 mV	15.50 ft	200.00 ml/min
8/30/2023 12:49 PM	15:00	9.14 pH	21.11 °C	813.95 µS/cm	0.19 mg/L	10.60 NTU	-184.9 mV	15.50 ft	200.00 ml/min
8/30/2023 12:54 PM	20:00	9.17 pH	21.02 °C	812.82 µS/cm	0.24 mg/L	5.31 NTU	-241.9 mV	15.50 ft	200.00 ml/min
8/30/2023 12:59 PM	25:00	9.21 pH	20.92 °C	812.87 µS/cm	0.32 mg/L	4.03 NTU	-249.2 mV	15.50 ft	200.00 ml/min
8/30/2023 1:04 PM	30:00	9.22 pH	20.98 °C	814.73 µS/cm	0.27 mg/L	4.00 NTU	-251.4 mV	15.50 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-10	Grab

October 2023

Low-Flow Test Report:

Test Date / Time: 10/3/2023 5:45:55 PM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: PT-09 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 20.75 ft** **Total Depth: 30.75 ft** **Initial Depth to Water: 15.62 ft**	**Pump Type: Peri** **Tubing Type: Poly** **Pump Intake From TOC: 25.75 ft** **Estimated Total Volume Pumped: 23 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.05 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850724**

Test Notes:
Two bottles: Metals and Sulfate.

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 5:45 PM	00:00	7.39 pH	26.19 °C	289.91 µS/cm	3.88 mg/L	718.00 NTU	49.3 mV	15.67 ft	200.00 ml/min
10/3/2023 5:50 PM	05:00	7.25 pH	22.78 °C	298.26 µS/cm	3.95 mg/L	821.00 NTU	52.3 mV	15.67 ft	200.00 ml/min
10/3/2023 5:55 PM	10:00	7.20 pH	22.47 °C	305.88 µS/cm	3.56 mg/L	701.00 NTU	53.2 mV	15.67 ft	200.00 ml/min
10/3/2023 6:00 PM	15:00	7.19 pH	22.42 °C	303.80 µS/cm	3.50 mg/L	533.00 NTU	62.6 mV	15.67 ft	200.00 ml/min
10/3/2023 6:05 PM	20:00	7.17 pH	22.38 °C	306.38 µS/cm	3.38 mg/L	392.00 NTU	59.2 mV	15.67 ft	200.00 ml/min
10/3/2023 6:10 PM	25:00	7.17 pH	22.35 °C	305.16 µS/cm	3.32 mg/L	213.00 NTU	58.1 mV	15.67 ft	200.00 ml/min
10/3/2023 6:15 PM	30:00	7.17 pH	22.40 °C	303.00 µS/cm	3.32 mg/L	159.90 NTU	59.0 mV	15.67 ft	200.00 ml/min
10/3/2023 6:20 PM	35:00	7.17 pH	22.31 °C	302.87 µS/cm	3.35 mg/L	105.00 NTU	50.4 mV	15.67 ft	200.00 ml/min
10/3/2023 6:25 PM	40:00	7.17 pH	22.28 °C	302.31 µS/cm	3.35 mg/L	86.60 NTU	59.9 mV	15.67 ft	200.00 ml/min
10/3/2023 6:30 PM	45:00	7.17 pH	22.24 °C	302.35 µS/cm	3.36 mg/L	67.10 NTU	60.5 mV	15.67 ft	200.00 ml/min
10/3/2023 6:35 PM	50:00	7.17 pH	22.15 °C	303.05 µS/cm	3.40 mg/L	49.50 NTU	60.4 mV	15.67 ft	200.00 ml/min
10/3/2023 6:40 PM	55:00	7.17 pH	22.11 °C	302.74 µS/cm	3.43 mg/L	42.50 NTU	50.5 mV	15.67 ft	200.00 ml/min
10/3/2023 6:45 PM	01:00:00	7.16 pH	21.86 °C	303.94 µS/cm	3.46 mg/L	32.90 NTU	59.2 mV	15.67 ft	200.00 ml/min

10/3/2023 6:50 PM	01:05:00	7.16 pH	21.79 °C	304.33 µS/cm	3.48 mg/L	29.00 NTU	49.2 mV	15.67 ft	200.00 ml/min
10/3/2023 6:55 PM	01:10:00	7.17 pH	21.64 °C	306.27 µS/cm	3.50 mg/L	24.70 NTU	56.1 mV	15.67 ft	200.00 ml/min
10/3/2023 7:00 PM	01:15:00	7.17 pH	21.52 °C	307.84 µS/cm	3.52 mg/L	18.20 NTU	55.6 mV	15.67 ft	200.00 ml/min
10/3/2023 7:05 PM	01:20:00	7.16 pH	21.43 °C	308.59 µS/cm	3.54 mg/L	16.50 NTU	54.7 mV	15.67 ft	200.00 ml/min
10/3/2023 7:10 PM	01:25:00	7.17 pH	21.42 °C	310.99 µS/cm	3.56 mg/L	14.40 NTU	53.6 mV	15.67 ft	200.00 ml/min
10/3/2023 7:15 PM	01:30:00	7.17 pH	21.35 °C	313.41 µS/cm	3.56 mg/L	12.20 NTU	52.9 mV	15.67 ft	200.00 ml/min
10/3/2023 7:20 PM	01:35:00	7.17 pH	21.23 °C	313.61 µS/cm	3.57 mg/L	12.30 NTU	45.4 mV	15.67 ft	200.00 ml/min
10/3/2023 7:25 PM	01:40:00	7.17 pH	21.15 °C	315.90 µS/cm	3.59 mg/L	11.00 NTU	52.0 mV	15.67 ft	200.00 ml/min
10/3/2023 7:30 PM	01:45:00	7.17 pH	21.06 °C	317.09 µS/cm	3.59 mg/L	9.44 NTU	51.8 mV	15.67 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-09	Grab.

Geosyntec consultants

GROUNDWATER SAMPLING LOG SHEET

Client: SCS
Site: Plant Hammond
Well ID: PT-10
Total Depth (ft): 27
Depth to Water (ft): 15.54
Well Diameter (in): 2
Well Volume (gal) = 0.041d²h: 1.879
Well Volume (L) = gal * 3.785: 7.11
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.: GW65 81
Location: Plant Hammond
Pump Type/Model: Peri/Aleois
Tubing Material: Polyethylene
Pump Intake/Tubing Depth (ft): 23
Start/Stop Purge Time: 0945/1135
Purge Rate (mL/min): 200
Total Purge Volume (L): 20
Purge Method: (Low-Flow) Well Volume Other: ____
Sampling Method: (Pump Discharge) Other: ____

Sampling Date: 10/03/2023
Sampler's Name: M. Sadhasivan
Sample Collection Time: 1133
Sample Purge Rate (mL/min): ~~200~~
Sample ID: HAM - PT-10
Laboratory Analyses: Fe, Mo, SO4
QA/QC Collected? No
QA/QC I.D. N/A

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.)
0948										start purge
0953	6.95	891.02	-0.1	0.66	16.55	—	15.59	200	1	
0958	7.01	897.36	-9.6	1.52	16.41	—	15.60	200	2	
1003	7.04	896.88	-14.6	1.17	16.44	—	15.60	200	3	
1008	7.04	896.52	-22.3	0.36	16.28	—	15.61	200	4	
1013	7.05	903.87	-26.8	0.84	16.37	—	15.61	200	5	
1018	7.06	897.58	-27.4	0.69	16.66	—	15.61	200	6	
1023	7.07	892.84	-25.8	1.67	16.68	—	15.62	200	7	
1028	7.07	905.39	-23.4	1.13	16.56	—	15.62	200	8	
1033	7.07	906.06	-28.8	0.28	16.68	—	15.61	200	9	
1038	7.07	904.34	-18.8	1.88	16.95	—	15.62	200	10	
1043	7.07	899.04	-24.8	1.21	16.96	—	15.62	200	11	
1048	7.08	888.76	-14.5	0.62	16.97	—	15.62	200	12	
1053	7.07	902.95	-20.5	0.80	16.98	—	15.61	200	13	
1058	7.08	905.31	-21.8	0.51	17.08	—	15.62	200	14	
1103	7.09	898.26	-22.6	2.74	17.18	—	15.62	200	15	
1108	7.08	895.37	-22.9	1.50	17.23	—	15.63	200	16	
1113	7.08	890.67	-22.1	0.35	17.24	—	15.63	200	17	
1118	7.08	892.50	-26.7	0.72	17.21	—	15.63	200	18	
Stabilizing Criteria	**+/- 0.1 SU**	**+/- 5%**		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		**< 10 NTUs or +/- 5%**	**< 0.3 ft**	**> 100 mL < 250 mL**		

Geosyntec consultants

GROUNDWATER SAMPLING LOG SHEET

Client: SCS
Site: Plant Hammond
Well ID: PT-1D
Total Depth (ft): 27
Depth to Water (ft): 15.54
Well Diameter (in): 2
Well Volume (gal) = 0.041d²h: 1.879
Well Volume (L) = gal * 3.785: 7.11
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.: GW 6581
Location: Plant Hammond
Pump Type/Model: Peri / Aleais
Tubing Material: Polyethylene
Pump Intake/Tubing Depth (ft): 23
Start/Stop Purge Time: 0945 / 1135
Purge Rate (mL/min): 200
Total Purge Volume (L): 20
Purge Method: (Low-Flow) Well Volume Other: ____
Sampling Method: (Pump Discharge) Other: ____

Sampling Date: 10/03/2023
Sampler's Name: M. Sadhasivam
Sample Collection Time: 1133
Sample Purge Rate (mL/min): 200
Sample ID: HAM-PT-1D
Laboratory Analyses: Fe, MD, SO4
QA/QC Collected? NO
QA/QC I.D. N/A

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.)
1123	7.08	88702	-27.0	0.68	17.29	—	15.64	200	19	
1128	7.07	884.18	-24.8	0.55	17.50	—	15.64	200	20	
1133										collect samples
										MS
Stabilizing Criteria	**+/- 0.1 SU**	**+/- 5%**		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		**< 10 NTUs or +/- 5%**	**< 0.3 ft**	**> 100 mL < 250 mL**		

Low-Flow Test Report:

Test Date / Time: 10/10/2023 9:30:09 AM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: PT-09 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 20.75 ft** **Total Depth: 30.75 ft** **Initial Depth to Water: 15.7 ft**	**Pump Type: Peristaltic** **Tubing Type: Poly** **Pump Intake From TOC: 25.75 ft** **Estimated Total Volume Pumped: 25 Liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.02 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883561**

Test Notes:
Five bottles: App. III and IV (No RADs) and Major Ions.

Weather Conditions:
Clear, 53 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
10/10/2023 9:30 AM	00:00	7.45 pH	20.08 °C	310.99 µS/cm	0.60 mg/L	12.34 NTU	72.8 mV	15.72 ft	200.00 ml/min
10/10/2023 9:35 AM	05:00	7.79 pH	20.36 °C	306.26 µS/cm	0.54 mg/L	12.31 NTU	53.3 mV	15.72 ft	200.00 ml/min
10/10/2023 9:40 AM	10:00	8.19 pH	20.56 °C	306.54 µS/cm	0.49 mg/L	10.47 NTU	39.1 mV	15.72 ft	200.00 ml/min
10/10/2023 9:45 AM	15:00	8.49 pH	20.75 °C	314.81 µS/cm	0.91 mg/L	8.49 NTU	27.3 mV	15.72 ft	200.00 ml/min
10/10/2023 9:50 AM	20:00	8.71 pH	20.83 °C	317.90 µS/cm	1.42 mg/L	7.66 NTU	6.4 mV	15.72 ft	200.00 ml/min
10/10/2023 9:55 AM	25:00	8.83 pH	20.97 °C	321.93 µS/cm	0.95 mg/L	8.27 NTU	0.6 mV	15.72 ft	200.00 ml/min
10/10/2023 10:00 AM	30:00	8.90 pH	21.03 °C	324.49 µS/cm	1.02 mg/L	9.08 NTU	13.8 mV	15.72 ft	200.00 ml/min
10/10/2023 10:05 AM	35:00	8.99 pH	21.07 °C	327.62 µS/cm	1.13 mg/L	11.35 NTU	14.0 mV	15.72 ft	200.00 ml/min
10/10/2023 10:10 AM	40:00	9.06 pH	21.20 °C	329.54 µS/cm	1.45 mg/L	12.65 NTU	-7.8 mV	15.72 ft	200.00 ml/min
10/10/2023 10:15 AM	45:00	9.11 pH	21.24 °C	331.60 µS/cm	1.73 mg/L	12.91 NTU	-9.5 mV	15.72 ft	200.00 ml/min
10/10/2023 10:20 AM	50:00	9.15 pH	21.29 °C	335.83 µS/cm	1.48 mg/L	14.13 NTU	-9.9 mV	15.72 ft	200.00 ml/min
10/10/2023 10:25 AM	55:00	9.19 pH	21.42 °C	335.28 µS/cm	1.98 mg/L	15.00 NTU	-10.8 mV	15.72 ft	200.00 ml/min
10/10/2023 10:30 AM	01:00:00	9.21 pH	21.44 °C	339.33 µS/cm	2.29 mg/L	13.08 NTU	6.9 mV	15.72 ft	200.00 ml/min

10/10/2023 10:35 AM	01:05:00	9.22 pH	21.46 °C	339.66 µS/cm	2.21 mg/L	12.51 NTU	5.7 mV	15.72 ft	200.00 ml/min
10/10/2023 10:40 AM	01:10:00	9.24 pH	21.60 °C	339.63 µS/cm	2.29 mg/L	12.48 NTU	7.3 mV	15.72 ft	200.00 ml/min
10/10/2023 10:45 AM	01:15:00	9.27 pH	21.68 °C	339.45 µS/cm	2.11 mg/L	11.66 NTU	6.3 mV	15.72 ft	200.00 ml/min
10/10/2023 10:50 AM	01:20:00	9.28 pH	21.75 °C	342.25 µS/cm	2.12 mg/L	10.11 NTU	-13.5 mV	15.72 ft	200.00 ml/min
10/10/2023 10:55 AM	01:25:00	9.31 pH	21.82 °C	341.54 µS/cm	1.75 mg/L	8.84 NTU	-16.5 mV	15.72 ft	200.00 ml/min
10/10/2023 11:00 AM	01:30:00	9.35 pH	21.82 °C	341.34 µS/cm	1.53 mg/L	8.21 NTU	-14.4 mV	15.72 ft	200.00 ml/min
10/10/2023 11:05 AM	01:35:00	9.32 pH	21.91 °C	342.29 µS/cm	1.57 mg/L	7.93 NTU	-20.1 mV	15.72 ft	200.00 ml/min
10/10/2023 11:10 AM	01:40:00	9.34 pH	22.00 °C	344.15 µS/cm	1.52 mg/L	7.37 NTU	-22.9 mV	15.72 ft	200.00 ml/min
10/10/2023 11:15 AM	01:45:00	9.36 pH	22.00 °C	343.81 µS/cm	1.55 mg/L	7.10 NTU	-2.7 mV	15.72 ft	200.00 ml/min
10/10/2023 11:20 AM	01:50:00	9.36 pH	22.05 °C	345.97 µS/cm	2.80 mg/L	6.17 NTU	-25.4 mV	15.72 ft	200.00 ml/min
10/10/2023 11:25 AM	01:55:00	9.41 pH	22.09 °C	345.31 µS/cm	2.92 mg/L	5.18 NTU	-4.7 mV	15.72 ft	200.00 ml/min
10/10/2023 11:30 AM	02:00:00	9.40 pH	22.18 °C	345.12 µS/cm	2.79 mg/L	4.93 NTU	-5.3 mV	15.72 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-09	Grab.
HAM-AP1-FD-01	Grab.

Low-Flow Test Report:

Test Date / Time: 10/10/2023 12:59:17 PM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: PT-10 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 21.75 ft** **Total Depth: 31.75 ft** **Initial Depth to Water: 15.02 ft**	**Pump Type: Peristaltic** **Tubing Type: Poly** **Pump Intake From TOC: 26.75 ft** **Estimated Total Volume Pumped: 7 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.82 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883561**

Test Notes:
Five bottles: App. III and IV (No RADs) and Major Ions.

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	
10/10/2023 12:59 PM	00:00	9.38 pH	22.18 °C	934.65 µS/cm	0.46 mg/L	7.91 NTU	-87.4 mV	15.84 ft	200.00 ml/min
10/10/2023 1:04 PM	05:00	9.58 pH	21.64 °C	929.08 µS/cm	0.39 mg/L	8.08 NTU	-243.5 mV	15.84 ft	200.00 ml/min
10/10/2023 1:09 PM	10:00	9.64 pH	21.55 °C	917.34 µS/cm	0.40 mg/L	6.83 NTU	-269.7 mV	15.84 ft	200.00 ml/min
10/10/2023 1:14 PM	15:00	9.67 pH	21.44 °C	913.20 µS/cm	0.38 mg/L	4.59 NTU	-281.6 mV	15.84 ft	200.00 ml/min
10/10/2023 1:19 PM	20:00	9.66 pH	21.47 °C	910.32 µS/cm	0.38 mg/L	3.99 NTU	-283.9 mV	15.84 ft	200.00 ml/min
10/10/2023 1:24 PM	25:00	9.70 pH	21.46 °C	904.79 µS/cm	0.38 mg/L	3.27 NTU	-281.4 mV	15.84 ft	200.00 ml/min
10/10/2023 1:29 PM	30:00	9.72 pH	21.48 °C	898.80 µS/cm	0.39 mg/L	2.95 NTU	-278.6 mV	15.84 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-10	Grab.

Low-Flow Test Report:

Test Date / Time: 10/17/2023 1:03:55 PM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: PT-07 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 37.94 ft** **Total Depth: 47.94 ft** **Initial Depth to Water: 26.12 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 43.94 ft** **Estimated Total Volume Pumped: 5.5 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: -0.02 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850724**

Test Notes:
Five bottles: App. III and IV (No RADs) and Major Ions.

Weather Conditions:
Clear, 60 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
10/17/2023 1:03 PM	00:00	6.83 pH	22.34 °C	795.52 µS/cm	1.70 mg/L	44.20 NTU	-83.4 mV	26.10 ft	100.00 ml/min
10/17/2023 1:08 PM	05:00	6.86 pH	21.02 °C	829.95 µS/cm	1.03 mg/L	14.70 NTU	-101.4 mV	26.10 ft	100.00 ml/min
10/17/2023 1:13 PM	10:00	6.88 pH	20.97 °C	833.43 µS/cm	0.65 mg/L	9.15 NTU	-90.8 mV	26.10 ft	100.00 ml/min
10/17/2023 1:18 PM	15:00	6.88 pH	20.92 °C	834.91 µS/cm	0.73 mg/L	8.78 NTU	-91.6 mV	26.10 ft	100.00 ml/min
10/17/2023 1:23 PM	20:00	6.89 pH	20.84 °C	835.65 µS/cm	0.34 mg/L	6.94 NTU	-91.9 mV	26.10 ft	100.00 ml/min
10/17/2023 1:28 PM	25:00	6.88 pH	20.84 °C	833.85 µS/cm	0.55 mg/L	5.61 NTU	-92.3 mV	26.10 ft	100.00 ml/min
10/17/2023 1:33 PM	30:00	6.89 pH	20.85 °C	834.74 µS/cm	0.52 mg/L	4.95 NTU	-92.8 mV	26.10 ft	100.00 ml/min
10/17/2023 1:38 PM	35:00	6.88 pH	20.72 °C	836.23 µS/cm	0.27 mg/L	4.56 NTU	-93.1 mV	26.10 ft	100.00 ml/min
10/17/2023 1:43 PM	40:00	6.88 pH	20.75 °C	835.78 µS/cm	0.21 mg/L	3.99 NTU	-104.7 mV	26.10 ft	100.00 ml/min
10/17/2023 1:48 PM	45:00	6.89 pH	20.71 °C	835.69 µS/cm	0.27 mg/L	3.22 NTU	-104.4 mV	26.10 ft	100.00 ml/min

Samples

Sample ID:	Description:

HAM-PT-07	Grab.
HAM-AP1-FD-01	Grab.

Low-Flow Test Report:

Test Date / Time: 10/17/2023 10:20:57 AM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: PT-08 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 30.2 ft** **Total Depth: 40.2 ft** **Initial Depth to Water: 25.48 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Intake From TOC: 35.2 ft** **Estimated Total Volume Pumped: 10.5 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min Final Draw Down: 0.02 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850724**

Test Notes:
Five bottles: App. III and IV (No RADs) and Major Ions.

Weather Conditions:
Clear, 50 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
10/17/2023 10:20 AM	00:00	6.71 pH	18.74 °C	469.88 µS/cm	1.34 mg/L	87.00 NTU	-35.1 mV	25.50 ft	100.00 ml/min
10/17/2023 10:25 AM	05:00	6.74 pH	18.86 °C	493.27 µS/cm	1.13 mg/L	115.00 NTU	-39.7 mV	25.50 ft	100.00 ml/min
10/17/2023 10:30 AM	10:00	6.75 pH	18.81 °C	491.50 µS/cm	0.92 mg/L	64.10 NTU	-52.2 mV	25.50 ft	100.00 ml/min
10/17/2023 10:35 AM	15:00	6.76 pH	18.88 °C	489.84 µS/cm	0.86 mg/L	55.30 NTU	-54.0 mV	25.50 ft	100.00 ml/min
10/17/2023 10:40 AM	20:00	6.76 pH	18.91 °C	488.18 µS/cm	0.72 mg/L	19.70 NTU	-54.8 mV	25.50 ft	100.00 ml/min
10/17/2023 10:45 AM	25:00	6.76 pH	18.96 °C	493.83 µS/cm	0.66 mg/L	14.10 NTU	-55.7 mV	25.50 ft	100.00 ml/min
10/17/2023 10:50 AM	30:00	6.76 pH	19.05 °C	498.76 µS/cm	0.58 mg/L	10.10 NTU	-56.6 mV	25.50 ft	100.00 ml/min
10/17/2023 10:55 AM	35:00	6.77 pH	18.96 °C	504.04 µS/cm	0.50 mg/L	12.27 NTU	-57.6 mV	25.50 ft	100.00 ml/min
10/17/2023 11:00 AM	40:00	6.77 pH	19.03 °C	505.50 µS/cm	0.45 mg/L	10.00 NTU	-45.4 mV	25.50 ft	100.00 ml/min
10/17/2023 11:05 AM	45:00	6.77 pH	18.96 °C	502.24 µS/cm	0.40 mg/L	8.98 NTU	-58.1 mV	25.50 ft	100.00 ml/min
10/17/2023 11:10 AM	50:00	6.78 pH	19.04 °C	502.18 µS/cm	0.37 mg/L	8.72 NTU	-58.8 mV	25.50 ft	100.00 ml/min
10/17/2023 11:15 AM	55:00	6.78 pH	19.00 °C	505.52 µS/cm	0.34 mg/L	7.68 NTU	-45.8 mV	25.50 ft	100.00 ml/min
10/17/2023 11:20 AM	01:00:00	6.78 pH	19.03 °C	504.39 µS/cm	0.32 mg/L	7.41 NTU	-59.4 mV	25.50 ft	100.00 ml/min

10/17/2023 11:25 AM	01:05:00	6.78 pH	19.05 °C	508.37 µS/cm	0.30 mg/L	7.29 NTU	-47.1 mV	25.50 ft	100.00 ml/min
10/17/2023 11:30 AM	01:10:00	6.78 pH	19.09 °C	513.15 µS/cm	0.26 mg/L	6.62 NTU	-60.2 mV	25.50 ft	100.00 ml/min
10/17/2023 11:35 AM	01:15:00	6.78 pH	19.03 °C	510.42 µS/cm	0.23 mg/L	5.99 NTU	-47.7 mV	25.50 ft	100.00 ml/min
10/17/2023 11:40 AM	01:20:00	6.79 pH	19.11 °C	508.65 µS/cm	0.21 mg/L	5.51 NTU	-62.0 mV	25.50 ft	100.00 ml/min
10/17/2023 11:45 AM	01:25:00	6.79 pH	19.16 °C	505.76 µS/cm	0.20 mg/L	5.98 NTU	-61.6 mV	25.50 ft	100.00 ml/min
10/17/2023 11:50 AM	01:30:00	6.79 pH	19.19 °C	504.51 µS/cm	0.19 mg/L	5.44 NTU	-62.1 mV	25.50 ft	100.00 ml/min
10/17/2023 11:55 AM	01:35:00	6.79 pH	19.23 °C	504.35 µS/cm	0.17 mg/L	5.25 NTU	-62.1 mV	25.50 ft	100.00 ml/min
10/17/2023 12:00 PM	01:40:00	6.79 pH	19.28 °C	504.85 µS/cm	0.17 mg/L	4.97 NTU	-62.5 mV	25.50 ft	100.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-08	Grab.

Low-Flow Test Report:

Test Date / Time: 10/17/2023 3:12:42 PM
Project: GP-Plant Hammond
Operator Name: Zain Webb

Location Name: PT-09 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 20.75 ft** **Total Depth: 30.75 ft** **Initial Depth to Water: 15.8 ft**	**Pump Type: Peri** **Tubing Type: Polyethylene** **Pump Intake From TOC: 25.75 ft** **Estimated Total Volume Pumped: 13 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.01 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 884189**

Test Notes:
Two bottles: Metals and Sulfate.

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	+/- 5	
10/17/2023 3:12 PM	00:00	7.65 pH	21.88 °C	275.86 µS/cm	5.71 mg/L	30.90 NTU	27.9 mV	15.81 ft	200.00 ml/min
10/17/2023 3:17 PM	05:00	7.66 pH	21.51 °C	277.73 µS/cm	5.72 mg/L	27.70 NTU	25.6 mV	15.81 ft	200.00 ml/min
10/17/2023 3:22 PM	10:00	7.67 pH	21.60 °C	275.43 µS/cm	5.74 mg/L	21.70 NTU	26.2 mV	15.81 ft	200.00 ml/min
10/17/2023 3:27 PM	15:00	7.70 pH	21.54 °C	274.39 µS/cm	5.81 mg/L	18.40 NTU	31.2 mV	15.81 ft	200.00 ml/min
10/17/2023 3:32 PM	20:00	7.72 pH	21.51 °C	268.18 µS/cm	5.88 mg/L	19.30 NTU	27.3 mV	15.81 ft	200.00 ml/min
10/17/2023 3:37 PM	25:00	7.74 pH	21.47 °C	266.38 µS/cm	5.89 mg/L	14.30 NTU	27.8 mV	15.81 ft	200.00 ml/min
10/17/2023 3:42 PM	30:00	7.76 pH	21.46 °C	263.26 µS/cm	5.96 mg/L	11.50 NTU	28.1 mV	15.81 ft	200.00 ml/min
10/17/2023 3:47 PM	35:00	7.77 pH	21.43 °C	260.16 µS/cm	5.99 mg/L	9.82 NTU	28.9 mV	15.81 ft	200.00 ml/min
10/17/2023 3:52 PM	40:00	7.78 pH	21.42 °C	258.52 µS/cm	6.03 mg/L	10.57 NTU	29.5 mV	15.81 ft	200.00 ml/min
10/17/2023 3:57 PM	45:01	7.79 pH	21.38 °C	254.76 µS/cm	6.07 mg/L	8.86 NTU	32.1 mV	15.81 ft	200.00 ml/min
10/17/2023 4:02 PM	50:01	7.79 pH	21.40 °C	255.22 µS/cm	6.07 mg/L	5.76 NTU	37.8 mV	15.81 ft	200.00 ml/min
10/17/2023 4:07 PM	55:01	7.80 pH	21.44 °C	254.09 µS/cm	6.07 mg/L	5.49 NTU	32.2 mV	15.81 ft	200.00 ml/min
10/17/2023 4:12 PM	01:00:01	7.80 pH	21.47 °C	252.68 µS/cm	6.07 mg/L	4.32 NTU	32.2 mV	15.81 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-09	Grab.

Low-Flow Test Report:

Test Date / Time: 10/17/2023 1:45:53 PM
Project: GP-Plant Hammond
Operator Name: Zain Webb

Location Name: PT-10 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 21.75 ft** **Total Depth: 31.75 ft** **Initial Depth to Water: 15.88 ft**	**Pump Type: Peri** **Tubing Type: Polyethylene** **Pump Intake From TOC: 26.75 ft** **Estimated Total Volume Pumped: 8 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.04 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 884189**

Test Notes:
Two bottles: Metals and Sulfate.

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	+/- 5	
10/17/2023 1:46 PM	00:53	7.03 pH	20.60 °C	622.14 µS/cm	0.26 mg/L	19.70 NTU	-53.6 mV	15.92 ft	200.00 ml/min
10/17/2023 1:51 PM	05:53	7.06 pH	20.48 °C	609.72 µS/cm	0.26 mg/L	17.10 NTU	-47.1 mV	15.92 ft	200.00 ml/min
10/17/2023 1:56 PM	10:53	7.06 pH	20.35 °C	600.37 µS/cm	0.24 mg/L	12.80 NTU	-48.6 mV	15.92 ft	200.00 ml/min
10/17/2023 2:01 PM	15:53	7.08 pH	20.31 °C	593.29 µS/cm	0.24 mg/L	9.79 NTU	-49.4 mV	15.92 ft	200.00 ml/min
10/17/2023 2:06 PM	20:53	7.08 pH	20.33 °C	592.50 µS/cm	0.24 mg/L	7.82 NTU	-49.7 mV	15.92 ft	200.00 ml/min
10/17/2023 2:11 PM	25:53	7.10 pH	20.31 °C	580.80 µS/cm	0.26 mg/L	5.41 NTU	-50.6 mV	15.92 ft	200.00 ml/min
10/17/2023 2:16 PM	30:53	7.09 pH	20.40 °C	576.76 µS/cm	0.25 mg/L	5.21 NTU	-50.3 mV	15.92 ft	200.00 ml/min
10/17/2023 2:21 PM	35:53	7.11 pH	20.31 °C	568.18 µS/cm	0.29 mg/L	4.42 NTU	-50.3 mV	15.92 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-10	Grab.

Low-Flow Test Report:

Test Date / Time: 10/24/2023 10:31:09 AM
Project: GP-Plant Hammond
Operator Name: A. Brown

Location Name: HAM-PT-07 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 37.40 ft** **Total Depth: 47.40 ft** **Initial Depth to Water: 26.40 ft**	**Pump Type: QED Bladder** **Tubing Type: LDPE** **Pump Intake From TOC: 42.50 ft** **Estimated Total Volume Pumped: 6 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 952637**

Test Notes:
Two bottles: Metals and Sulfate.

Weather Conditions:
Sunny, 60 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
10/24/2023 10:31 AM	00:00	6.81 pH	21.28 °C	801.80 µS/cm	1.69 mg/L	--	-71.1 mV	26.40 ft	200.00 ml/min
10/24/2023 10:36 AM	05:00	6.76 pH	19.74 °C	856.54 µS/cm	0.49 mg/L	12.93 NTU	-87.1 mV	26.40 ft	200.00 ml/min
10/24/2023 10:41 AM	10:00	6.77 pH	19.74 °C	855.52 µS/cm	0.41 mg/L	8.44 NTU	-93.4 mV	26.40 ft	200.00 ml/min
10/24/2023 10:46 AM	15:00	6.79 pH	19.72 °C	852.43 µS/cm	0.36 mg/L	6.59 NTU	-92.6 mV	26.40 ft	200.00 ml/min
10/24/2023 10:51 AM	20:00	6.80 pH	19.77 °C	855.16 µS/cm	0.32 mg/L	4.57 NTU	-99.7 mV	26.40 ft	200.00 ml/min
10/24/2023 10:56 AM	25:00	6.82 pH	19.76 °C	856.03 µS/cm	0.29 mg/L	3.47 NTU	-102.0 mV	26.40 ft	200.00 ml/min
10/24/2023 11:01 AM	30:00	6.83 pH	19.83 °C	857.51 µS/cm	0.27 mg/L	2.78 NTU	-103.8 mV	26.40 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-07	Grab.

Low-Flow Test Report:

Test Date / Time: 10/24/2023 12:07:30 PM
Project: GP-Plant Hammond
Operator Name: A. Brown

Location Name: HAM-PT-08 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 31.63 ft** **Total Depth: 41.63 ft** **Initial Depth to Water: 25.70 ft**	**Pump Type: QED Bladder** **Tubing Type: LDPE** **Pump Intake From TOC: 36.60 ft** **Estimated Total Volume Pumped: 25.4 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.01 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 952637**

Test Notes:
Two bottles: Metals and Sulfate.

Weather Conditions:
Sunny, 60 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
10/24/2023 12:07 PM	00:00	6.82 pH	22.58 °C	636.21 µS/cm	1.23 mg/L	--	-38.7 mV	25.70 ft	200.00 ml/min
10/24/2023 12:12 PM	05:00	6.75 pH	20.83 °C	1.93 µS/cm	5.48 mg/L	113.00 NTU	-6.8 mV	25.71 ft	200.00 ml/min
10/24/2023 12:18 PM	10:47	6.75 pH	20.52 °C	732.77 µS/cm	0.36 mg/L	77.30 NTU	-52.9 mV	25.71 ft	200.00 ml/min
10/24/2023 12:23 PM	15:47	6.75 pH	20.39 °C	730.60 µS/cm	0.31 mg/L	50.60 NTU	-57.4 mV	25.71 ft	200.00 ml/min
10/24/2023 12:28 PM	20:47	6.75 pH	20.30 °C	733.95 µS/cm	0.29 mg/L	38.10 NTU	-63.6 mV	25.71 ft	200.00 ml/min
10/24/2023 12:33 PM	25:47	6.75 pH	20.26 °C	739.50 µS/cm	0.21 mg/L	30.00 NTU	-65.9 mV	25.71 ft	200.00 ml/min
10/24/2023 12:38 PM	30:47	6.75 pH	20.32 °C	738.62 µS/cm	0.18 mg/L	21.20 NTU	-67.8 mV	25.71 ft	200.00 ml/min
10/24/2023 12:43 PM	35:47	6.75 pH	20.35 °C	741.30 µS/cm	0.16 mg/L	17.40 NTU	-69.5 mV	25.71 ft	200.00 ml/min
10/24/2023 12:48 PM	40:47	6.75 pH	20.30 °C	738.81 µS/cm	0.16 mg/L	16.40 NTU	-67.3 mV	25.71 ft	200.00 ml/min
10/24/2023 12:53 PM	45:47	6.75 pH	20.25 °C	739.90 µS/cm	0.15 mg/L	13.10 NTU	-64.9 mV	25.71 ft	200.00 ml/min
10/24/2023 12:58 PM	50:47	6.76 pH	20.22 °C	739.03 µS/cm	0.15 mg/L	11.70 NTU	-70.7 mV	25.71 ft	200.00 ml/min
10/24/2023 1:03 PM	55:47	6.75 pH	20.21 °C	737.28 µS/cm	0.16 mg/L	14.15 NTU	-71.3 mV	25.71 ft	200.00 ml/min
10/24/2023 1:08 PM	01:00:47	6.75 pH	20.75 °C	743.94 µS/cm	0.18 mg/L	12.57 NTU	-73.0 mV	25.71 ft	200.00 ml/min
10/24/2023 1:13 PM	01:05:47	6.76 pH	20.80 °C	743.51 µS/cm	0.16 mg/L	10.65 NTU	-68.8 mV	25.71 ft	200.00 ml/min
10/24/2023 1:14 PM	01:06:56	6.76 pH	20.79 °C	741.17 µS/cm	0.15 mg/L	9.94 NTU	-68.2 mV	25.71 ft	200.00 ml/min

10/24/2023 1:19 PM	01:11:56	6.75 pH	20.84 °C	740.63 µS/cm	0.12 mg/L	8.69 NTU	-68.7 mV	25.71 ft	200.00 ml/min
10/24/2023 1:24 PM	01:16:56	6.75 pH	20.78 °C	739.31 µS/cm	0.11 mg/L	8.52 NTU	-73.8 mV	25.71 ft	200.00 ml/min
10/24/2023 1:29 PM	01:21:56	6.75 pH	20.79 °C	738.65 µS/cm	0.12 mg/L	8.69 NTU	-74.9 mV	25.71 ft	200.00 ml/min
10/24/2023 1:34 PM	01:26:56	6.75 pH	20.79 °C	738.55 µS/cm	0.12 mg/L	8.38 NTU	-75.3 mV	25.71 ft	200.00 ml/min
10/24/2023 1:39 PM	01:31:56	6.75 pH	21.10 °C	740.35 µS/cm	0.63 mg/L	7.43 NTU	-64.9 mV	25.71 ft	200.00 ml/min
10/24/2023 1:44 PM	01:36:56	6.75 pH	21.08 °C	740.78 µS/cm	0.50 mg/L	7.03 NTU	-67.7 mV	25.71 ft	200.00 ml/min
10/24/2023 1:49 PM	01:41:56	6.75 pH	21.19 °C	740.38 µS/cm	0.45 mg/L	6.18 NTU	-73.9 mV	25.71 ft	200.00 ml/min
10/24/2023 1:54 PM	01:46:56	6.75 pH	21.04 °C	740.30 µS/cm	0.44 mg/L	5.53 NTU	-69.8 mV	25.71 ft	200.00 ml/min
10/24/2023 1:59 PM	01:51:56	6.75 pH	20.84 °C	739.10 µS/cm	0.39 mg/L	5.59 NTU	-69.6 mV	25.71 ft	200.00 ml/min
10/24/2023 2:04 PM	01:56:56	6.75 pH	21.15 °C	738.29 µS/cm	0.29 mg/L	5.23 NTU	-75.1 mV	25.71 ft	200.00 ml/min
10/24/2023 2:09 PM	02:01:56	6.75 pH	21.12 °C	738.78 µS/cm	0.25 mg/L	5.45 NTU	-76.1 mV	25.71 ft	200.00 ml/min
10/24/2023 2:14 PM	02:06:56	6.75 pH	20.57 °C	736.95 µS/cm	0.23 mg/L	4.87 NTU	-75.7 mV	25.71 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-08	Grab.

Low-Flow Test Report:

Test Date / Time: 10/24/2023 3:16:47 PM
Project: GP-Plant Hammond
Operator Name: A. Brown

Location Name: HAM-PT-09 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 20.75 ft** **Total Depth: 30.75 ft** **Initial Depth to Water: 16.04 ft**	**Pump Type: QED Bladder** **Tubing Type: LDPE** **Pump Intake From TOC: 25.70 ft** **Estimated Total Volume Pumped: 11 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 952637**

Test Notes:
Five bottles: App. III and IV (No RADs) and Major Ions.

Weather Conditions:
Sunny, 60 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
10/24/2023 3:16 PM	00:00	7.28 pH	22.29 °C	317.17 µS/cm	1.60 mg/L	--	43.8 mV	16.04 ft	200.00 ml/min
10/24/2023 3:21 PM	05:00	7.27 pH	21.55 °C	315.61 µS/cm	1.61 mg/L	18.30 NTU	42.2 mV	16.04 ft	200.00 ml/min
10/24/2023 3:26 PM	10:00	7.27 pH	21.45 °C	308.88 µS/cm	2.05 mg/L	14.40 NTU	40.3 mV	16.04 ft	200.00 ml/min
10/24/2023 3:31 PM	15:00	7.27 pH	21.41 °C	309.04 µS/cm	2.31 mg/L	11.51 NTU	42.2 mV	16.04 ft	200.00 ml/min
10/24/2023 3:36 PM	20:00	7.27 pH	21.33 °C	313.55 µS/cm	2.35 mg/L	8.75 NTU	42.2 mV	16.04 ft	200.00 ml/min
10/24/2023 3:41 PM	25:00	7.26 pH	21.37 °C	321.83 µS/cm	2.31 mg/L	8.25 NTU	41.8 mV	16.04 ft	200.00 ml/min
10/24/2023 3:46 PM	30:00	7.25 pH	21.30 °C	335.62 µS/cm	2.27 mg/L	8.89 NTU	42.8 mV	16.04 ft	200.00 ml/min
10/24/2023 3:51 PM	35:00	7.26 pH	21.28 °C	342.05 µS/cm	2.24 mg/L	5.78 NTU	42.7 mV	16.04 ft	200.00 ml/min
10/24/2023 3:56 PM	40:00	7.26 pH	21.37 °C	347.91 µS/cm	2.16 mg/L	5.82 NTU	41.4 mV	16.04 ft	200.00 ml/min
10/24/2023 4:01 PM	45:00	7.25 pH	21.33 °C	354.96 µS/cm	2.12 mg/L	5.76 NTU	42.7 mV	16.04 ft	200.00 ml/min
10/24/2023 4:06 PM	50:00	7.25 pH	21.28 °C	362.29 µS/cm	2.07 mg/L	5.31 NTU	42.8 mV	16.04 ft	200.00 ml/min
10/24/2023 4:11 PM	55:00	7.25 pH	21.31 °C	367.85 µS/cm	1.99 mg/L	4.91 NTU	42.7 mV	16.04 ft	200.00 ml/min

Samples

Sample ID:	Description:

HAM-PT-09	Grab.
HAM-AP1-FD-01	Grab.

Low-Flow Test Report:

Test Date / Time: 10/24/2023 4:39:31 PM
Project: GP-Plant Hammond
Operator Name: A. Brown

Location Name: HAM-PT-10 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 21.75 ft** **Total Depth: 31.75 ft** **Initial Depth to Water: 16.14 ft**	**Pump Type: QED Bladder** **Tubing Type: LDPE** **Pump Intake From TOC: 26.70 ft** **Estimated Total Volume Pumped: 6 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 952637**

Test Notes:
Five bottles: App. III and IV (No RADs) and Major Ions.

Weather Conditions:
Sunny, 60 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
10/24/2023 4:39 PM	00:00	7.15 pH	24.64 °C	625.15 µS/cm	0.47 mg/L	--	-38.5 mV	16.14 ft	200.00 ml/min
10/24/2023 4:44 PM	05:00	7.08 pH	21.72 °C	613.97 µS/cm	0.24 mg/L	5.51 NTU	-66.4 mV	16.14 ft	200.00 ml/min
10/24/2023 4:49 PM	10:00	7.10 pH	21.37 °C	595.45 µS/cm	0.18 mg/L	3.34 NTU	-73.7 mV	16.14 ft	200.00 ml/min
10/24/2023 4:54 PM	15:00	7.11 pH	21.33 °C	573.80 µS/cm	0.14 mg/L	2.69 NTU	-70.6 mV	16.14 ft	200.00 ml/min
10/24/2023 4:59 PM	20:00	7.11 pH	21.30 °C	566.65 µS/cm	0.14 mg/L	2.31 NTU	-72.4 mV	16.14 ft	200.00 ml/min
10/24/2023 5:04 PM	25:00	7.12 pH	21.21 °C	556.62 µS/cm	0.13 mg/L	1.84 NTU	-79.5 mV	16.14 ft	200.00 ml/min
10/24/2023 5:09 PM	30:00	7.13 pH	21.19 °C	548.18 µS/cm	0.13 mg/L	1.43 NTU	-80.6 mV	16.14 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-10	Grab.

Low-Flow Test Report:

Test Date / Time: 10/31/2023 11:00:14 AM
Project: GP-Plant Hammond
Operator Name: Zain Webb

Location Name: PT-07 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 37.94 ft** **Total Depth: 47.94 ft** **Initial Depth to Water: 26.64 ft**	**Pump Type: Bladder Pump** **Tubing Type: Polyethylene** **Pump Intake From TOC: 42.94 ft** **Estimated Total Volume Pumped: 5.25 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 0.08 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 843593**

Test Notes:

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	
10/31/2023 11:00 AM	00:00	6.73 pH	18.73 °C	802.89 µS/cm	0.91 mg/L	15.50 NTU	-92.8 mV	26.80 ft	100.00 ml/min
10/31/2023 11:05 AM	05:00	6.74 pH	18.79 °C	803.46 µS/cm	0.64 mg/L	14.10 NTU	-91.9 mV	26.81 ft	100.00 ml/min
10/31/2023 11:10 AM	10:00	6.71 pH	18.84 °C	803.38 µS/cm	1.34 mg/L	12.30 NTU	-74.3 mV	26.72 ft	100.00 ml/min
10/31/2023 11:15 AM	15:00	6.71 pH	18.83 °C	802.27 µS/cm	1.24 mg/L	11.60 NTU	-88.6 mV	26.72 ft	100.00 ml/min
10/31/2023 11:17 AM	17:00	6.72 pH	18.83 °C	642.00 µS/cm	1.65 mg/L	9.46 NTU	-78.4 mV	26.72 ft	100.00 ml/min
10/31/2023 11:22 AM	22:00	6.76 pH	18.91 °C	792.13 µS/cm	1.00 mg/L	8.79 NTU	-96.5 mV	26.72 ft	100.00 ml/min
10/31/2023 11:27 AM	27:00	6.76 pH	18.86 °C	797.11 µS/cm	0.77 mg/L	8.08 NTU	-98.2 mV	26.72 ft	100.00 ml/min
10/31/2023 11:32 AM	32:00	6.76 pH	19.29 °C	801.91 µS/cm	1.10 mg/L	6.33 NTU	-84.4 mV	26.72 ft	100.00 ml/min
10/31/2023 11:37 AM	37:00	6.75 pH	19.28 °C	799.91 µS/cm	0.69 mg/L	4.65 NTU	-86.6 mV	26.72 ft	100.00 ml/min
10/31/2023 11:42 AM	42:00	6.75 pH	19.41 °C	795.92 µS/cm	0.60 mg/L	3.28 NTU	-82.8 mV	26.72 ft	100.00 ml/min
10/31/2023 11:47 AM	47:00	6.75 pH	19.32 °C	793.71 µS/cm	0.70 mg/L	4.39 NTU	-84.0 mV	26.72 ft	100.00 ml/min

Samples

Sample ID:	Description:
PT-07	Grab.

Low-Flow Test Report:

Test Date / Time: 10/31/2023 2:21:02 PM
Project: GP-Plant Hammond
Operator Name: Zain Webb

Location Name: PT-08 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 32.00 ft** **Total Depth: 42.00 ft** **Initial Depth to Water: 25.91 ft**	**Pump Type: Bladder Pump** **Tubing Type: Polyethylene** **Intake From TOC: 37.00 ft** **Estimated Total Volume Pumped: 7.50 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min Final Draw Down: 0.03 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 843593**

Test Notes:

Weather Conditions:
Clear, 60 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
10/31/2023 2:21 PM	00:00	6.64 pH	19.21 °C	723.66 µS/cm	1.39 mg/L	16.00 NTU	-56.9 mV	25.94 ft	100.00 ml/min
10/31/2023 2:26 PM	05:00	6.57 pH	19.26 °C	721.57 µS/cm	1.42 mg/L	11.50 NTU	-53.8 mV	25.94 ft	100.00 ml/min
10/31/2023 2:31 PM	10:00	6.57 pH	19.28 °C	727.58 µS/cm	1.31 mg/L	11.90 NTU	-52.3 mV	25.94 ft	100.00 ml/min
10/31/2023 2:36 PM	15:00	6.56 pH	19.19 °C	729.03 µS/cm	1.32 mg/L	9.11 NTU	-54.6 mV	25.94 ft	100.00 ml/min
10/31/2023 2:41 PM	20:00	6.56 pH	19.25 °C	731.47 µS/cm	1.06 mg/L	7.89 NTU	-53.7 mV	25.94 ft	100.00 ml/min
10/31/2023 2:46 PM	25:00	6.56 pH	19.28 °C	729.17 µS/cm	1.13 mg/L	7.62 NTU	-50.3 mV	25.94 ft	100.00 ml/min
10/31/2023 2:51 PM	30:00	6.55 pH	19.19 °C	733.05 µS/cm	0.92 mg/L	6.38 NTU	-52.6 mV	25.94 ft	100.00 ml/min
10/31/2023 2:56 PM	35:00	6.55 pH	19.22 °C	732.30 µS/cm	0.94 mg/L	6.36 NTU	-52.0 mV	25.94 ft	100.00 ml/min
10/31/2023 3:01 PM	40:00	6.55 pH	19.23 °C	731.61 µS/cm	0.99 mg/L	6.29 NTU	-51.7 mV	25.94 ft	100.00 ml/min
10/31/2023 3:06 PM	45:00	6.55 pH	19.24 °C	734.08 µS/cm	1.02 mg/L	5.25 NTU	-51.0 mV	25.94 ft	100.00 ml/min
10/31/2023 3:11 PM	50:00	6.55 pH	19.23 °C	743.59 µS/cm	0.73 mg/L	3.71 NTU	-52.3 mV	25.94 ft	100.00 ml/min
10/31/2023 3:16 PM	55:00	6.54 pH	19.24 °C	739.22 µS/cm	1.74 mg/L	4.75 NTU	-46.8 mV	25.94 ft	100.00 ml/min
10/31/2023 3:21 PM	01:00:00	6.54 pH	19.33 °C	740.51 µS/cm	1.39 mg/L	4.65 NTU	-46.7 mV	25.94 ft	100.00 ml/min

10/31/2023 3:26 PM	01:05:00	6.54 pH	19.22 °C	747.41 µS/cm	1.31 mg/L	4.57 NTU	-46.3 mV	25.94 ft	100.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-08	Grab.

Low-Flow Test Report:

Test Date / Time: 10/31/2023 2:20:09 PM
Project: GP-Plant Hammond
Operator Name: Elisabeth Russell

Location Name: PT-09 **Well Diameter: 2 in** **Screen Length: 10 ft** **Top of Screen: 17.45 ft** **Total Depth: 27.45 ft** **Initial Depth to Water: 16.15 ft**	**Pump Type: Peri** **Tubing Type: Polyethylene** **Pump Intake From TOC: 22.45 ft** **Estimated Total Volume Pumped: 21.35 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 175 ml/min** **Final Draw Down: 0.02 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 980712**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
10/31/2023 2:20 PM	00:00	7.42 pH	23.02 °C	449.80 µS/cm	0.96 mg/L	15.20 NTU	-8.0 mV	16.16 ft	175.00 ml/min
10/31/2023 2:25 PM	05:00	7.09 pH	20.29 °C	468.07 µS/cm	0.45 mg/L	16.00 NTU	12.4 mV	16.15 ft	175.00 ml/min
10/31/2023 2:30 PM	10:00	7.09 pH	20.20 °C	467.68 µS/cm	0.32 mg/L	14.60 NTU	19.6 mV	16.16 ft	175.00 ml/min
10/31/2023 2:35 PM	15:00	7.06 pH	20.03 °C	469.57 µS/cm	0.30 mg/L	15.50 NTU	24.0 mV	16.16 ft	175.00 ml/min
10/31/2023 2:40 PM	20:00	7.06 pH	19.92 °C	471.21 µS/cm	0.31 mg/L	14.90 NTU	25.6 mV	16.16 ft	175.00 ml/min
10/31/2023 2:45 PM	25:00	7.05 pH	20.40 °C	471.34 µS/cm	0.32 mg/L	15.00 NTU	23.6 mV	16.17 ft	175.00 ml/min
10/31/2023 2:50 PM	30:00	7.04 pH	20.08 °C	475.26 µS/cm	0.42 mg/L	14.40 NTU	29.3 mV	16.17 ft	175.00 ml/min
10/31/2023 2:52 PM	32:04	7.05 pH	20.10 °C	479.57 µS/cm	0.32 mg/L	14.10 NTU	25.7 mV	16.17 ft	175.00 ml/min
10/31/2023 2:57 PM	37:04	7.05 pH	20.10 °C	480.27 µS/cm	0.32 mg/L	14.40 NTU	28.4 mV	16.17 ft	175.00 ml/min
10/31/2023 3:02 PM	42:04	7.05 pH	20.03 °C	485.61 µS/cm	0.31 mg/L	13.40 NTU	28.3 mV	16.17 ft	175.00 ml/min
10/31/2023 3:07 PM	47:04	7.05 pH	20.13 °C	492.34 µS/cm	0.42 mg/L	12.10 NTU	28.1 mV	16.17 ft	175.00 ml/min
10/31/2023 3:12 PM	52:04	7.04 pH	20.15 °C	493.33 µS/cm	0.46 mg/L	10.40 NTU	28.2 mV	16.17 ft	175.00 ml/min
10/31/2023 3:17 PM	57:04	7.04 pH	20.21 °C	504.28 µS/cm	0.37 mg/L	10.30 NTU	27.4 mV	16.17 ft	175.00 ml/min
10/31/2023 3:22 PM	01:02:04	7.04 pH	20.08 °C	511.01 µS/cm	0.33 mg/L	9.06 NTU	26.4 mV	16.17 ft	175.00 ml/min
10/31/2023 3:27 PM	01:07:04	7.04 pH	20.07 °C	514.05 µS/cm	0.31 mg/L	8.15 NTU	21.9 mV	16.17 ft	175.00 ml/min
10/31/2023 3:32 PM	01:12:04	7.04 pH	20.12 °C	518.52 µS/cm	0.32 mg/L	7.33 NTU	24.1 mV	16.17 ft	175.00 ml/min

10/31/2023 3:37 PM	01:17:04	7.04 pH	20.11 °C	517.70 µS/cm	0.32 mg/L	6.61 NTU	23.5 mV	16.17 ft	175.00 ml/min
10/31/2023 3:42 PM	01:22:04	7.03 pH	20.07 °C	520.83 µS/cm	0.46 mg/L	5.66 NTU	23.8 mV	16.17 ft	175.00 ml/min
10/31/2023 3:47 PM	01:27:04	7.03 pH	19.96 °C	526.27 µS/cm	0.47 mg/L	5.43 NTU	20.3 mV	16.17 ft	175.00 ml/min
10/31/2023 3:52 PM	01:32:04	7.04 pH	20.05 °C	525.46 µS/cm	0.47 mg/L	4.99 NTU	22.3 mV	16.17 ft	175.00 ml/min
10/31/2023 3:57 PM	01:37:04	7.04 pH	19.93 °C	523.84 µS/cm	0.31 mg/L	4.75 NTU	20.8 mV	16.17 ft	175.00 ml/min
10/31/2023 4:02 PM	01:42:04	7.04 pH	20.06 °C	528.08 µS/cm	0.31 mg/L	4.77 NTU	20.1 mV	16.17 ft	175.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-09	Grab.

Low-Flow Test Report:

Test Date / Time: 10/31/2023 11:59:06 AM
Project: GP-Plant Hammond
Operator Name: Elisabeth Russell

Location Name: PT-10 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 17.40 ft** **Total Depth: 27.40 ft**	**Pump Type: Peri** **Tubing Type: Polyethylene** **Pump Intake From TOC: 22.4 ft** **Estimated Total Volume Pumped: 12.80 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 160 ml/min Final Draw Down: 0.03 m**	**Instrument Used: Aqua TROLL 400** **Serial Number: 980712**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.5	
10/31/2023 11:59 AM	00:00	6.98 pH	19.52 °C	571.55 µS/cm	0.22 mg/L	27.80 NTU	-19.5 mV	16.28 ft	160.00 ml/min
10/31/2023 12:04 PM	05:00	7.01 pH	19.05 °C	558.56 µS/cm	0.31 mg/L	22.80 NTU	-40.8 mV	16.28 ft	160.00 ml/min
10/31/2023 12:09 PM	10:00	7.03 pH	19.37 °C	544.09 µS/cm	0.37 mg/L	17.90 NTU	-36.5 mV	16.28 ft	160.00 ml/min
10/31/2023 12:14 PM	15:00	7.05 pH	19.12 °C	533.66 µS/cm	0.53 mg/L	15.90 NTU	-39.1 mV	16.28 ft	160.00 ml/min
10/31/2023 12:19 PM	20:00	7.05 pH	19.27 °C	527.39 µS/cm	0.48 mg/L	12.30 NTU	-41.5 mV	16.28 ft	160.00 ml/min
10/31/2023 12:24 PM	25:00	7.06 pH	19.23 °C	520.16 µS/cm	0.68 mg/L	9.95 NTU	-41.9 mV	16.28 ft	160.00 ml/min
10/31/2023 12:29 PM	30:00	7.08 pH	19.28 °C	512.67 µS/cm	0.56 mg/L	8.32 NTU	-42.8 mV	16.28 ft	160.00 ml/min
10/31/2023 12:34 PM	35:00	7.08 pH	19.05 °C	505.66 µS/cm	0.53 mg/L	7.96 NTU	-42.1 mV	16.28 ft	160.00 ml/min
10/31/2023 12:39 PM	40:00	7.09 pH	19.04 °C	506.96 µS/cm	0.50 mg/L	6.19 NTU	-54.1 mV	16.28 ft	160.00 ml/min
10/31/2023 12:44 PM	45:00	7.09 pH	19.36 °C	500.96 µS/cm	0.42 mg/L	5.23 NTU	-56.1 mV	16.28 ft	160.00 ml/min
10/31/2023 12:49 PM	50:00	7.10 pH	19.76 °C	499.43 µS/cm	0.29 mg/L	5.00 NTU	-56.2 mV	16.28 ft	160.00 ml/min
10/31/2023 12:54 PM	55:00	7.10 pH	19.81 °C	485.85 µS/cm	0.16 mg/L	4.71 NTU	-56.5 mV	16.28 ft	160.00 ml/min
10/31/2023 12:59 PM	01:00:00	7.11 pH	19.83 °C	488.29 µS/cm	0.15 mg/L	4.40 NTU	-44.2 mV	16.28 ft	160.00 ml/min
10/31/2023 1:04 PM	01:05:00	7.11 pH	19.84 °C	483.92 µS/cm	0.15 mg/L	3.88 NTU	-57.2 mV	16.28 ft	160.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-10	Grab.

November 2023

Low-Flow Test Report:

Test Date / Time: 11/7/2023 2:33:23 PM
Project: GP-Plant Hammond
Operator Name: Zain Webb

Location Name: PT-07 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 38.00 ft** **Total Depth: 48.00 ft** **Initial Depth to Water: 26.87 ft**	**Pump Type: Bladder Pump** **Tubing Type: Polyethylene Pump** **Intake From TOC: 42.00 ft** **Estimated Total Volume Pumped: 6.5 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min Final Draw Down: 0.06 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 980712**

Test Notes:
Two bottles: Metals and Sulfate.

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	
11/7/2023 2:33 PM	00:00	6.85 pH	22.10 °C	958.12 µS/cm	1.34 mg/L	13.20 NTU	-100.4 mV	26.93 ft	100.00 ml/min
11/7/2023 2:38 PM	05:00	6.87 pH	21.46 °C	969.15 µS/cm	0.74 mg/L	11.80 NTU	-100.5 mV	26.93 ft	100.00 ml/min
11/7/2023 2:43 PM	10:00	6.87 pH	21.23 °C	969.58 µS/cm	0.51 mg/L	8.16 NTU	-111.5 mV	26.93 ft	100.00 ml/min
11/7/2023 2:48 PM	15:00	6.88 pH	21.01 °C	972.17 µS/cm	0.97 mg/L	8.45 NTU	-109.6 mV	26.93 ft	100.00 ml/min
11/7/2023 2:53 PM	20:00	6.88 pH	21.01 °C	974.50 µS/cm	0.67 mg/L	7.93 NTU	-99.6 mV	26.93 ft	100.00 ml/min
11/7/2023 2:58 PM	25:00	6.87 pH	21.10 °C	972.63 µS/cm	0.44 mg/L	7.66 NTU	-100.2 mV	26.93 ft	100.00 ml/min
11/7/2023 3:03 PM	30:00	6.88 pH	20.96 °C	972.46 µS/cm	0.69 mg/L	6.47 NTU	-99.5 mV	26.93 ft	100.00 ml/min
11/7/2023 3:08 PM	35:00	6.88 pH	20.92 °C	974.90 µS/cm	0.44 mg/L	6.39 NTU	-110.4 mV	26.93 ft	100.00 ml/min
11/7/2023 3:13 PM	40:00	6.88 pH	20.98 °C	974.66 µS/cm	0.50 mg/L	7.16 NTU	-110.7 mV	26.93 ft	100.00 ml/min
11/7/2023 3:18 PM	45:00	6.88 pH	20.85 °C	973.99 µS/cm	0.70 mg/L	6.81 NTU	-100.9 mV	26.93 ft	100.00 ml/min
11/7/2023 3:23 PM	50:00	6.88 pH	20.77 °C	975.68 µS/cm	0.32 mg/L	4.30 NTU	-101.4 mV	26.93 ft	100.00 ml/min
11/7/2023 3:28 PM	55:00	6.89 pH	20.74 °C	976.30 µS/cm	0.25 mg/L	4.34 NTU	-111.5 mV	26.93 ft	100.00 ml/min
11/7/2023 3:33 PM	01:00:00	6.89 pH	20.67 °C	974.44 µS/cm	0.30 mg/L	4.27 NTU	-111.5 mV	26.93 ft	100.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-07	Grab.

Low-Flow Test Report:

Test Date / Time: 11/7/2023 12:29:45 PM
Project: GP-Plant Hammond
Operator Name: Zain Webb

Location Name: PT-08 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 32.20 ft** **Total Depth: 42.20 ft** **Initial Depth to Water: 26.13 ft**	**Pump Type: Bladder Pump** **Tubing Type: Polyethylene Pump** **Intake From TOC: 37.20 ft** **Estimated Total Volume Pumped: 4 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 0.03 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 980712**

Test Notes:
Two bottles: Metals and Sulfate.

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	
11/7/2023 12:29 PM	00:00	6.72 pH	21.42 °C	866.79 µS/cm	5.50 mg/L	38.50 NTU	-53.5 mV	26.16 ft	100.00 ml/min
11/7/2023 12:34 PM	05:00	6.72 pH	20.87 °C	909.58 µS/cm	1.13 mg/L	20.00 NTU	-52.5 mV	26.16 ft	100.00 ml/min
11/7/2023 12:39 PM	10:00	6.72 pH	20.86 °C	907.90 µS/cm	1.03 mg/L	14.60 NTU	-48.4 mV	26.16 ft	100.00 ml/min
11/7/2023 12:44 PM	15:00	6.72 pH	20.77 °C	915.19 µS/cm	1.17 mg/L	12.30 NTU	-46.7 mV	26.16 ft	100.00 ml/min
11/7/2023 12:49 PM	20:00	6.72 pH	20.84 °C	911.12 µS/cm	1.04 mg/L	10.90 NTU	-45.8 mV	26.16 ft	100.00 ml/min
11/7/2023 12:54 PM	25:00	6.72 pH	20.81 °C	909.93 µS/cm	1.11 mg/L	7.49 NTU	-45.2 mV	26.16 ft	100.00 ml/min
11/7/2023 12:59 PM	30:00	6.72 pH	20.88 °C	915.32 µS/cm	1.07 mg/L	5.99 NTU	-44.7 mV	26.16 ft	100.00 ml/min
11/7/2023 1:04 PM	35:00	6.73 pH	20.78 °C	914.11 µS/cm	0.99 mg/L	4.81 NTU	-44.5 mV	26.16 ft	100.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-08	Grab.
HAM-AP1-FD-01	Grab.

Low-Flow Test Report:

Test Date / Time: 11/14/2023 3:53:06 PM
Project: GP-Plant Hammond
Operator Name: Zain Webb

Location Name: PT-09 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 17.45 ft** **Total Depth: 27.45 ft** **Initial Depth to Water: 16.25 ft**	**Pump Type: Bladder Pump** **Tubing Type: Polyethylene Pump** **Intake From TOC: 22.45 ft** **Estimated Total Volume Pumped: 18.5 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 0.03 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 843285**

Test Notes:
Switched to 100 ml/min after 1633 measurement (40 minutes).
Turbidity was not measured between 1658 to 1733.
Five bottles: App. III and IV (No RADs) and Major Ions.

Weather Conditions:
Clear, 60 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
11/14/2023 3:53 PM	00:00	7.04 pH	20.21 °C	832.67 µS/cm	0.70 mg/L	511.00 NTU	5.8 mV	16.28 ft	200.00 ml/min
11/14/2023 3:58 PM	05:00	6.99 pH	20.11 °C	822.55 µS/cm	0.71 mg/L	493.00 NTU	0.9 mV	16.28 ft	200.00 ml/min
11/14/2023 4:03 PM	10:00	6.98 pH	20.06 °C	806.04 µS/cm	0.24 mg/L	436.00 NTU	-5.2 mV	16.28 ft	200.00 ml/min
11/14/2023 4:08 PM	15:00	6.98 pH	20.02 °C	806.67 µS/cm	0.10 mg/L	392.00 NTU	-5.6 mV	16.28 ft	200.00 ml/min
11/14/2023 4:13 PM	20:00	6.98 pH	19.97 °C	805.83 µS/cm	0.08 mg/L	285.00 NTU	-1.2 mV	16.28 ft	200.00 ml/min
11/14/2023 4:18 PM	25:00	6.98 pH	19.96 °C	805.95 µS/cm	0.07 mg/L	165.00 NTU	-0.7 mV	16.28 ft	200.00 ml/min
11/14/2023 4:23 PM	30:00	6.92 pH	20.02 °C	738.20 µS/cm	0.10 mg/L	218.00 NTU	-7.7 mV	16.28 ft	200.00 ml/min
11/14/2023 4:28 PM	35:00	6.95 pH	19.93 °C	815.54 µS/cm	0.06 mg/L	254.00 NTU	-2.0 mV	16.28 ft	200.00 ml/min
11/14/2023 4:33 PM	40:00	6.97 pH	19.86 °C	810.32 µS/cm	0.06 mg/L	256.00 NTU	-7.9 mV	16.28 ft	200.00 ml/min
11/14/2023 4:38 PM	45:00	6.98 pH	19.79 °C	790.18 µS/cm	0.07 mg/L	231.00 NTU	-3.0 mV	16.28 ft	100.00 ml/min
11/14/2023 4:43 PM	50:00	6.99 pH	19.78 °C	790.72 µS/cm	0.08 mg/L	204.00 NTU	-9.1 mV	16.28 ft	100.00 ml/min
11/14/2023 4:48 PM	55:00	6.98 pH	19.71 °C	793.44 µS/cm	0.07 mg/L	176.00 NTU	-6.2 mV	16.28 ft	100.00 ml/min
11/14/2023 4:53 PM	01:00:00	6.98 pH	19.75 °C	794.47 µS/cm	0.07 mg/L	157.00 NTU	-7.7 mV	16.28 ft	100.00 ml/min

11/14/2023 4:58 PM	01:05:00	6.98 pH	19.63 °C	805.30 µS/cm	0.06 mg/L	137.00 NTU	-14.2 mV	16.28 ft	100.00 ml/min
11/14/2023 5:03 PM	01:10:00	6.98 pH	19.58 °C	804.92 µS/cm	0.07 mg/L	--	-9.9 mV	16.28 ft	100.00 ml/min
11/14/2023 5:08 PM	01:15:00	6.98 pH	19.58 °C	805.70 µS/cm	0.07 mg/L	--	-10.0 mV	16.28 ft	100.00 ml/min
11/14/2023 5:13 PM	01:20:00	6.98 pH	19.52 °C	806.74 µS/cm	0.07 mg/L	--	-7.8 mV	16.28 ft	100.00 ml/min
11/14/2023 5:18 PM	01:25:00	6.98 pH	19.40 °C	805.83 µS/cm	0.09 mg/L	--	-6.7 mV	16.28 ft	100.00 ml/min
11/14/2023 5:23 PM	01:30:00	6.98 pH	19.24 °C	805.29 µS/cm	0.11 mg/L	--	-5.5 mV	16.28 ft	100.00 ml/min
11/14/2023 5:28 PM	01:35:00	6.99 pH	19.04 °C	806.51 µS/cm	0.14 mg/L	--	-4.1 mV	16.28 ft	100.00 ml/min
11/14/2023 5:33 PM	01:40:00	6.99 pH	18.83 °C	806.38 µS/cm	0.17 mg/L	--	-3.2 mV	16.28 ft	100.00 ml/min
11/14/2023 5:38 PM	01:45:00	6.99 pH	18.81 °C	773.72 µS/cm	0.29 mg/L	120.00 NTU	-17.6 mV	16.28 ft	100.00 ml/min
11/14/2023 5:43 PM	01:50:00	7.01 pH	19.18 °C	759.38 µS/cm	0.09 mg/L	96.80 NTU	-23.0 mV	16.28 ft	100.00 ml/min
11/14/2023 5:48 PM	01:55:00	6.99 pH	19.16 °C	793.05 µS/cm	0.06 mg/L	65.00 NTU	-14.7 mV	16.28 ft	100.00 ml/min
11/14/2023 5:53 PM	02:00:00	6.98 pH	19.16 °C	809.36 µS/cm	0.06 mg/L	64.30 NTU	-12.8 mV	16.28 ft	100.00 ml/min
11/14/2023 5:58 PM	02:05:00	6.98 pH	19.07 °C	813.75 µS/cm	0.06 mg/L	64.10 NTU	-12.9 mV	16.28 ft	100.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-09	Grab. Field filtered.

Low-Flow Test Report:

Test Date / Time: 11/14/2023 10:10:13 AM
Project: GP-Plant Hammond
Operator Name: Zain Webb

Location Name: PT-10 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 17.40 ft** **Total Depth: 27.40 ft** **Initial Depth to Water: 16.34 ft**	**Pump Type: Bladder Pump** **Tubing Type: Polyethylene Pump** **Intake From TOC: 22.40 ft** **Estimated Total Volume Pumped: 51 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.02 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 843285**

Test Notes:
Five bottles: App. III and IV (No RADs) and Major Ions.

Weather Conditions:
Clear, 60 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
11/14/2023 10:10 AM	00:00	7.06 pH	20.13 °C	723.00 µS/cm	2.90 mg/L	184.00 NTU	-50.0 mV	16.36 ft	200.00 ml/min
11/14/2023 10:15 AM	05:00	7.09 pH	20.31 °C	718.54 µS/cm	2.89 mg/L	217.00 NTU	-52.3 mV	16.36 ft	200.00 ml/min
11/14/2023 10:20 AM	10:00	7.11 pH	20.21 °C	720.93 µS/cm	3.10 mg/L	236.00 NTU	-52.3 mV	16.36 ft	200.00 ml/min
11/14/2023 10:25 AM	15:00	7.13 pH	20.46 °C	720.57 µS/cm	3.07 mg/L	221.00 NTU	-50.4 mV	16.36 ft	200.00 ml/min
11/14/2023 10:30 AM	20:00	7.13 pH	20.55 °C	721.81 µS/cm	2.91 mg/L	224.00 NTU	-48.8 mV	16.36 ft	200.00 ml/min
11/14/2023 10:35 AM	25:00	7.13 pH	20.56 °C	722.96 µS/cm	2.96 mg/L	203.00 NTU	-56.9 mV	16.36 ft	200.00 ml/min
11/14/2023 10:40 AM	30:00	7.14 pH	20.53 °C	723.17 µS/cm	2.88 mg/L	183.00 NTU	-58.1 mV	16.36 ft	200.00 ml/min
11/14/2023 10:45 AM	35:00	7.14 pH	20.55 °C	723.18 µS/cm	2.90 mg/L	145.00 NTU	-57.6 mV	16.36 ft	200.00 ml/min
11/14/2023 10:50 AM	40:00	7.14 pH	20.46 °C	723.13 µS/cm	2.91 mg/L	121.00 NTU	-57.7 mV	16.36 ft	200.00 ml/min
11/14/2023 10:55 AM	45:00	7.14 pH	20.47 °C	723.40 µS/cm	2.84 mg/L	112.00 NTU	-57.4 mV	16.36 ft	200.00 ml/min
11/14/2023 11:00 AM	50:00	7.15 pH	20.66 °C	721.55 µS/cm	2.85 mg/L	89.50 NTU	-58.8 mV	16.36 ft	200.00 ml/min
11/14/2023 11:05 AM	55:00	7.15 pH	20.65 °C	720.57 µS/cm	2.84 mg/L	77.20 NTU	-59.1 mV	16.36 ft	200.00 ml/min
11/14/2023 11:10 AM	01:00:00	7.15 pH	20.66 °C	718.59 µS/cm	2.83 mg/L	73.60 NTU	-59.1 mV	16.36 ft	200.00 ml/min

11/14/2023 11:15 AM	01:05:00	7.16 pH	20.64 °C	717.70 µS/cm	2.87 mg/L	69.80 NTU	-59.5 mV	16.36 ft	200.00 ml/min
11/14/2023 11:20 AM	01:10:00	7.15 pH	20.76 °C	716.63 µS/cm	2.73 mg/L	63.70 NTU	-50.3 mV	16.36 ft	200.00 ml/min
11/14/2023 11:25 AM	01:15:00	7.15 pH	20.85 °C	715.16 µS/cm	2.71 mg/L	57.10 NTU	-49.6 mV	16.36 ft	200.00 ml/min
11/14/2023 11:30 AM	01:20:00	7.15 pH	20.82 °C	714.75 µS/cm	2.71 mg/L	52.40 NTU	-59.4 mV	16.36 ft	200.00 ml/min
11/14/2023 11:35 AM	01:25:00	7.16 pH	20.60 °C	716.47 µS/cm	2.85 mg/L	48.70 NTU	-51.1 mV	16.36 ft	200.00 ml/min
11/14/2023 11:40 AM	01:30:00	7.15 pH	20.56 °C	717.68 µS/cm	2.80 mg/L	43.50 NTU	-57.6 mV	16.36 ft	200.00 ml/min
11/14/2023 11:45 AM	01:35:00	7.15 pH	20.51 °C	715.46 µS/cm	2.80 mg/L	38.90 NTU	-59.4 mV	16.36 ft	200.00 ml/min
11/14/2023 11:50 AM	01:40:00	7.15 pH	20.51 °C	715.72 µS/cm	2.73 mg/L	36.00 NTU	-58.9 mV	16.36 ft	200.00 ml/min
11/14/2023 11:55 AM	01:45:00	7.15 pH	20.42 °C	715.01 µS/cm	2.74 mg/L	32.10 NTU	-50.6 mV	16.36 ft	200.00 ml/min
11/14/2023 12:00 PM	01:50:00	7.16 pH	20.28 °C	714.07 µS/cm	2.81 mg/L	29.50 NTU	-59.2 mV	16.36 ft	200.00 ml/min
11/14/2023 12:05 PM	01:55:00	7.15 pH	20.29 °C	715.60 µS/cm	2.73 mg/L	26.80 NTU	-58.5 mV	16.36 ft	200.00 ml/min
11/14/2023 12:10 PM	02:00:00	7.15 pH	20.32 °C	714.97 µS/cm	2.73 mg/L	25.00 NTU	-59.1 mV	16.36 ft	200.00 ml/min
11/14/2023 12:15 PM	02:05:00	7.16 pH	20.20 °C	717.27 µS/cm	2.82 mg/L	25.20 NTU	-50.5 mV	16.36 ft	200.00 ml/min
11/14/2023 12:20 PM	02:10:00	7.16 pH	20.17 °C	716.90 µS/cm	2.81 mg/L	23.60 NTU	-49.8 mV	16.36 ft	200.00 ml/min
11/14/2023 12:25 PM	02:15:00	7.16 pH	20.13 °C	717.12 µS/cm	2.80 mg/L	21.30 NTU	-50.2 mV	16.36 ft	200.00 ml/min
11/14/2023 12:30 PM	02:20:00	7.16 pH	20.16 °C	716.77 µS/cm	2.82 mg/L	20.70 NTU	-58.8 mV	16.36 ft	200.00 ml/min
11/14/2023 12:35 PM	02:25:00	7.16 pH	20.42 °C	711.41 µS/cm	2.79 mg/L	18.10 NTU	-58.6 mV	16.36 ft	200.00 ml/min
11/14/2023 12:40 PM	02:30:00	7.16 pH	20.38 °C	709.41 µS/cm	2.84 mg/L	16.50 NTU	-59.4 mV	16.36 ft	200.00 ml/min
11/14/2023 12:45 PM	02:35:00	7.16 pH	20.50 °C	710.45 µS/cm	2.82 mg/L	14.30 NTU	-50.5 mV	16.36 ft	200.00 ml/min
11/14/2023 12:50 PM	02:40:00	7.16 pH	20.65 °C	708.61 µS/cm	2.84 mg/L	12.40 NTU	-58.9 mV	16.36 ft	200.00 ml/min
11/14/2023 12:55 PM	02:45:00	7.16 pH	20.64 °C	708.97 µS/cm	2.78 mg/L	11.50 NTU	-58.8 mV	16.36 ft	200.00 ml/min
11/14/2023 1:00 PM	02:50:00	7.17 pH	20.64 °C	707.88 µS/cm	2.89 mg/L	10.90 NTU	-59.0 mV	16.36 ft	200.00 ml/min
11/14/2023 1:05 PM	02:55:00	7.16 pH	20.56 °C	707.30 µS/cm	2.85 mg/L	9.56 NTU	-50.3 mV	16.36 ft	200.00 ml/min
11/14/2023 1:10 PM	03:00:00	7.16 pH	20.54 °C	709.75 µS/cm	2.77 mg/L	9.05 NTU	-50.1 mV	16.36 ft	200.00 ml/min
11/14/2023 1:15 PM	03:05:00	7.16 pH	20.51 °C	713.00 µS/cm	2.86 mg/L	8.72 NTU	-49.0 mV	16.36 ft	200.00 ml/min
11/14/2023 1:20 PM	03:10:00	7.16 pH	20.49 °C	711.84 µS/cm	2.81 mg/L	7.95 NTU	-49.7 mV	16.36 ft	200.00 ml/min
11/14/2023 1:25 PM	03:15:00	7.17 pH	20.51 °C	709.49 µS/cm	2.92 mg/L	7.92 NTU	-58.4 mV	16.36 ft	200.00 ml/min
11/14/2023 1:30 PM	03:20:00	7.16 pH	20.64 °C	710.81 µS/cm	2.80 mg/L	7.44 NTU	-49.5 mV	16.36 ft	200.00 ml/min
11/14/2023 1:35 PM	03:25:00	7.17 pH	20.64 °C	709.32 µS/cm	3.00 mg/L	7.28 NTU	-51.8 mV	16.36 ft	200.00 ml/min

11/14/2023 1:40 PM	03:30:00	7.18 pH	20.56 °C	709.06 µS/cm	3.01 mg/L	7.18 NTU	-51.0 mV	16.36 ft	200.00 ml/min
11/14/2023 1:45 PM	03:35:00	7.17 pH	20.38 °C	713.76 µS/cm	2.93 mg/L	6.00 NTU	-58.2 mV	16.36 ft	200.00 ml/min
11/14/2023 1:50 PM	03:40:00	7.16 pH	20.32 °C	714.94 µS/cm	2.81 mg/L	6.59 NTU	-50.7 mV	16.36 ft	200.00 ml/min
11/14/2023 1:55 PM	03:45:00	7.16 pH	20.32 °C	718.15 µS/cm	2.83 mg/L	5.92 NTU	-56.9 mV	16.36 ft	200.00 ml/min
11/14/2023 2:00 PM	03:50:00	7.17 pH	20.29 °C	715.43 µS/cm	2.93 mg/L	5.46 NTU	-51.1 mV	16.36 ft	200.00 ml/min
11/14/2023 2:05 PM	03:55:00	7.18 pH	20.20 °C	716.17 µS/cm	3.05 mg/L	5.07 NTU	-51.6 mV	16.36 ft	200.00 ml/min
11/14/2023 2:10 PM	04:00:00	7.18 pH	20.42 °C	713.34 µS/cm	3.00 mg/L	5.61 NTU	-50.4 mV	16.36 ft	200.00 ml/min
11/14/2023 2:15 PM	04:05:00	7.16 pH	20.49 °C	712.92 µS/cm	2.80 mg/L	4.80 NTU	-49.2 mV	16.36 ft	200.00 ml/min
11/14/2023 2:20 PM	04:10:00	7.16 pH	20.60 °C	713.27 µS/cm	2.86 mg/L	4.45 NTU	-50.9 mV	16.36 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-10	Grab.
HAM-AP1-FD-01	Grab.

Low-Flow Test Report:

Test Date / Time: 11/21/2023 10:07:07 AM
Project: Plant Hammond
Operator Name: Elisabeth Russell

Location Name: PT-07 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 38.00 ft** **Total Depth: 48.00 ft** **Initial Depth to Water: 27.35 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 43.00 ft** **Estimated Total Volume Pumped: 27.2 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.09 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883533**

Test Notes:
Five Bottles: App. III and IV (No RADS) and Major Ions

Fe: 3.5 mg/L

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 10:07 AM	00:00	6.84 pH	19.15 °C	748.51 µS/cm	2.38 mg/L	291.00 NTU	-59.0 mV	27.32 ft	200.00 ml/min
11/21/2023 10:12 AM	05:00	6.85 pH	19.15 °C	745.54 µS/cm	2.20 mg/L	162.00 NTU	-62.0 mV	27.31 ft	200.00 ml/min
11/21/2023 10:17 AM	10:00	6.86 pH	19.10 °C	747.55 µS/cm	2.09 mg/L	101.00 NTU	-76.3 mV	27.29 ft	200.00 ml/min
11/21/2023 10:22 AM	15:00	6.86 pH	19.10 °C	682.64 µS/cm	2.14 mg/L	103.00 NTU	-66.2 mV	27.28 ft	200.00 ml/min
11/21/2023 10:27 AM	20:00	6.87 pH	19.10 °C	747.85 µS/cm	2.18 mg/L	97.80 NTU	-67.3 mV	27.28 ft	200.00 ml/min
11/21/2023 10:32 AM	25:00	6.87 pH	19.10 °C	745.71 µS/cm	2.18 mg/L	60.20 NTU	-68.1 mV	27.28 ft	200.00 ml/min
11/21/2023 10:37 AM	30:00	6.87 pH	19.13 °C	743.90 µS/cm	2.12 mg/L	49.30 NTU	-79.6 mV	27.26 ft	200.00 ml/min
11/21/2023 10:42 AM	35:00	6.88 pH	19.15 °C	746.55 µS/cm	2.16 mg/L	38.20 NTU	-70.1 mV	27.26 ft	200.00 ml/min
11/21/2023 10:47 AM	40:00	6.88 pH	19.15 °C	746.83 µS/cm	2.12 mg/L	33.00 NTU	-80.7 mV	27.26 ft	200.00 ml/min
11/21/2023 10:52 AM	45:00	6.88 pH	19.14 °C	747.00 µS/cm	2.06 mg/L	26.10 NTU	-71.6 mV	27.25 ft	200.00 ml/min
11/21/2023 10:57 AM	50:00	6.88 pH	19.13 °C	746.90 µS/cm	2.10 mg/L	20.50 NTU	-81.3 mV	27.25 ft	200.00 ml/min
11/21/2023 11:02 AM	55:00	6.88 pH	19.14 °C	744.65 µS/cm	2.12 mg/L	14.60 NTU	-73.1 mV	27.25 ft	200.00 ml/min
11/21/2023 11:07 AM	01:00:00	6.88 pH	19.17 °C	746.80 µS/cm	2.14 mg/L	13.90 NTU	-73.0 mV	27.26 ft	200.00 ml/min

11/21/2023 11:12 AM	01:05:00	6.88 pH	19.15 °C	746.77 µS/cm	2.26 mg/L	14.10 NTU	-73.9 mV	27.26 ft	200.00 ml/min
11/21/2023 11:17 AM	01:10:00	6.89 pH	19.16 °C	746.54 µS/cm	2.22 mg/L	13.20 NTU	-82.0 mV	27.26 ft	200.00 ml/min
11/21/2023 11:22 AM	01:15:00	6.89 pH	19.15 °C	746.67 µS/cm	2.39 mg/L	11.70 NTU	-74.8 mV	27.26 ft	200.00 ml/min
11/21/2023 11:27 AM	01:20:00	6.89 pH	19.15 °C	746.87 µS/cm	2.45 mg/L	10.40 NTU	-75.1 mV	27.26 ft	200.00 ml/min
11/21/2023 11:32 AM	01:25:00	6.89 pH	19.15 °C	746.60 µS/cm	2.54 mg/L	8.46 NTU	-75.4 mV	27.26 ft	200.00 ml/min
11/21/2023 11:37 AM	01:30:00	6.89 pH	19.16 °C	746.51 µS/cm	2.36 mg/L	9.46 NTU	-75.5 mV	27.26 ft	200.00 ml/min
11/21/2023 11:42 AM	01:35:00	6.89 pH	19.17 °C	746.46 µS/cm	2.39 mg/L	8.72 NTU	-82.9 mV	27.26 ft	200.00 ml/min
11/21/2023 11:47 AM	01:40:00	6.89 pH	19.19 °C	746.21 µS/cm	2.43 mg/L	6.08 NTU	-76.6 mV	27.26 ft	200.00 ml/min
11/21/2023 11:52 AM	01:45:00	6.89 pH	19.18 °C	743.14 µS/cm	2.37 mg/L	5.07 NTU	-76.7 mV	27.26 ft	200.00 ml/min
11/21/2023 11:57 AM	01:50:00	6.89 pH	19.17 °C	745.87 µS/cm	2.52 mg/L	4.92 NTU	-77.5 mV	27.26 ft	200.00 ml/min
11/21/2023 12:02 PM	01:55:00	6.89 pH	19.16 °C	745.43 µS/cm	2.55 mg/L	4.90 NTU	-77.7 mV	27.26 ft	200.00 ml/min
11/21/2023 12:04 PM	01:57:41	6.89 pH	19.16 °C	746.39 µS/cm	2.44 mg/L	4.20 NTU	-78.3 mV	27.26 ft	200.00 ml/min
11/21/2023 12:09 PM	02:02:41	6.89 pH	19.18 °C	745.93 µS/cm	2.36 mg/L	4.17 NTU	-78.2 mV	27.26 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-07	Grab.

Low-Flow Test Report:

Test Date / Time: 11/21/2023 1:37:21 PM
Project: Plant Hammond
Operator Name: Elisabeth Russell

Location Name: PT-08 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 32.00 ft** **Total Depth: 42.00 ft** **Initial Depth to Water: 26.44 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 37.00 ft** **Estimated Total Volume Pumped: 11.25 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 0.03 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883533**

Test Notes:
Five Bottles: App III AND IV (No RADs) and Major Ions

Fe: 7.0 mg/L

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 1:37 PM	00:00	6.83 pH	18.97 °C	732.45 µS/cm	1.32 mg/L	18.00 NTU	-52.2 mV	26.44 ft	150.00 ml/min
11/21/2023 1:42 PM	05:00	6.82 pH	18.97 °C	684.25 µS/cm	1.33 mg/L	26.80 NTU	-52.3 mV	26.42 ft	150.00 ml/min
11/21/2023 1:47 PM	10:00	6.83 pH	18.97 °C	733.97 µS/cm	1.52 mg/L	23.60 NTU	-52.4 mV	26.42 ft	150.00 ml/min
11/21/2023 1:52 PM	15:00	6.83 pH	18.97 °C	595.78 µS/cm	1.38 mg/L	15.00 NTU	-52.6 mV	26.43 ft	150.00 ml/min
11/21/2023 1:57 PM	20:00	6.84 pH	18.97 °C	686.24 µS/cm	1.49 mg/L	10.80 NTU	-55.4 mV	26.45 ft	150.00 ml/min
11/21/2023 2:02 PM	25:00	6.84 pH	18.99 °C	734.15 µS/cm	1.68 mg/L	7.51 NTU	-59.0 mV	26.46 ft	150.00 ml/min
11/21/2023 2:07 PM	30:00	6.83 pH	18.99 °C	769.28 µS/cm	1.37 mg/L	6.39 NTU	-52.7 mV	26.46 ft	150.00 ml/min
11/21/2023 2:12 PM	35:00	6.83 pH	18.97 °C	735.52 µS/cm	1.48 mg/L	4.82 NTU	-51.1 mV	26.46 ft	150.00 ml/min
11/21/2023 2:17 PM	40:00	6.81 pH	18.98 °C	735.32 µS/cm	0.06 mg/L	3.82 NTU	-50.0 mV	26.46 ft	150.00 ml/min
11/21/2023 2:22 PM	45:00	6.83 pH	18.98 °C	701.70 µS/cm	1.30 mg/L	3.74 NTU	-56.1 mV	26.47 ft	150.00 ml/min
11/21/2023 2:27 PM	50:00	6.84 pH	18.99 °C	734.95 µS/cm	1.39 mg/L	4.60 NTU	-58.0 mV	26.47 ft	150.00 ml/min
11/21/2023 2:32 PM	55:00	6.83 pH	19.00 °C	734.64 µS/cm	1.51 mg/L	4.04 NTU	-51.0 mV	26.47 ft	150.00 ml/min
11/21/2023 2:37 PM	01:00:00	6.83 pH	18.99 °C	749.39 µS/cm	1.33 mg/L	4.12 NTU	-50.5 mV	26.47 ft	150.00 ml/min

Samples

Sample ID:	Description:
HAM-PT-08	Grab.

Calibration Reports

July 2023

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Mana Neely | Date: 8/13/23 | Time (start): 0850 | Time (finish): 0910

smarTroll SN: 884187 | Turbidity Meter Type: LaMote 2020we | SN: 7009-1416

Weather Conditions: 73-91, 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)	222501 53 11/23	25.72	4490	4122.4	4487.6	+/- 5 %	(Yes) No	
pH (4)			4.00	4.02	4.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (4) check	–	–	4.00	–	–	+/- 0.1 SU	Yes No	
pH (7)	22168933 11/23	25.7	7.00	7.35	7.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (7) check	–	–	7.00	–	–	+/- 0.1 SU	Yes No	
pH (10)	21320202 12/23	25.5	10.00	10.3	10.0	+/- 0.1 SU	(Yes) No	
Mid-Day pH (10) check	–	–	10.00	–	–	+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/23	24.72	228	215.4	227.7	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	101.11%	100.00%	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0	0.20	0.06	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1.00	0.71	0.81	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			10.00	11.36	9.99	+/- 0.5 NTU	(Yes) No	

August 2023

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: C-CAIN | Date: 8/9/23 | Time (start): 0815 | Time (finish): 0845

smarTroll SN: 883553 | Turbidity Meter Type: LaMotte 2020 | 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	~~4574.8 8044/9/23~~ 4490	4573.5	4490	+/- 5 %	(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)	22C8993 11/23	23.43	7.0	7.05	7.0	+/- 0.1 SU	(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	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	Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	95.23	100	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0	0.00	0.00	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1	1.43	1.13	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			10	10.75	10	+/- 0.5 NTU	(Yes) No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: A. Szwast | Date: 8/9/2023 | Time (start): 1145 | Time (finish): 1205

smarTroll SN: 883530 | Turbidity Meter Type: LaMotte 2020t | SN: 4139-2623

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 11/2023	24.50	4,490	4250.9	4490.0	+/- 5 %	Yes No	
pH (4)			4.00	4.45	4.00	+/- 0.1 SU	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	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	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	Yes No	
DO (%) (1pt, 100% water saturated air cal)			~~101.24~~ 100.00 8-9-2023	101.24	100.0	+/- 6 % saturation	Yes No	
Turbidity 0 NTU			0.00	0.00	—	+/- 0.5 NTU	Yes No	
Turbidity 1 NTU			1.00	1.08	—	+/- 0.5 NTU	Yes No	
Turbidity 10 NTU			10.00	10.7	9.89	+/- 0.5 NTU	Yes No	

Geosyntec consultants

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	3.94	4.00	+/- 0.1 SU	(Yes) 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	(Yes) No	
Mid-Day pH (7) check	↓					+/- 0.1 SU	Yes No	
pH (10)	21320202 12/23	23.70	10.0	10.6	10.0	+/- 0.1 SU	(Yes) No	
Mid-Day pH (10) check	↓					+/- 0.1 SU	Yes No	
ORP (mV)	21390149 11/23	23.85	228	230.90	228	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)			100 %	102.36 %	100 %	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0.0	0.0	0.0	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1.0	1.0	1.0	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			10.0	11.1	10.4	+/- 0.5 NTU	(Yes) No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Thomas Kessler

Date: 8/9/23

Time (start): 0800

Time (finish): 0825

smarTroll SN: 850729

Turbidity Meter Type: LaMotte 2020we

SN: 1475-4011

Weather Conditions: Sunny 75°

Facility and Unit: Plant Hammond

Project No.: GW6881

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	21.91	4490	4562	4490	+/- 5 %	(Yes) No	
pH (4)	11/23		4	4.04	4.0	+/- 0.1 SU	(Yes) No	
Mid-Day pH (4) check	↓	29	4	4.03	—	+/- 0.1 SU	(Yes) No	
pH (7)	2216893 11/23	22.77	~~7.06~~ 7.00	7.06	7.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (7) check	↓	29	7	6.98	—	+/- 0.1 SU	(Yes) No	
pH (10)	21380202 12/23	22.62	10.00	10.01	10.0	+/- 0.1 SU	(Yes) No	
Mid-Day pH (10) check	↓	29	10	9.91	—	+/- 0.1 SU	(Yes) No	
ORP (mV)	2276085 8/23		228	227.7	228	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)			100	99.08	100	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0	.53	0	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1	.56	.93	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			10	10.35	10.1	+/- 0.5 NTU	(Yes) No	

Field Instrumentation Calibration Form

Site Name: Plant Hammond

Date: 8/30/23

Calibrated By: T. Hessler

Field Conditions: Cloudy, 75°

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter		
Turbidity Meter		

Calibration Standard Information

Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24[illegible].44	5/24	YSI
pH (SU)	4.00	24000044	5/24	
pH (SU)	7.00	22790439	4/24	
pH (SU)	10.00	22116156	4/24	
D.O. (%)	N/A	—	—	
ORP (mV)	228.0	24600285	4/24	

Calibration

Time Start

Time Finish

Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	22.8	± 10% of standard	EPA 2023
pH (SU)	4.00	4.6 4.01	22.75	± 0.1	GWMP
pH (SU)	7.00	7.01	22.98	± 0.1	GWMP
pH (SU)	10.00	10.00	23.11	± 0.1	GWMP
D.O. (%)	N/A	100	—	± 10%	NA
ORP (mV)	228.0	229	23.05	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	0	0	± 10% of standard	EPA 2023
	1	1.00		
	10	10.20		

Calibration Check

Time Start 1314

Time Finish

Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4300	23.5	± 10% of standard	EPA 2023
pH (SU)	4.00	6.3	23.8	± 0.1	GWMP
pH (SU)	7.00	9.7	22.9	± 0.1	GWMP
pH (SU)	10.00	11.5	24.1	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	0	0	± 10% of standard	EPA 2023
	1	1.02		
	10	9.99		

Notes: meter does not seem to hold cal. suspect pH.

October 2023

Field Instrumentation Calibration Form

Site Name: Plant Hammond

Date: 10/3/2023

Calibrated By: T. Hess

Field Conditions: clear, 55°

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Insitu Aquaread	850724
Turbidity Meter	hach	→

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24000041	5/24	↓
pH (SU)	4.00	↓	↓	↓
pH (SU)	7.00	22240134	4/24	↓
pH (SU)	10.00	22116130	4/24	↓
D.O. (%)	N/A	—	—	↓
ORP (mV)	228.0	24100258	6/24	↓

Calibration					
Time Start 0820		Time Finish 0855			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	18.97	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	18.72	± 0.1	GWMP
pH (SU)	7.00	7.00	19.27	± 0.1	GWMP
pH (SU)	10.00	10.00	19.30	± 0.1	GWMP
D.O. (%)	N/A	100	18.63	± 10%	NA
ORP (mV)	228.0	228	18.51	± 10	EPA 2023
		261			

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.4	± 10% of standard	EPA 2023
	100	99.9		
	800	761		

Calibration Check					
Time Start 1310		Time Finish 1320			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	~~20.44~~	~~25.12.4~~	± 10% of standard	EPA 2023
pH (SU)	4.00	4.08	24.83	± 0.1	GWMP
pH (SU)	7.00	7.01	23.74	± 0.1	GWMP
pH (SU)	10.00	9.98	22.67	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.1	± 10% of standard	EPA 2023
	100	101		
	800	789		

Notes:

~~Real conductivity = 0~~

cond. 4265.0

Field Instrumentation Calibration Form

Site Name: Plant Hammond

Date: 10/03/2023

Field Conditions: Sunny

Calibrated By: M. Sadhasivan

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquaread	850853
Turbidity Meter	N/A	N/A

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24000444	05/2024	–
pH (SU)	4.00	24000444	05/2024	–
pH (SU)	7.00	22890139	04/2024	–
pH (SU)	10.00	21320202	12/2023	–
D.O. (%)	N/A	24 –	–	–
ORP (mV)	228.0	24002258	06/2024	–

Calibration					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	17.26	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	17.07	± 0.1	GWMP
pH (SU)	7.00	7.00	18.06	± 0.1	GWMP
pH (SU)	10.00	10.00	17.93	± 0.1	GWMP
D.O. (%)	N/A	100.1		± 10%	NA
ORP (mV)	228.0	228	18.21	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)		MS	± 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			± 10% of standard	EPA 2023
pH (SU)	4.00			± 0.1	GWMP
pH (SU)	7.00			± 0.1	GWMP
pH (SU)	10.00		MS	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)		MS	± 10% of standard	EPA 2023

Notes:

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 10/10/23

Calibrated By: T. Hessler

Field Conditions: clear 50°

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	aquaticall 400	88356
Turbidity Meter	lamotte	2754-2617

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	2410660044	5/24	ins. tu
pH (SU)	4.00	↓	↓	
pH (SU)	7.00	2210139	4/24	
pH (SU)	10.00	2211030	4/24	
D.O. (%)	N/A			
ORP (mV)	228.0	2410075K	4/24	↓

Calibration					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	17.41	± 10% of standard	EPA 2023
pH (SU)	4.00	4	17.51	± 0.1	GWMP
pH (SU)	7.00	7.0	17.63	± 0.1	GWMP
pH (SU)	10.00	10.0	17.54	± 0.1	GWMP
D.O. (%)	N/A	100	100	± 10%	NA
ORP (mV)	228.0	228	19.55	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	0	0	± 10% of standard	EPA 2023
	1	0.99		
	10	9.87		

Calibration Check					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	3757	24.29	± 10% of standard	EPA 2023
pH (SU)	4.00	6.96	24.79	± 0.1	GWMP
pH (SU)	7.00	10.15	24.80	± 0.1	GWMP
pH (SU)	10.00	17.60	24.47	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	0	0	± 10% of standard	EPA 2023
	1	1.05		
	10	10.09		

Notes: Recal pH/cond - Replace pH Ref. Solution

cond = 4490

pH4 = 4.0

pH7 = 7.0

pH10 = 10.0

Site Name: Peart Hammond

Field Instrumentation Calibration Form

Date: 10-17

Calibrated By: Zain Webb

Field Conditions: Clear. 50°F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	AquaTroll 400	884189
Turbidity Meter	LaMotte 2020t	4104-2623

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	4,490	24000044	05/24	AIR
pH (SU)	4.00	24000044	05/24	AIR
pH (SU)	7.00	22240134	04/24	AIR
pH (SU)	10.00	22110130	04/24	AIR
D.O. (%)	N/A	-	-	-
ORP (mV)	228.0	24007258	06/24	AIR

Calibration					
Time Start		**Time Finish**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4490	14.75	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	14.22	± 0.1	GWMP
pH (SU)	7.00	7.00	14.77	± 0.1	GWMP
pH (SU)	10.00	10.00	15.25	± 0.1	GWMP
D.O. (%)	N/A	100.3	18.69	± 10%	NA
ORP (mV)	228.0	228	15.14	± 10	EPA 2023

	Standard	**Calibration Value**	**Acceptance Criteria**	**Reference**
Turbidity (NTU)	0	0.00	± 10% of standard	EPA 2023
	1	1.03		
	10	9.9		

Calibration Check					
Time Start		**Time Finish**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	—	—	± 10% of standard	EPA 2023
pH (SU)	4.00	—	—	± 0.1	GWMP
pH (SU)	7.00	—	—	± 0.1	GWMP
pH (SU)	10.00	—	—	± 0.1	GWMP

	Standard	**Calibration Value**	**Acceptance Criteria**	**Reference**
Turbidity (NTU)	—	—	± 10% of standard	EPA 2023
	—	—		
	—	—		
	—	—		

Notes:

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 10-17

Calibrated By: Hudson K.

Field Conditions: Clear. 50°F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	AquaTroll 400	850724
Turbidity Meter	LaMotte 2020e	1495-4011

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24000044	05/24	AIR
pH (SU)	4.00	24000044	05/24	AIR
pH (SU)	7.00	22290139	04/24	AIR
pH (SU)	10.00	22110130	04/24	AIR
D.O. (%)	N/A	–	–	–
ORP (mV)	228.0	24002258	06/24	AIR

Calibration					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	14.7	± 10% of standard	EPA 2023
pH (SU)	4.00	4.01	14.87	± 0.1	GWMP
pH (SU)	7.00	7.00	14.68	± 0.1	GWMP
pH (SU)	10.00	10.01	15.03	± 0.1	GWMP
D.O. (%)	N/A	180.1	10.08	± 10%	NA
ORP (mV)	228.0	228	14.91	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	0		± 10% of standard	EPA 2023
	1	.98		
	10	9.93		

Calibration Check					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	—	—	± 10% of standard	EPA 2023
pH (SU)	4.00	—	—	± 0.1	GWMP
pH (SU)	7.00	—	—	± 0.1	GWMP
pH (SU)	10.00	—	—	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	—	—	± 10% of standard	EPA 2023
	—	—		
	—	—		
	—	—		

Notes:

Site Name: Hammond (AP-1, AP-2) **Field Instrumentation Calibration Form** Date: 10/24/23

Calibrated By: Alex Brown Field Conditions: 50F Sunny

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	In Situ / Aquatroll	952627
Turbidity Meter	LaMotte 2020we	1511-4111

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	4,490	24000044	5/24	Autocal
pH (SU)	4.00	24000044	5/24	AutoCal
pH (SU)	7.00	22290139	04/24	↓
pH (SU)	10.00	22110130	04/24	
D.O. (%)	N/A	—	—	
ORP (mV)	228.0	24002258	06/24	

Calibration					
Time Start 0810		**Time Finish** 0840			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4490	17.16	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	17.07	± 0.1	GWMP
pH (SU)	7.00	7.00	17.41	± 0.1	GWMP
pH (SU)	10.00	10.00	17.74	± 0.1	GWMP
D.O. (%)	N/A	100.7	16.51	± 10%	NA
ORP (mV)	228.0	228.0	17.66	± 10	EPA 2023

	Standard	**Calibration Value**	**Acceptance Criteria**	**Reference**
Turbidity (NTU)	1.00	1.01	± 10% of standard	EPA 2023
	10.00	10.00		
	0	0		
	—	—		

Calibration Check					
Time Start 1430		**Time Finish** 1445			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4490	23.43	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	23.02	± 0.1	GWMP
pH (SU)	7.00	7.00	23.82	± 0.1	GWMP
pH (SU)	10.00	10.00	23.78	± 0.1	GWMP

	Standard	**Calibration Value**	**Acceptance Criteria**	**Reference**
Turbidity (NTU)	1.00	1.00	± 10% of standard	EPA 2023
	10.00	10.00		
	0	0		
	—	—		

Notes:

Site Name: Hammond

Field Instrumentation Calibration Form

Date: 10-31-23

Calibrated By: Zain Webb

Field Conditions: Cloudy, 45°F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	In-Situ Aqua Troll 400	873593
Turbidity Meter	HACH 2100Q	22090800086

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24000074	05/24	AIR
pH (SU)	4.00	↓	↓	↓
pH (SU)	7.00	22290139	04/24	↓
pH (SU)	10.00	22110130	04/24	↓
D.O. (%)	N/A	—	—	↓
ORP (mV)	228.0	24002258	06/24	↓

Calibration					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	13.31	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	13.53	± 0.1	GWMP
pH (SU)	7.00	7.00	14.94	± 0.1	GWMP
pH (SU)	10.00	10.00	15.35	± 0.1	GWMP
D.O. (%)	N/A	—	—	± 10%	NA
ORP (mV)	228.0	228	15.12	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	10	10	± 10% of standard	EPA 2023
	20	20		
	100	106		
	800	800		

Calibration Check					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	17.18	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	16.09	± 0.1	GWMP
pH (SU)	7.00	7.00	16.71	± 0.1	GWMP
pH (SU)	10.00	10.00	16.58	± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	10	10	± 10% of standard	EPA 2023
	20	20		
	100	100		
	800	800		

Notes

Site Name Plant Hammond

Field Instrumentation Calibration Form

Date 10/31/2023

Calibrated By Elisabeth Russell

Field Conditions cold, cloudy

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	InSitu Aquatroll 600	980712
Turbidity Meter	HACH 2100Q	22090D 000344

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	4,490	24000044	5/2024	AIR
pH (SU)	4.00	24000044	5/2024	AIR
pH (SU)	7.00	22290139	4/2024	AIR
pH (SU)	10.00	22110130	4/2024	AIR
D.O. (%)	N/A	N/A	N/A	AIR
ORP (mV)	228.0	24002258	6/2024	AIR

Calibration					
Time Start 1050		**Time Finish** 1120			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4490	15.52	± 10% of standard	EPA 2023
pH (SU)	4.00	4.0	14.81	± 0.1	GWMP
pH (SU)	7.00	7.0	15.52	± 0.1	GWMP
pH (SU)	10.00	10.0	15.68	± 0.1	GWMP
D.O. (%)	N/A	100.1	15.27	± 10%	NA
ORP (mV)	228.0	228	15.62	± 10	EPA 2023

	Standard	**Calibration Value**	**Acceptance Criteria**	**Reference**
Turbidity (NTU)	10.0	10.9	± 10% of standard	EPA 2023
	20.0	20.3		
	100.0	101.0		
	800.0	822.0		

Calibration Check					
Time Start		**Time Finish**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4490	22.57	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	22.60	± 0.1	GWMP
pH (SU)	7.00	7.00	21.28	± 0.1	GWMP
pH (SU)	10.00	10.00	20.14	± 0.1	GWMP

	Standard	**Calibration Value**	**Acceptance Criteria**	**Reference**
Turbidity (NTU)	10.0	10.7	± 10% of standard	EPA 2023
	20.0	20.8		
	100.0	103.0		
	800.00	828.0		

Notes:

November 2023

Site Name: Hammond

Field Instrumentation Calibration Form

Date: ~~11-6-23~~ 11-7-23

Calibrated By: Zain Webb

Field Conditions: Clear, 50°F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	In Situ AquaTroll 600	930712
Turbidity Meter	HACH 2100Q	15050C081579

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24060046	05/24	ATR
pH (SU)	4.00	↓	↓	↓
pH (SU)	7.00	22240139	04/24	
pH (SU)	10.00	22110130	04/24	
D.O. (%)	N/A	—	—	
ORP (mV)	228.0	24002258	06/24	

Calibration					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	17.76	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	17.98	± 0.1	GWMP
pH (SU)	7.00	7.00	18.07	± 0.1	GWMP
pH (SU)	10.00	10.00	18.07	± 0.1	GWMP
D.O. (%)	N/A	100.2	~~15.48~~ 21.48	± 10%	NA
ORP (mV)	228.0	228.0	17.80	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	10	± 10% of standard	EPA 2023
	20	20		
	100	100		
	800	800		

Calibration Check					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	21.84	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	22.37	± 0.1	GWMP
pH (SU)	7.00	7.00	21.27	± 0.1	GWMP
pH (SU)	10.00	10.00	20.78	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	10	± 10% of standard	EPA 2023
	20	20		
	100	100		
	800	800		

Notes:

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 11/14/23

Calibrated By: Zain Webb

Field Conditions: Cloudy, 50°F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	In-Situ AquaTroll 600	843285
Turbidity Meter	Hach 2100Q	22090D000285

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	2400686411	05/24	YSI
pH (SU)	4.00	↓	↓	↑
pH (SU)	7.00	22290139	04/24	
pH (SU)	10.00	22110130	04/24	
D.O. (%)	N/A	—	—	
ORP (mV)	228.0	24002258	06/24	↓

Calibration					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	15.38	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	15.56	± 0.1	GWMP
pH (SU)	7.00	7.00	15.82	± 0.1	GWMP
pH (SU)	10.00	10.00	15.96	± 0.1	GWMP
D.O. (%)	N/A	100%	14.41	± 10%	NA
ORP (mV)	228.0	228.0	15.60	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	10	± 10% of standard	EPA 2023
	20	20		
	100	100		
	800	800		

Calibration Check					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	21.63	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	21.72	± 0.1	GWMP
pH (SU)	7.00	7.00	20.73	± 0.1	GWMP
pH (SU)	10.00	10.00	20.07	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	10	± 10% of standard	EPA 2023
	20	20		
	100	100		
	800	800		

Notes:

DO cal error; had to recalibrate

/

Invalid sensor calibration

\

Fixed once sponge was properly positioned

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 11/21/23

Calibrated By: Elisabeth Russell

Field Conditions: 60°, rainy

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	YSI 600	883533
Turbidity Meter	Hach 2100Q	22690C 0000086

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24000044	5/24	YSI
pH (SU)	4.00	24006044	5/24	YSI
pH (SU)	7.00	22290139	4/24	YSI
pH (SU)	10.00	22110130	4/24	YSI
D.O. (%)	N/A	—	—	YSI
ORP (mV)	228.0	24012358	6/24	YSI

Calibration					
Time Start	750	Time Finish	852		
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4,490	17.99 ER 11-21-23	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	18.08	± 0.1	GWMP
pH (SU)	7.00	7.00	18.23	± 0.1	GWMP
pH (SU)	10.00	10.00	18.35	± 0.1	GWMP
D.O. (%)	N/A	100%	12.01 ER 11-21-23	± 10%	NA
ORP (mV)	228.0	228	17.33	± 10	EPA 2023

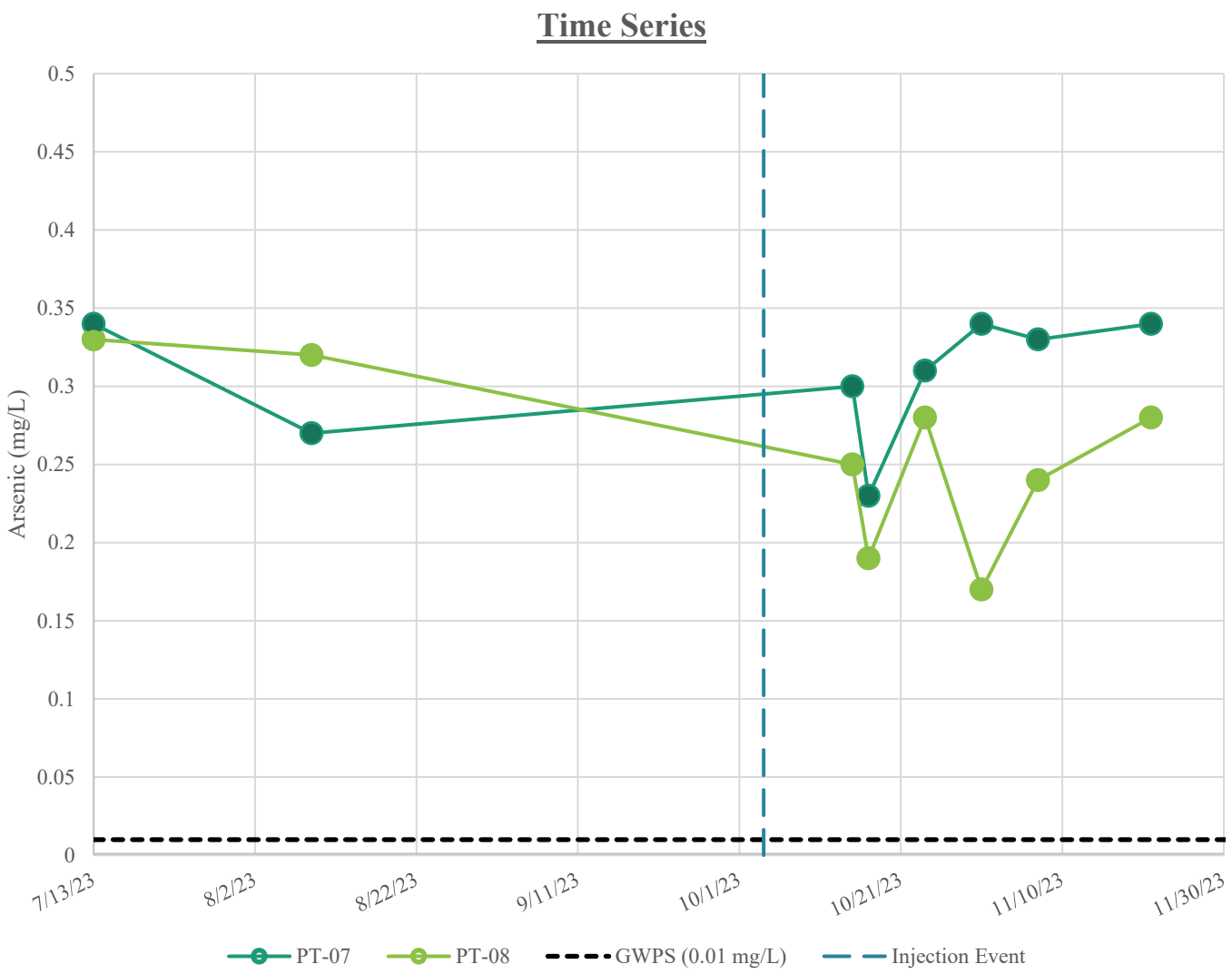
	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	9.93	± 10% of standard	EPA 2023
	20	20.3		
	100	101		
	800	820		

Calibration Check					
Time Start	1250	Time Finish	1310		
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	19.73	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	19.02	± 0.1	GWMP
pH (SU)	7.00	7.00	19.71	± 0.1	GWMP
pH (SU)	10.00	10.00	19.15	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	10	± 10% of standard	EPA 2023
	20	20		
	100	100		
	800	800		

Notes:

Time Series Plots



Notes:
1. mg/L = milligrams per liter
2. GWPS = Groundwater Protection Standard

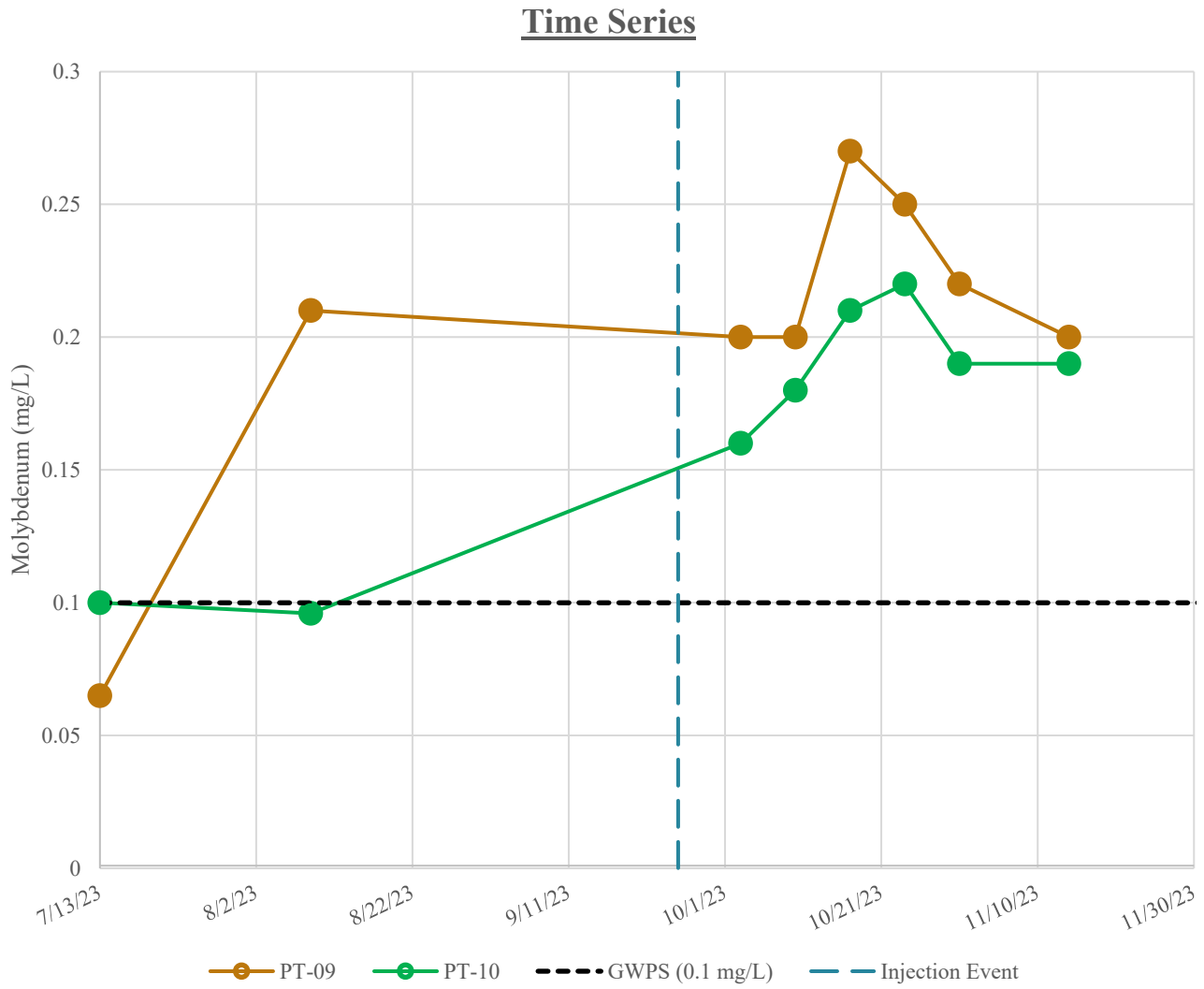
TIME SERIES – HGWC-13 PILOT STUDY AREA

GEORGIA POWER COMPANY
PLANT HAMMOND AP-1
ROME, FLOYD COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA | JANUARY 2024



Notes:
1. mg/L = milligrams per liter
2. GWPS = Groundwater Protection Standard

TIME SERIES – HGWC-8 PILOT STUDY AREA

GEORGIA POWER COMPANY
PLANT HAMMOND AP-1
ROME, FLOYD COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

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

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SECTION **PAGE**

GEOCHECK ADDENDUM

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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).

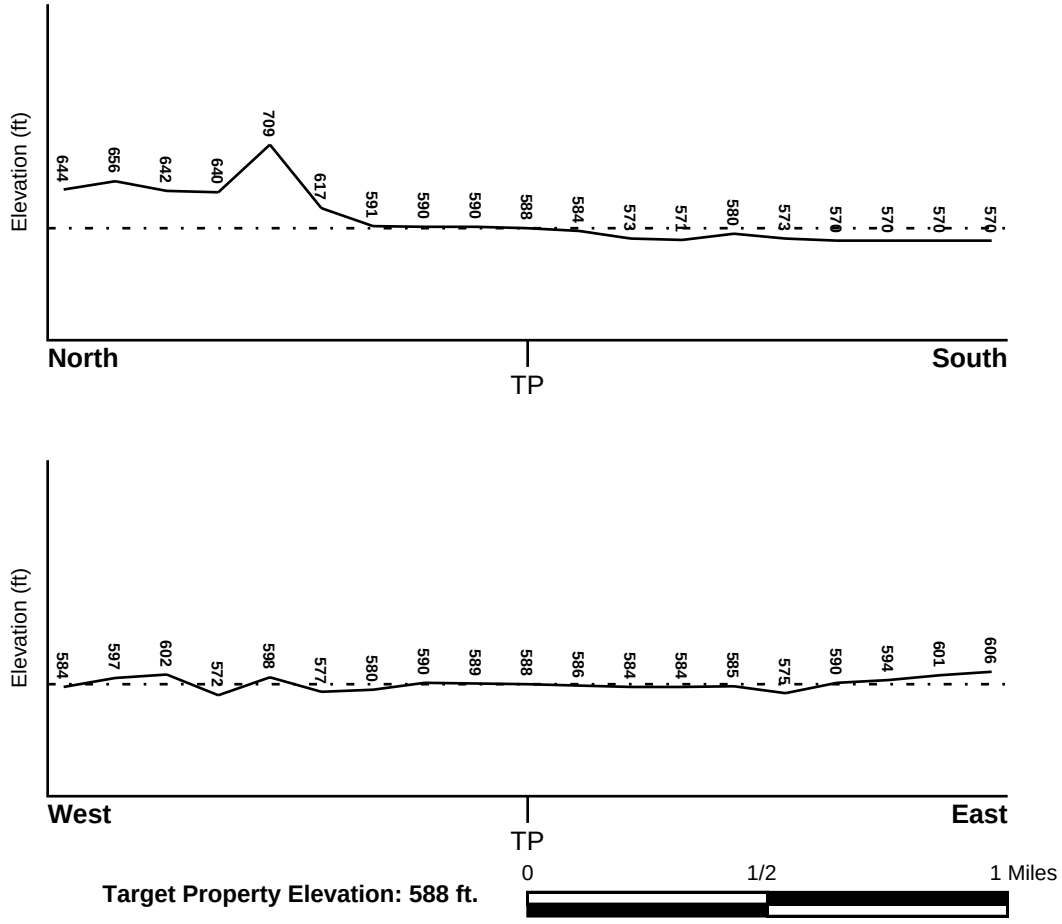
TOPOGRAPHIC INFORMATION

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

Flood Plain Panel at Target Property	FEMA Source Type
13115C0163E	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
13115C0164E	FEMA FIRM Flood data
13115C0252E	FEMA FIRM Flood data
13115C0251E	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
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.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
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							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
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	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	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

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	2.000
Federal FRDS PWS	2.000
State Database	2.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
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

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

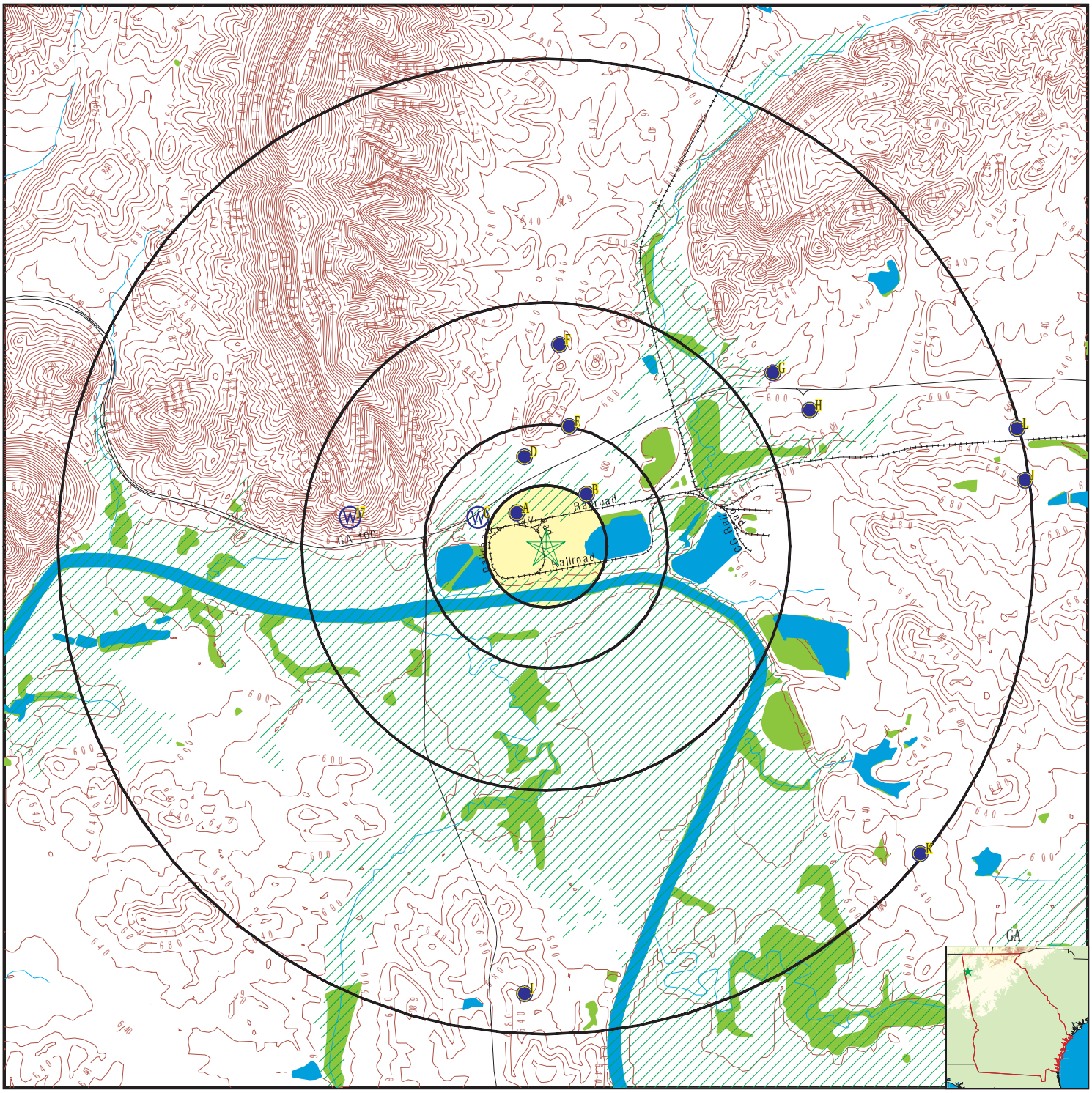
MAP ID	WELL ID	LOCATION FROM TP
A2	0000004171	1/8 - 1/4 Mile NW
B4	0000004172	1/8 - 1/4 Mile NNE
C5	0000004168	1/4 - 1/2 Mile WNW
C6	0000004169	1/4 - 1/2 Mile WNW
D8	0000004175	1/4 - 1/2 Mile North
B10	0000004173	1/4 - 1/2 Mile NE
D11	0000004177	1/4 - 1/2 Mile NNW
E14	0000004181	1/4 - 1/2 Mile North
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

MAP ID	WELL ID	LOCATION FROM TP
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



County Boundary
Major Roads
Contour Lines
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

0 1/2 1 2 Miles

Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location
100-year flood zone
500-year flood zone
National Wetland Inventory
Wildlife Areas

SITE NAME:	Plant Hammond	CLIENT:	Geosyntec Consultants
ADDRESS:	5963 Alabama Hwy Rome GA 30165	CONTACT:	Anthony Szwast
		INQUIRY #:	07486316.1r
LAT/LONG:	34.252258 / 85.346763	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

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 **0000004168**

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:	0000004168

C6
WNW
1/4 - 1/2 Mile
Higher

GA WELLS **0000004169**

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:	0000004169

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 **0000004170**

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:	0000004170

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 **0000004188**

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:	0000004188

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

	Database	EDR ID Number
G20 **NE** **1 - 2 Miles** **Lower**	**GA WELLS**	**0000004185**

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:	0000004185

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

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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

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H23 **ENE** **1 - 2 Miles** **Higher**		**GA WELLS**	**0000004180**
County code:	115	Well num:	03JJ17
Remarks:	C.W. AKRIDGE	Lat:	341535
Lon:	0851942	Latlon datum:	NAD27
Alt:	605	Alt datum:	NGVD29

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

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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

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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

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 **FED USGS** **USGS40000266908**
1 - 2 Miles
Higher

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 **GA WELLS** **0000004178**
1 - 2 Miles
Higher

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 **FED USGS** **USGS40000266966**
1 - 2 Miles
Higher

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

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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

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
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^{R} 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