Prepared for

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

2023 SEMIANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

PLANT HAMMOND ASH POND 1 (AP-1)

Prepared by

engineers | scientists | innovators

1255 Roberts Boulevard, Suite 200
Kennesaw, Georgia 30144

Project Number GW6581E

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Geosyntec
consultants

CERTIFICATION STATEMENT

This *2023 Semiannual 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.

Whitney B. Law
Georgia Professional Engineer No. 36641

August 31, 2023
Date

SUMMARY

This summary of the *2023 Semiannual Groundwater Monitoring and Corrective Action Report* provides the status of the groundwater monitoring and corrective action program for the reporting period of January through July 2023 (referred to herein as the "semiannual 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 semiannual reporting period, the Site remained in assessment monitoring as corrective measures are being evaluated.

During the semiannual reporting period, Geosyntec conducted one groundwater sampling event in January 2023 in support of the assessment monitoring program. Groundwater

[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

samples were submitted to Pace Analytical Services, LLC, for analysis. Per the federal CCR Rule, groundwater data from the semiannual assessment monitoring event conducted during the semiannual 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 semiannual reporting period.

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

[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.

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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
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 Semiannual 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 July 2023 (referred to herein as the semiannual 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 is 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 Initial Written Closure Plan, published in 2016 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**.

2.0 GROUNDWATER MONITORING ACTIVITIES

In accordance with § 257.90(e), the following describes monitoring-related activities performed during the semiannual 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 provide additional data to define groundwater flow direction, gradients, and characterize groundwater quality downgradient of AP-1. PT-07, PT-08, PT-09, and PT-10 were installed to specifically monitor the performance of the pilot study injections scheduled for August 2023 in support of the ACM program.

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

2.2 Assessment Monitoring

Georgia Power initiated an assessment monitoring program for groundwater at AP-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 first semiannual assessment monitoring event was conducted in January 2023. The wells sampled and the dates the samples were collected at AP-1 during the semiannual reporting period are summarized in **Table 2**. Details of these events and analytical results are discussed in Section 3.

2.3 Additional Groundwater Evaluations

Pre-design investigations (PDI) 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. These analytical results were used to determine the locations and depths of pilot study injection and performance monitoring piezometers. The results were summarized in *HGWC-8 Pilot Study Workplan* (Geosyntec, 2023a) and *HGWC-13 Pilot Study Workplan* (Geosyntec, 2023b).

Baseline sampling of the performance monitoring piezometers (PT-07, PT-08, PT-09, and PT-10) was performed in July 2023. These analytical results will be summarized in the next semiannual groundwater monitoring report and a comprehensive technical memorandum that will be prepared at the conclusion of the pilot study for inclusion in a subsequent semiannual groundwater monitoring report. Field and laboratory reports will also be included in next semiannual groundwater monitoring report.

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 semiannual 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 2023 assessment monitoring event and used to calculate the corresponding groundwater elevations, which are presented in **Table 3**. The January 2023 groundwater elevations are generally representative of the groundwater elevations reported for prior monitoring events.

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 2023 as the staff gauge was reportedly removed in preparation of the closure construction activities.

The groundwater and surface water elevation data were used to prepare a potentiometric surface map for the January 2023 gauging event, which is presented on **Figure 3**. 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 2023 gauging event. 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 gauging event. The general trajectory of the flow paths used in the calculations and associated potentiometric contour lines are shown on **Figure 3**. The calculated average hydraulic gradients along the southerly and easterly groundwater flow path lines associated with AP-1 for the semiannual reporting period is 0.017 feet per foot (ft/ft).

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 2023 gauging event, the average groundwater flow velocity in the vicinity of AP-1 for the semiannual reporting period was calculated to be 1.3 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 LaMotte 2020we portable turbidity meter. 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 semiannual reporting period are provided in **Appendix B**.

3.4 Laboratory Analyses

Laboratory analyses were performed by Pace Analytical, which is accredited by the National Environmental Laboratory Accreditation Program (NELAP). Pace Analytical maintains a NELAP certification for the Appendix III and Appendix IV constituents analyzed for this project. Analytical methods used for groundwater sample analyses, and associated results, are listed in the analytical laboratory reports included in **Appendix B**. The groundwater analytical results from the semiannual reporting period are summarized in **Table 5**.

3.5 Quality Assurance and Quality Control Summary

Quality assurance/quality control (QA/QC) samples were collected during the groundwater monitoring 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 data are considered usable for meeting project objectives, and the results are considered valid. The associated data validation reports are provided in **Appendix B**, along with the laboratory reports.

4.0 STATISTICAL ANALYSIS

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

4.1 Statistical Methods

Groundwater data from the semiannual 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 C** and summarized in Sections 4.1.1 and 4.1.2. The GWPS were finalized pursuant to § 257.95(d)(2) and presented in **Table 6**.

4.1.1 Appendix III Statistical Methods

Based on guidance from GA EPD, statistical tests used to evaluate the groundwater monitoring data consist of interwell prediction limits (PLs) combined with a 1-of-2 verification resample plan for each of the Appendix III constituents. Interwell PLs pool upgradient well data to establish a background limit for an individual constituent, and the most recent sample from each downgradient well is compared to the same limit for each constituent. The most recent sample from each downgradient well is compared to the background limit to 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 C**, 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 semiannual 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 C**). No statistically significant trends were identified during this reporting cycle.

4.2.2 Summary of Statistical Analyses

The SSLs identified for the semiannual 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 C**.

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 2023 semiannual assessment monitoring event were used to generate the arsenic and molybdenum iso-concentration maps presented on **Figures 4** and **5**, respectively.

5.1 Alternate Source Demonstrations

An 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.

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. On June 30, 2023, Georgia Power submitted separate workplans for HGWC-8 and HGWC-13 to GA EPD outlining the design and implementation of this pilot study (Geosyntec, 2023a, 2023b). Updates concerning the pilot study results will be reported to GA EPD as brief summaries included as part of semiannual groundwater monitoring and corrective action reporting. A

comprehensive technical memorandum will be prepared at the conclusion of the pilot study for inclusion in a 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.

7.0 CONCLUSIONS AND FUTURE ACTIONS

This *2023 Semiannual 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 semiannual 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 scheduled for August 2023. 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 pilot study for inclusion in a 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 July 26, 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	Status of Monitoring Well
Purpose of Sampling Event:		**Assessment**	
Detection Monitoring Well			
HGWA-1	Upgradient	X	Assessment
HGWA-2	Upgradient	X	Assessment
HGWA-3	Upgradient	X	Assessment
HGWA-43D	Upgradient	X	Assessment
HGWA-44D	Upgradient	X	Assessment
HGWC-7	Downgradient	X	Assessment
HGWC-8	Downgradient	X	Assessment
HGWC-9	Downgradient	X	Assessment
HGWC-10	Downgradient	X	Assessment
HGWC-11	Downgradient	X	Assessment
HGWC-12	Downgradient	X	Assessment
HGWC-13	Downgradient	X	Assessment
Assessment Monitoring Well			
MW-5	Downgradient	X	Assessment
MW-6	Downgradient	X	Assessment
MW-7	Downgradient	X	Assessment
MW-19	Downgradient	X	Assessment
MW-20	Downgradient	X	Assessment
MW-24D	Downgradient	X	Assessment
MW-25D	Downgradient	X	Assessment
MW-26D	Downgradient	X	Assessment
MW-27D	Downgradient	X	Assessment
MW-28D	Downgradient	X	Assessment
MW-29	Downgradient	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	
		Depth to Water (ft BTOC)	Groundwater Elevation [1] (ft)
Detection Monitoring Well			
HGWA-1	595.21	10.25	584.96
HGWA-2	587.92	8.05	579.87
HGWA-3	587.74	7.50	580.24
HGWA-43D	595.08	10.23	584.85
HGWA-44D	594.79	10.96	583.83
HGWC-7	579.18	6.33	572.85
HGWC-8	579.82	7.90	571.92
HGWC-9	580.36	14.85	565.51
HGWC-10	579.37	13.16	566.21
HGWC-11	580.67	16.43	564.24
HGWC-12	580.73	16.50	564.23
HGWC-13	595.76	24.68	571.08
Assessment Monitoring Well			
MW-5	581.14	16.67	564.47
MW-6	581.84	17.11	564.73
MW-7	577.73	14.40	563.33
MW-19	580.65	13.68	566.97
MW-20	579.00	12.95	566.05
MW-24D	595.68	29.15	566.53
MW-25D	580.59	16.37	564.22
MW-26D	580.41	14.95	565.46
MW-27D	579.70	8.07	571.63
MW-28D	579.08	8.25	570.83
MW-29	575.06	4.36	570.70
Piezometer			
AP1A-1	587.44	5.94	581.50
MW-1	588.66	7.22	581.44
MW-8	586.93	19.14	567.79
MW-30D	578.59	5.90	572.69
MW-40D	578.92	115.42	463.50
Surface Water Level Gauge Point			
Coosa River	--	--	560.40

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.

Table 4

Horizontal Groundwater Gradient and Flow Velocity Calculations

Plant Hammond AP-1, Floyd County, Georgia

Flow Path Direction [1]	January 23, 2023			
	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
Easterly Flow Path (HGWC-8 to MW-20)	571.92	566.05	350	0.017

Flow Path Direction [1]	K_h (ft/day)	n_e	i (ft/ft)	V (ft/day)[2]	V (ft/day)[3]
Southerly Flow Path (HGWC-13 to MW-7)	11.82	0.15	0.017	1.4	1.3
Easterly Flow Path (HGWC-8 to MW-20)	11.82	0.15	0.017	1.3	

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 Figure 3 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 Groundwater Analytical Data
Plant Hammond AP-1, Floyd County, Georgia

	Well ID:	HGWA-1	HGWA-2	HGWA-3	HGWA-43D	HGWA-44D	HGWC-7	HGWC-8	HGWC-9	HGWC-10	HGWC-11	HGWC-12	HGWC-13
	Sample Date:	1/24/2023	1/24/2023	1/23/2023	1/24/2023	1/24/2023	1/27/2023	2/1/2023	1/26/2023	1/27/2023	1/26/2023	1/26/2023	1/26/2023
	Parameter [1,2,3]												
APPENDIX III	Boron	0.015 J	0.046	0.012 J	0.037 J	0.44	0.93	1.9	1.9	0.065	0.50	1.5	0.83
	Calcium	117	29.4	85.0	56.6	13.2	124	110	173	60.4	113	154	234
	Chloride	9.0	7.1	5.6	4.3	24.9	40.0	52.4	86.9	1.6	8.8	34.6	12.5
	Fluoride	0.089 J	0.053 J	0.061 J	0.23	1.3	0.10	0.40	0.11	0.16	0.20	0.21	0.40
	pH	6.76	5.23	7.32	7.56	8.22	7.25	6.60	7.07	6.89	6.24	7.10	6.90
	Sulfate	48.3	79.7	39.5	34.7	10.1	119	179	217	37.3	209	228	495
	TDS	369	164	293	271	363	473	528	745	188	429	624	962
APPENDIX IV	Antimony	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	0.00092 J	<0.00078	<0.00078	<0.00078	<0.00078
	Arsenic	<0.0022	<0.0022	<0.0022	<0.0022	0.0027 J	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	0.0025 J	0.53
	Barium	0.033	0.088	0.13	0.28	0.18	0.065	0.058	0.069	0.041	0.031	0.076	0.079
	Beryllium	<0.000054	0.00016 J	<0.000054	<0.000054	<0.000054	<0.000054	0.000056 J	<0.000054	<0.000054	<0.000054	<0.000054	0.000099 J
	Cadmium	<0.00011	0.00021 J	<0.00011	<0.00011	<0.00011	0.00019 J	0.00014 J	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011
	Chromium	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	0.0014 J	<0.0055	0.0013 J	0.0012 J	0.0012 J	<0.0011	<0.0011
	Cobalt	<0.00039	0.024	<0.00039	<0.00039	<0.00039	0.00067 J	<0.002	0.00068 J	<0.00039	<0.00039	0.0012 J	0.012
	Fluoride	0.089 J	0.053 J	0.061 J	0.23	1.3	0.10	0.40	0.11	0.16	0.20	0.21	0.40
	Lead	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089
	Lithium	0.00092 J	0.0014 J	0.003 J	0.002 J	0.064	0.0018 J	0.0015 J	0.0032 J	<0.00073	<0.00073	0.0058 J	0.04
	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
	Molybdenum	<0.00074	<0.00074	<0.00074	0.0027 J	0.0026 J	0.039	0.29	0.021	<0.00074	0.022	0.048	0.023
	Comb. Radium 226/228	0.549 U	0.829 U	0.311 U	1.25	0.421 U	0.45 U	0.241 U	0.516 U	1.2	0.441 U	0.877	0.719
	Selenium	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	0.0035 J	0.01	<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	0.00031 J

Notes:
< = 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 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 5
Summary of Groundwater Analytical Data
Plant Hammond AP-1, Floyd County, Georgia

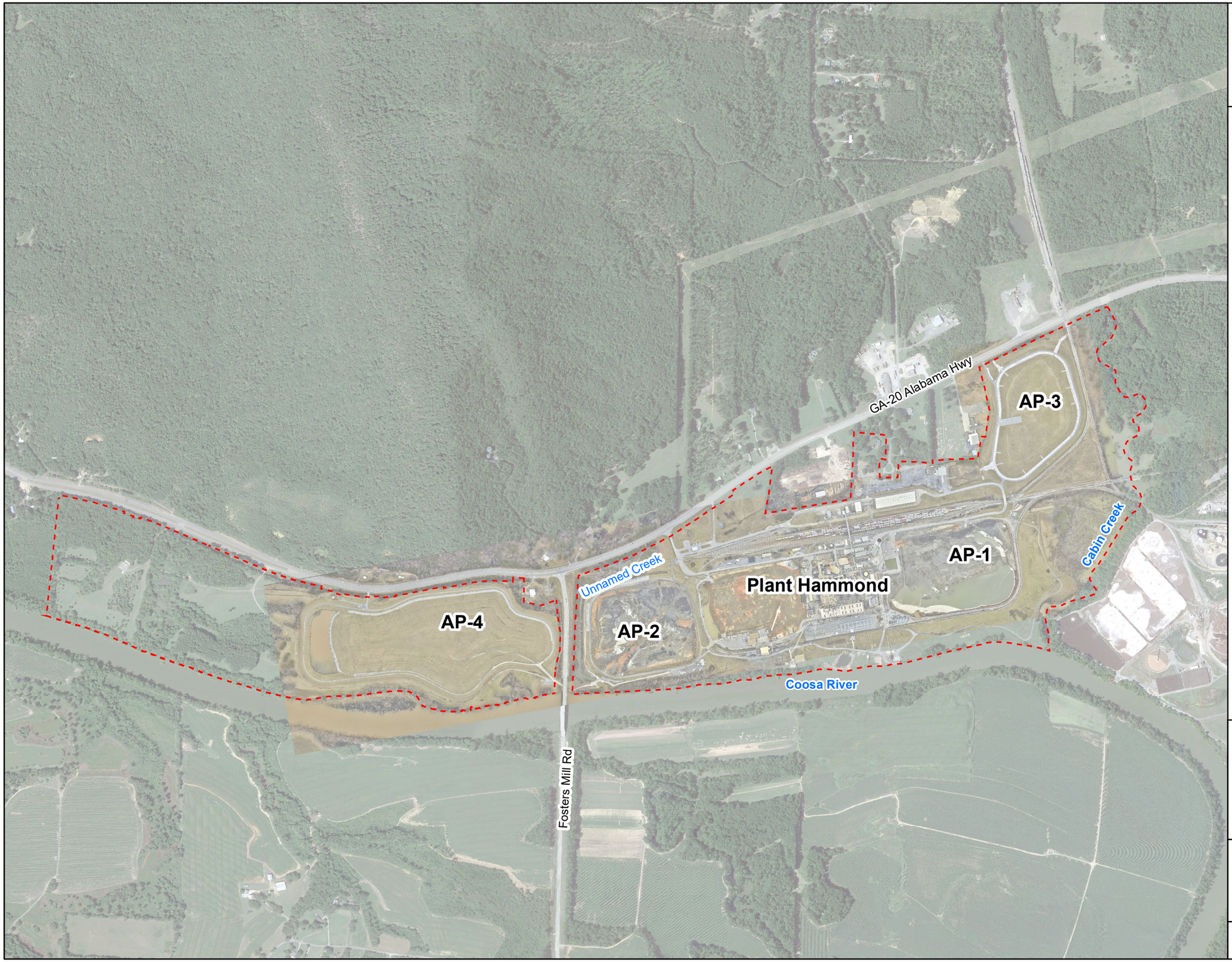
	Well ID:	MW-5	MW-6	MW-7	MW-19	MW-20	MW-24D	MW-25D	MW-26D	MW-27D	MW-28D	MW-29
	Sample Date:	1/26/2023	1/26/2023	1/26/2023	1/26/2023	1/26/2023	1/26/2023	1/26/2023	1/26/2023	1/27/2023	1/26/2023	1/26/2023
	Parameter [1,2,3]											
APPENDIX III	Boron	0.044	0.71	0.033 J	0.36	0.099	0.47	0.30	1.8	0.12	0.29	1.0
	Calcium	76.1	180	21.6	118	122	107	21.8	179	28.1	64.4	146
	Chloride	0.86 J	30.5	1.2	7.7	30.0	38.0	17.2	83.6	32.5	27.7	62.4
	Fluoride	0.087 J	0.088 J	0.06 J	0.098 J	0.081 J	0.083 J	1.6	0.11	0.30	0.22	0.068 J
	pH	6.07	6.90	6.23	6.13	6.95	7.61	7.74	7.14	7.80	7.67	7.23
	Sulfate	137	203	26.0	214	109	152	0.59 J	240	9.1	40.8	161
	TDS	363	646	89.0	490	482	412	346	741	255	349	632
APPENDIX IV	Antimony	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078
	Arsenic	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022
	Barium	0.05	0.079	0.044	0.039	0.097	0.054	0.65	0.065	0.94	0.80	0.076
	Beryllium	<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
	Chromium	0.0032 J	0.0014 J	0.0017 J	0.0011 J	<0.0011	<0.0011	0.0012 J	<0.0011	<0.0011	<0.0011	<0.0011
	Cobalt	<0.00039	0.00044 J	<0.00039	0.022	<0.00039	<0.00039	<0.00039	0.00051 J	<0.00039	<0.00039	0.00056 J
	Fluoride	0.087 J	0.088 J	0.06 J	0.098 J	0.081 J	0.083 J	1.6	0.11	0.30	0.22	0.068 J
	Lead	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089
	Lithium	<0.00073	<0.00073	<0.00073	0.0038 J	<0.00073	0.0025 J	0.036	0.0031 J	0.0072 J	0.011 J	0.0019 J
	Mercury	<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	0.0029 J	<0.00074	0.012	<0.00074	0.0012 J	<0.00074	0.028	0.0014 J	0.0025 J	0.0029 J
	Comb. Radium 226/228	0.909	0.493 U	0.318 U	0.333 U	0.561 U	0.0906 U	1.1	0.386 U	1.1	0.821	0.793 U
	Selenium	0.0045 J	<0.0014	<0.0014	0.0056	<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

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.

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

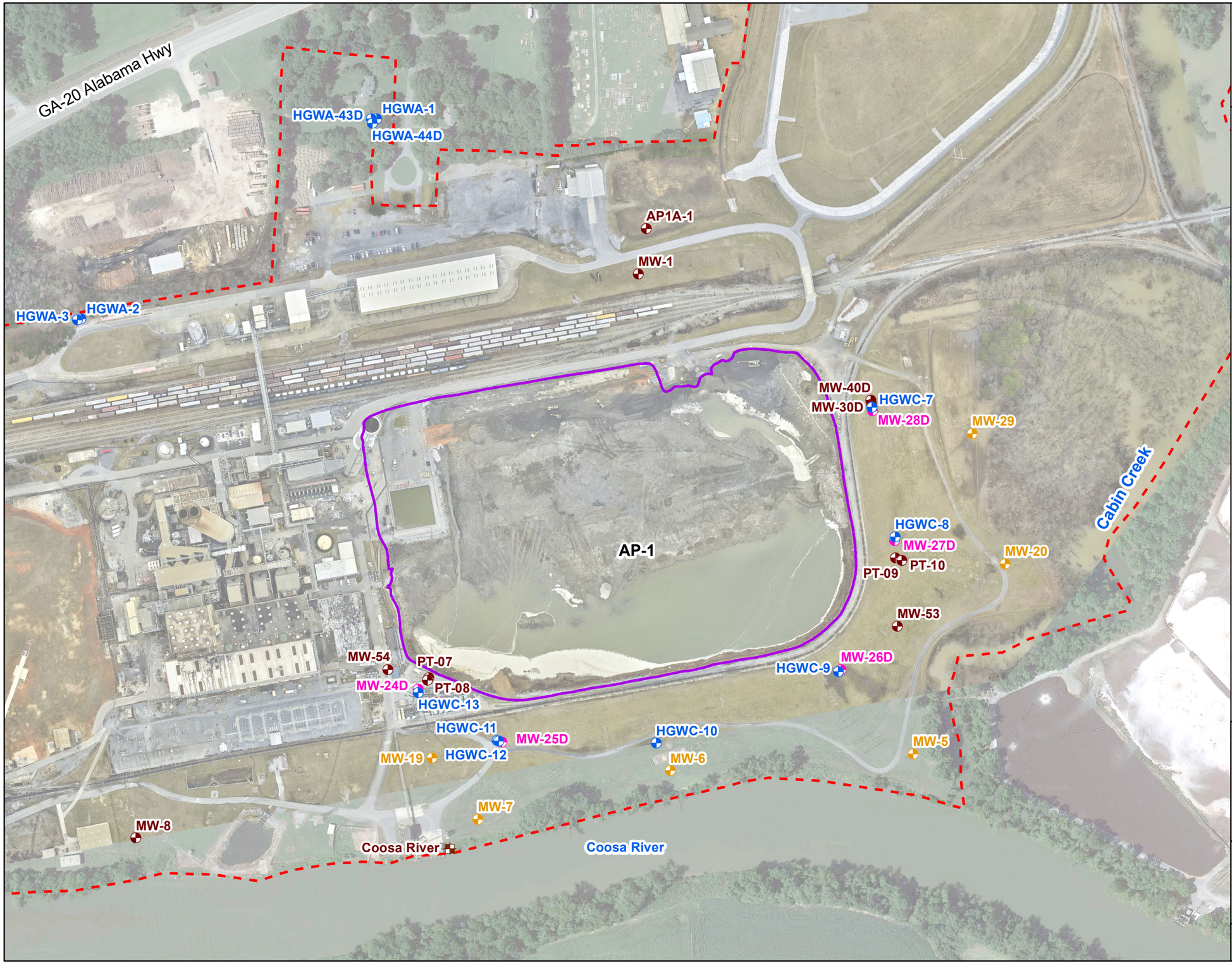
GEORGIA POWER COMPANY
PLANT HAMMOND AP-1
ROME, FLOYD COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA | AUGUST 2023

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, February 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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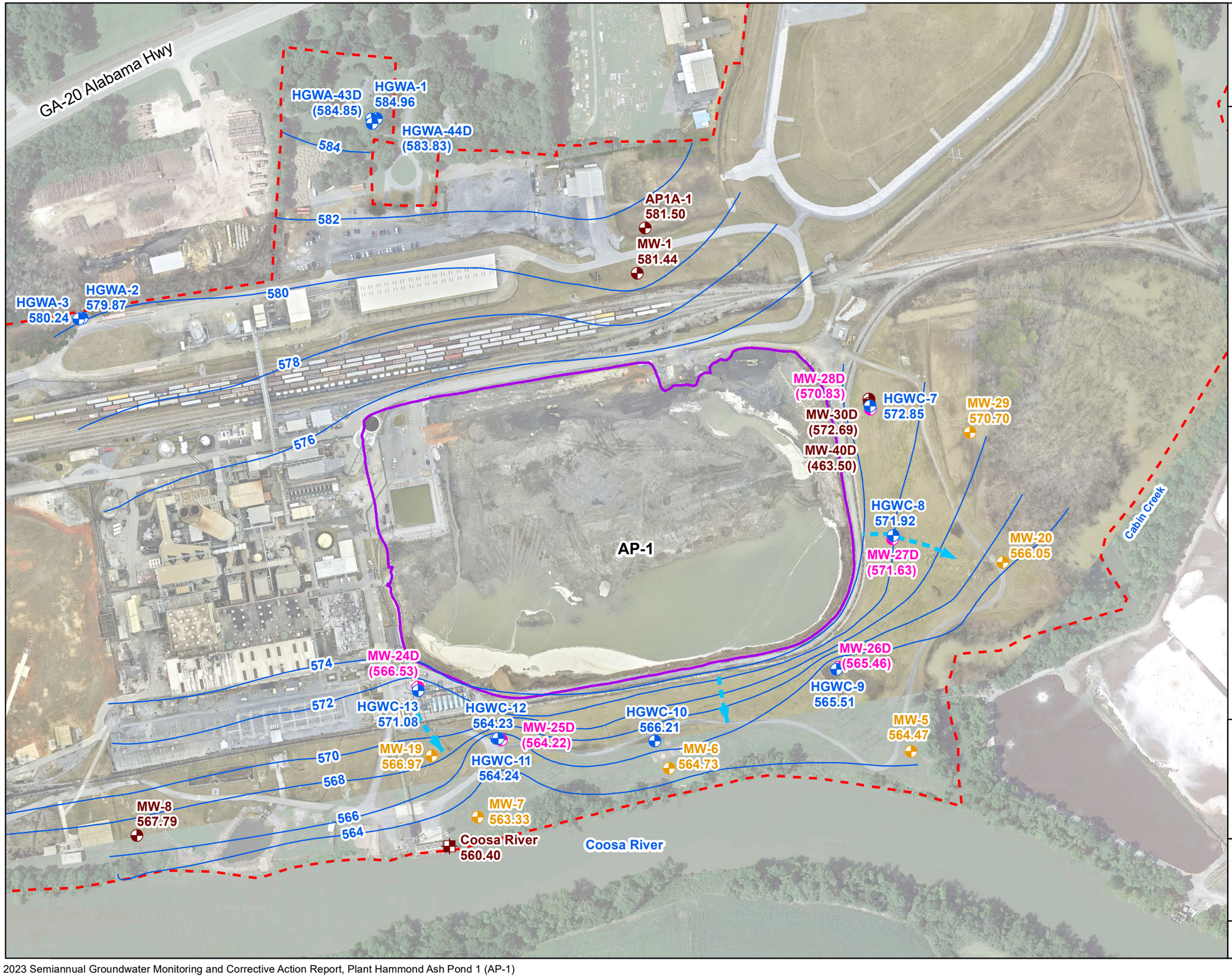
FIGURE 2



N

LEGEND

- Detection Monitoring Well
- Horizontal Assessment Monitoring
- Vertical Asessment 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. PE036649 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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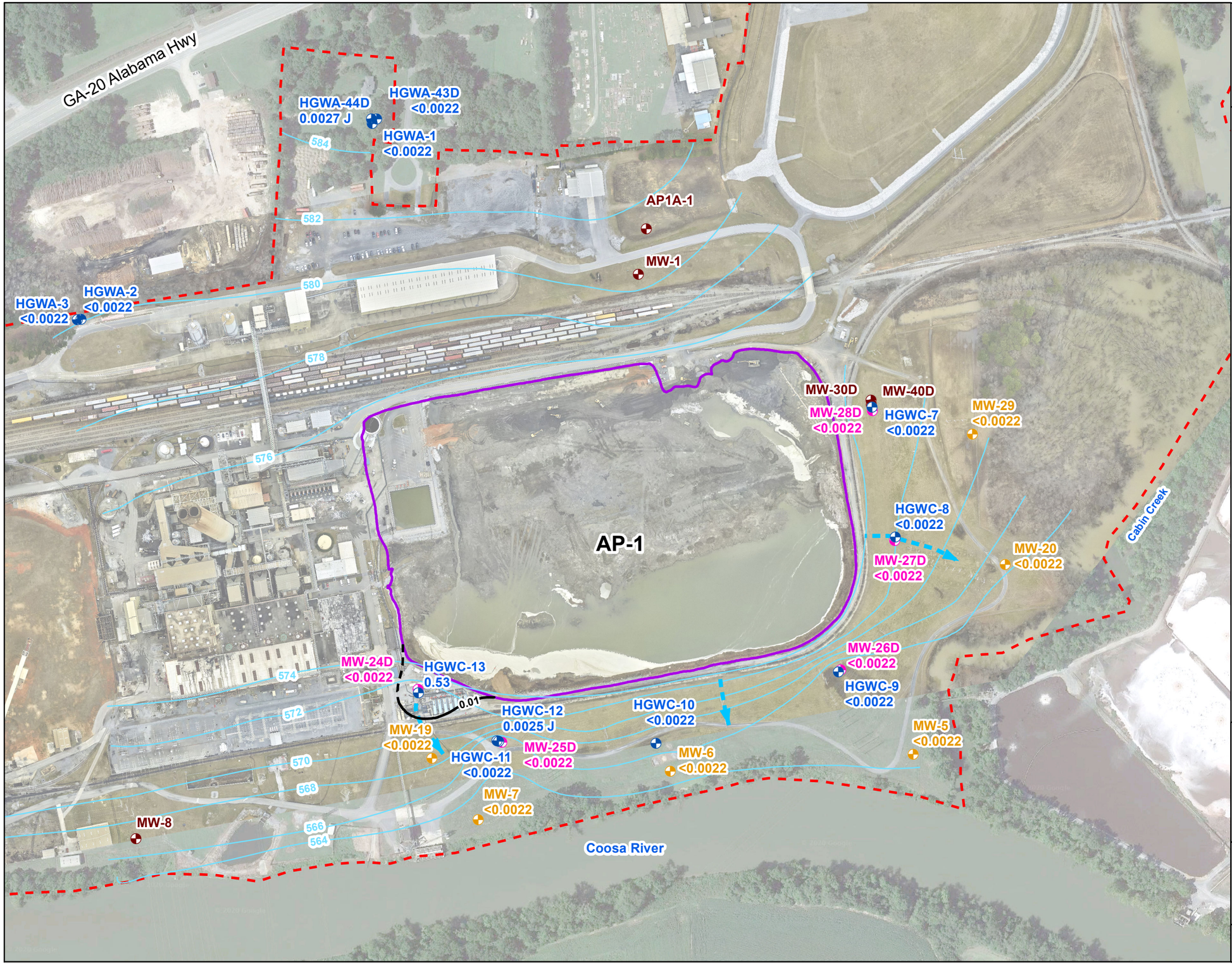
FIGURE 3



N

LEGEND

- Detection Monitoring Well
- Horizontal Assessment Monitoring
- Vertical Assessment Monitoring
- Piezometer
- GWPS Arsenic Iso-Concentration Contour (mg/L) (dashed where inferred)
- Groundwater Elevation Iso-Contour
- Approximate Groundwater Flow
- Approximate AP-1
- 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 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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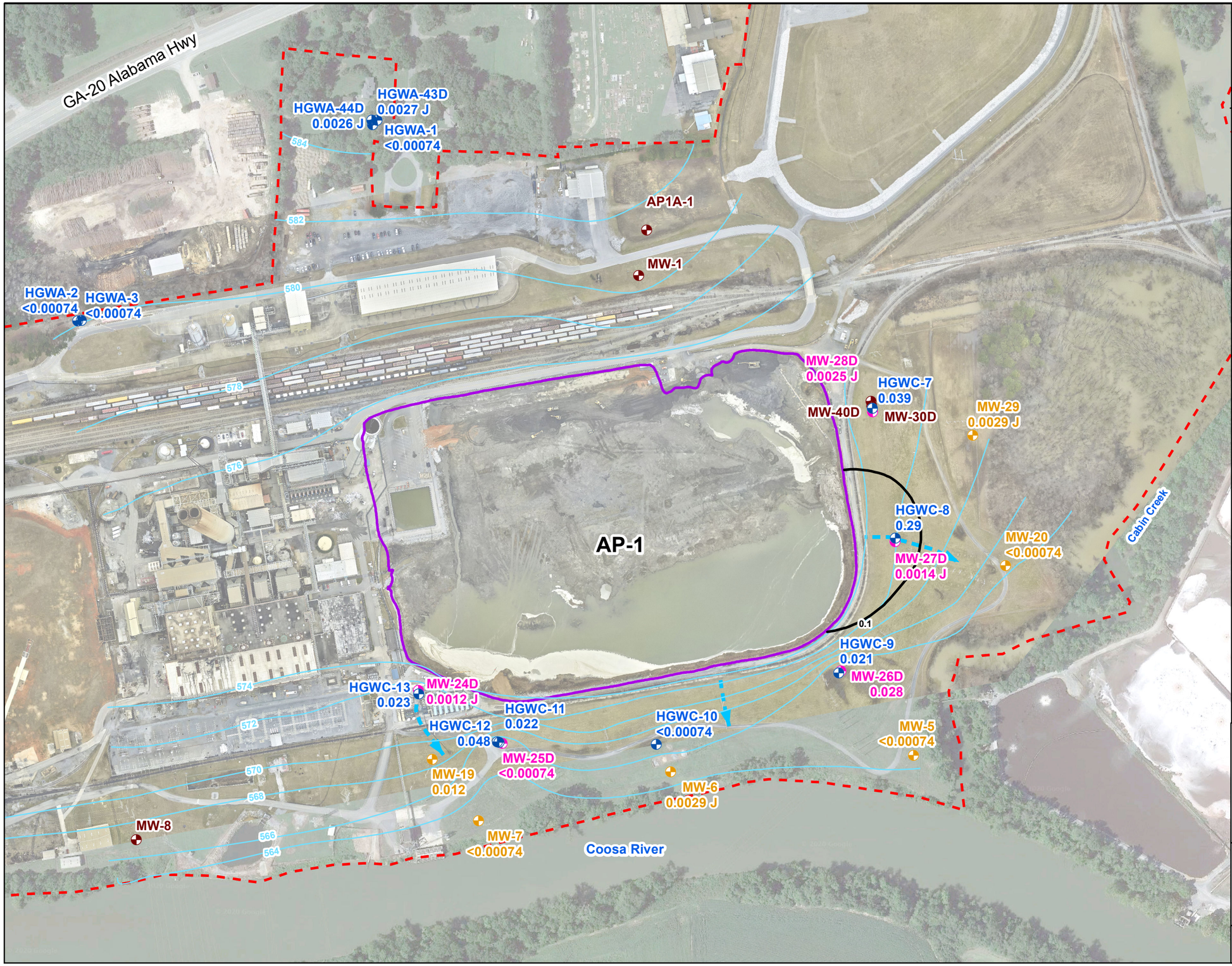
FIGURE 4



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 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

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FIGURE 5

APPENDIX A

Well Maintenance and Repair Documentation Memorandum

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?	Y		
b	Is the well properly identified with the correct well ID?	Y		
c	Is the well in a high traffic area?		Y	
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?	Y		
b	Is the casing free of degradation or deterioration?	Y		
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?	Y		
f	If locked, is the well lock in good condition?	Y		
g	Is the well lid in good condition?	Y		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	Y		
b	Is the well pad sloped away from the protective casing?	Y		
c	Is the well pad in complete contact with the protective casing?	Y		
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)?	Y		
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)?	Y		
c	Is the well properly vented for equilibration of air pressure?	Y		
d	Is the survey point clearly marked on the inner casing?	Y		
e	Is the depth of the well consistent with the original well log?	Y		
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?	Y		
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 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
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~~ ② 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:

APPENDIX B

Laboratory Analytical and Field Sampling Reports

LABORATORY ANALYTICAL REPORTS

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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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
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
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
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

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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
Peachtree Corners, GA 30092
(770)734-4200

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
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
Peachtree Corners, GA 30092
(770)734-4200

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

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(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
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(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
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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

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REPORT OF LABORATORY ANALYSIS

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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

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REPORT OF LABORATORY ANALYSIS

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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
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
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																													
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.

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.

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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

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Collected 1/27/23

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): Chloride, Fluoride, Sulfate N; Full App. III and IV metals N; RAD 226/228 N; TDS N

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE 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	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-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 Sevast / 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 Sevast, Consultant / Geosyntec Consultants, Inc.

SIGNATURE of SAMPLER: Anthony Sevast, 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

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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): N	N	N	N	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																			Chloride, Fluoride, Sulfate	Full App. III and IV metals	RAD 226/228	TDS		
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 Hoy / Geosyntec	2/3/23	1230	
	Christine Hoy / 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 Security Commissioner / 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

Cooler Temp Corrected (°C): 2.4

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:** _____

***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
(770)734-4200

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

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

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
Peachtree Corners, GA 30092
(770)734-4200

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
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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

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-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	

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: 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	

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: 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	

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: 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	

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REPORT OF LABORATORY ANALYSIS

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(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																												
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:

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																													
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:

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

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

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
Peachtree Corners, GA 30092
(770)734-4200

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
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
		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
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(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
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
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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

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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	

REPORT OF LABORATORY ANALYSIS

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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	

REPORT OF LABORATORY ANALYSIS

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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

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-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	

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-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

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

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	

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

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	

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

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

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: 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	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(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	

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REPORT OF LABORATORY ANALYSIS

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(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	

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REPORT OF LABORATORY ANALYSIS

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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	

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REPORT OF LABORATORY ANALYSIS

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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	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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(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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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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***Check all unpreserved Nitrates for chlorine

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Collected: 1/26/23

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Page: 1 of 2

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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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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
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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

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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
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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)
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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	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. 92649924
1	HAM-HGWC-8	WG	G	2/1/2023	1002			16	5	2		3						X	X	X	X	N	019 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																							

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 Heng / Geosyntec	2/3/23	1230	
	Christine Heng / 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 Saint Cum... / Geosyntec Consultants, Inc.
SIGNATURE of SAMPLER: [illegible] 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.

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

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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

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SAMPLE SUMMARY

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

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92648448001	**HAM-HGWA-3**	Water	01/23/23 16:49	01/24/23 12:38
92648448002	**HAM-HGWA-2**	Water	01/24/23 09:35	01/26/23 11:15
92648448003	**HAM-HGWA-43D**	Water	01/24/23 10:55	01/26/23 11:15
92648448004	**HAM-HGWA-44D**	Water	01/24/23 10:57	01/26/23 11:15
92648448005	**HAM-HGWA-1**	Water	01/24/23 09:35	01/26/23 11:15

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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

Pace Analytical Services, LLC
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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
Peachtree Corners, GA 30092
(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

Pace Analytical Services, LLC
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ANALYTICAL RESULTS - RADIOCHEMISTRY

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

Sample: HAM-HGWA-43D **Lab ID: 92648448003** Collected: 01/24/23 10:55 Received: 01/26/23 11:15 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**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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Peachtree Corners, GA 30092
(770)734-4200

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

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-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

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

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
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

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.

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

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)
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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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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				
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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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CHAIN-OF-CUSTODY / Analytical Request Document

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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

VALIDATION REPORTS

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.

---

* * * * *

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

Geosyntec consultants

180A Market Place Boulevard
Knoxville, TN 37922
PH 865.330.0037
www.geosyntec.com

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

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 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

Geosyntec consultants

180A Market Place Boulevard
Knoxville, TN 37922
PH 865.330.0037
www.geosyntec.com

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 (°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

FIELD SAMPLING REPORTS

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.

CALIBRATION REPORTS

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	

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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	

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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	

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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	

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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	

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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	

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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	

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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	

Geosyntec consultants

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	

Geosyntec consultants

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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Geosyntec consultants

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	

Geosyntec consultants

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	

APPENDIX C

Statistical Analysis Report

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)

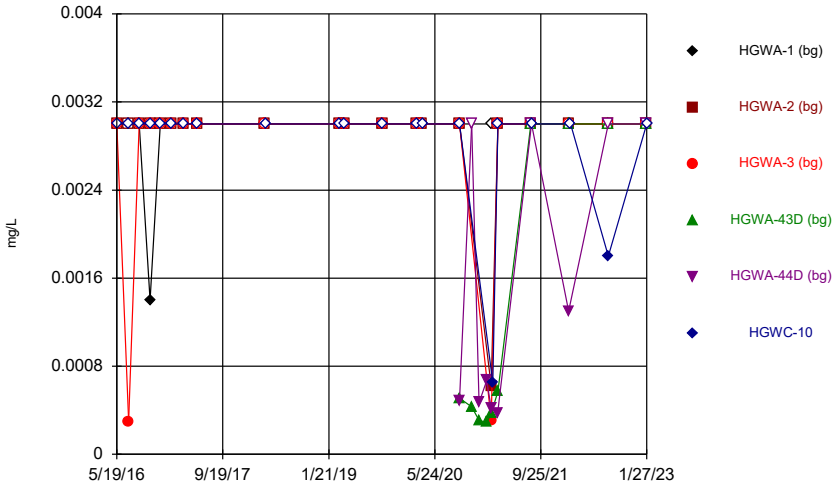
Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 4/14/2023, 1:16 PM

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

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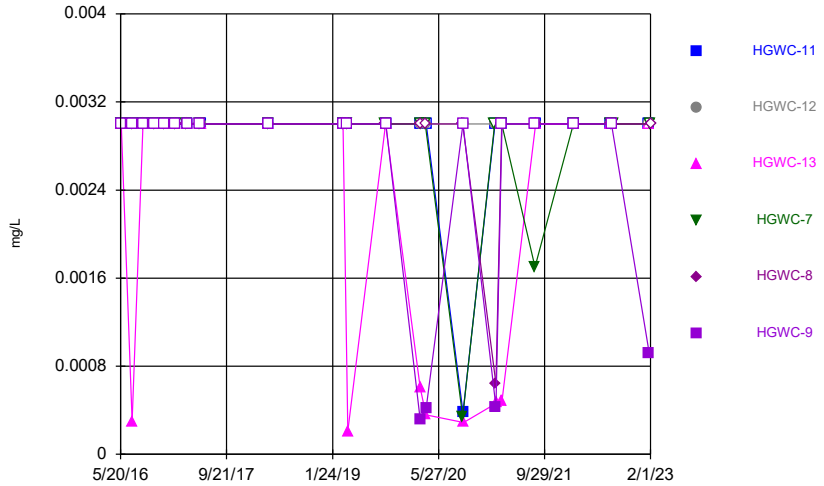

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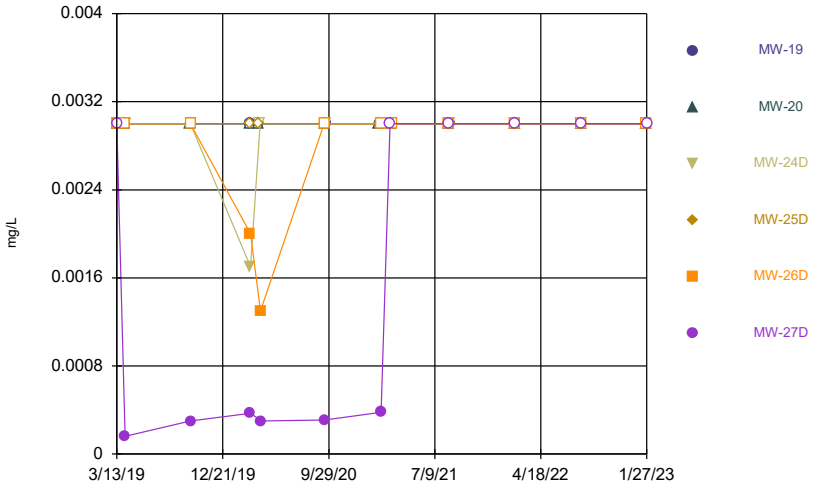

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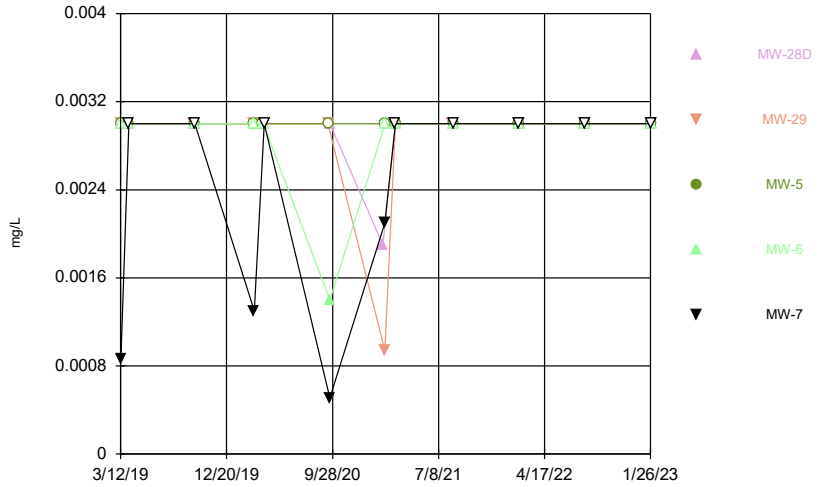

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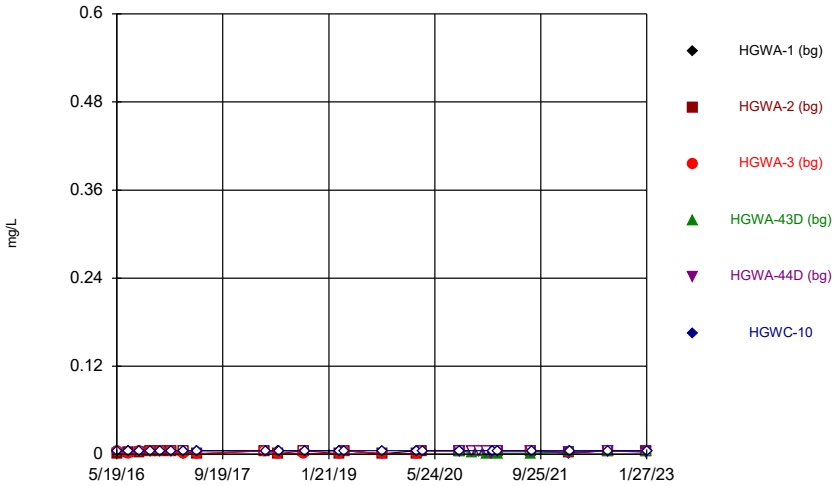

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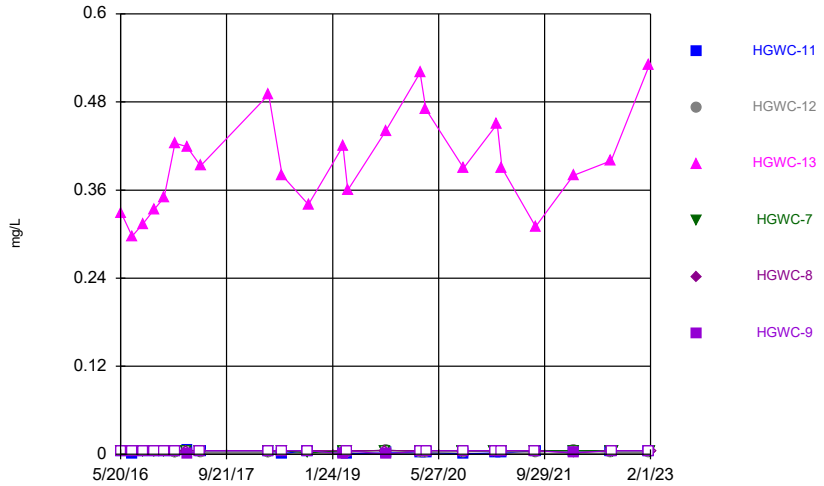

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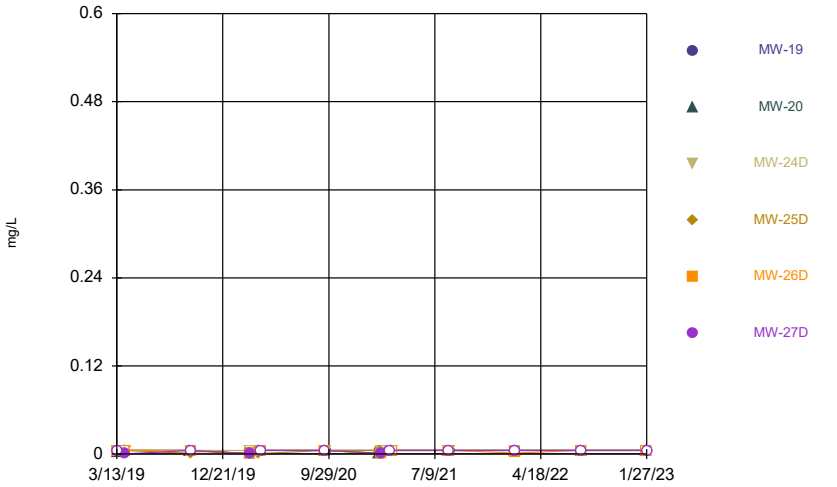

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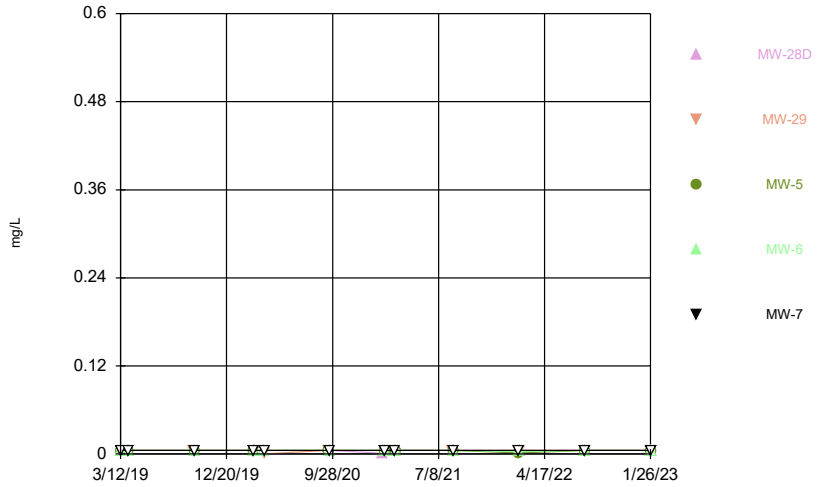

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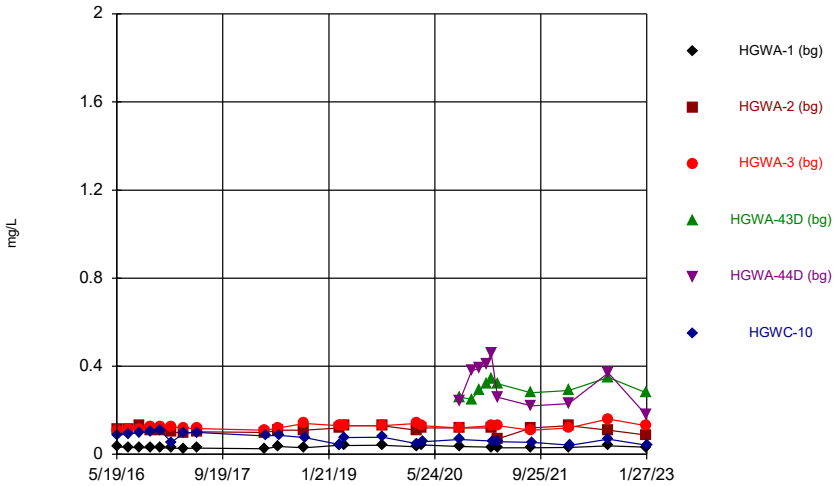
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series



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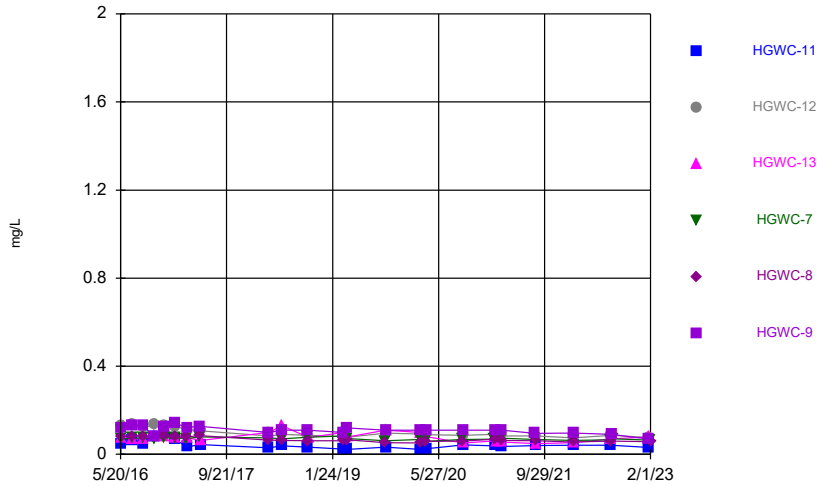
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series



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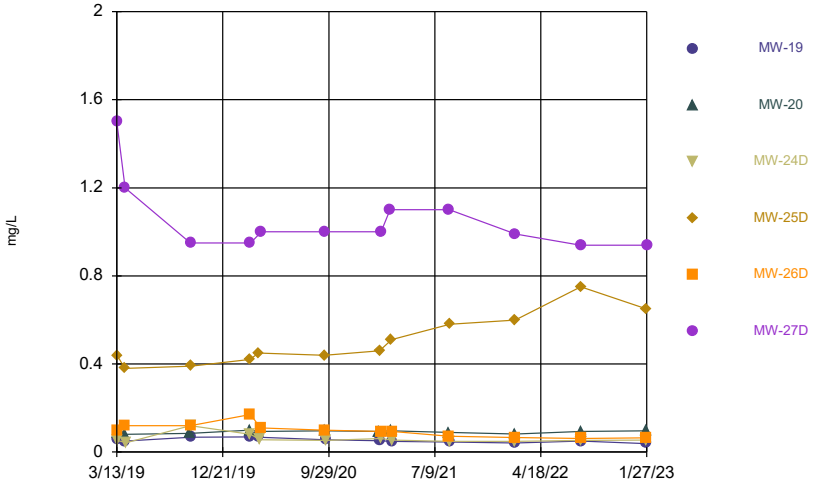
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

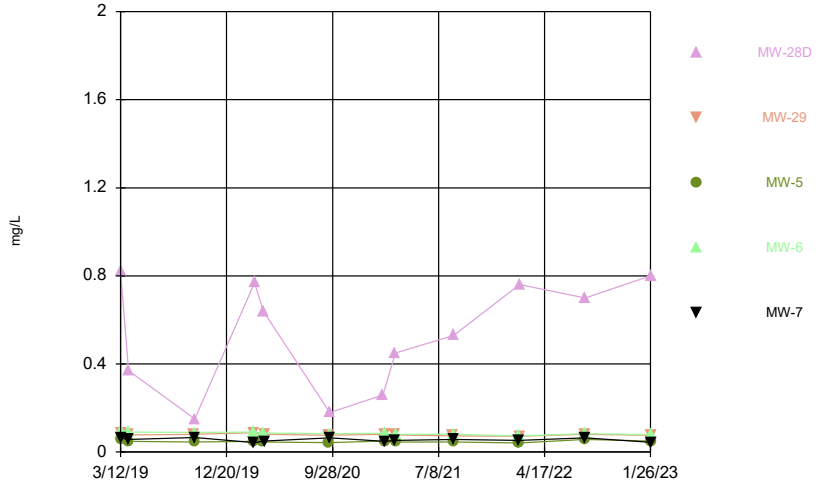


Constituent: Barium Analysis Run 4/14/2023 12:18 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series



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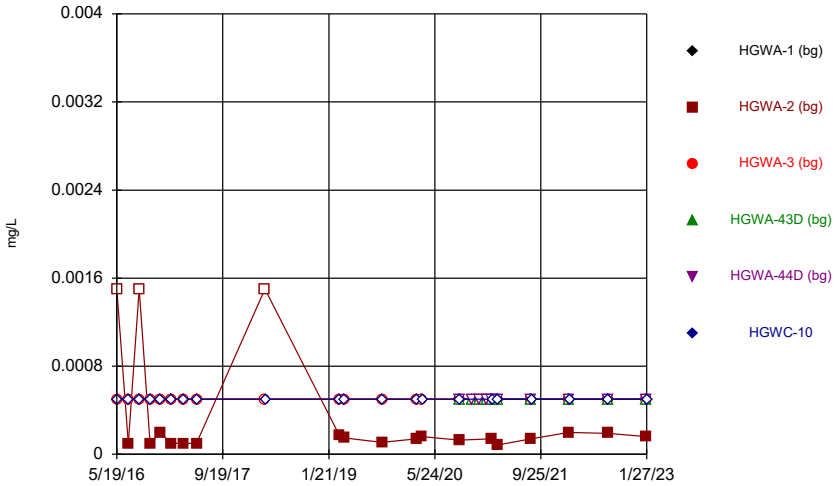
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

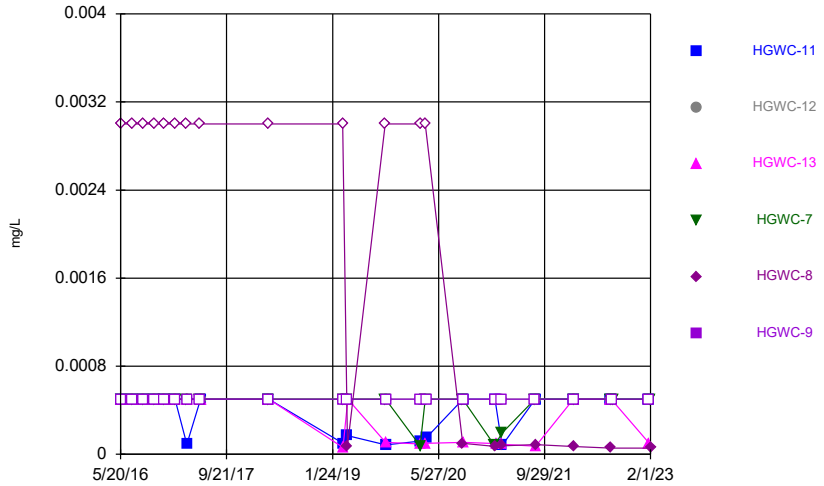
Time Series



Constituent: 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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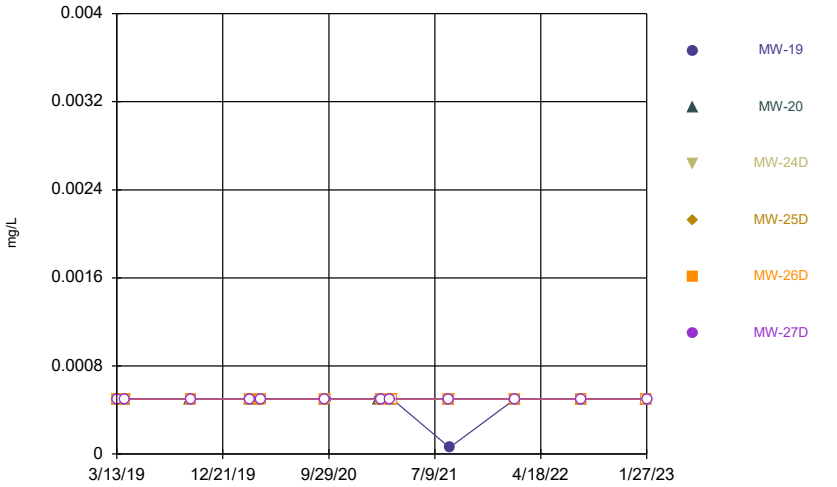
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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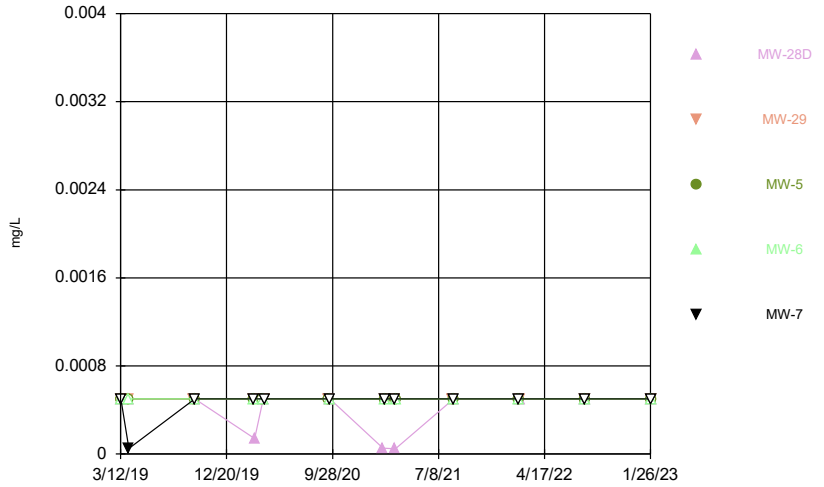
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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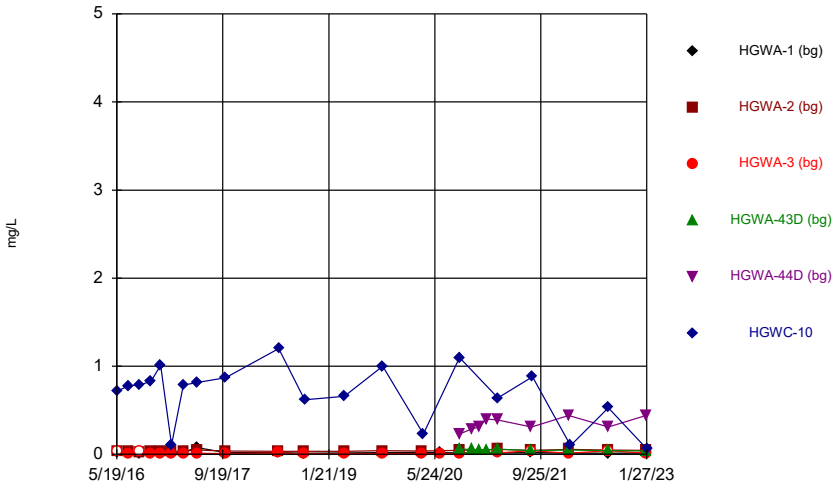
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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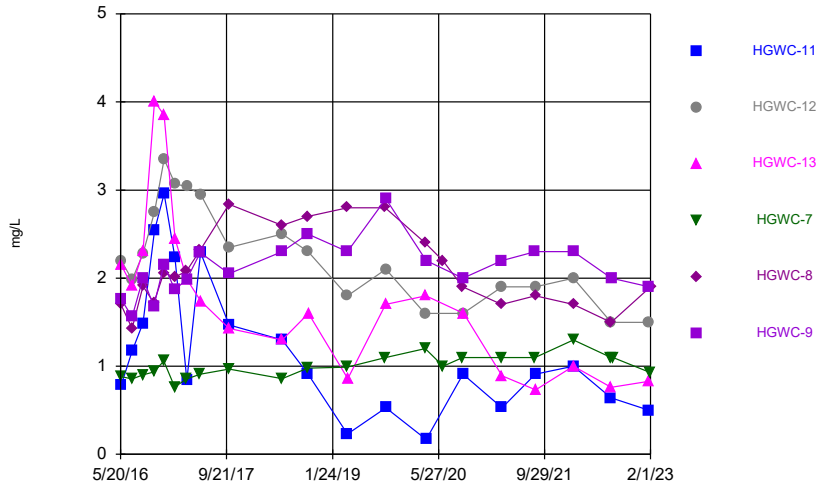
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series



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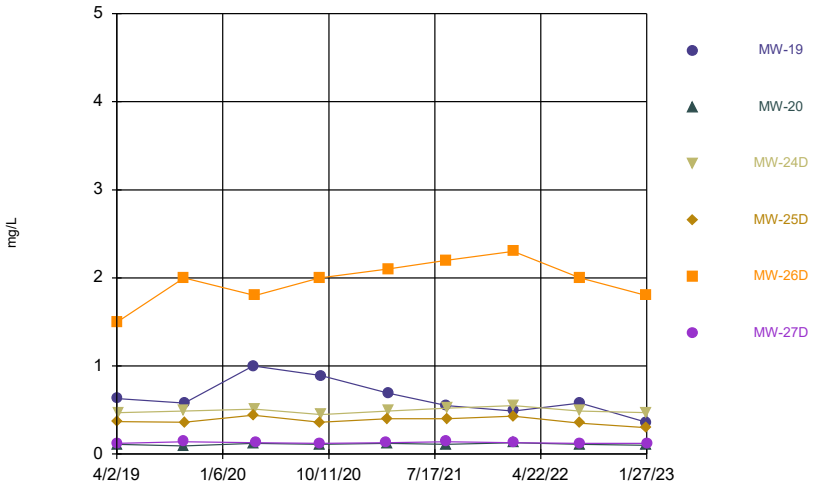
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

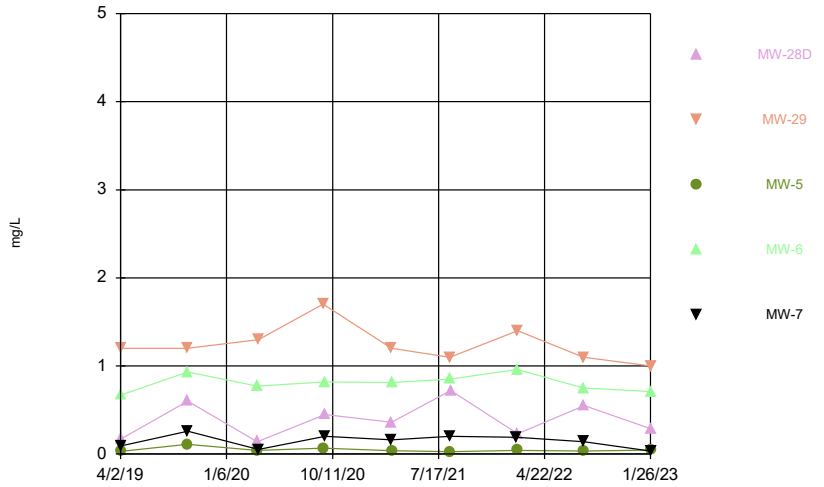
Time Series



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

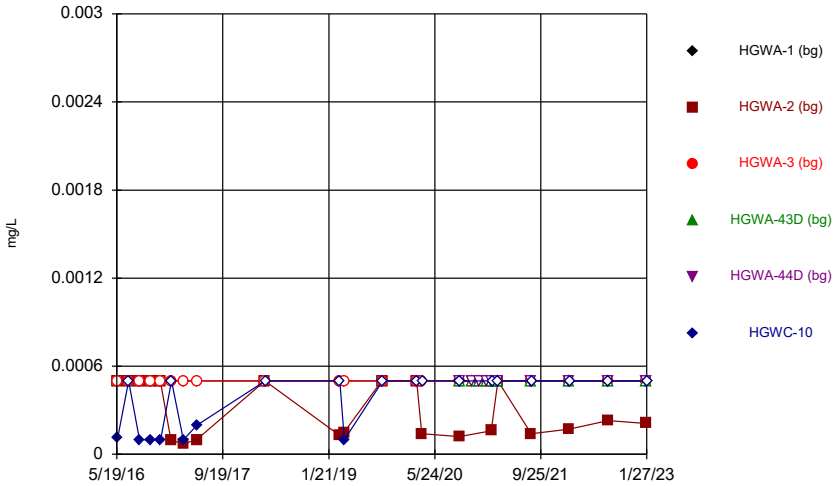
Time Series



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



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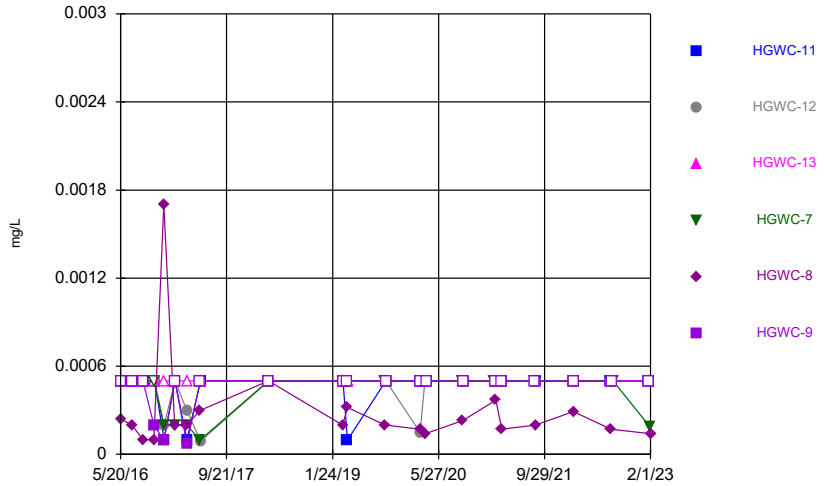
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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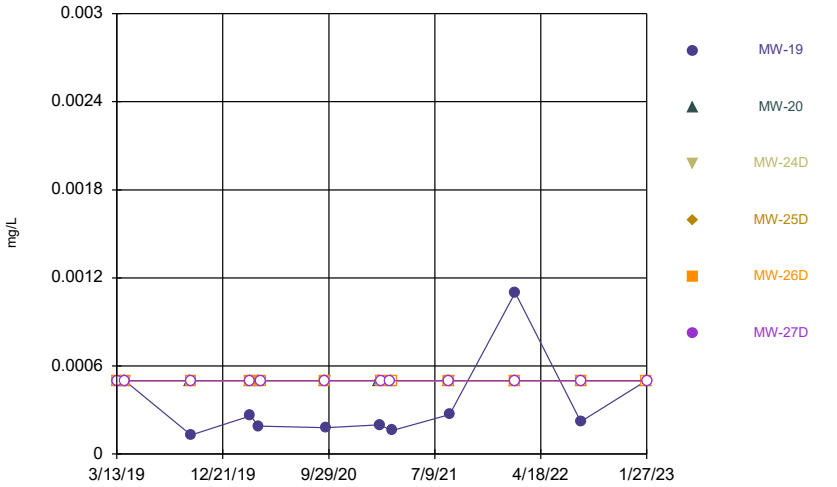
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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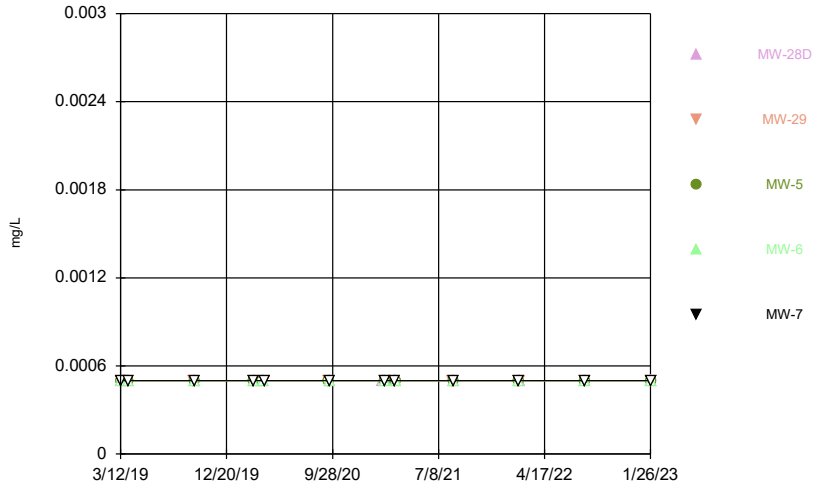
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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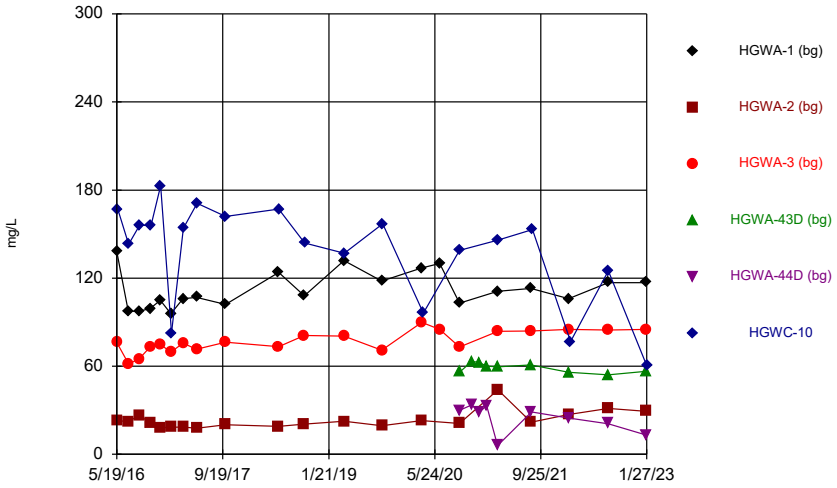
Plant Hammond Client: Southern Company Data: Hammond AP-1

Time Series



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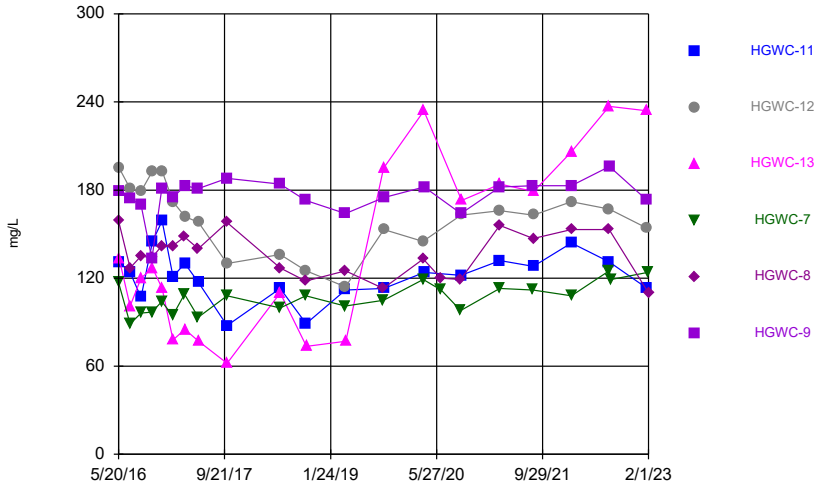
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

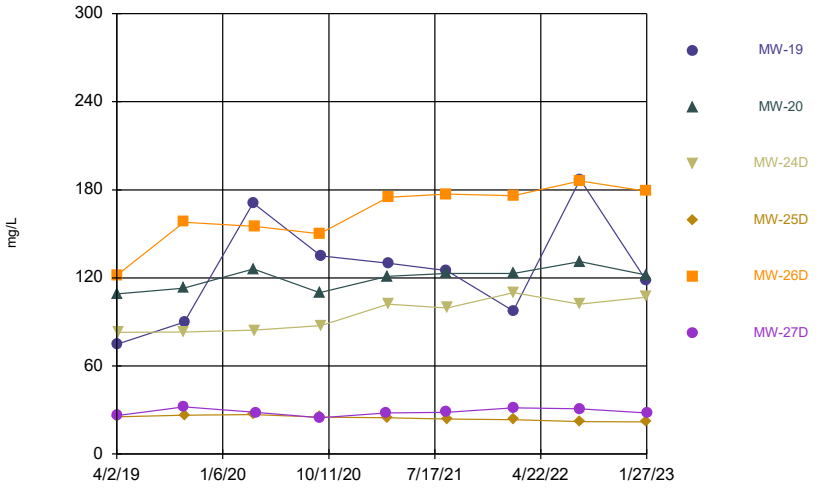


Constituent: Calcium Analysis Run 4/14/2023 12:18 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

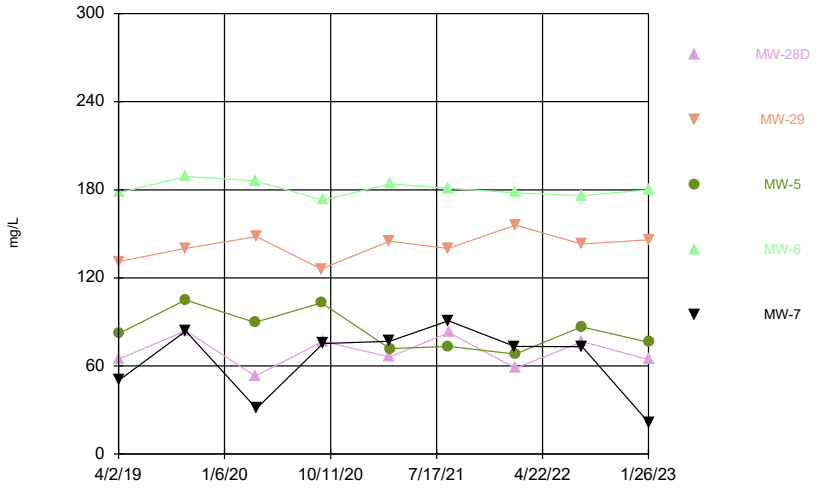


Constituent: Calcium Analysis Run 4/14/2023 12:18 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

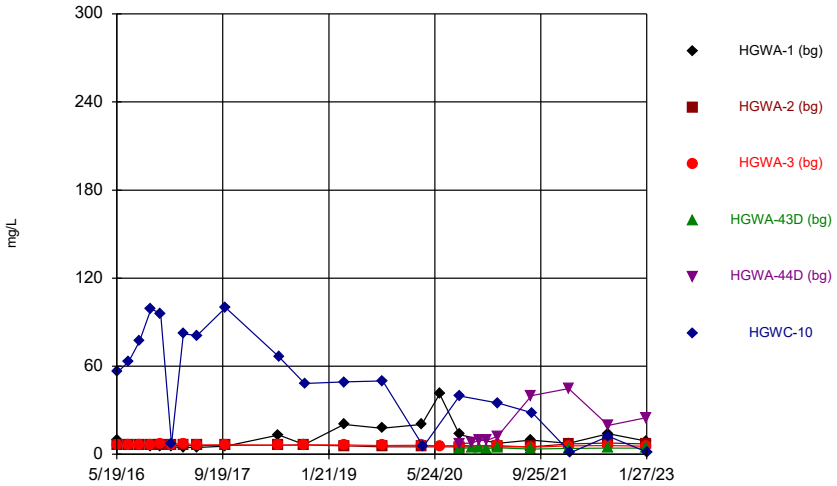


Constituent: Calcium Analysis Run 4/14/2023 12:18 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

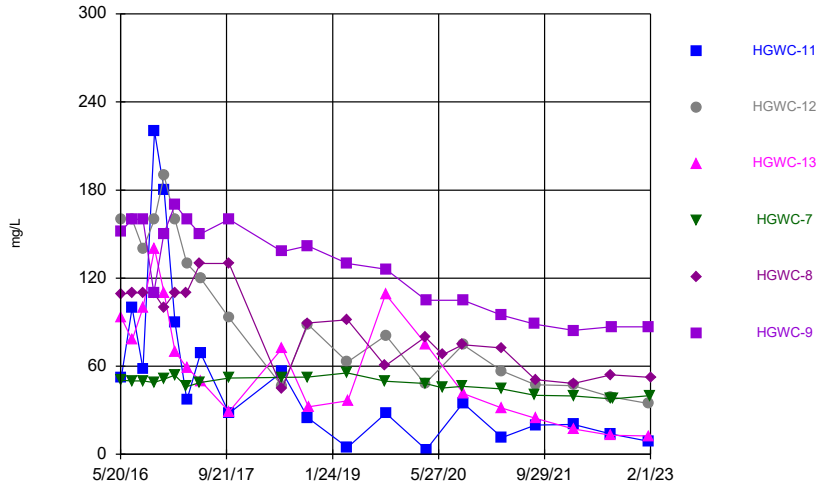


Constituent: Chloride Analysis Run 4/14/2023 12:18 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

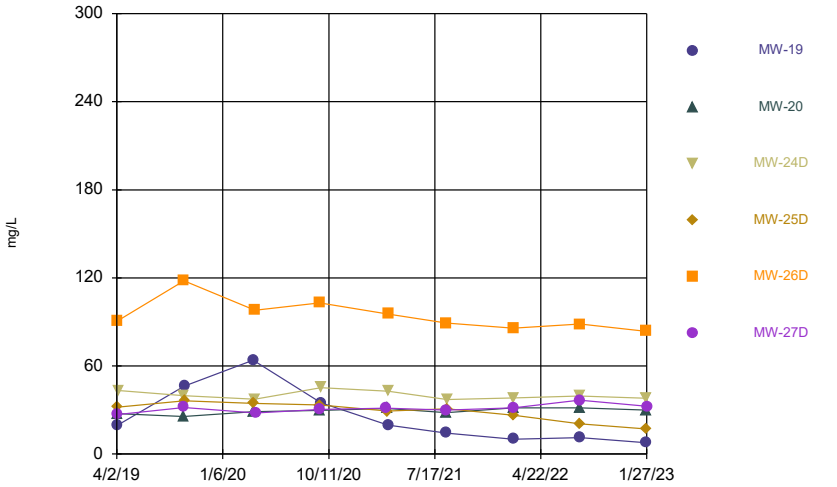


Constituent: Chloride Analysis Run 4/14/2023 12:18 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

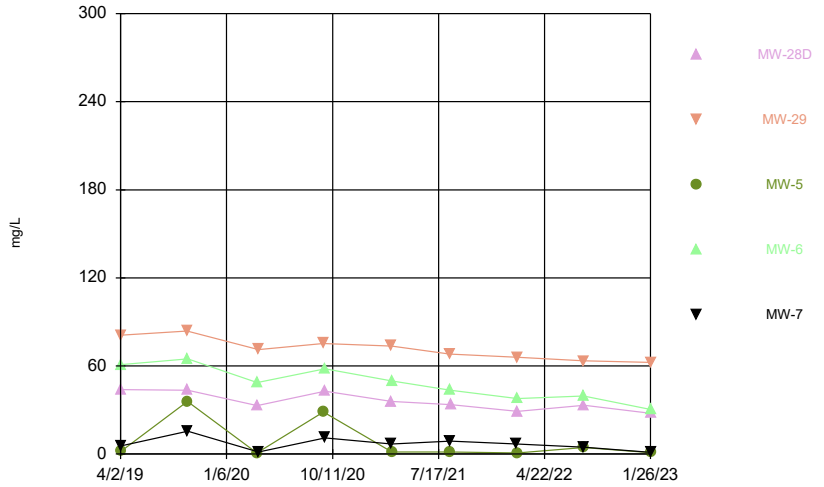


Constituent: Chloride Analysis Run 4/14/2023 12:18 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series



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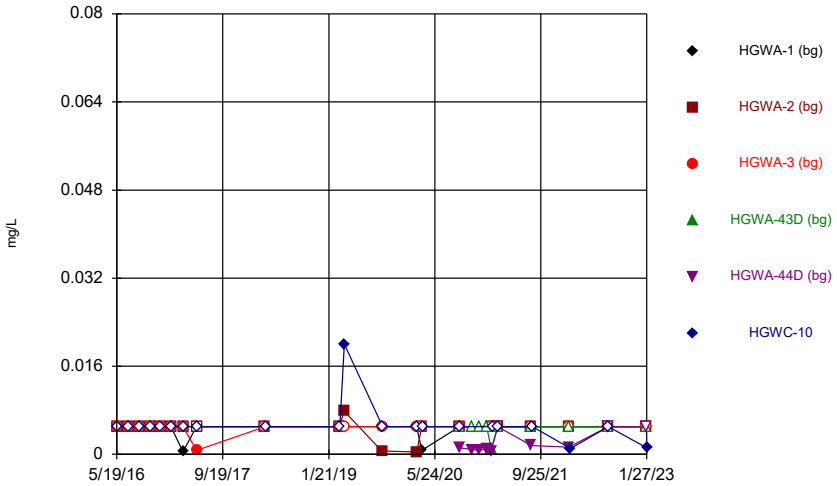
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

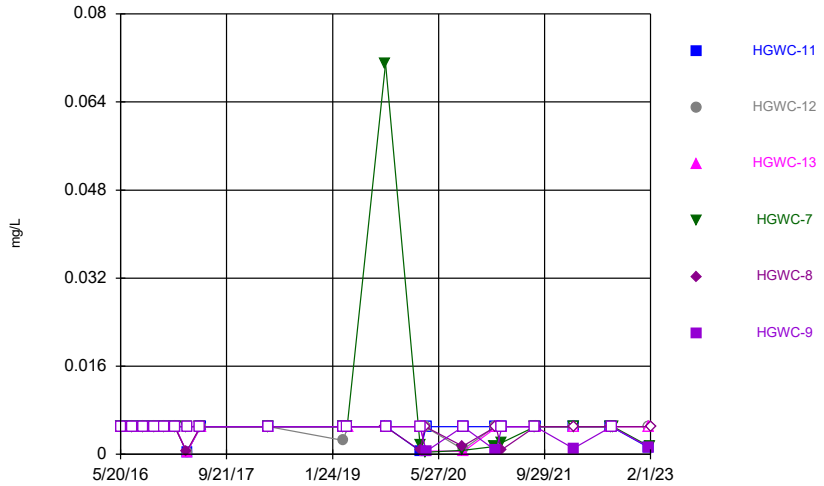
Time Series



Constituent: 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.

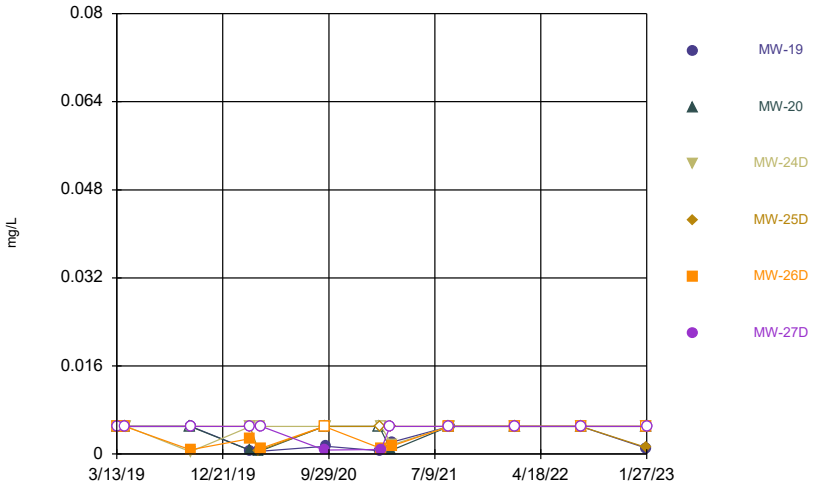
Time Series



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.

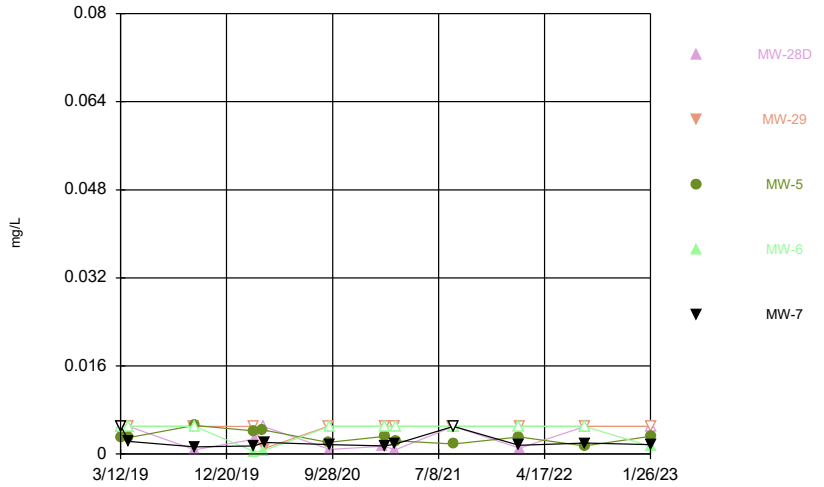
Time Series



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.

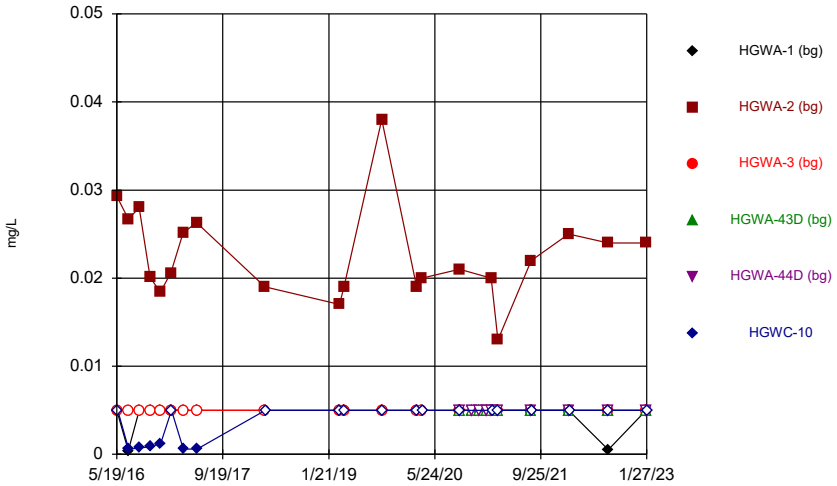
Time Series



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.

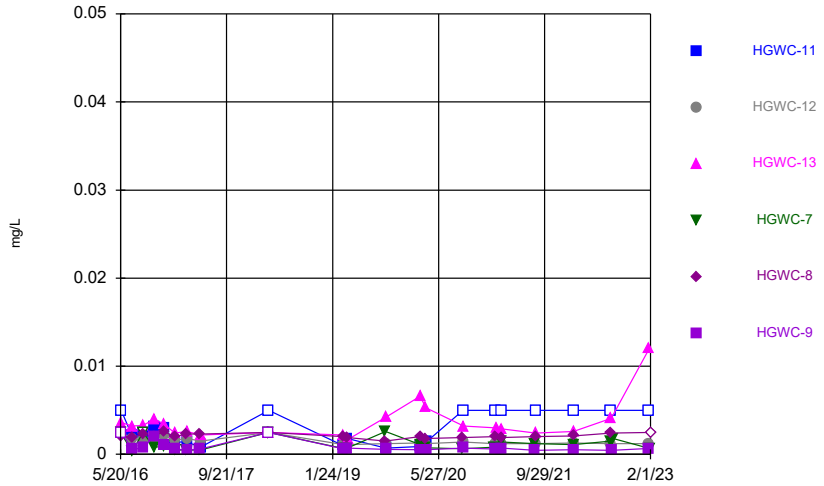
Time Series



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.

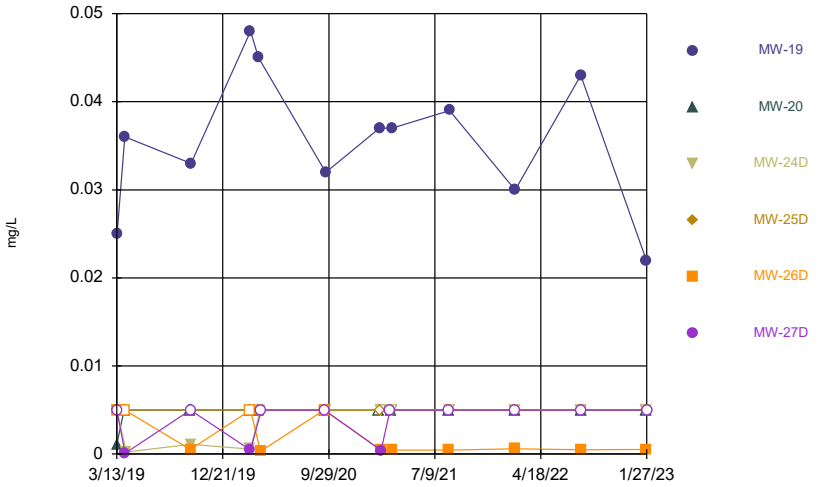
Time Series



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.

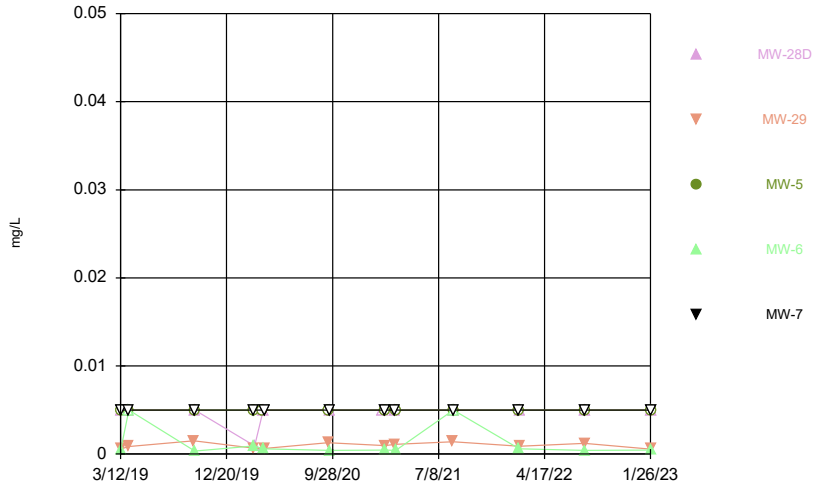
Time Series



Constituent: Cobalt Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

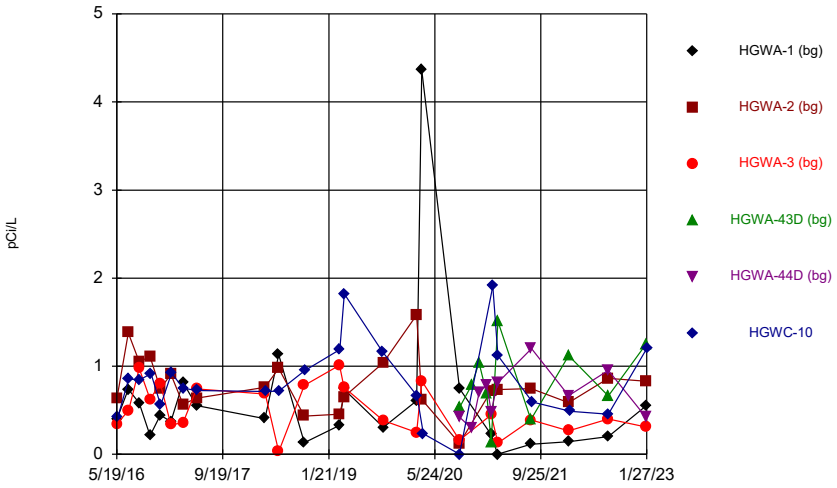
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Cobalt Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

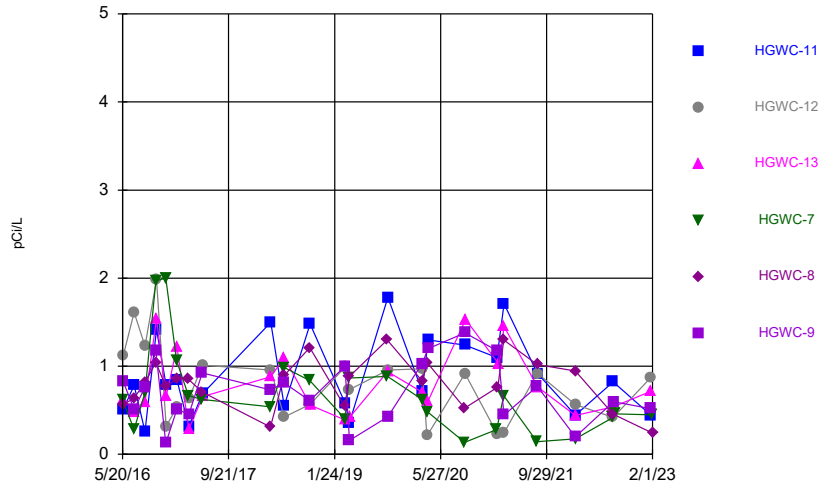
Time Series



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

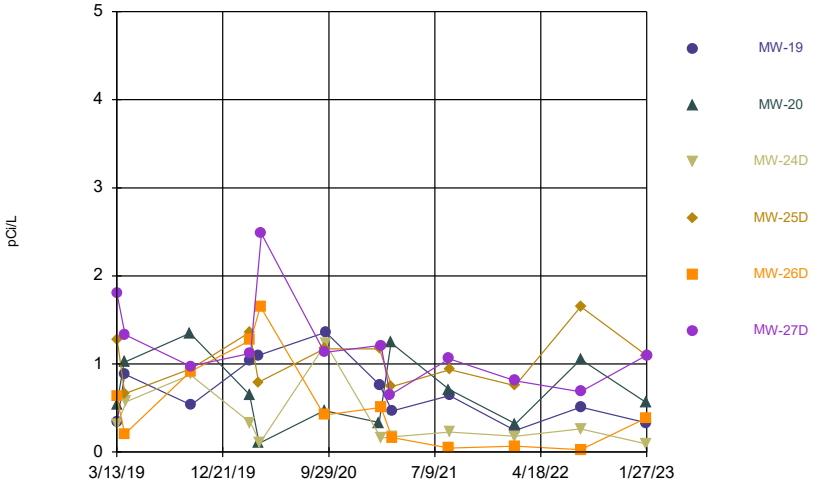
Time Series



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

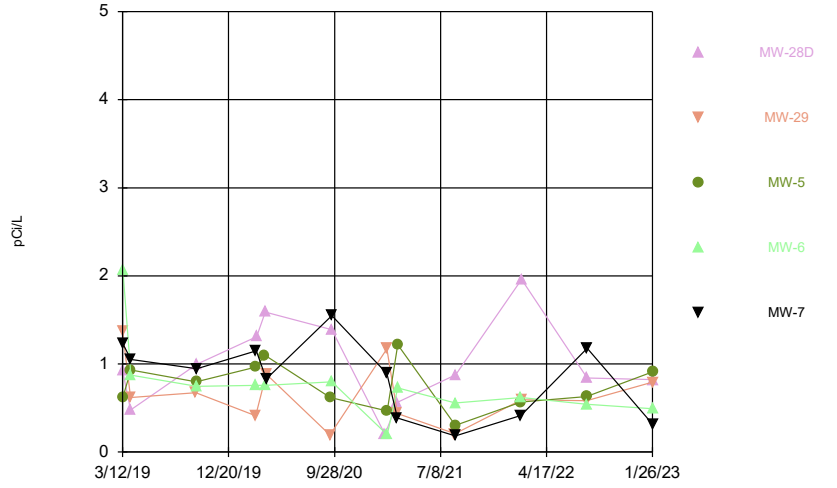
Time Series



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

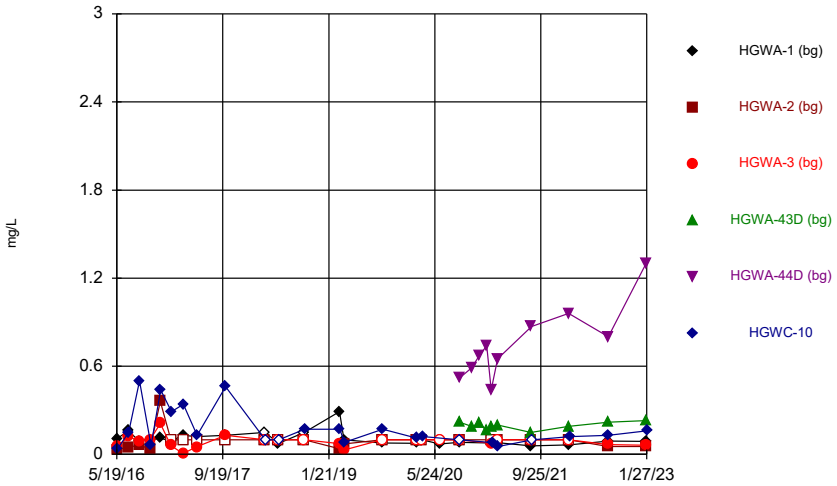
Time Series



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.

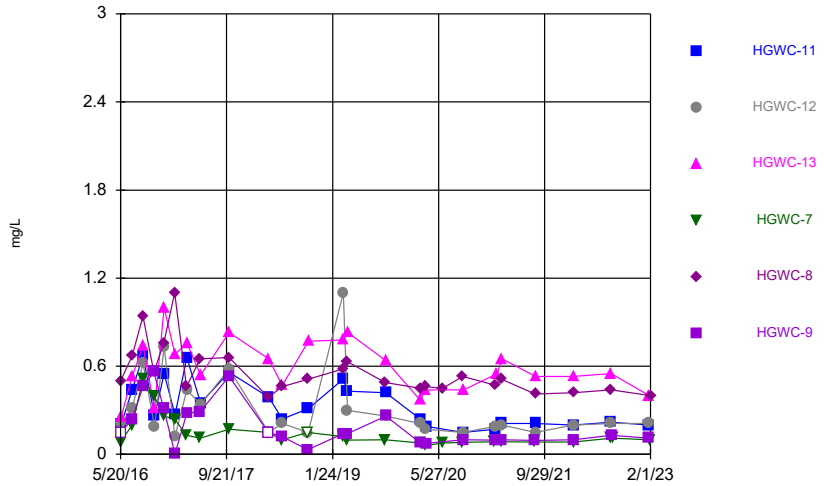
Time Series



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.

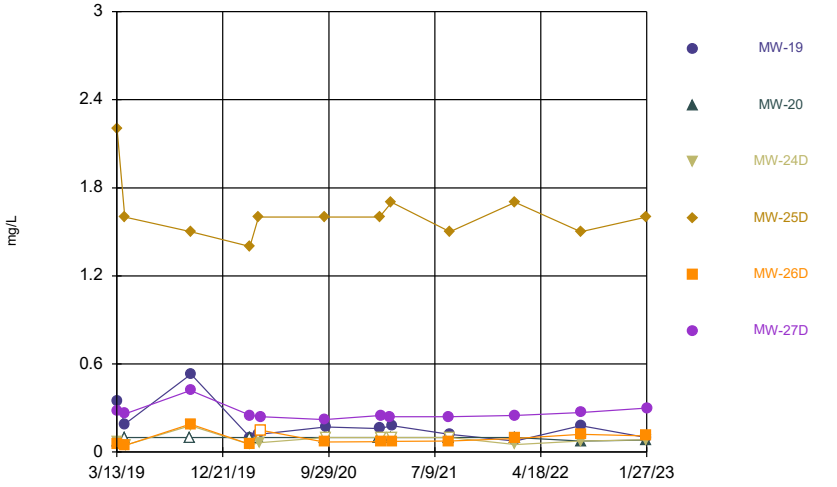
Time Series



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.

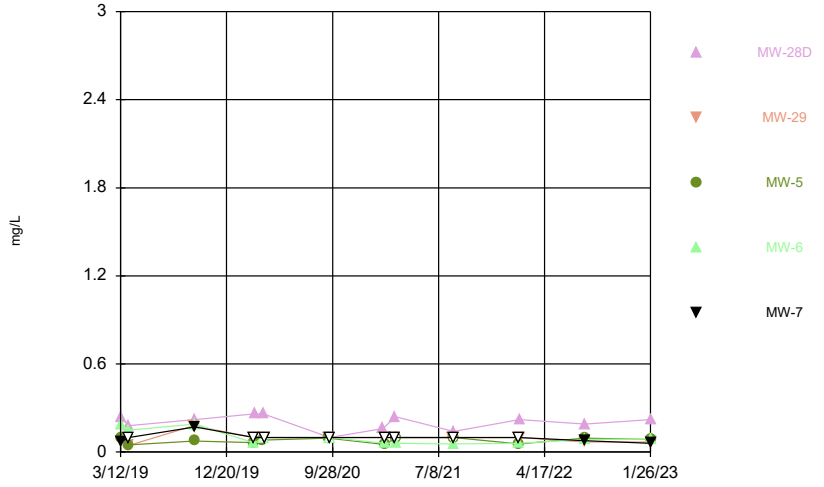
Time Series



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.

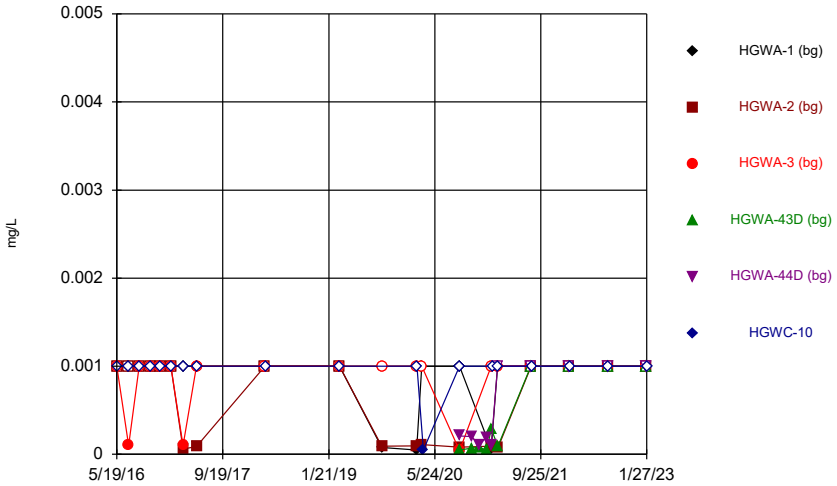
Time Series



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.

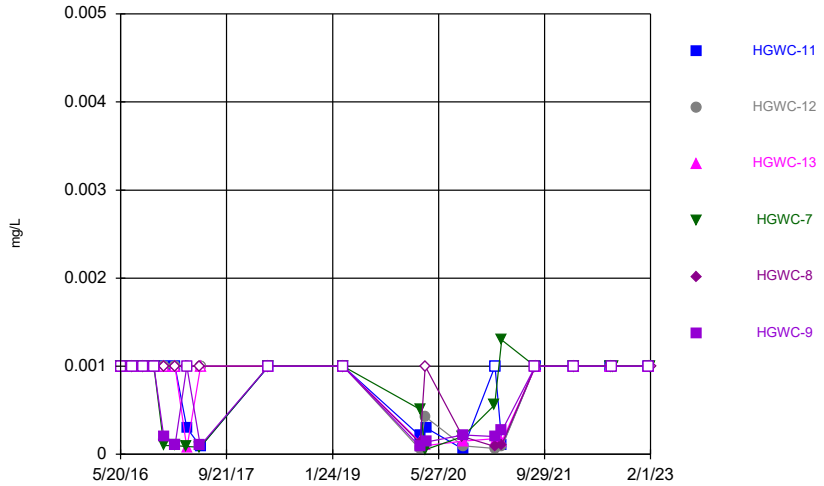
Time Series



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.

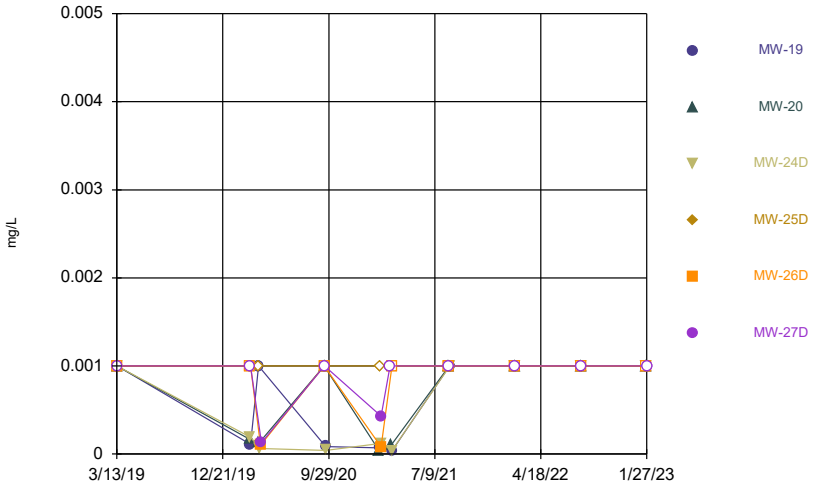
Time Series



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.

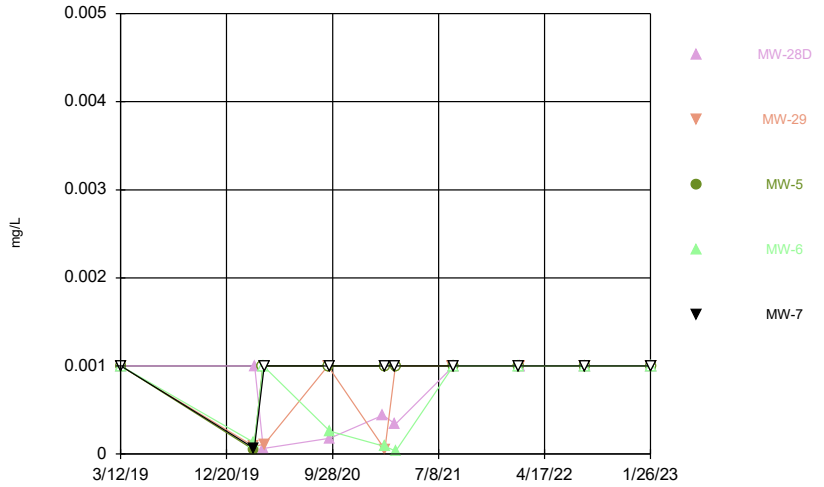
Time Series



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.

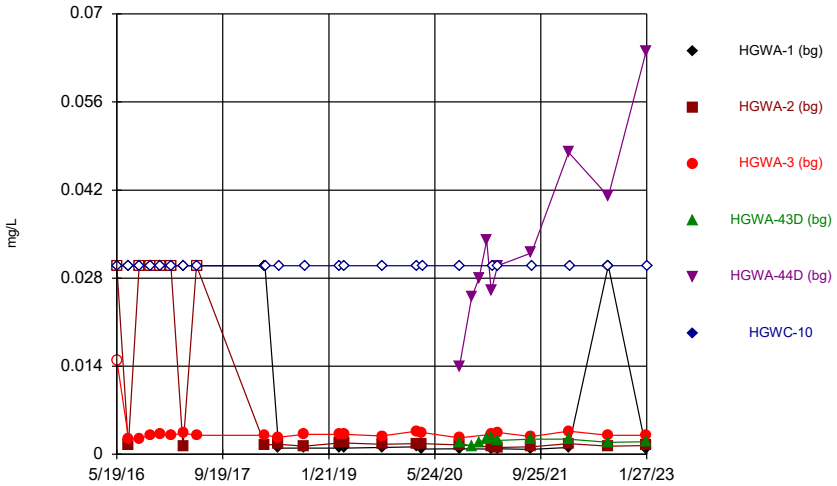
Time Series



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.

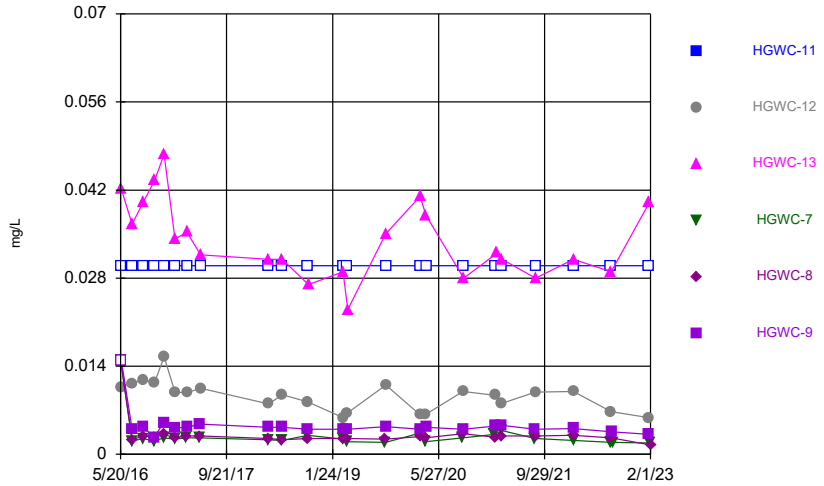
Time Series



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.

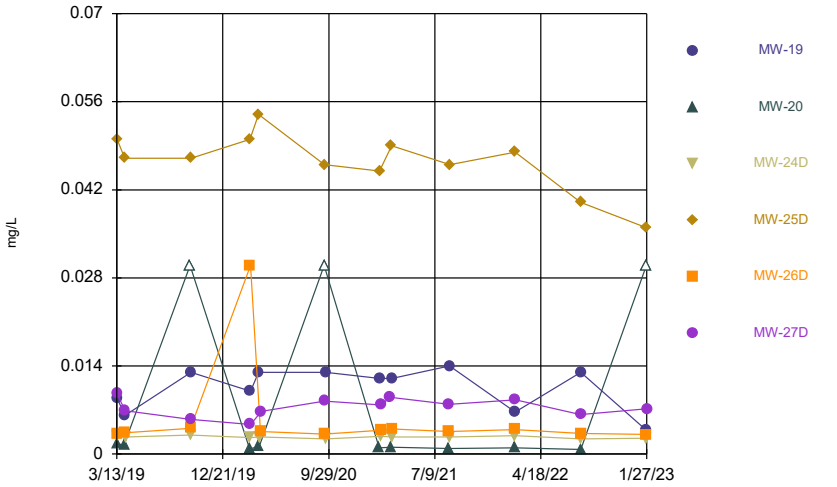
Time Series



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.

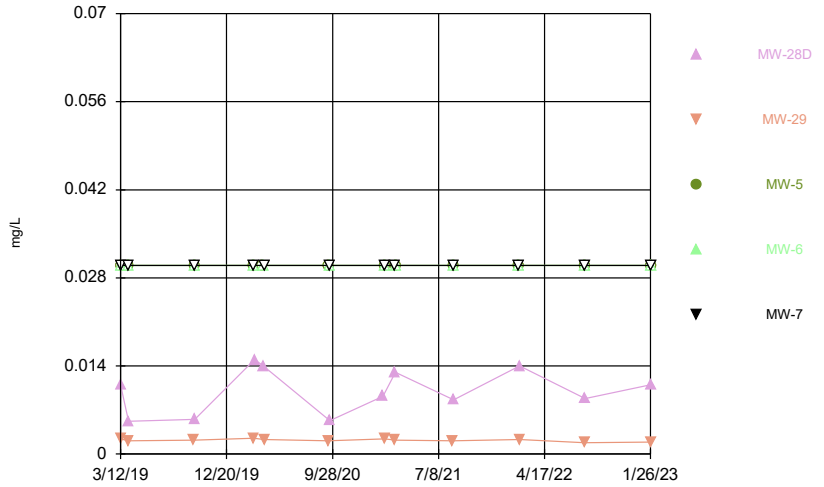
Time Series



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.

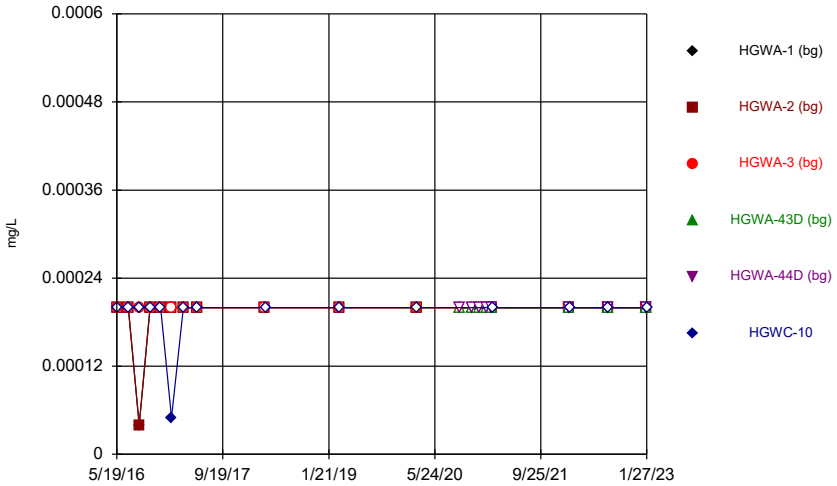
Time Series



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.

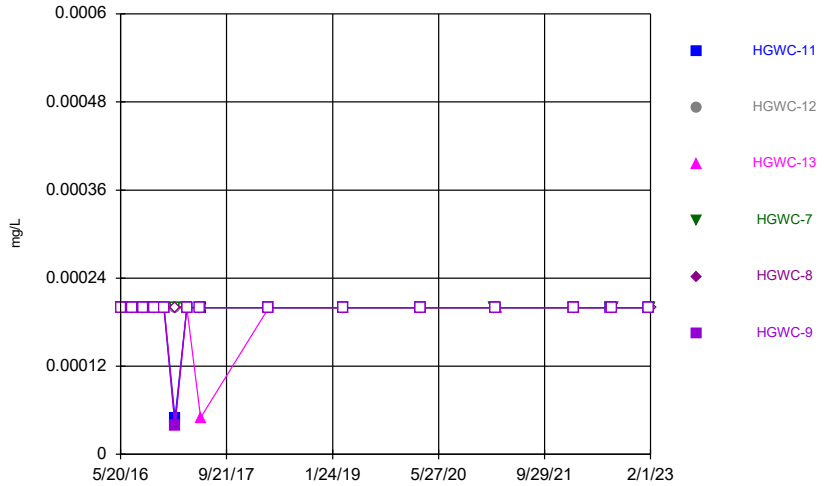
Time Series



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.

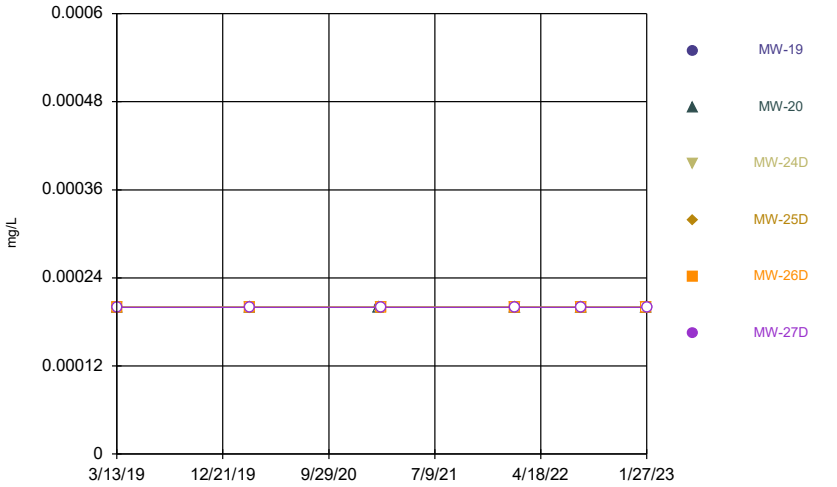
Time Series



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.

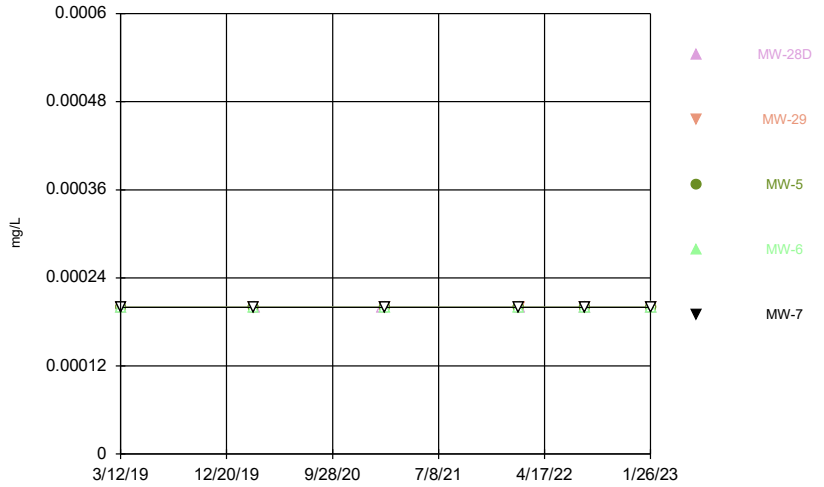
Time Series



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.

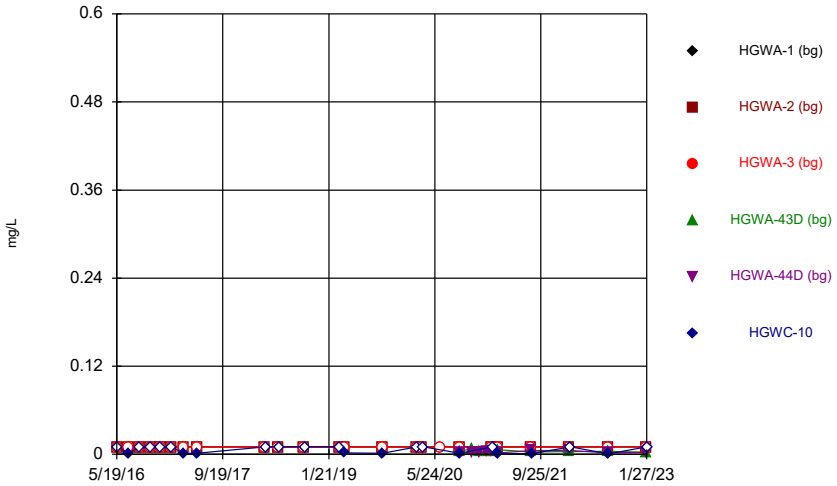
Time Series



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.

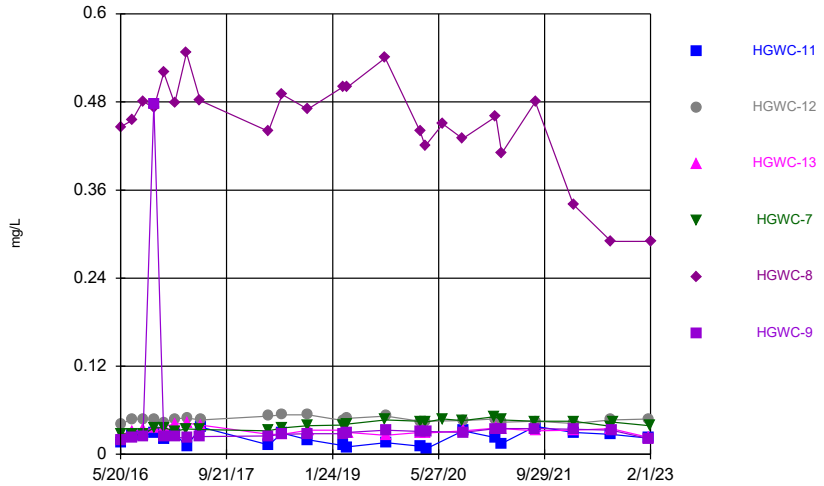
Time Series



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

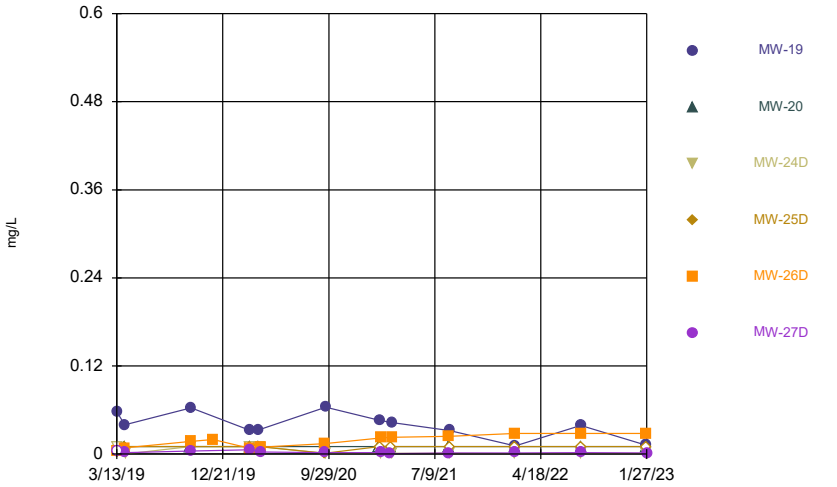
Time Series



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.

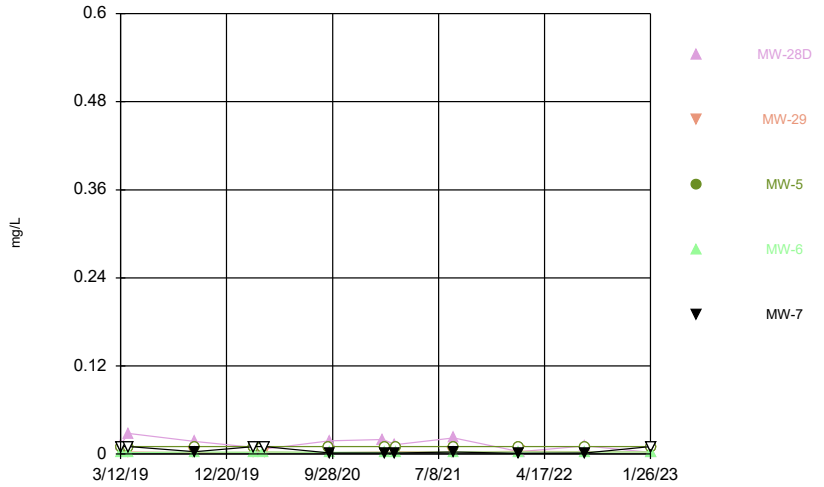
Time Series



Constituent: Molybdenum Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

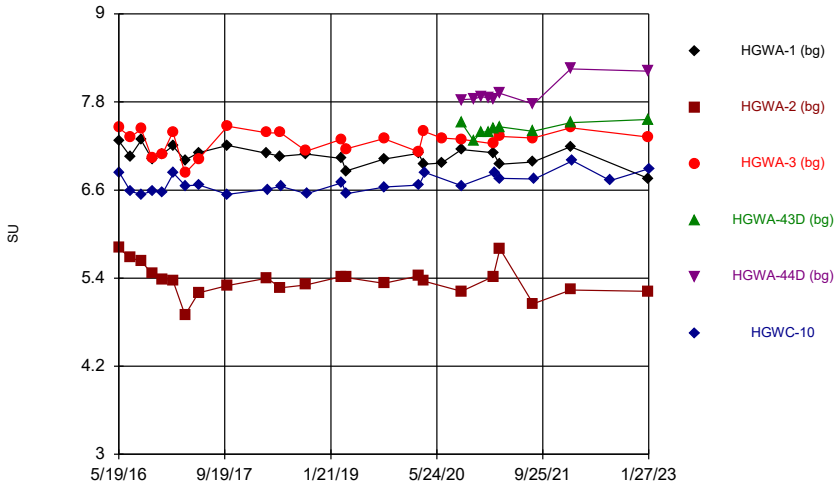
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Molybdenum Analysis Run 4/14/2023 12:18 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Time Series

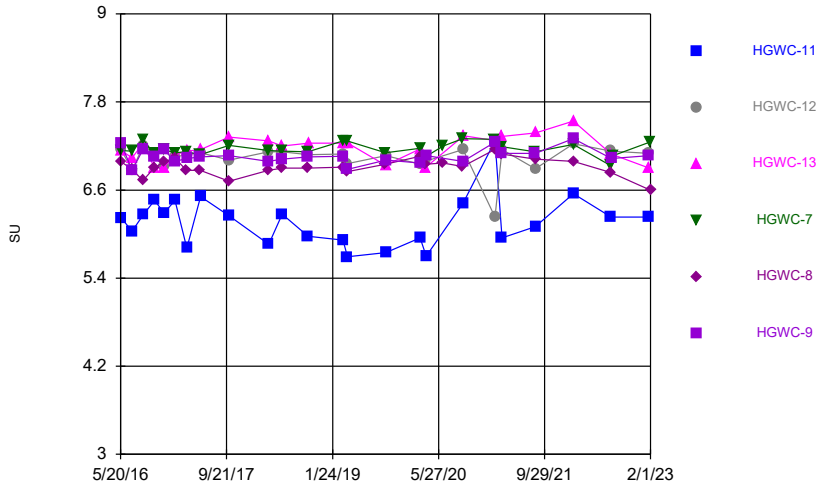


Constituent: pH, Field Analysis Run 4/14/2023 12:18 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

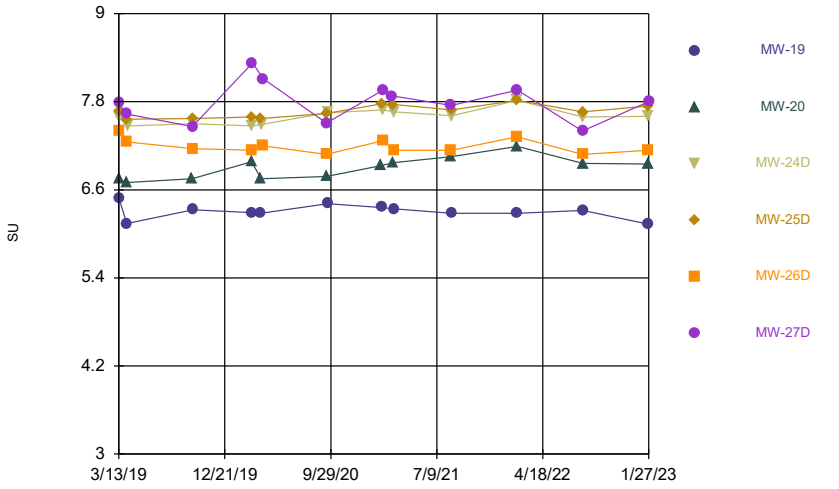


Constituent: pH, Field Analysis Run 4/14/2023 12:18 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

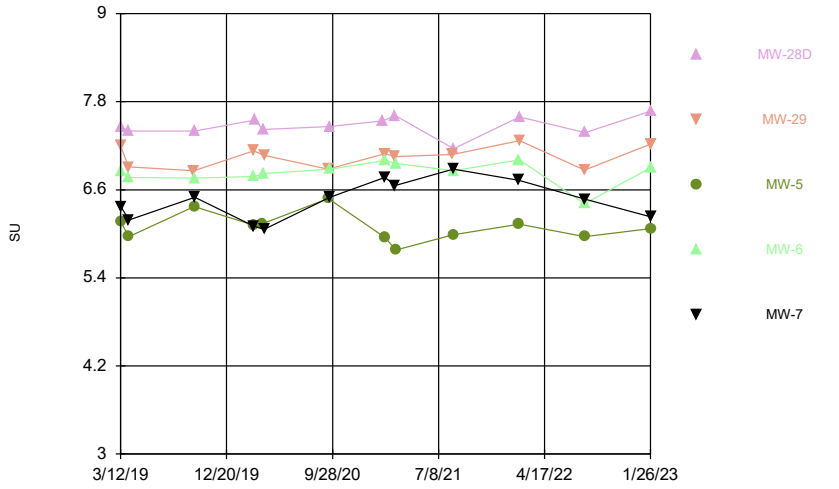


Constituent: pH, Field Analysis Run 4/14/2023 12:19 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

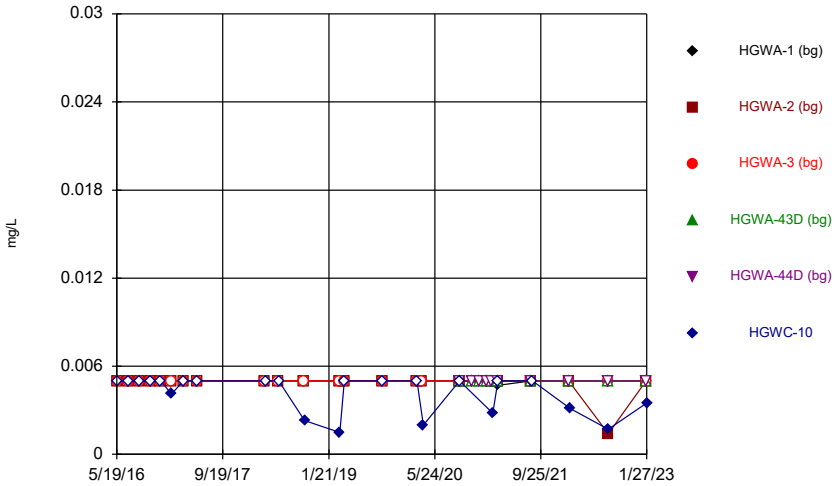


Constituent: pH, Field Analysis Run 4/14/2023 12:19 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

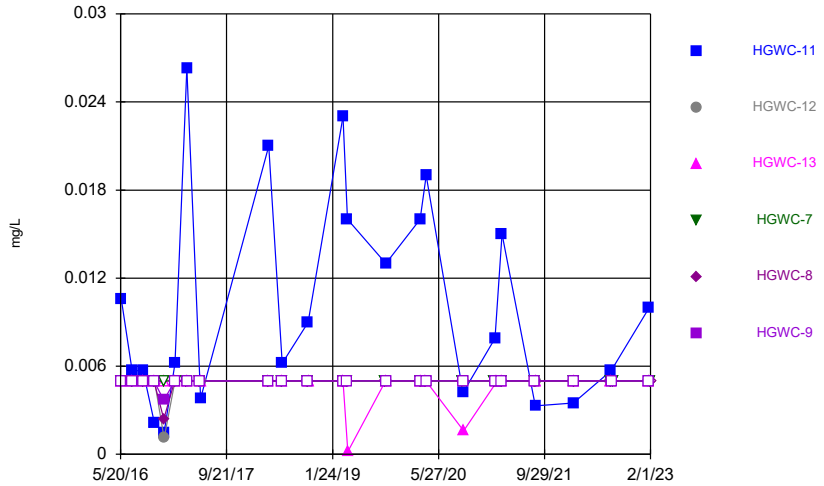
Time Series



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.

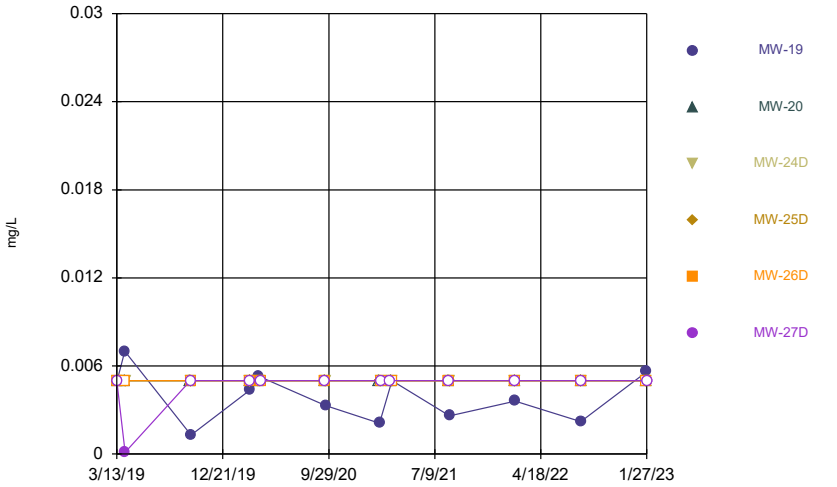
Time Series



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.

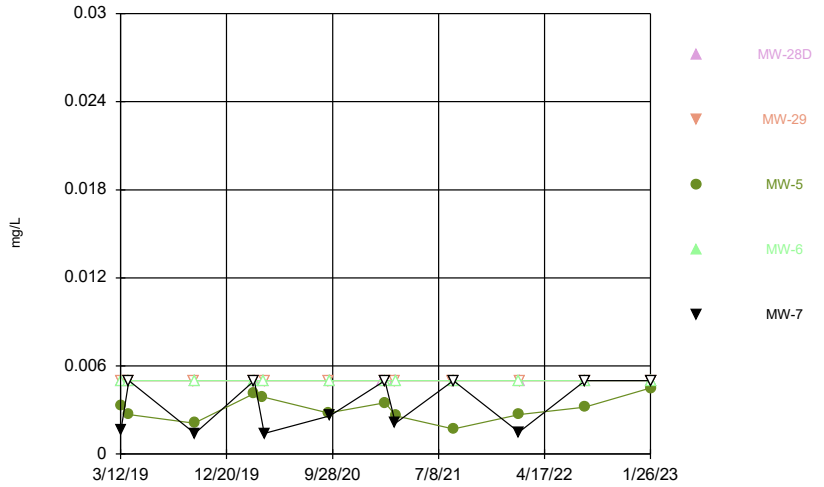
Time Series



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.

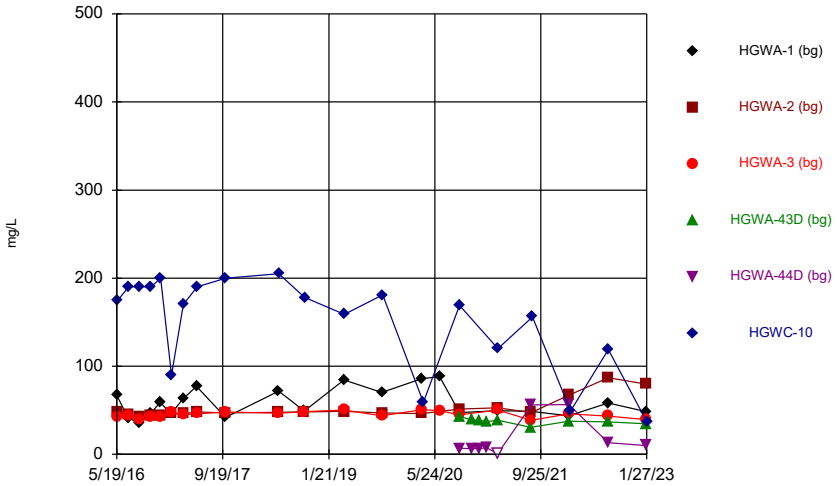
Time Series



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.

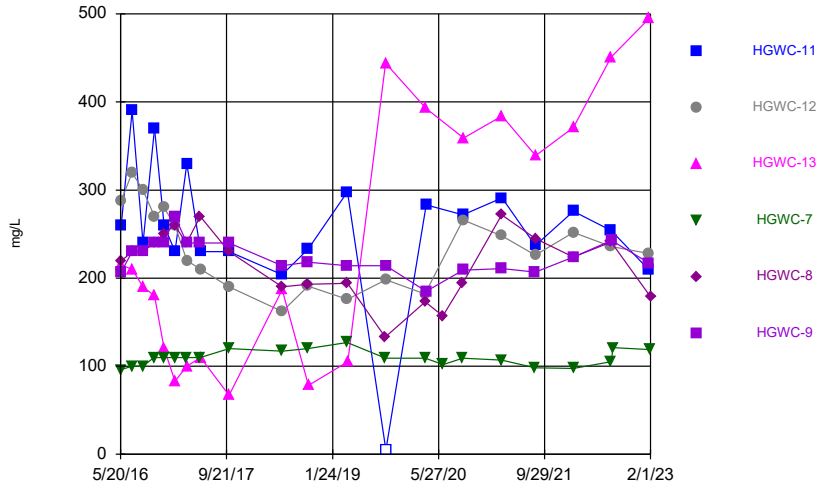
Time Series



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.

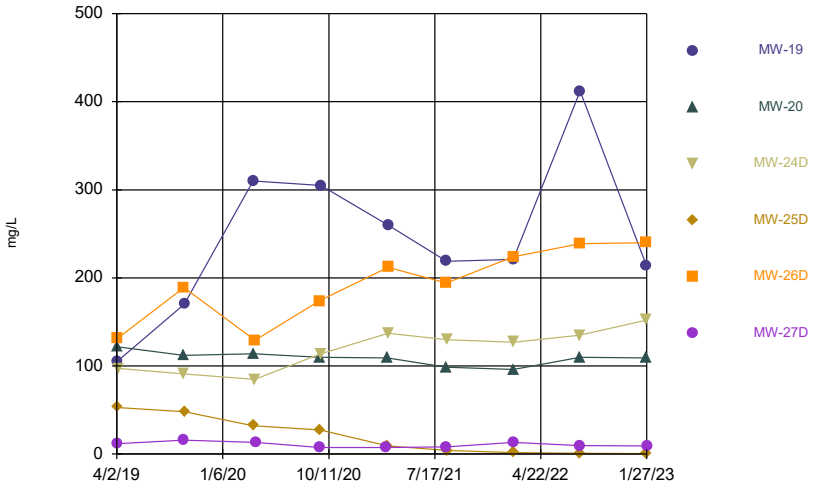
Time Series



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

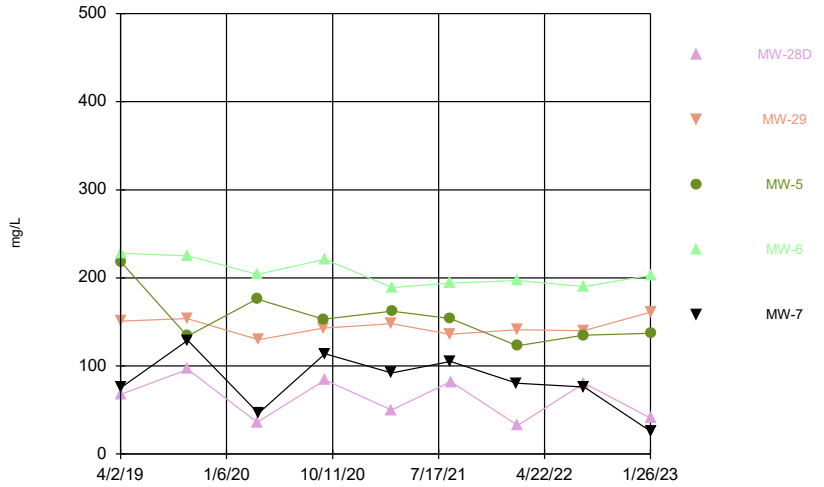
Time Series



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

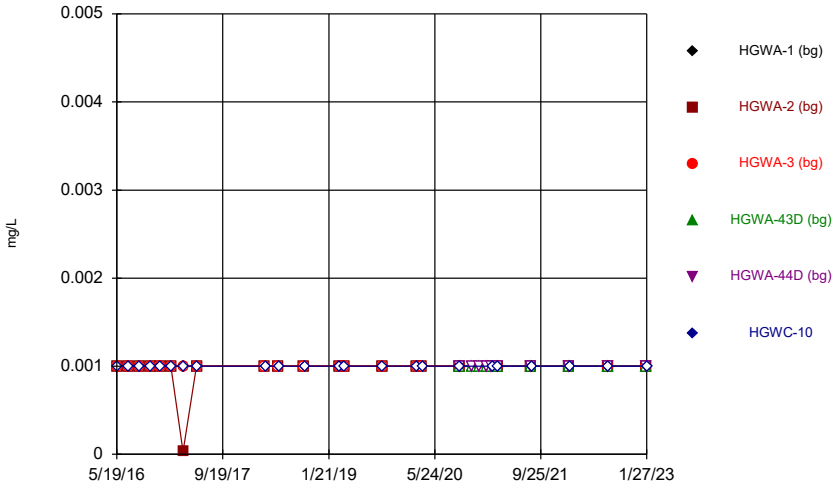
Time Series



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.

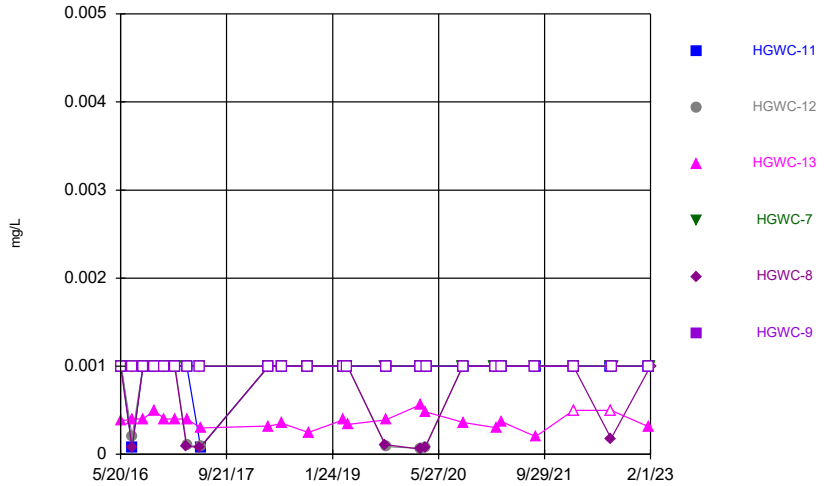
Time Series



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.

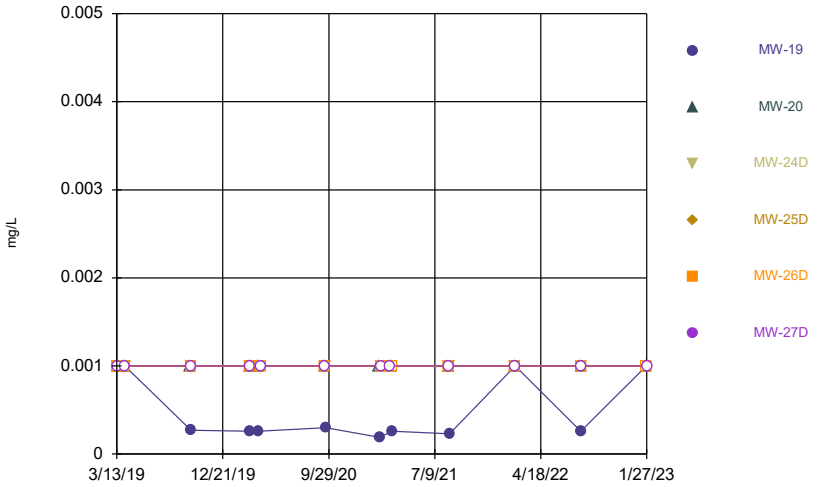
Time Series



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.

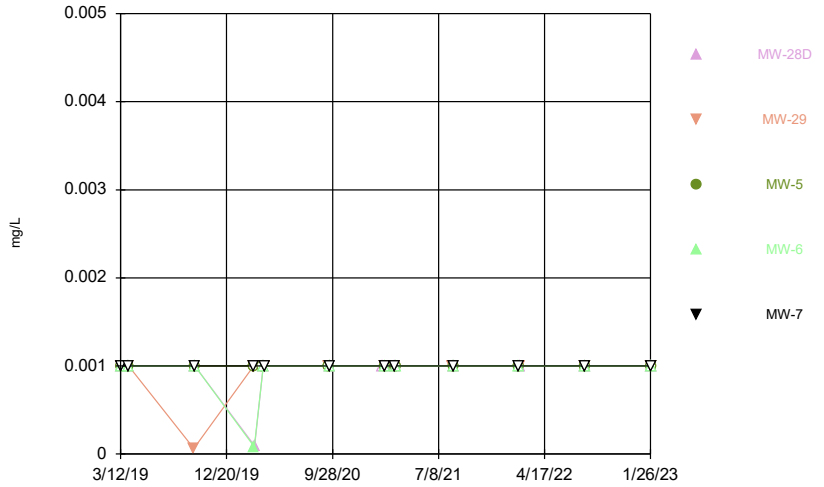
Time Series



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.

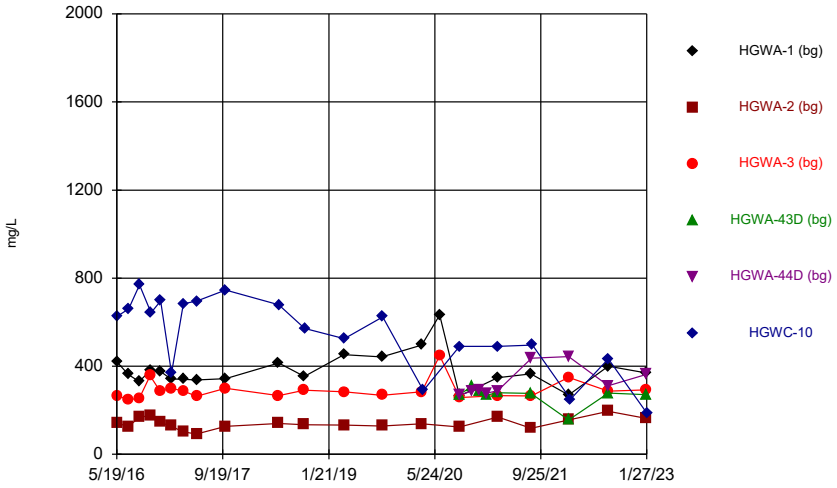
Time Series



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

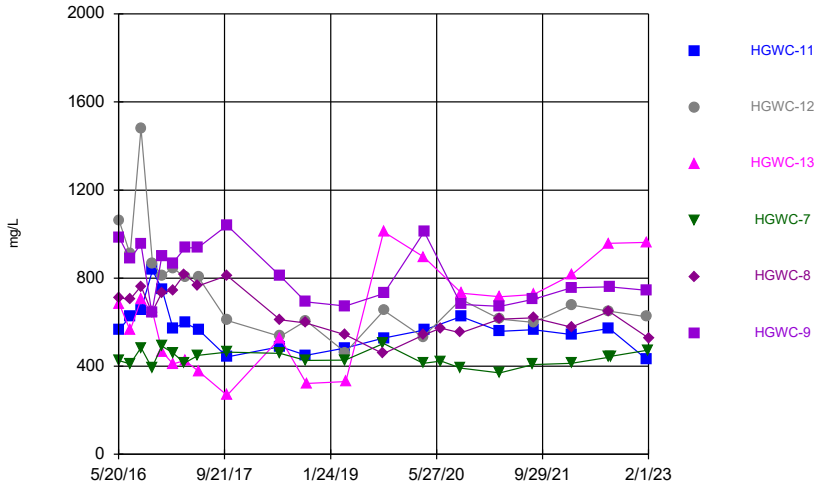


Constituent: Total Dissolved Solids Analysis Run 4/14/2023 12:19 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

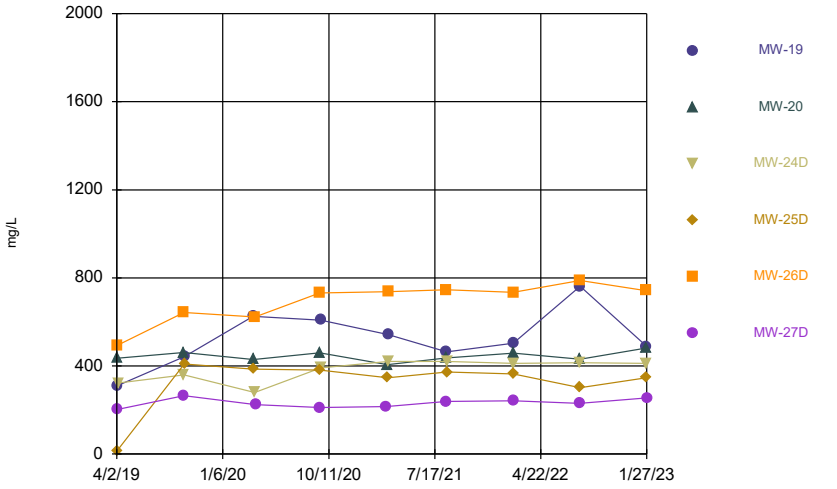


Constituent: Total Dissolved Solids Analysis Run 4/14/2023 12:19 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

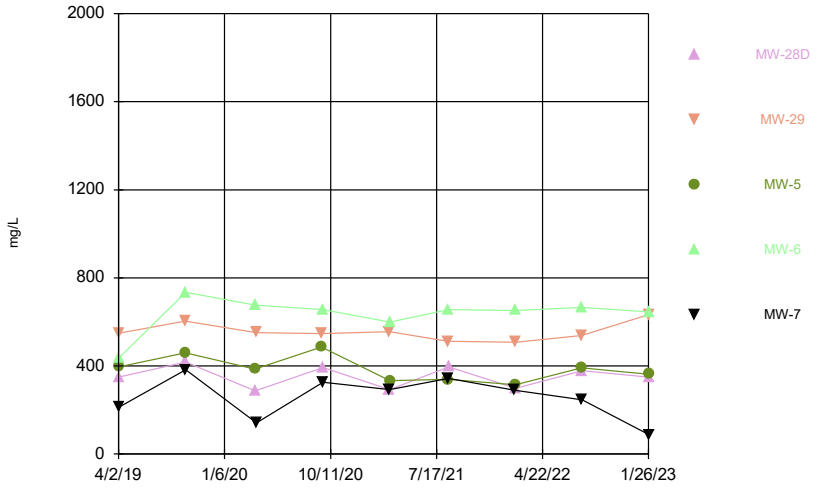


Constituent: Total Dissolved Solids Analysis Run 4/14/2023 12:19 PM

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

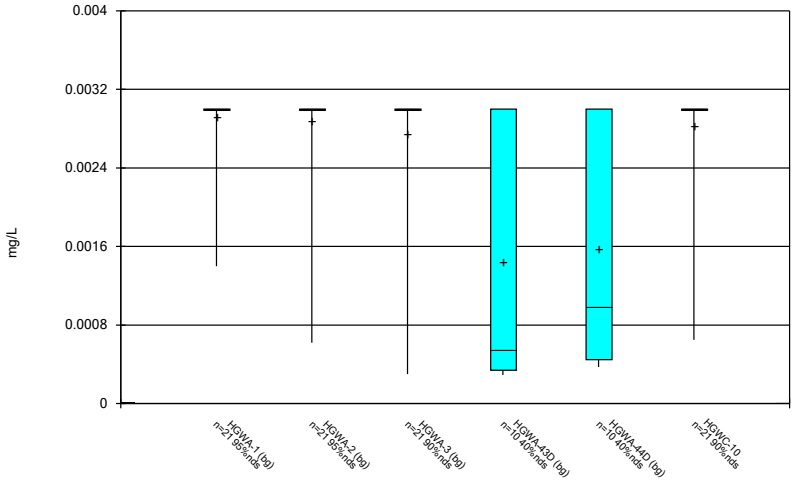
Constituent: Total Dissolved Solids (mg/L) Analysis Run 4/14/2023 12:20 PM

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.

Box & Whiskers Plot

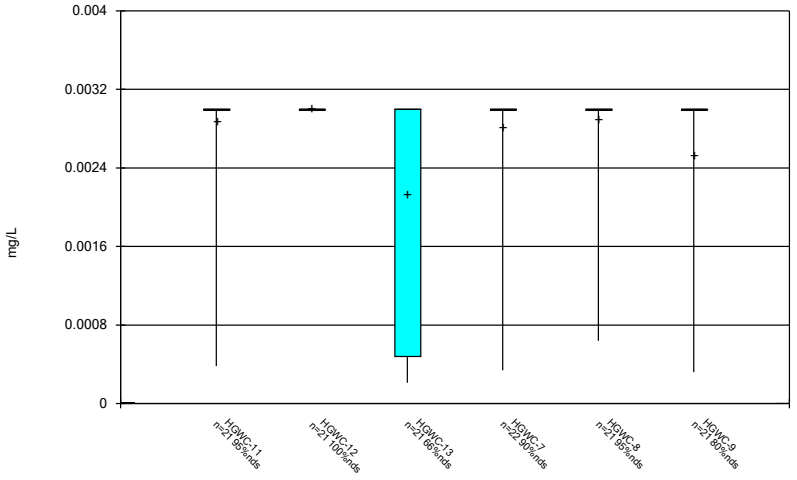


Constituent: Antimony Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

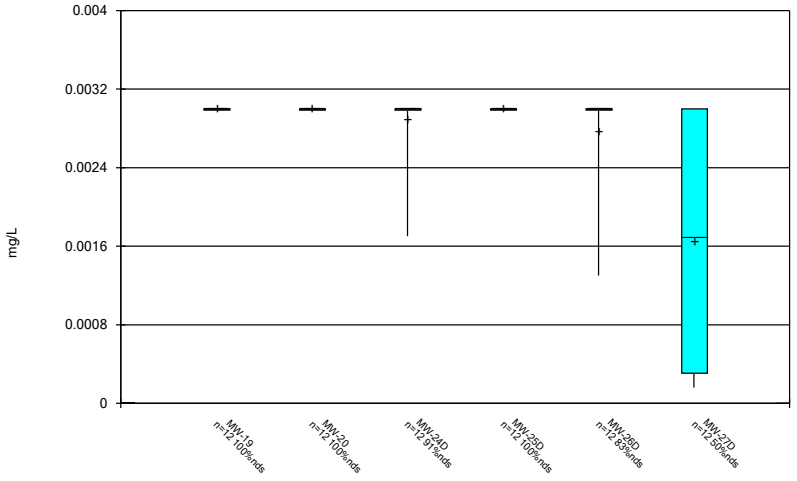


Constituent: Antimony Analysis Run 4/14/2023 12:21 PM

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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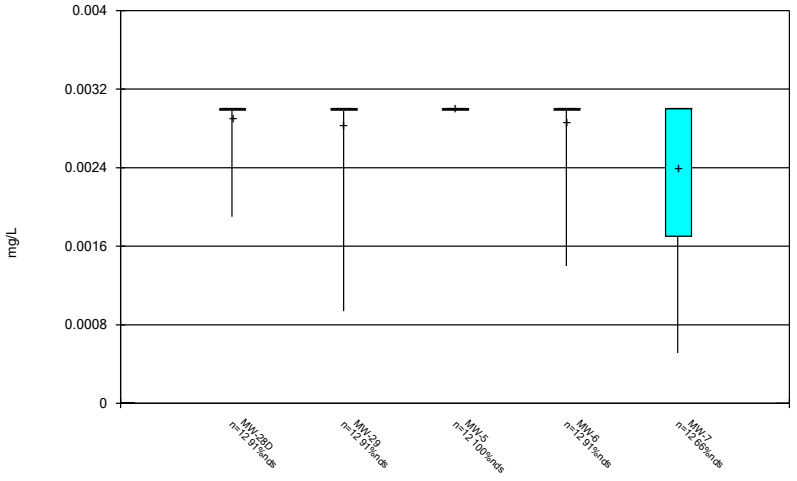
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

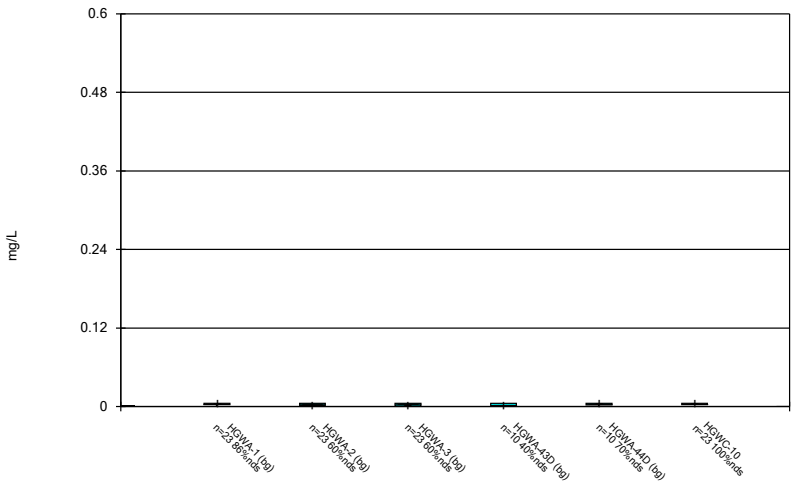
Box & Whiskers Plot



Constituent: Antimony Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

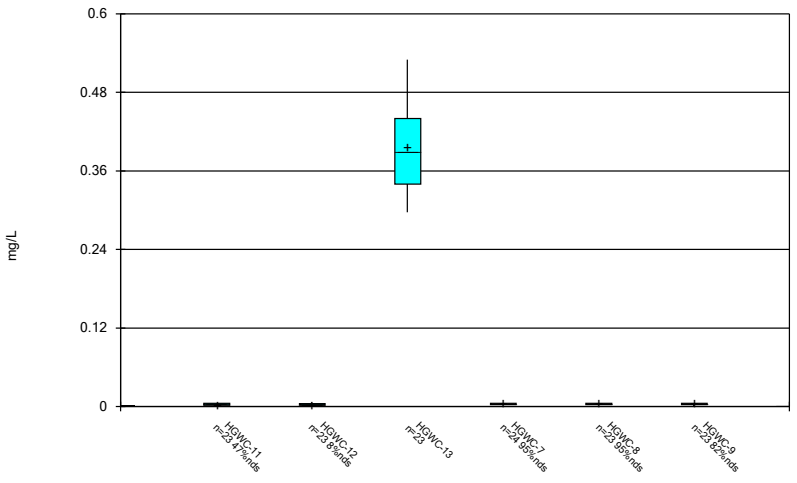


Constituent: Arsenic Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

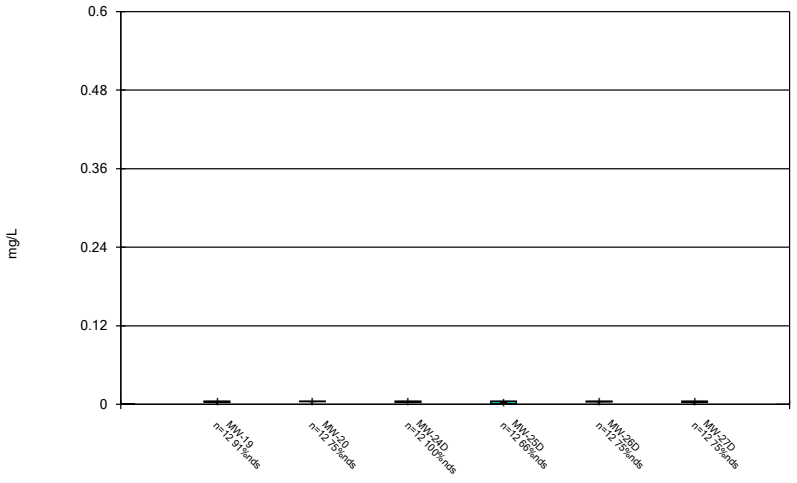


Constituent: Arsenic Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

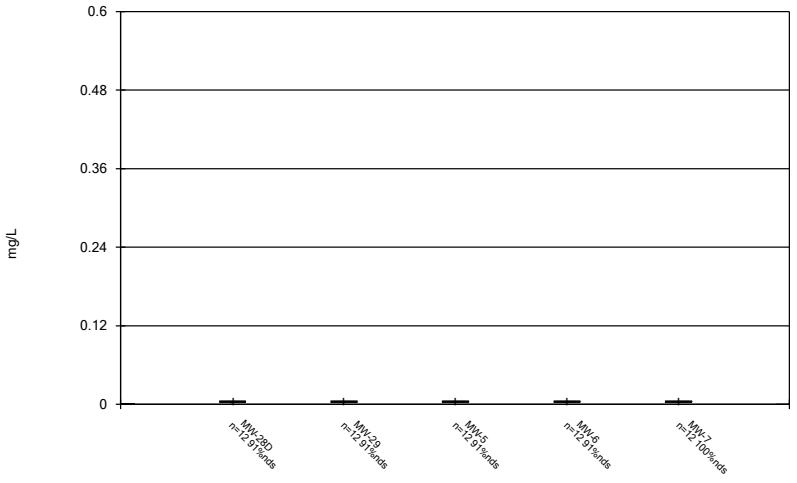


Constituent: Arsenic Analysis Run 4/14/2023 12:21 PM

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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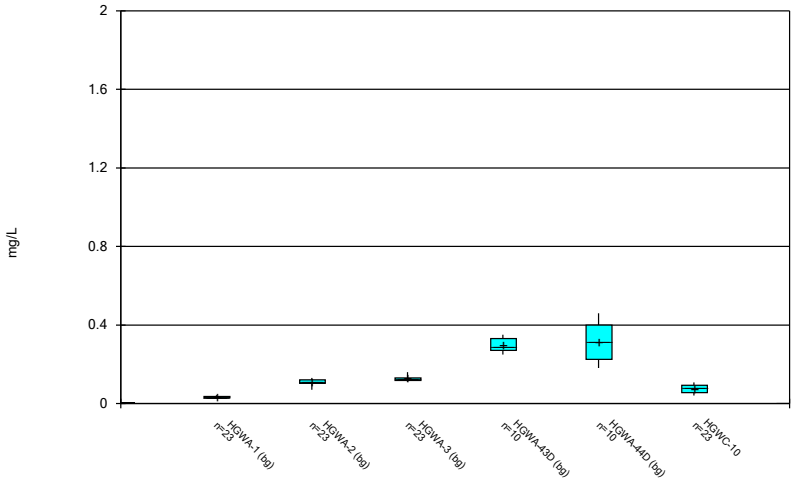
Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

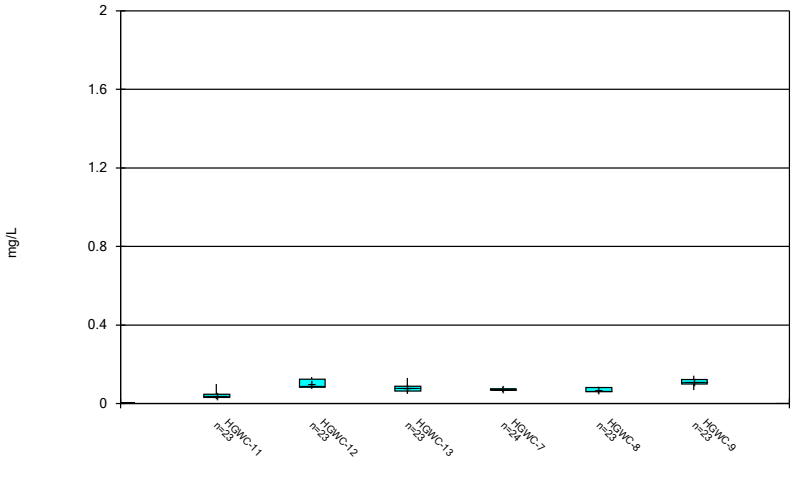


Constituent: Barium Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

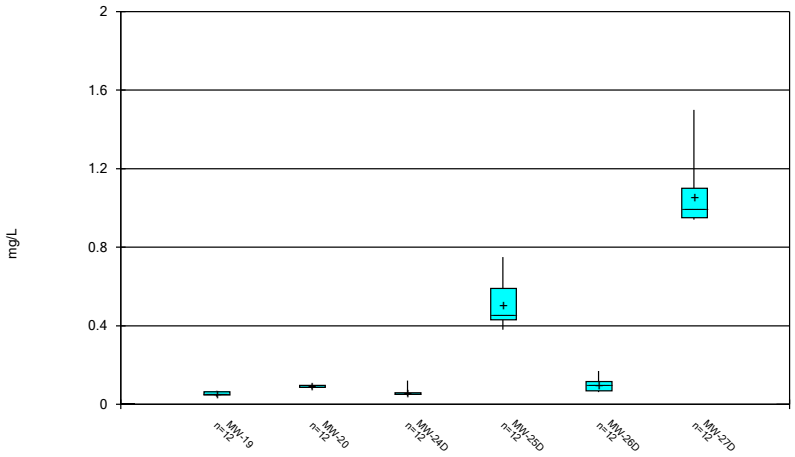


Constituent: Barium Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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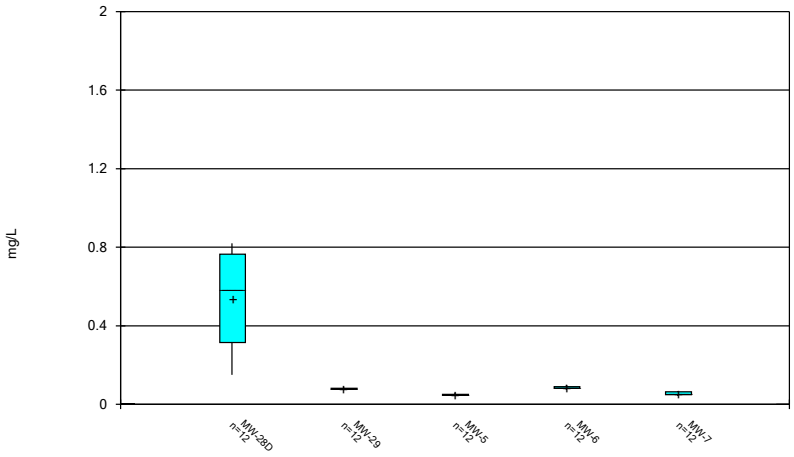
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

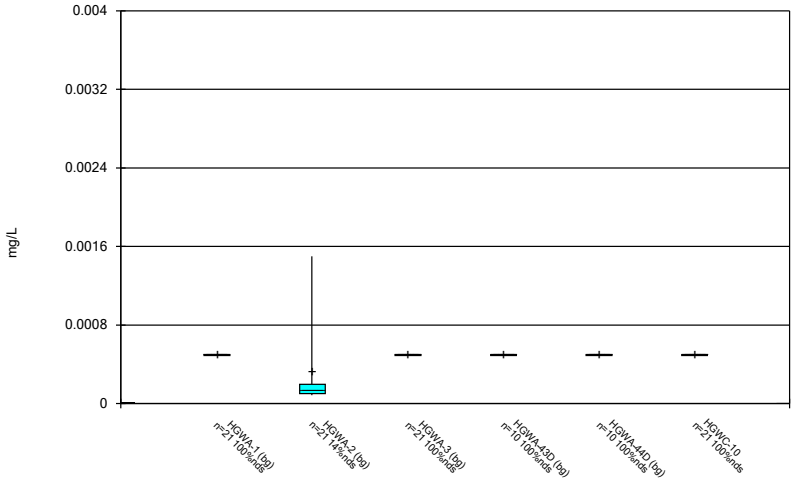
Box & Whiskers Plot



Constituent: Barium Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

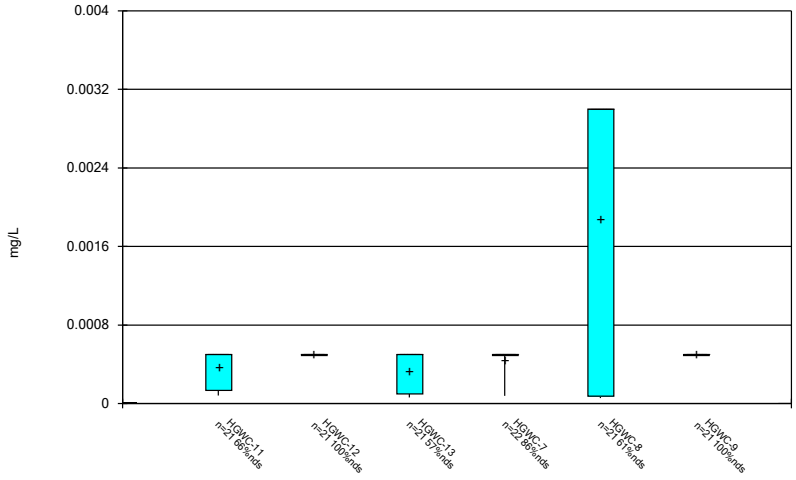


Constituent: Beryllium Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

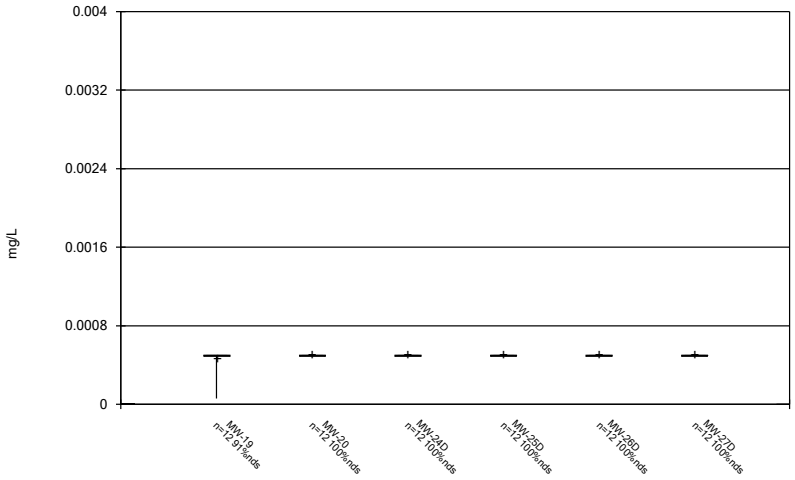


Constituent: Beryllium Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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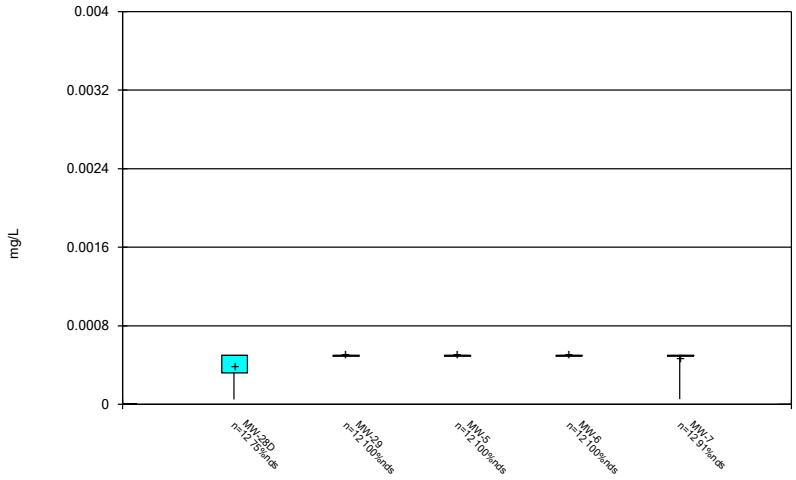
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

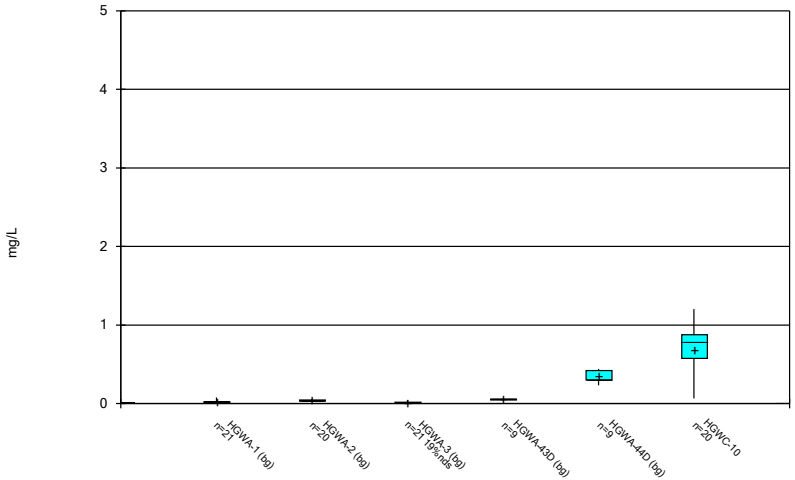
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

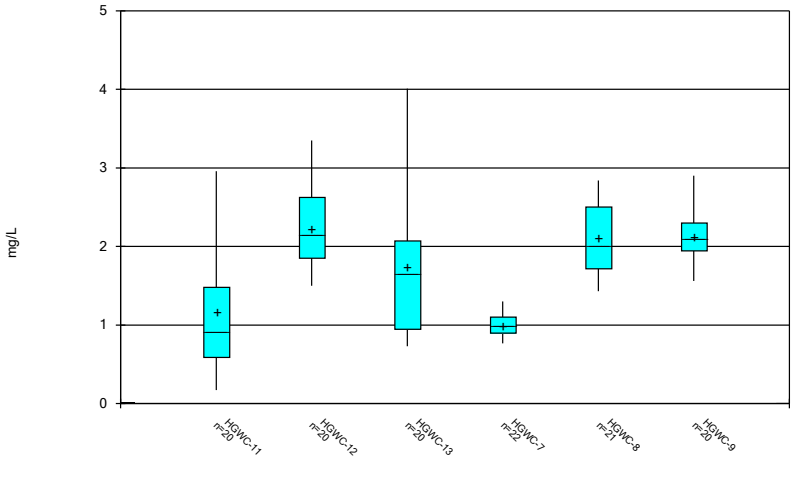


Constituent: Boron Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

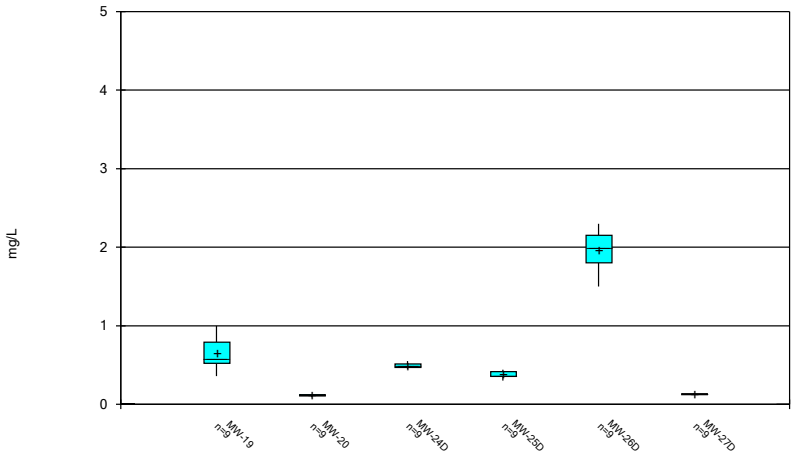


Constituent: Boron Analysis Run 4/14/2023 12:21 PM

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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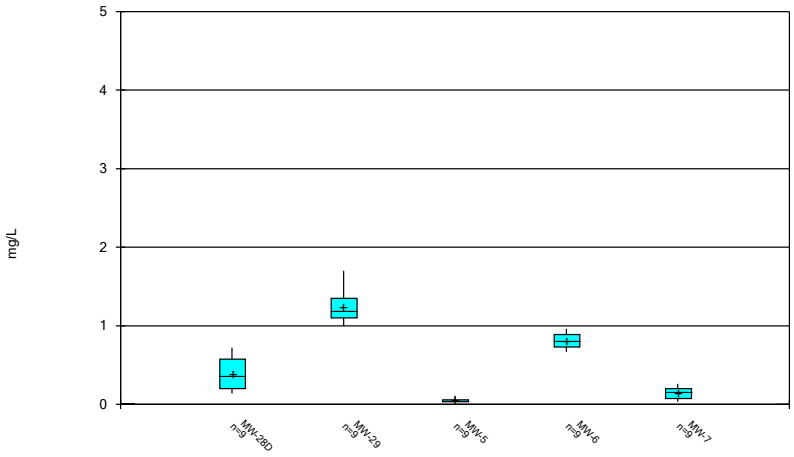
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

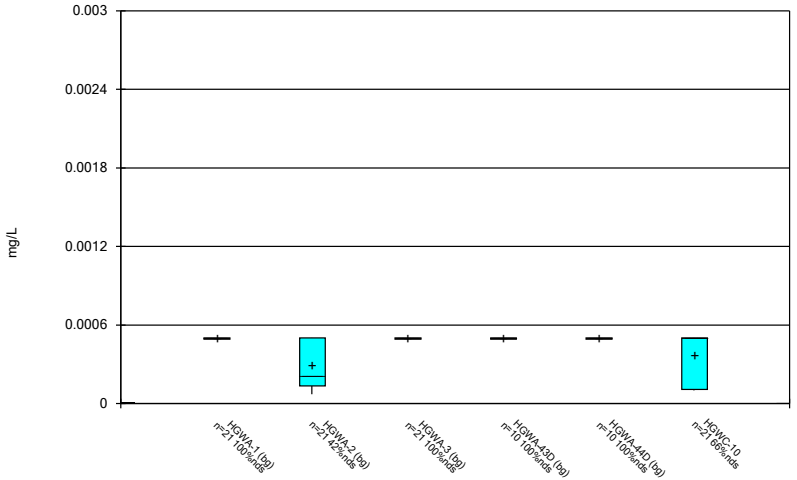
Box & Whiskers Plot



Constituent: Boron Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

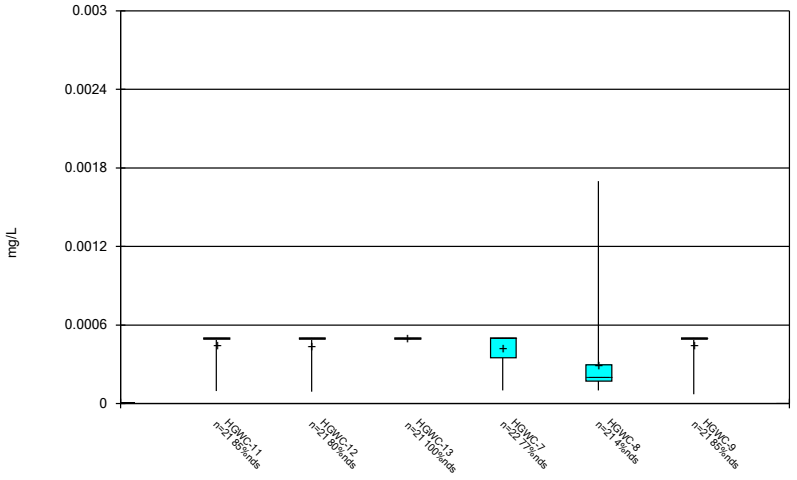


Constituent: Cadmium Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

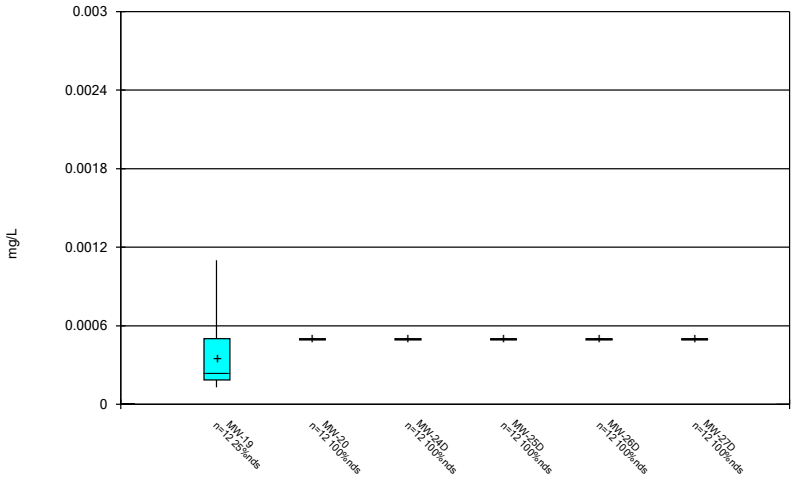


Constituent: Cadmium Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

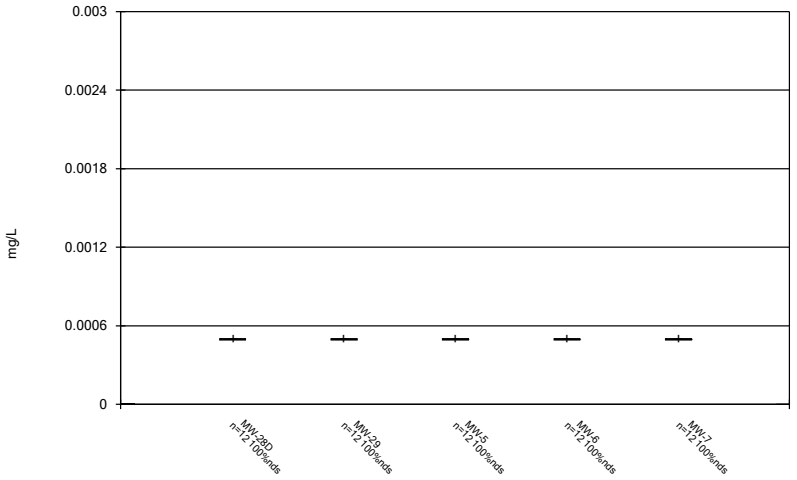


Constituent: Cadmium Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

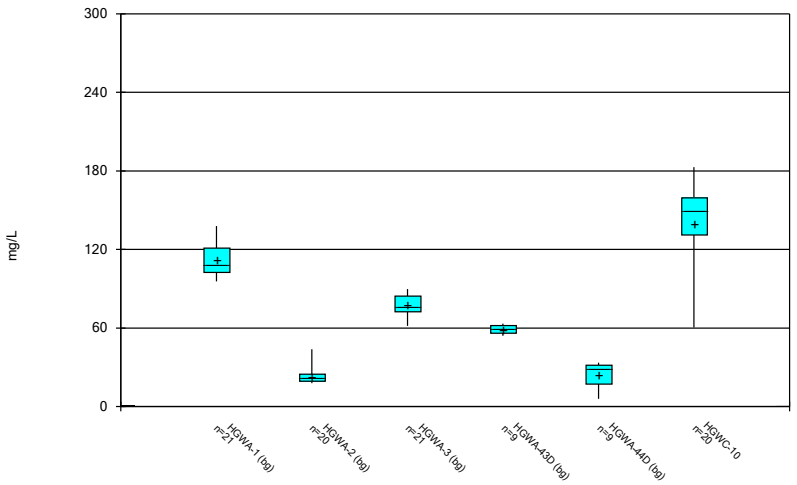
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

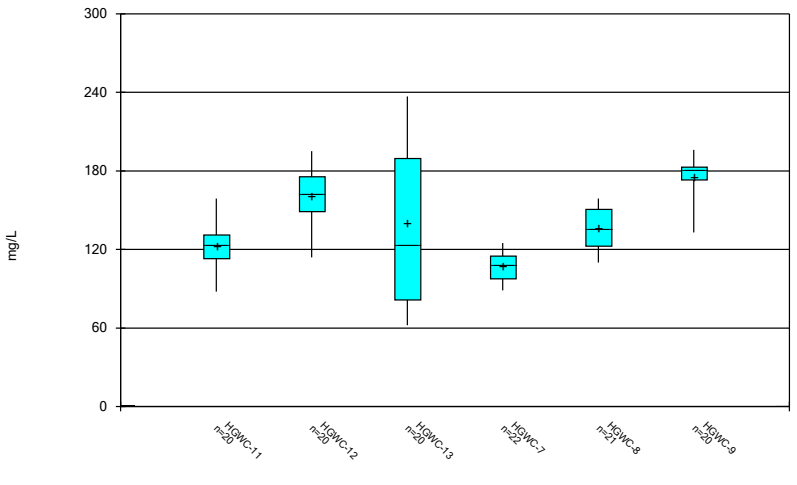


Constituent: Calcium Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

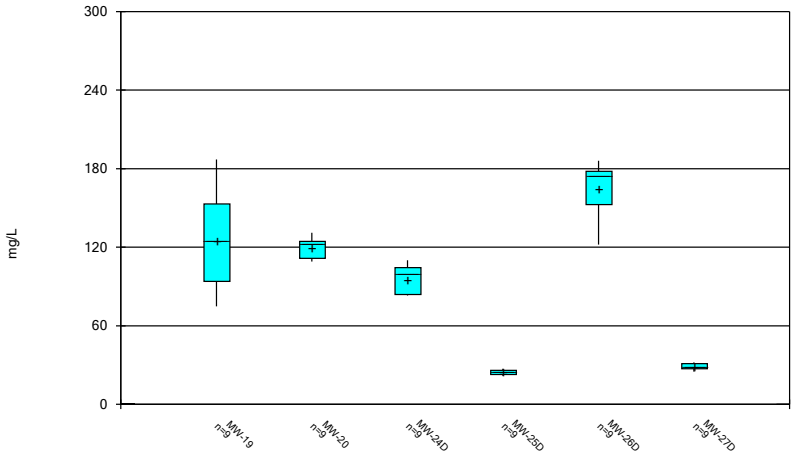


Constituent: Calcium Analysis Run 4/14/2023 12:21 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

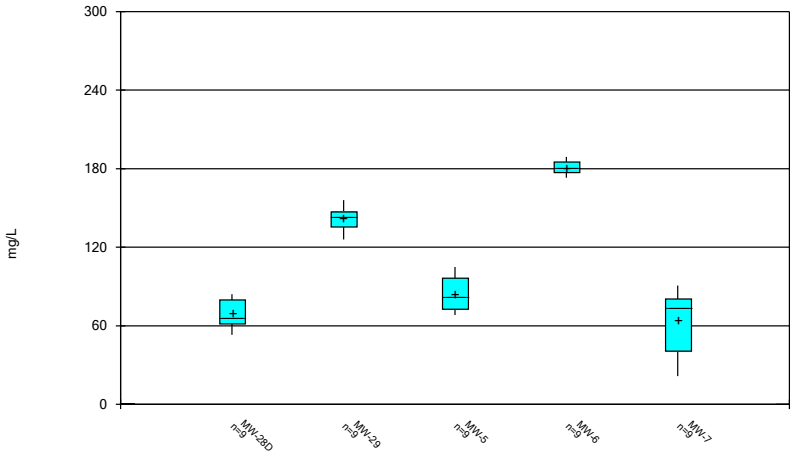


Constituent: Calcium Analysis Run 4/14/2023 12:21 PM

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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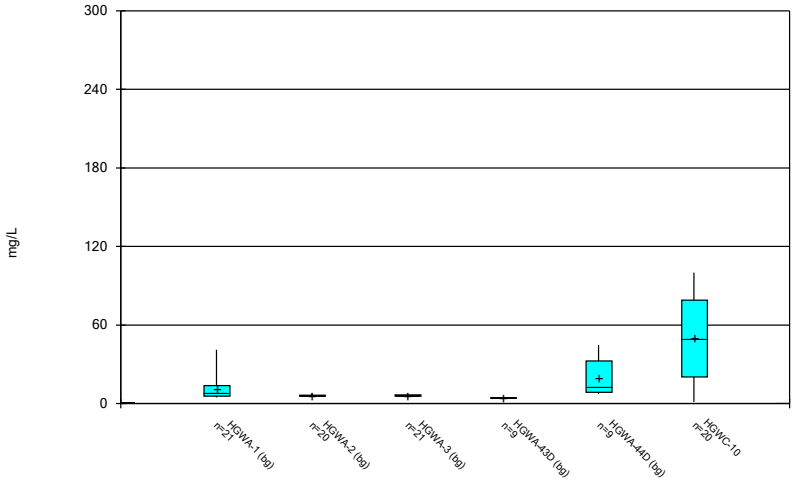
Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

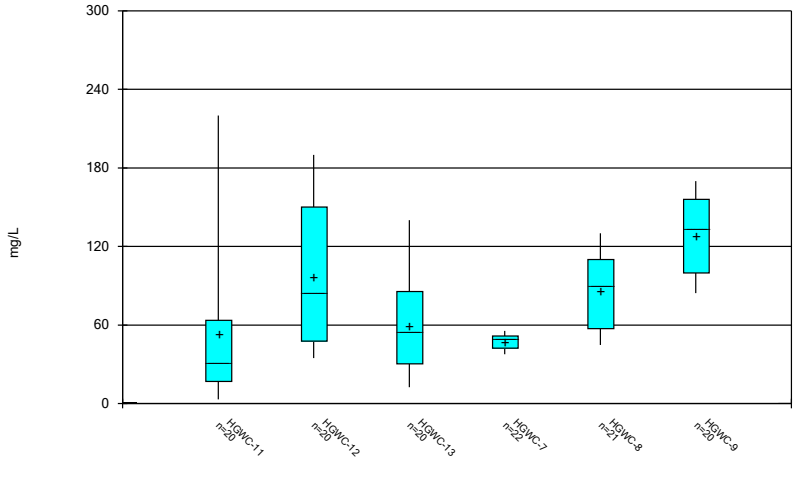


Constituent: Chloride Analysis Run 4/14/2023 12:21 PM

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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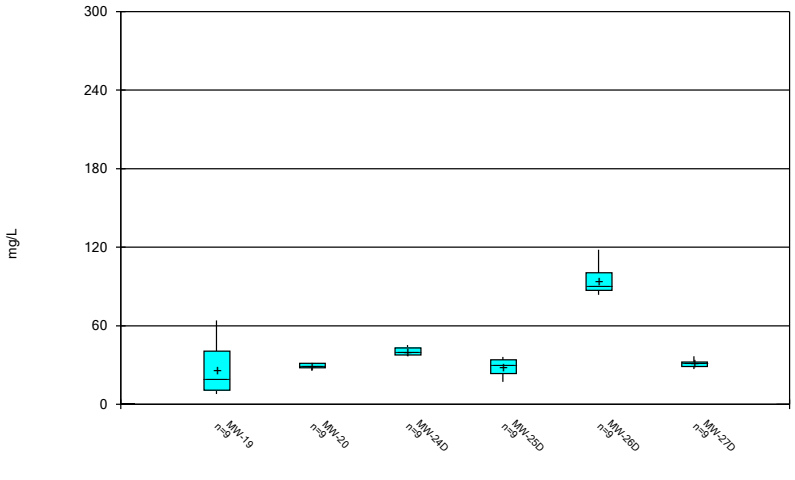
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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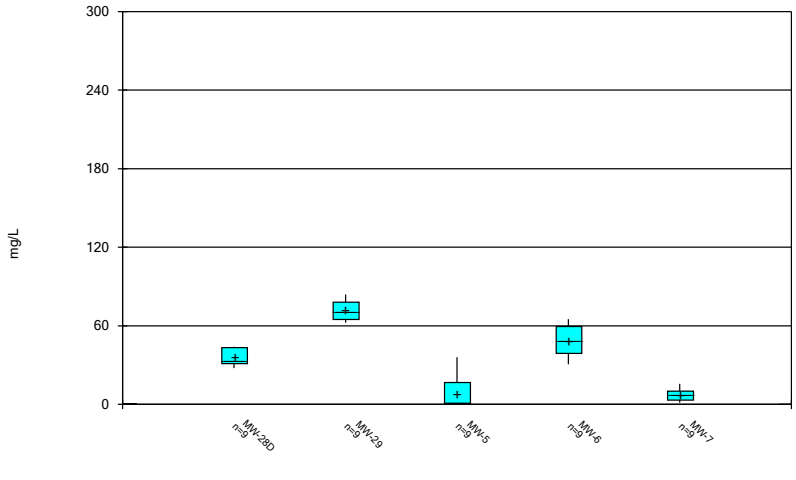
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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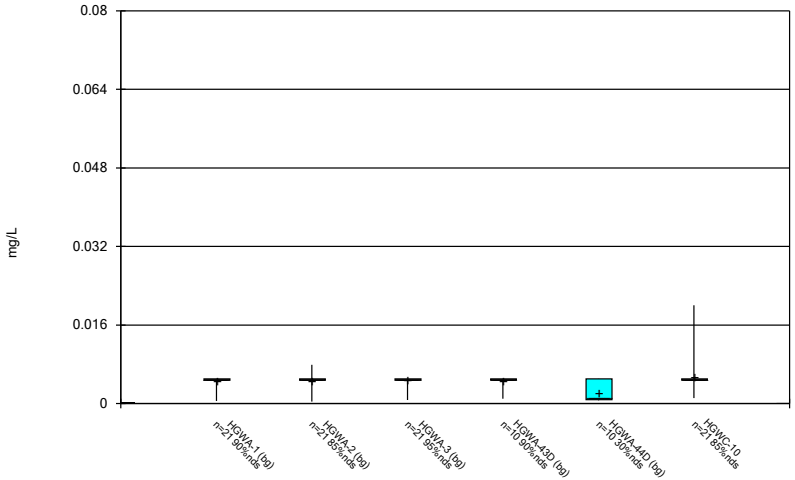
Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot



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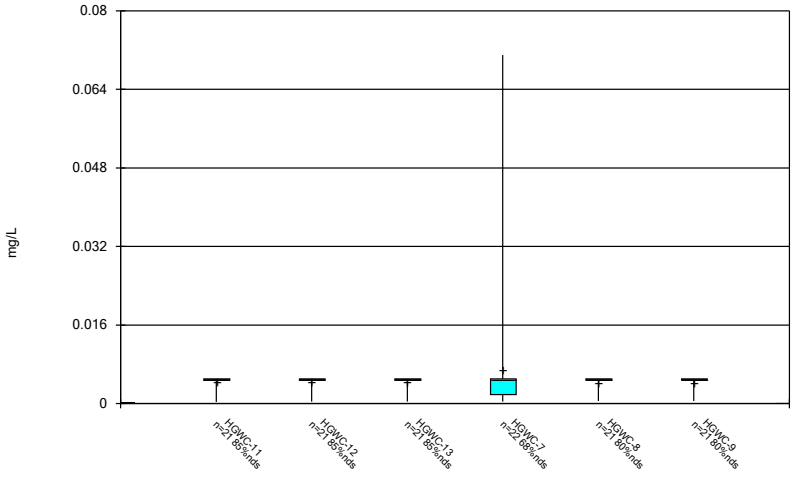
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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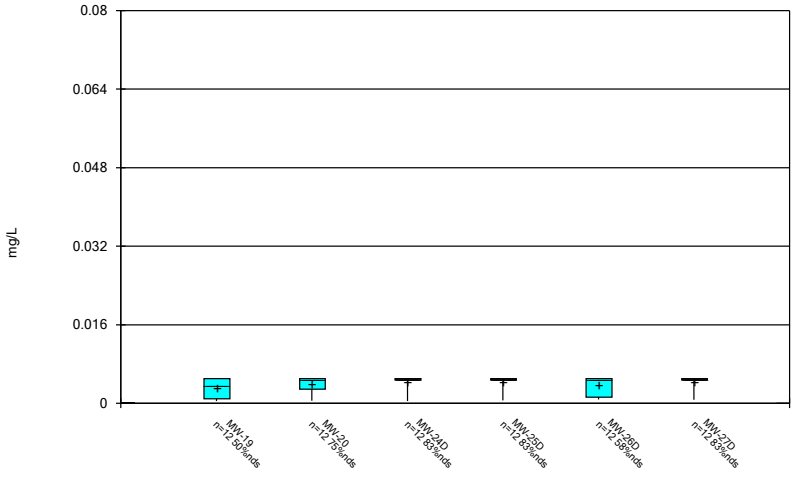
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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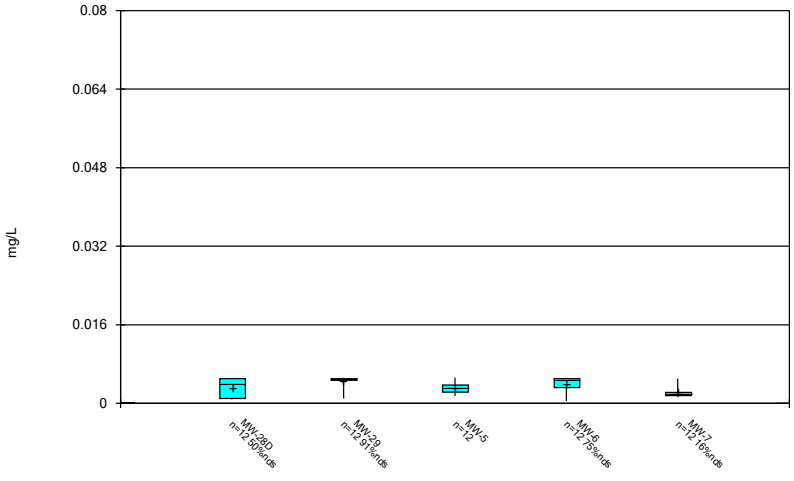
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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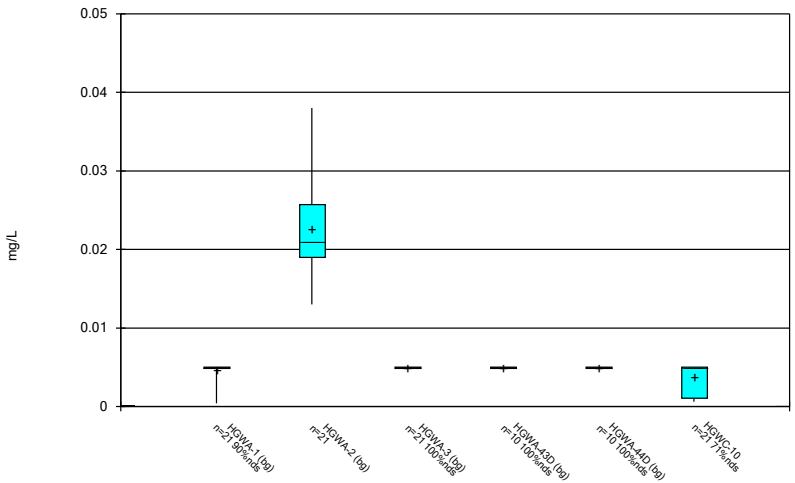
Box & Whiskers Plot



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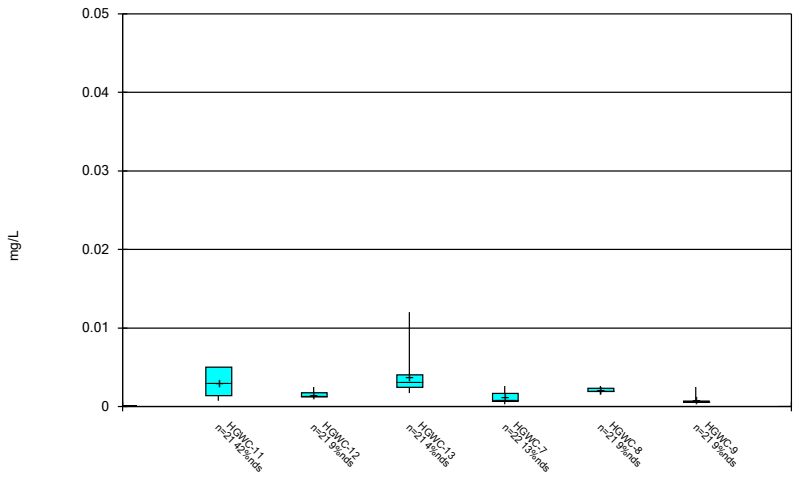
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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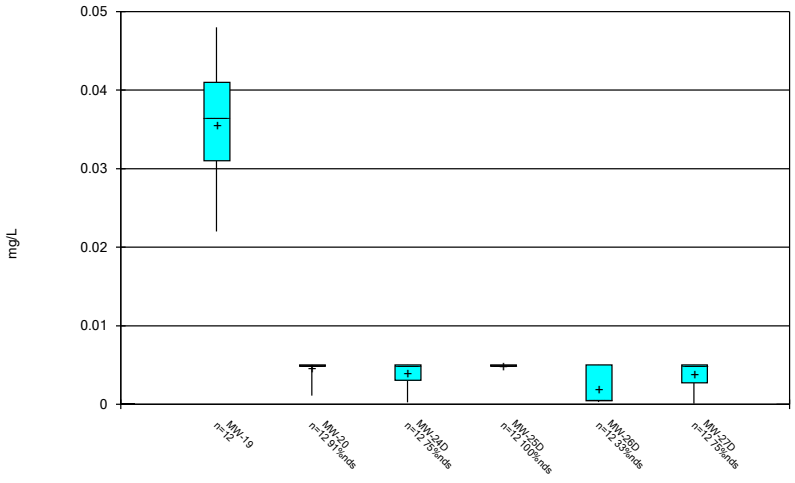
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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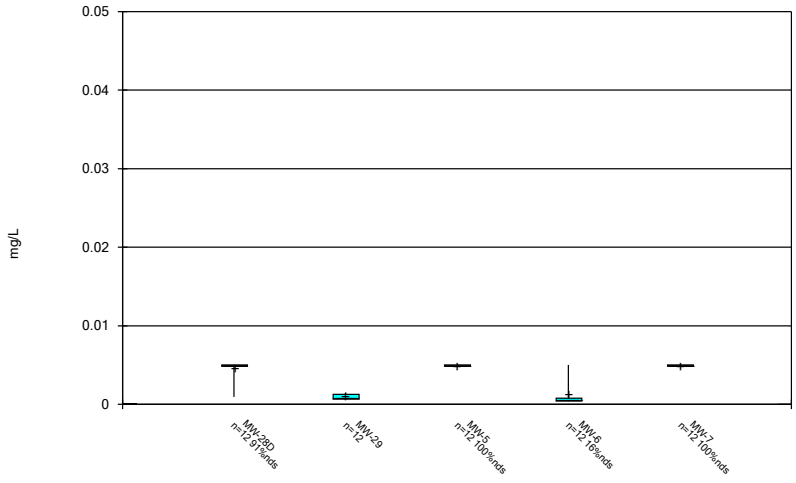
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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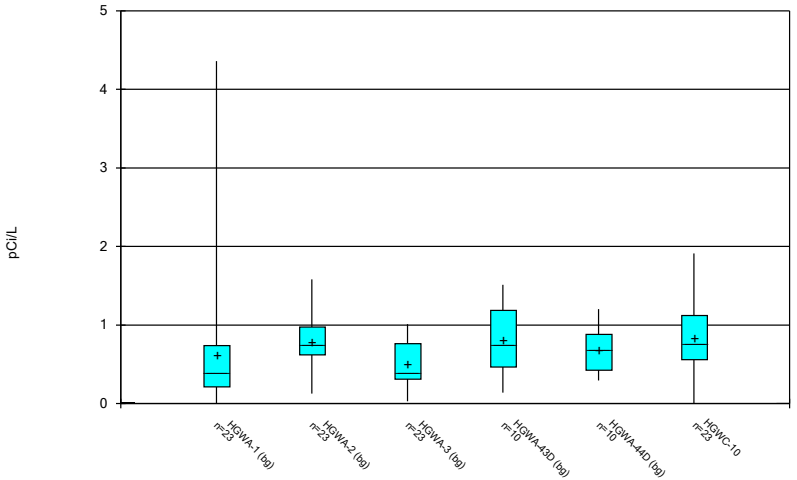
Plant Hammond Client: Southern Company Data: Hammond AP-1

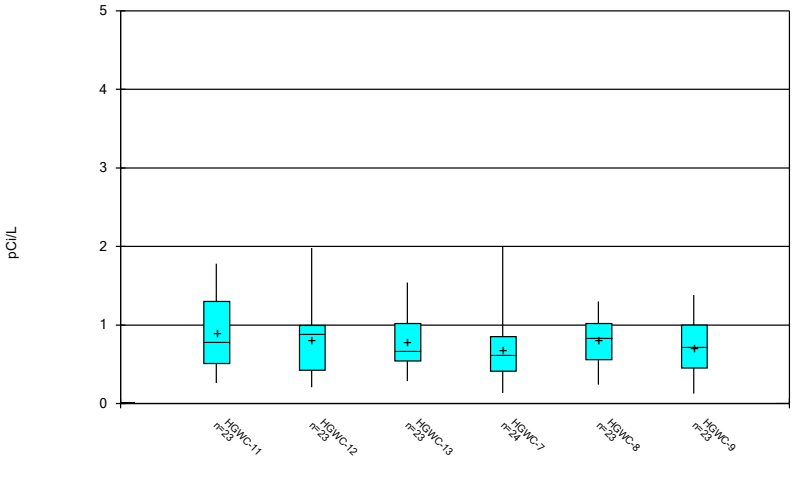
Box & Whiskers Plot



Constituent: 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



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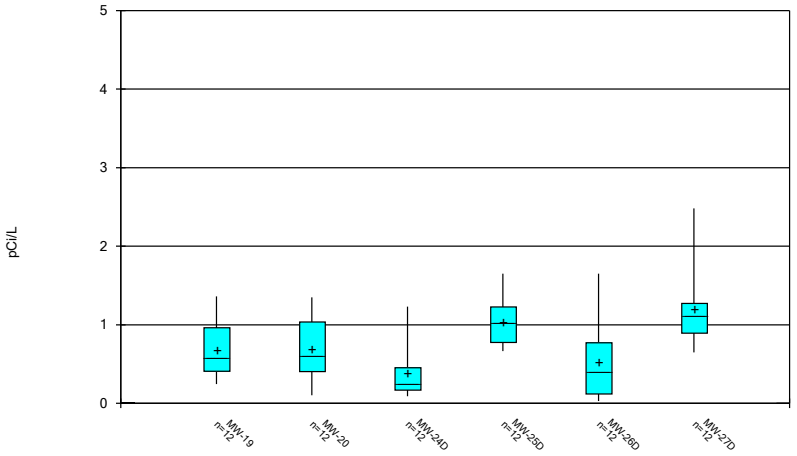
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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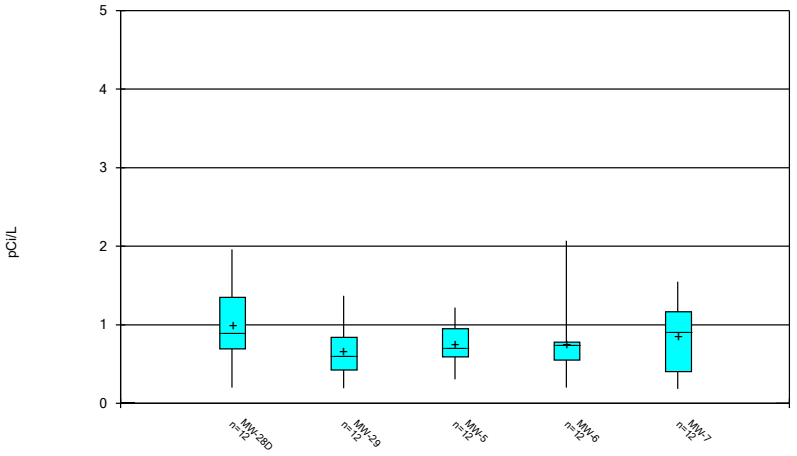
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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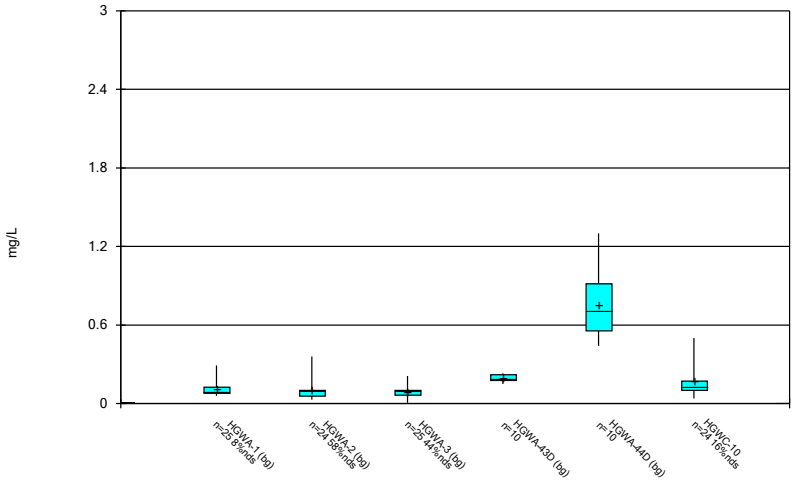
Box & Whiskers Plot

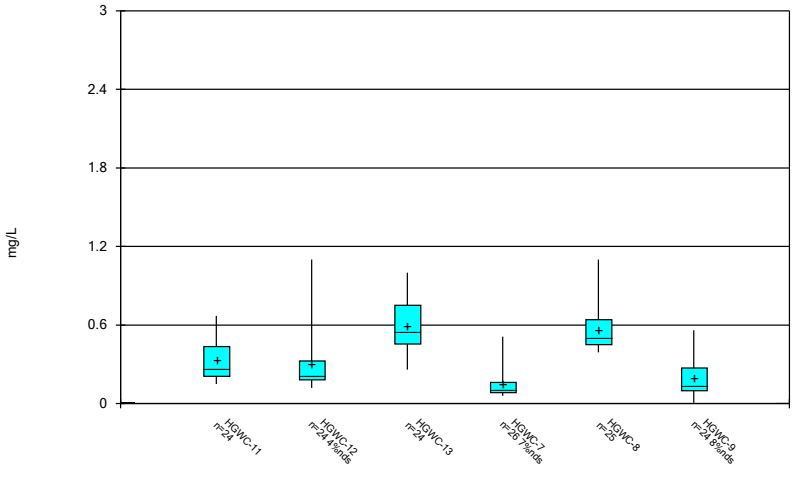


Constituent: Fluoride Analysis Run 4/14/2023 12:21 PM

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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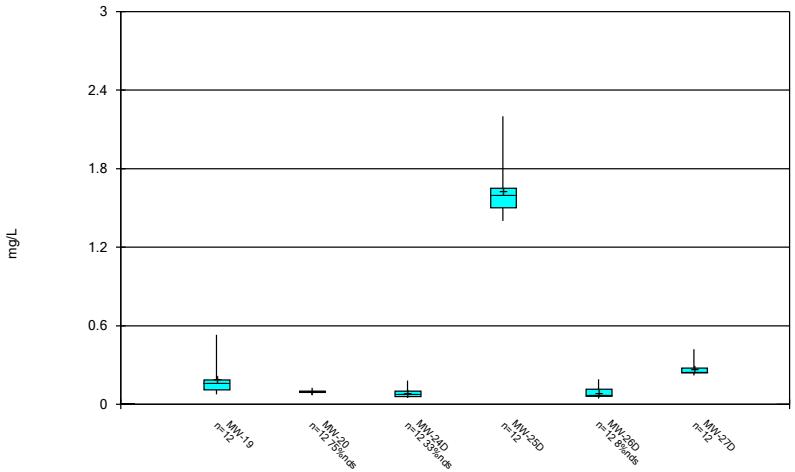
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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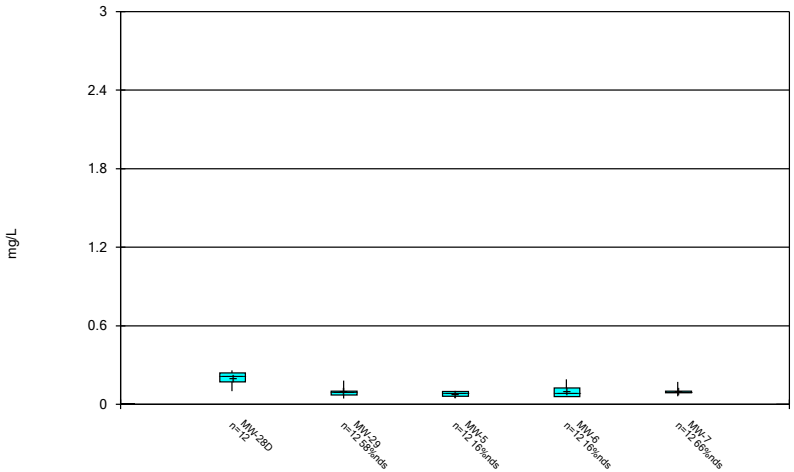
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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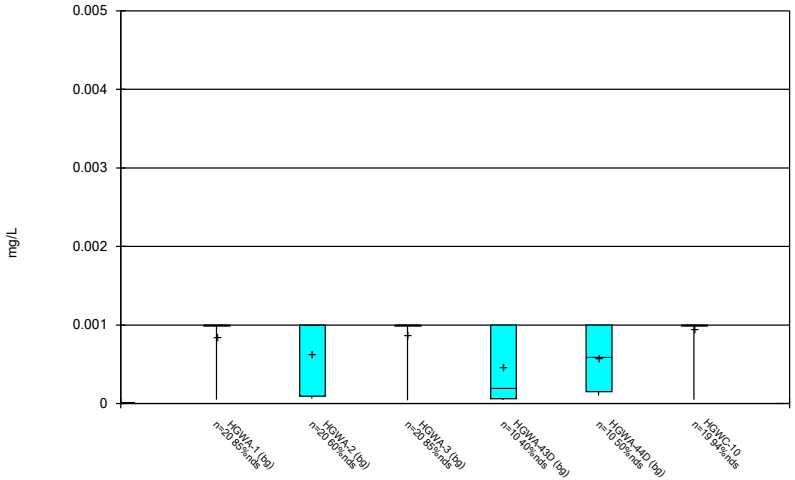
Box & Whiskers Plot



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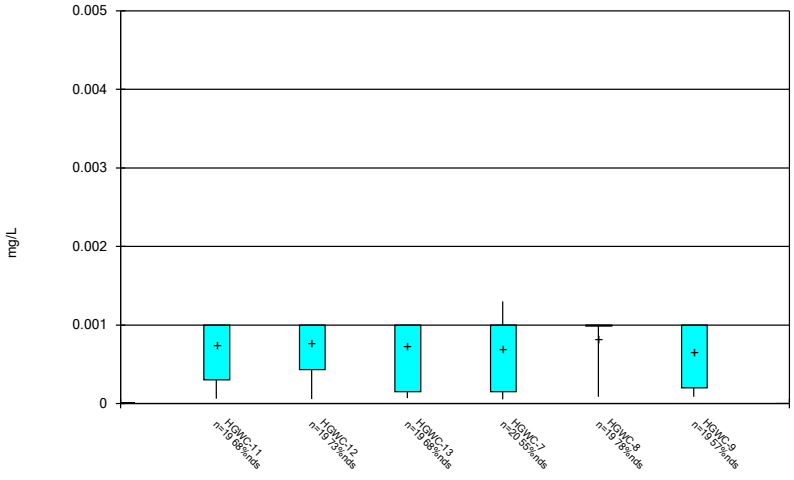
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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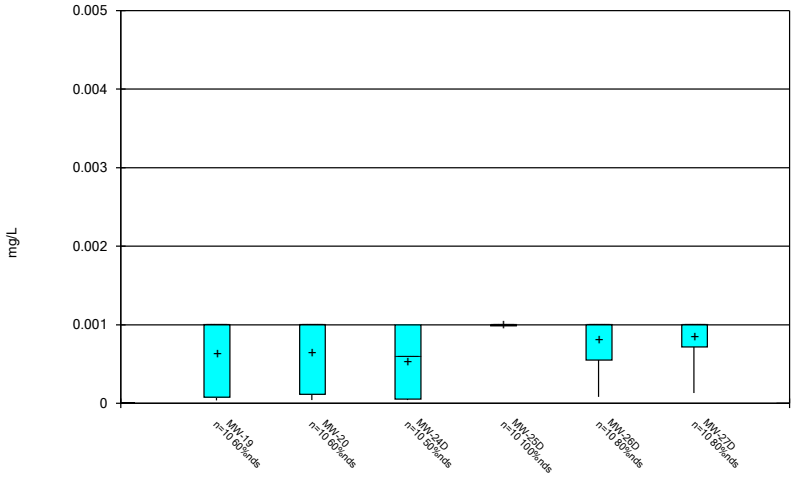
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

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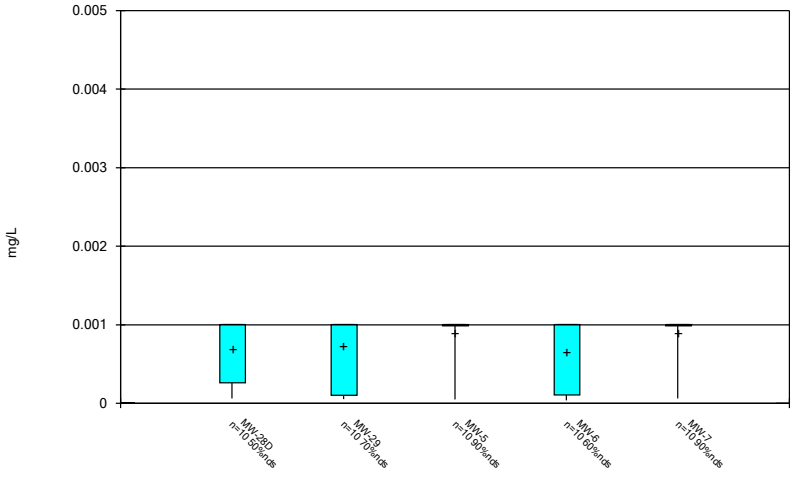

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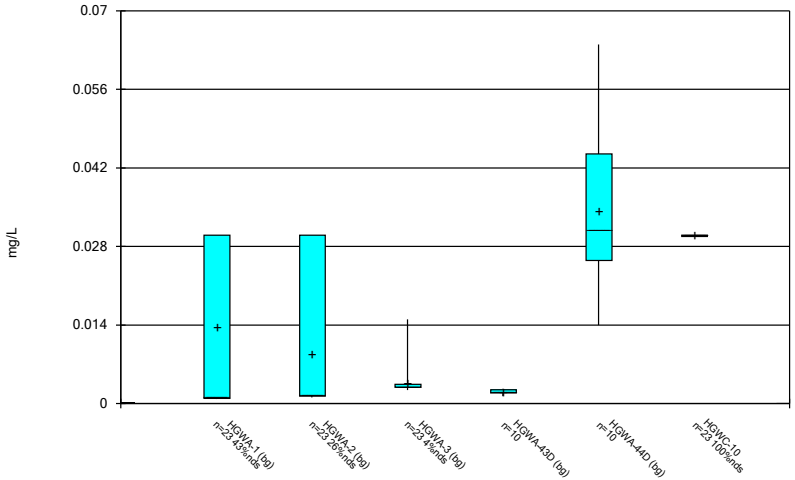
Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot



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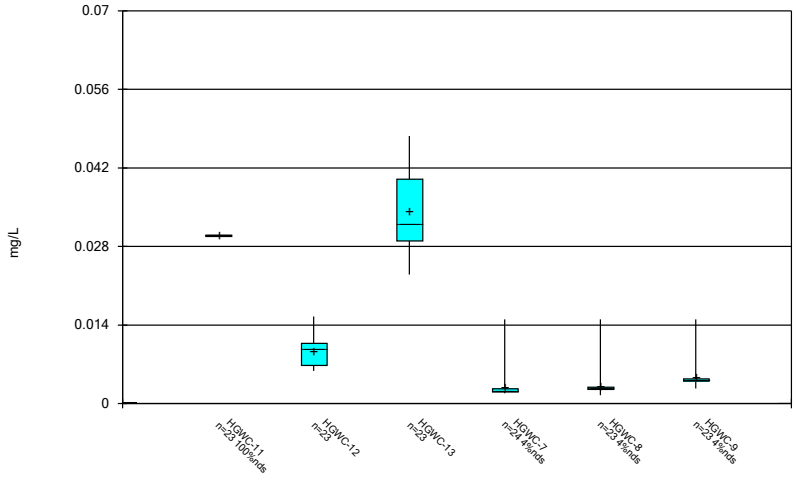
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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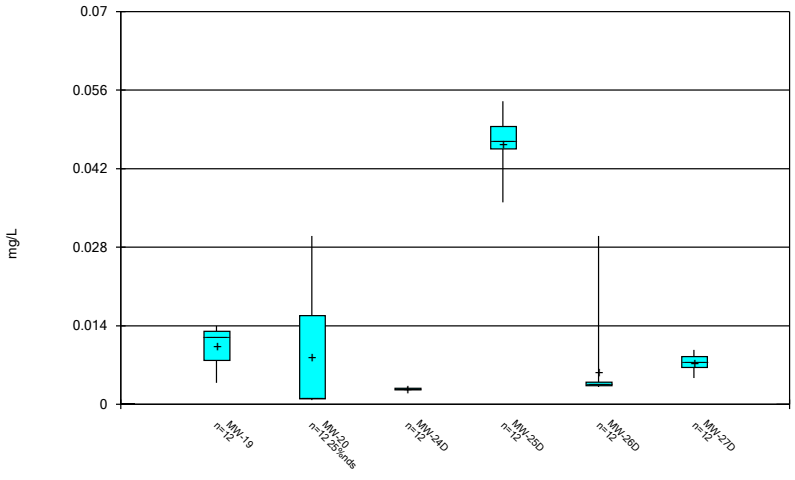
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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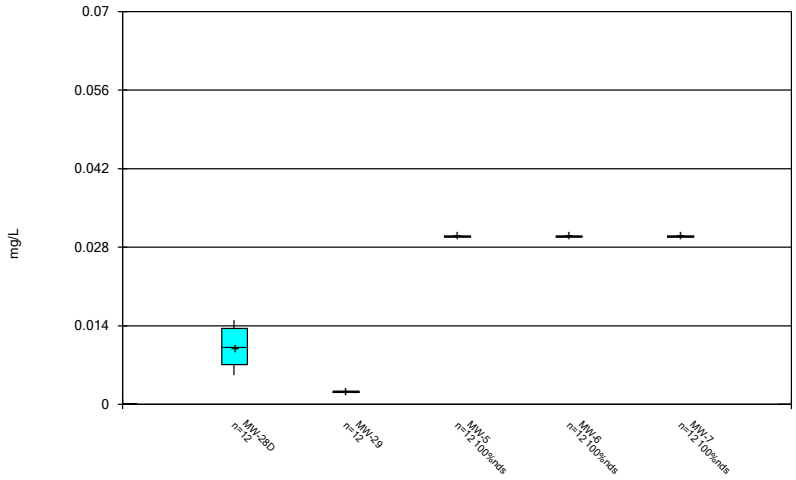
Box & Whiskers Plot



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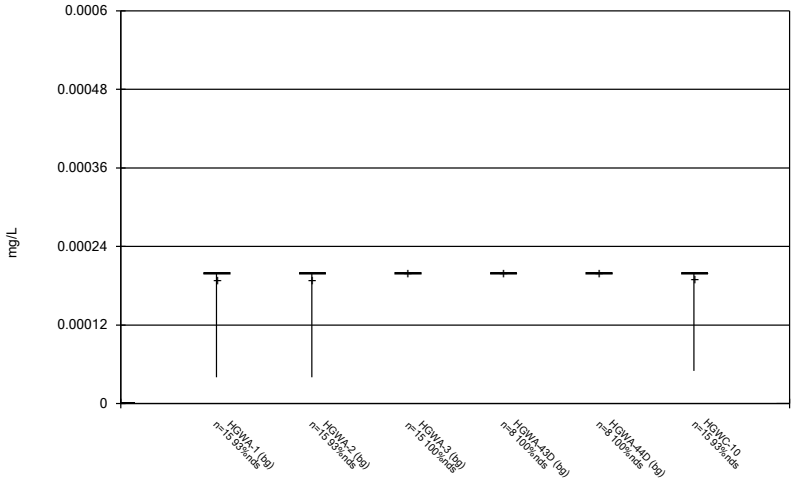
Box & Whiskers Plot



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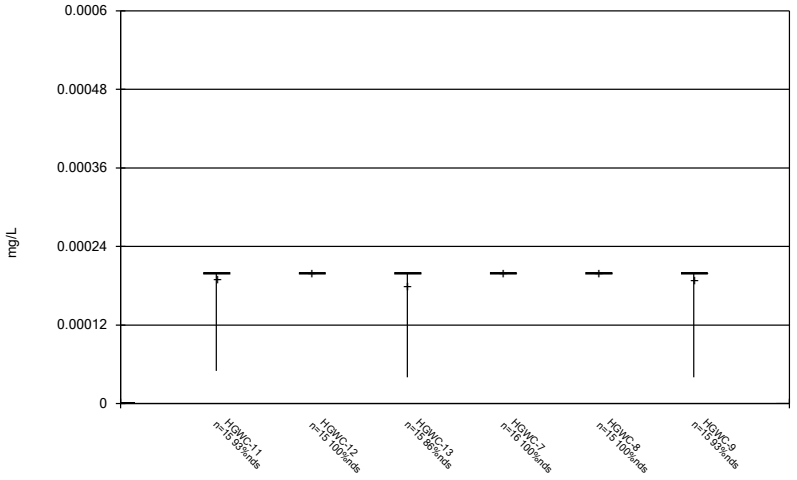
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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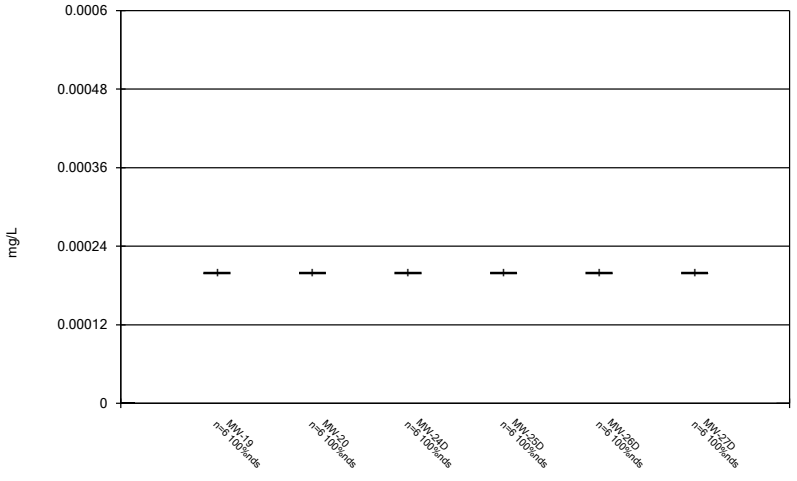
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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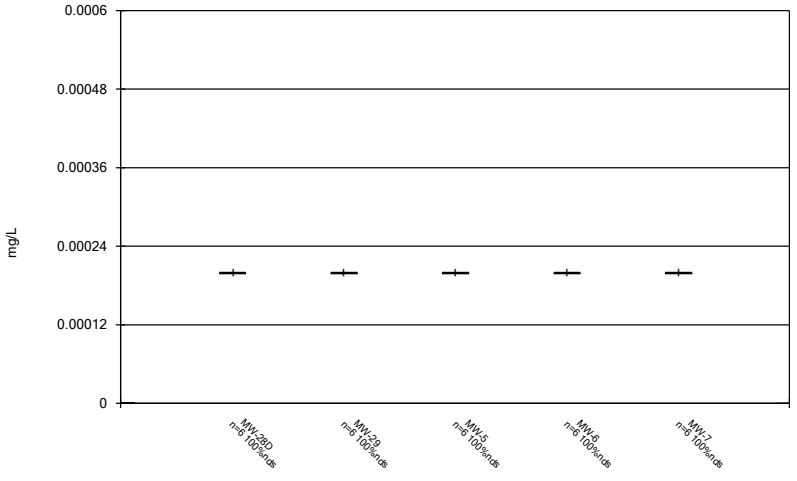
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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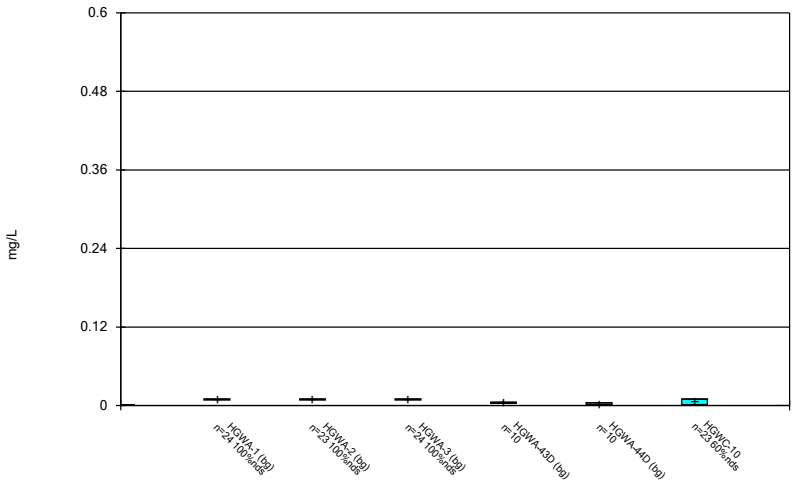
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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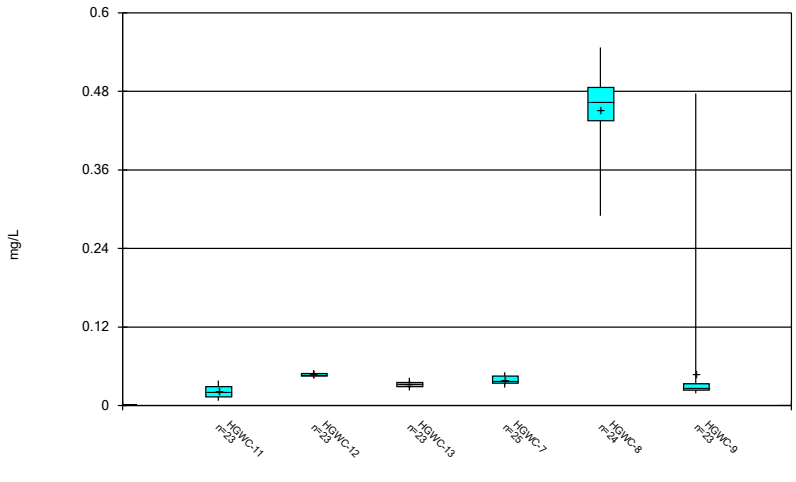
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

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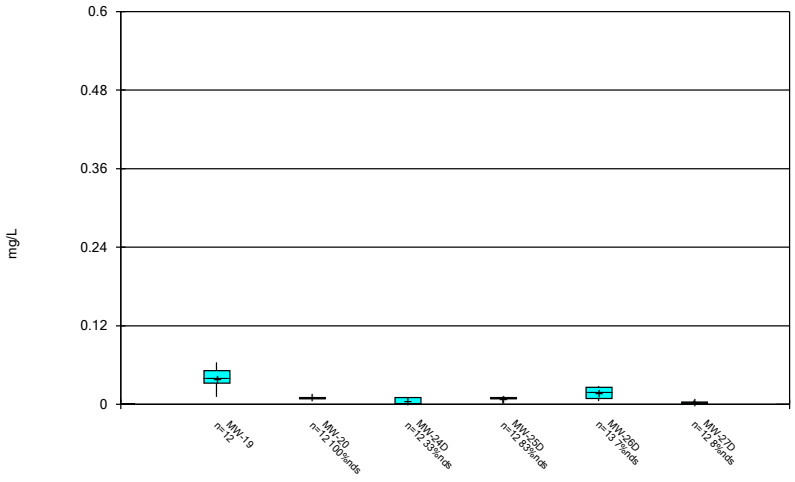

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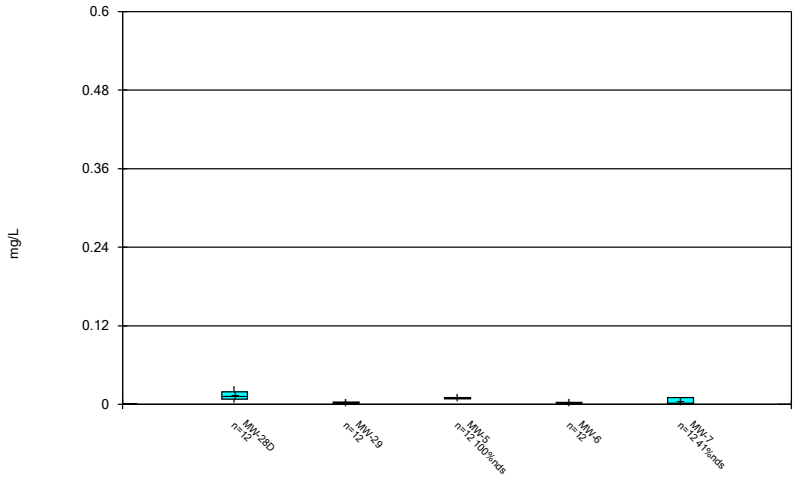

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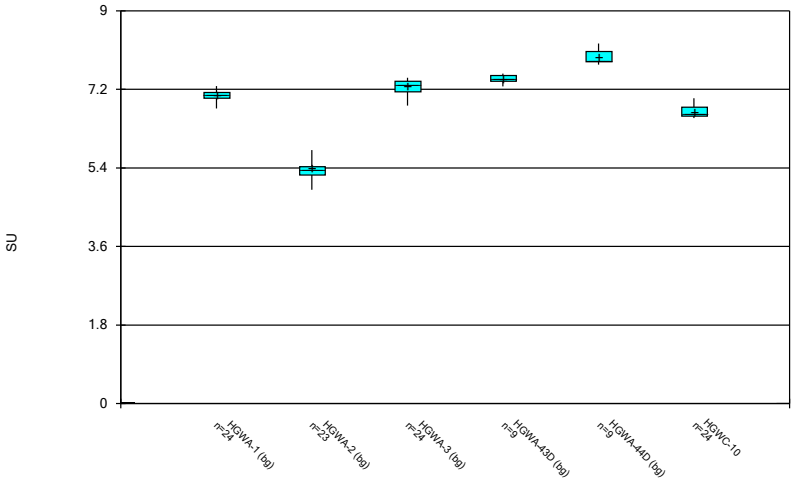
Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

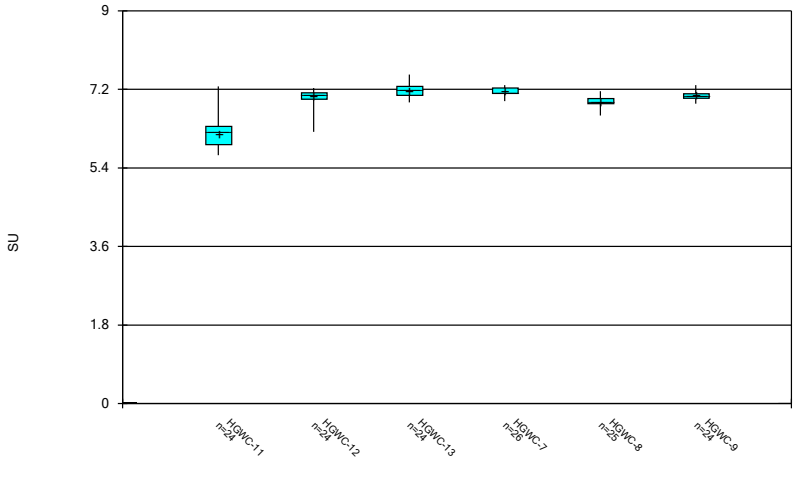


Constituent: pH, Field Analysis Run 4/14/2023 12:22 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

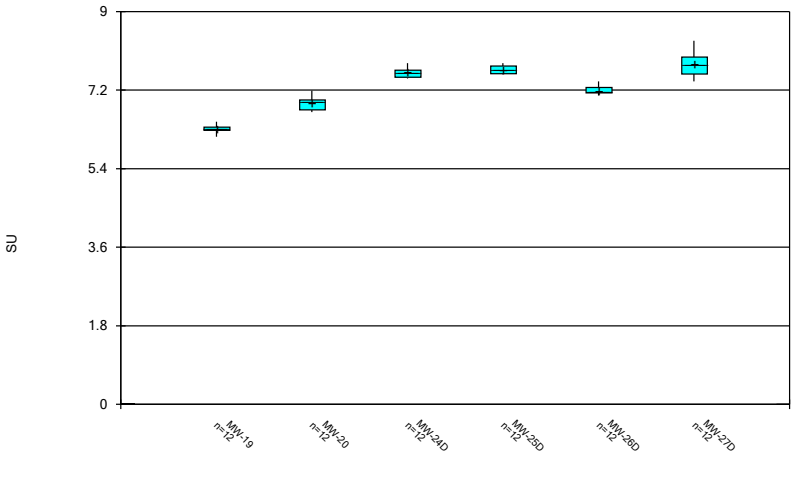


Constituent: pH, Field Analysis Run 4/14/2023 12:22 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

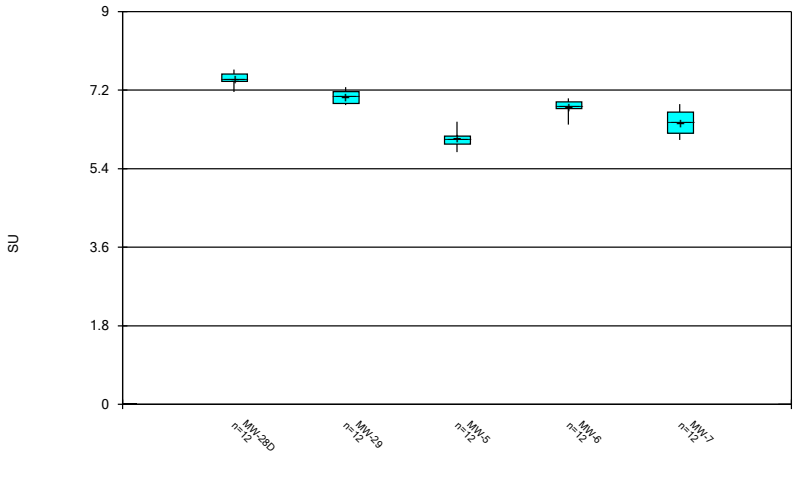


Constituent: pH, Field Analysis Run 4/14/2023 12:22 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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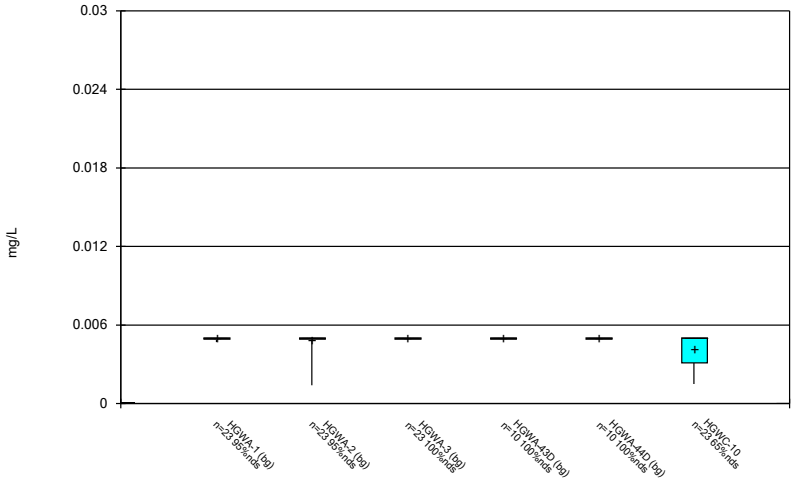
Box & Whiskers Plot



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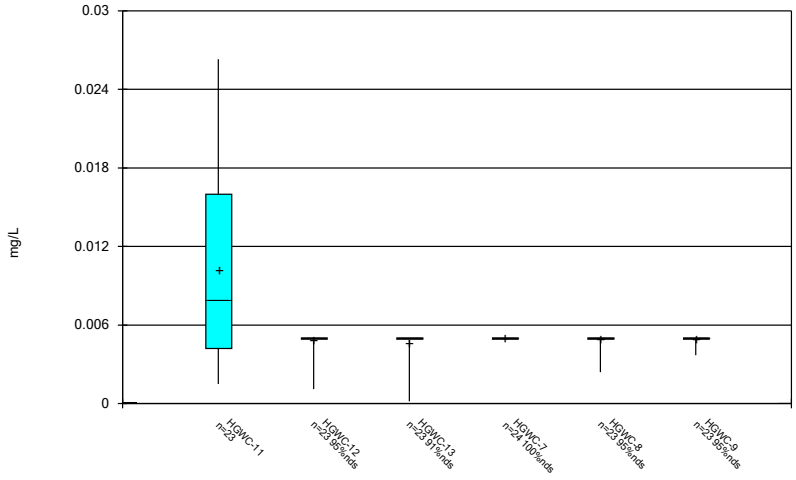
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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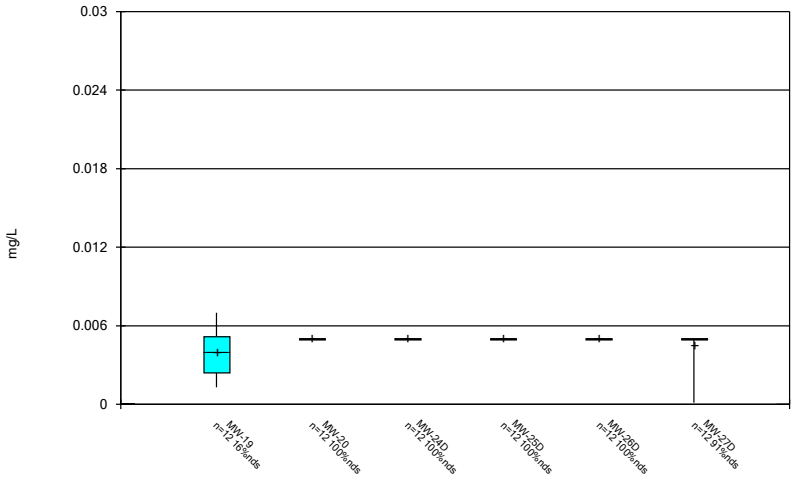
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

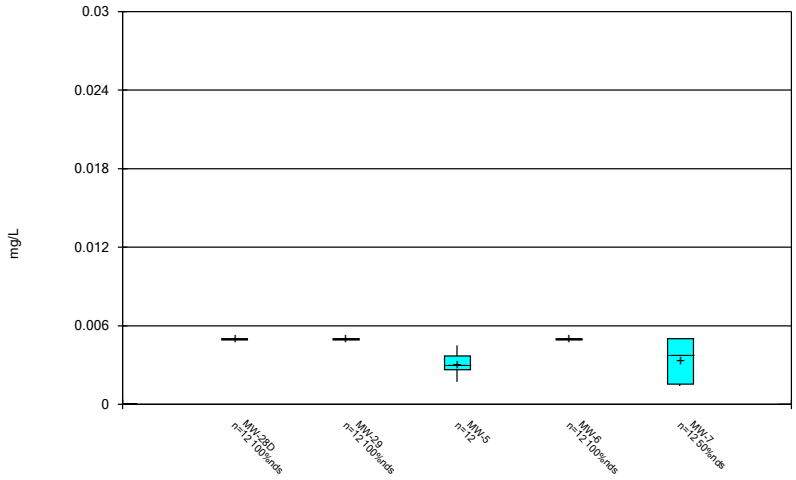


Constituent: Selenium Analysis Run 4/14/2023 12:22 PM

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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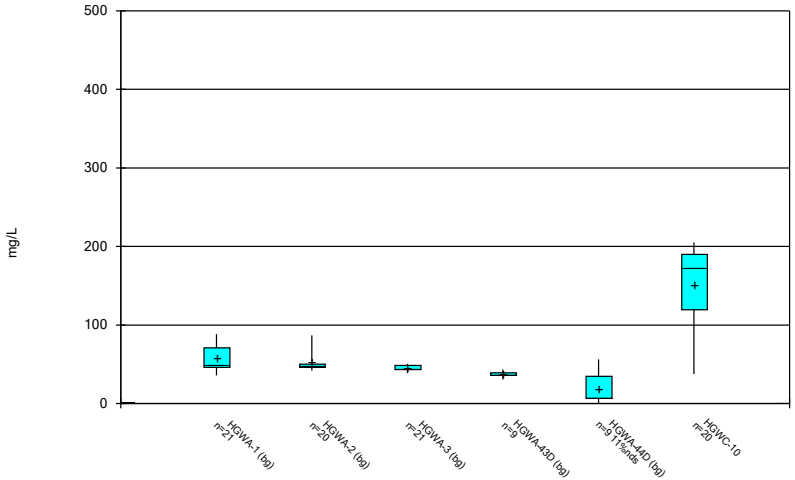
Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot



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Plant Hammond Client: Southern Company Data: Hammond AP-1

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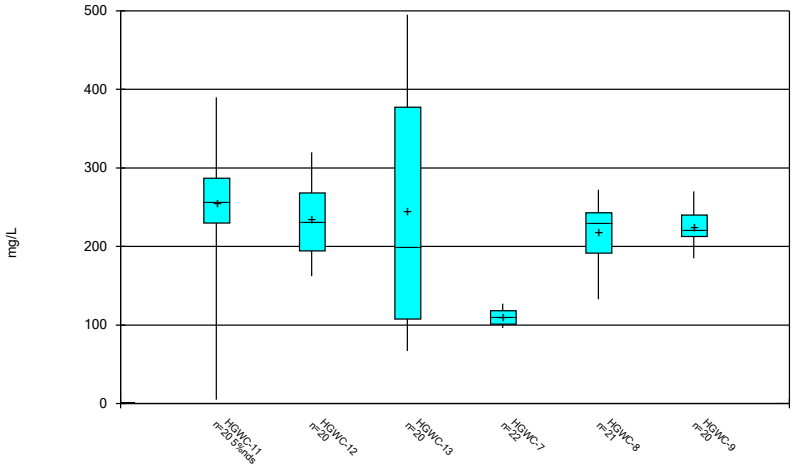
Box & Whiskers Plot



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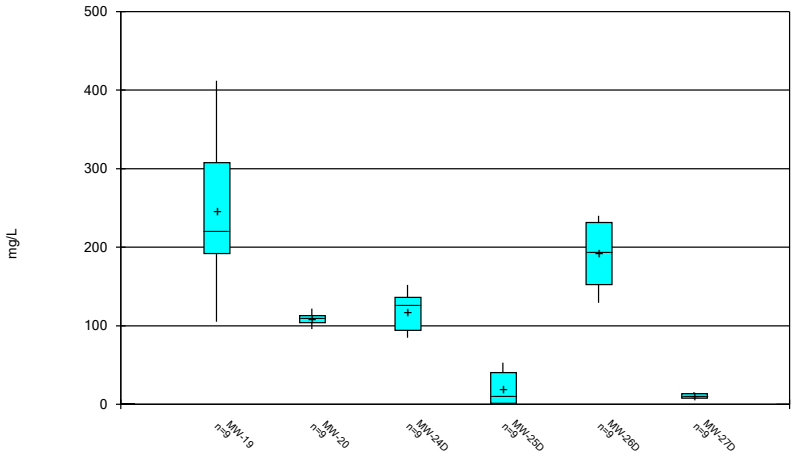
Box & Whiskers Plot



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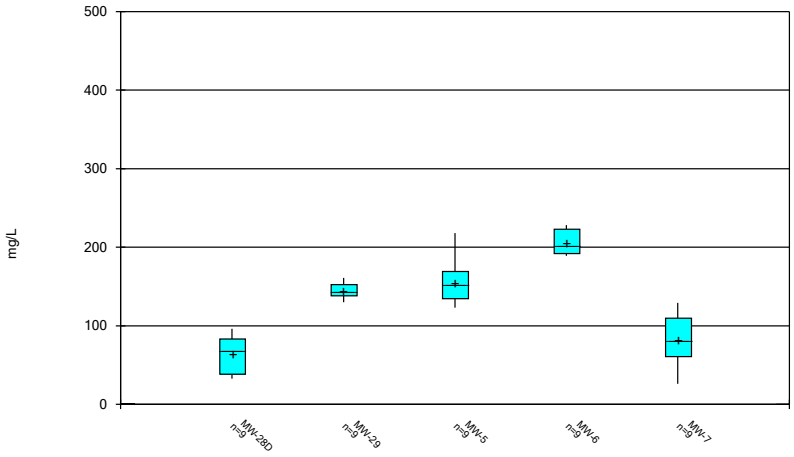

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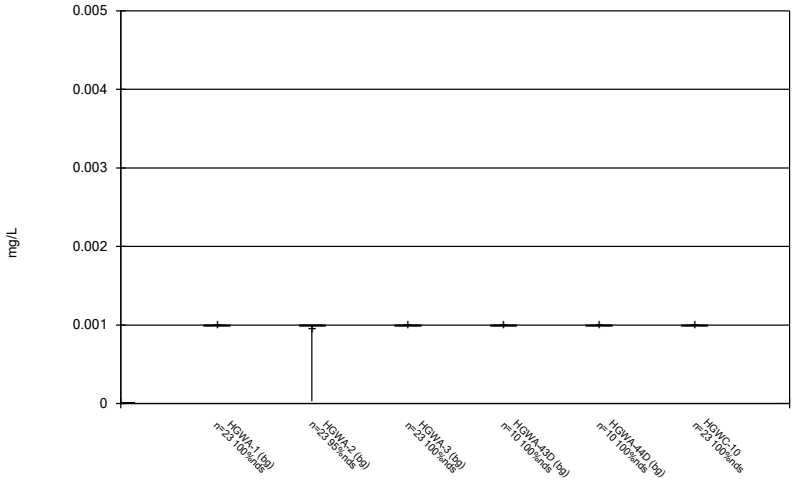
Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot



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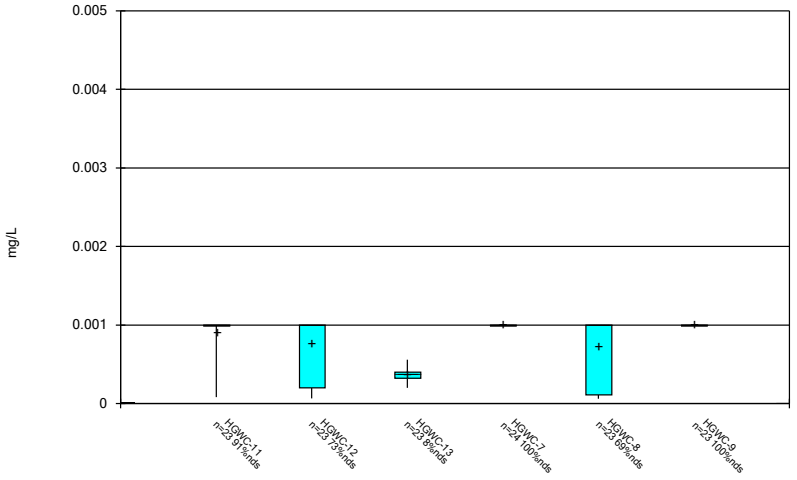
Box & Whiskers Plot



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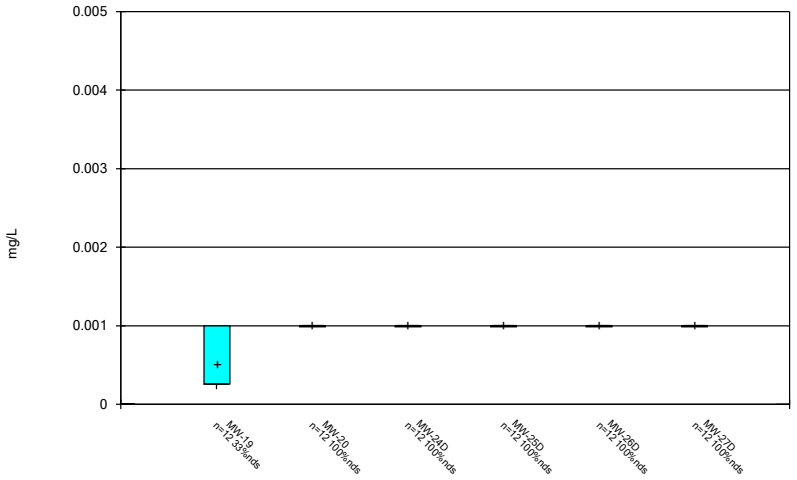
Box & Whiskers Plot



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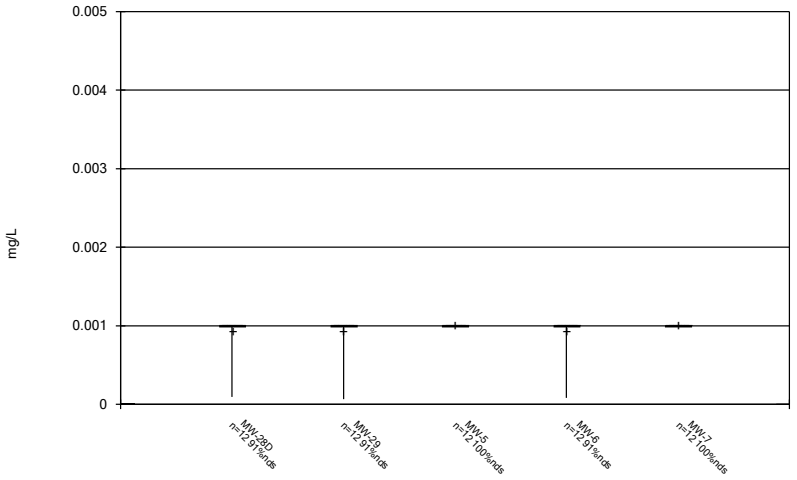
Box & Whiskers Plot



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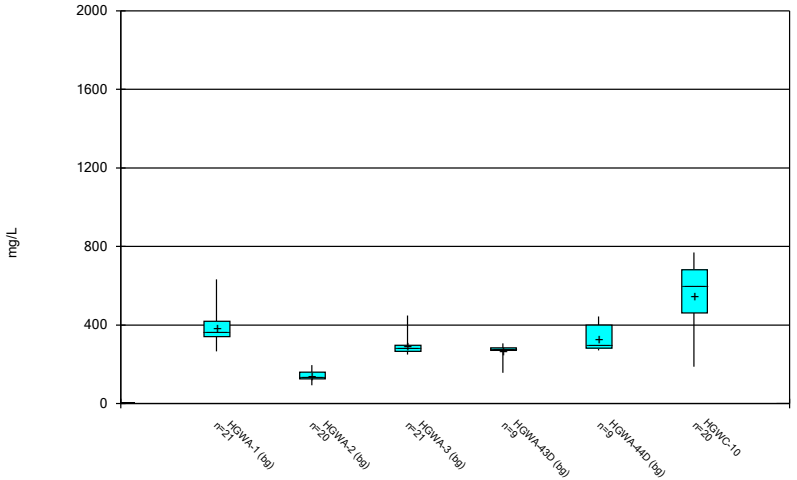
Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

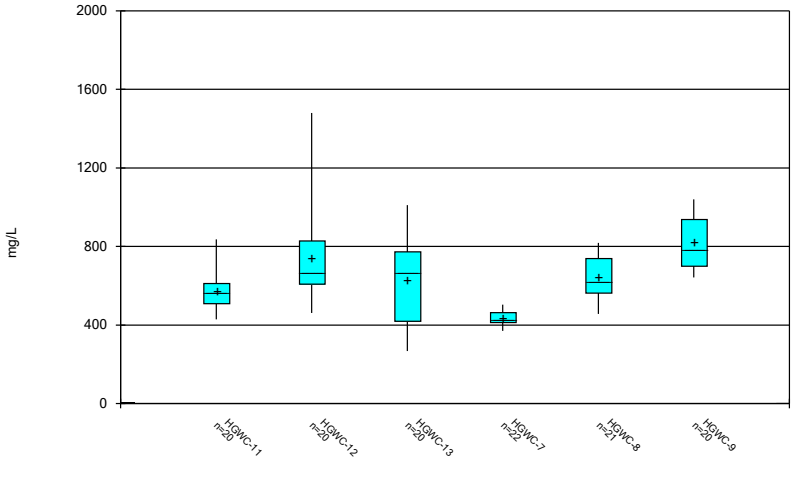


Constituent: Total Dissolved Solids Analysis Run 4/14/2023 12:22 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

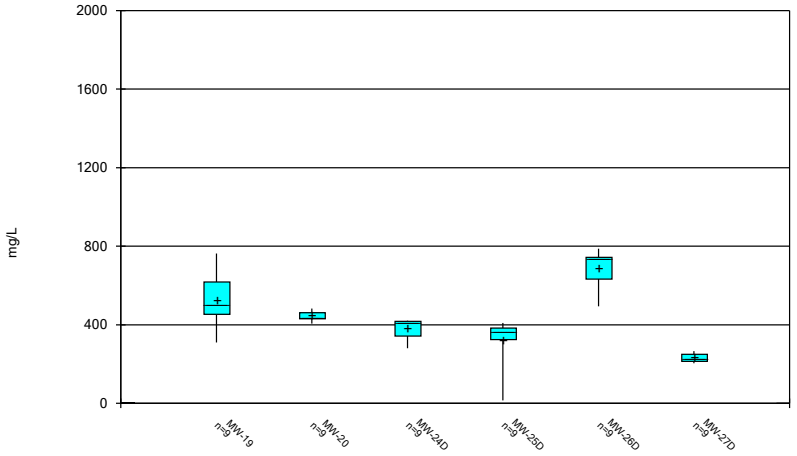


Constituent: Total Dissolved Solids Analysis Run 4/14/2023 12:22 PM

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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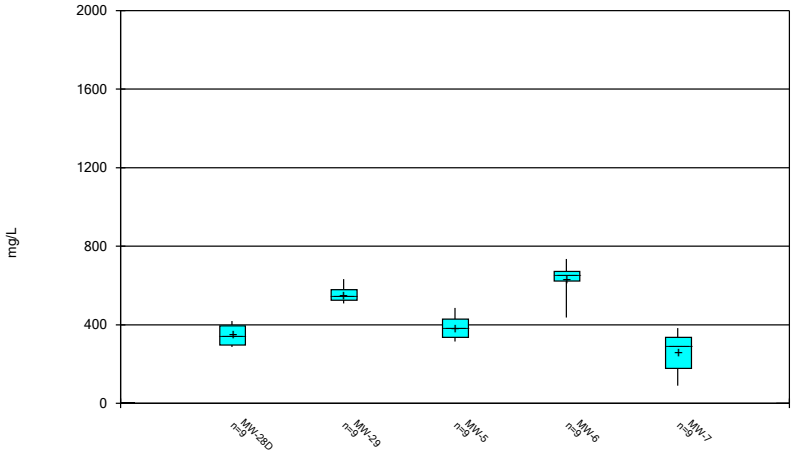
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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**

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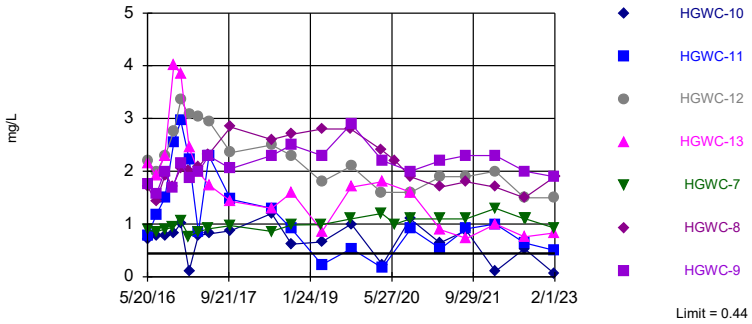
Exceeds Limit: HGWC-11, HGWC-12, HGWC-13, HGWC-7, HGWC-8, HGWC-9

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

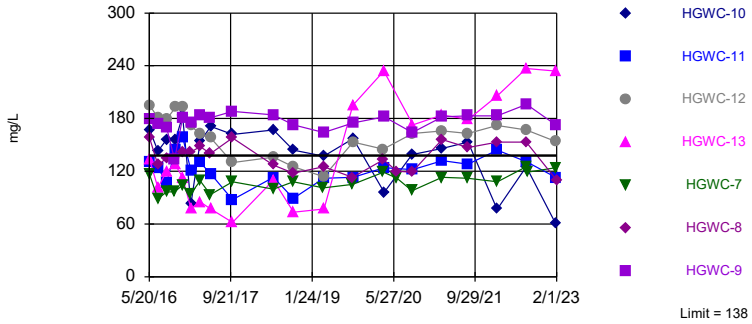
Plant Hammond Client: Southern Company Data: Hammond AP-1

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

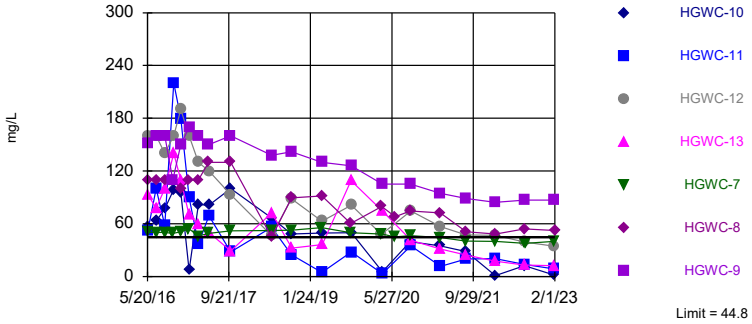
Plant Hammond Client: Southern Company Data: Hammond AP-1

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

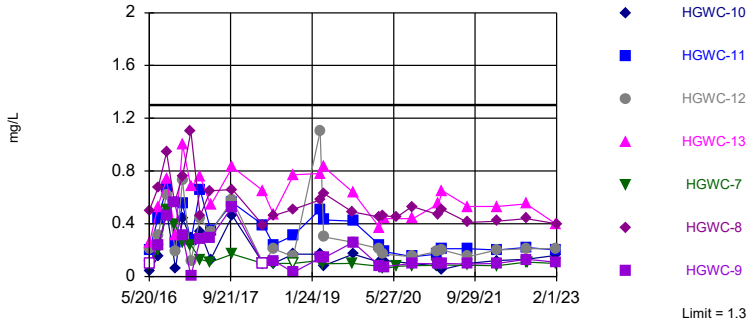
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

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

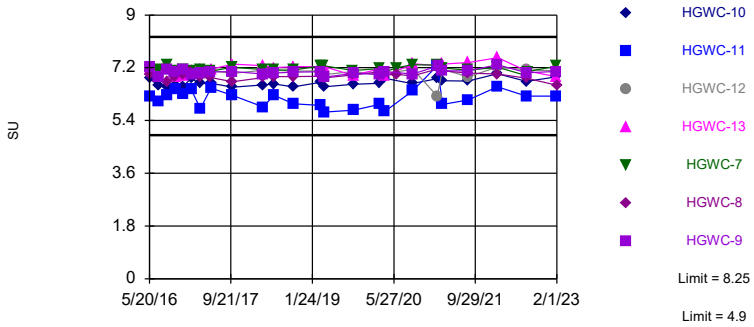
Plant Hammond Client: Southern Company Data: Hammond AP-1

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

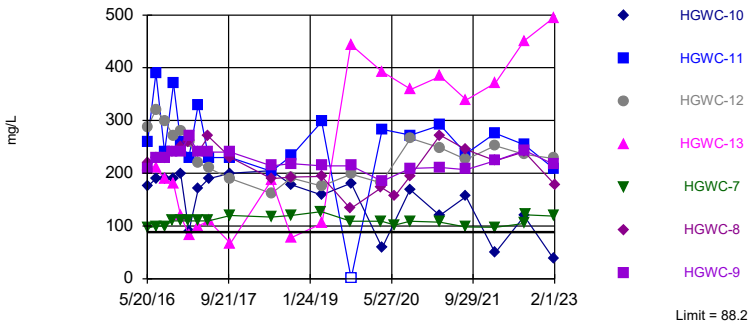
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

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

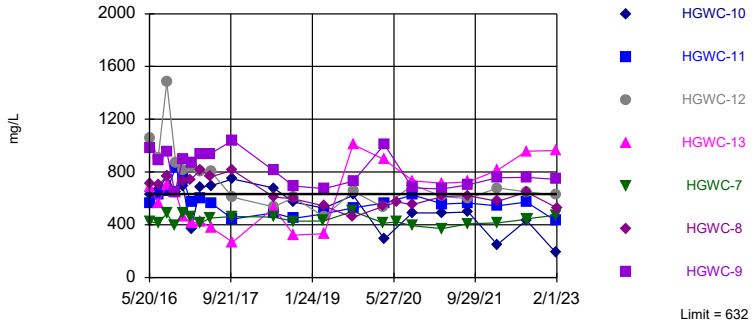
Plant Hammond Client: Southern Company Data: Hammond AP-1

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**

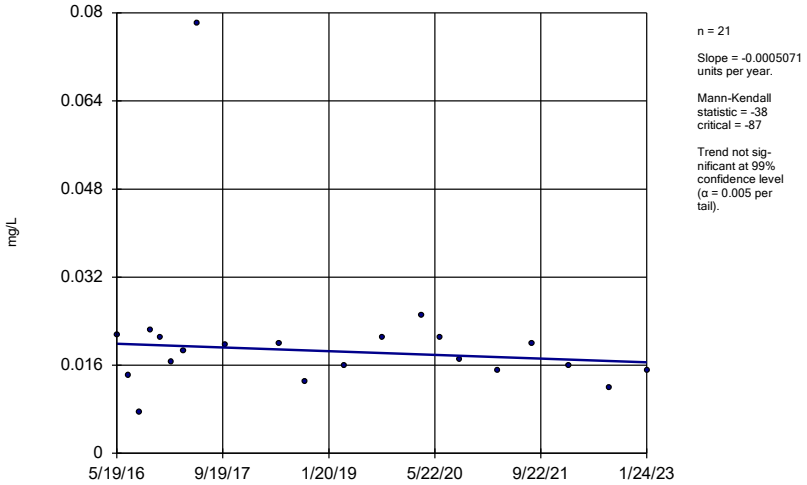
Appendix III Trend Tests - All Results

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

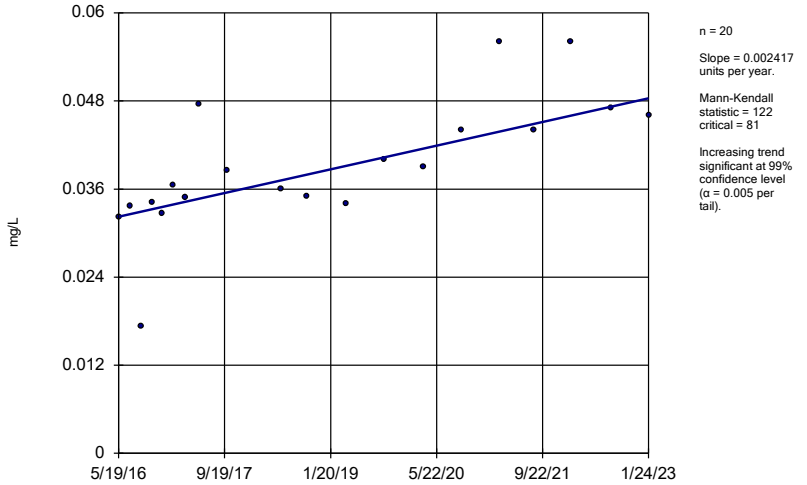
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

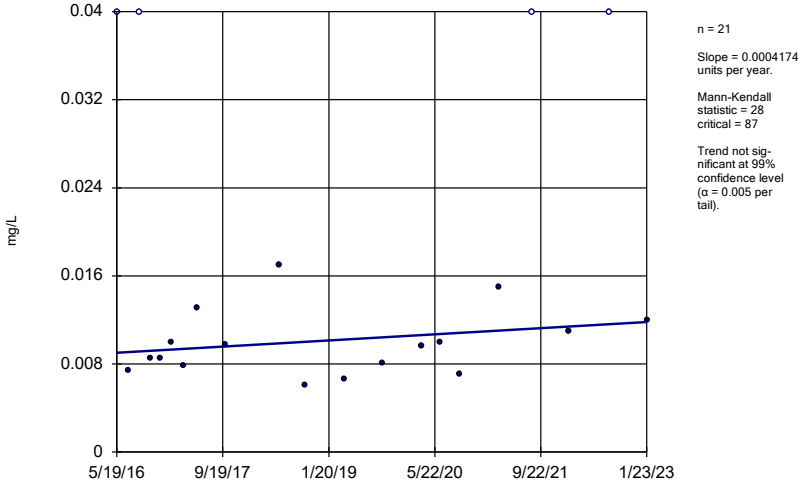
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

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

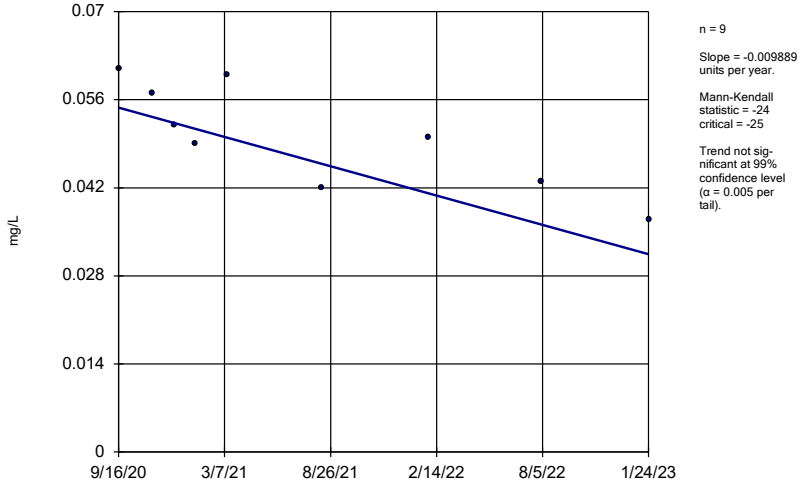
Trend not significant at 99% confidence level (α = 0.005 per tail).

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.

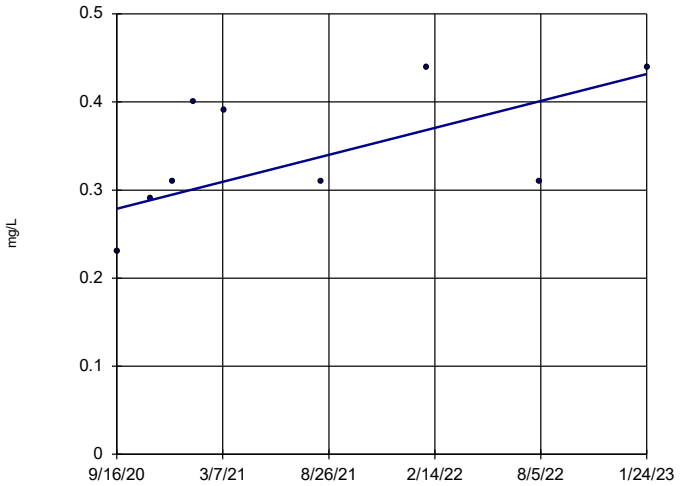
Mann-Kendall statistic = -24
critical = -25

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).

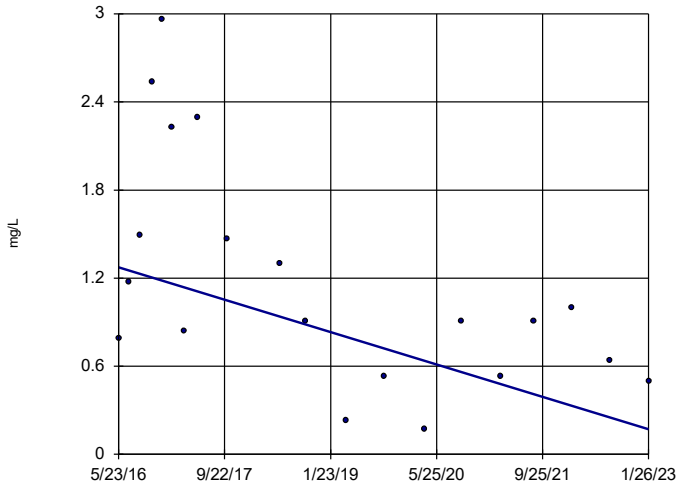
Constituent: Boron Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

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).

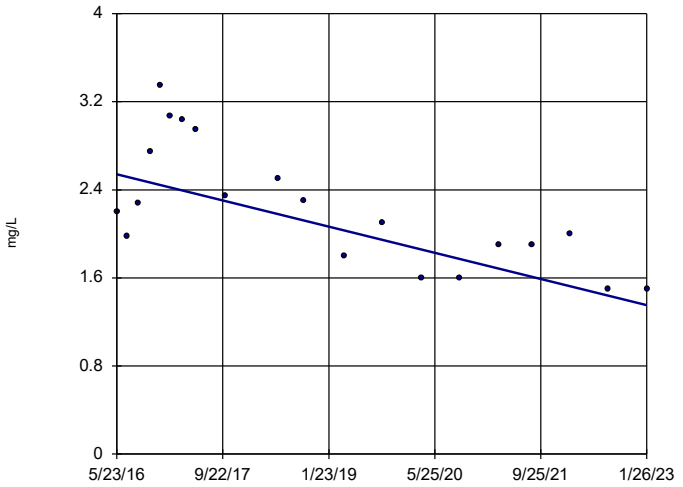
Constituent: Boron Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

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).

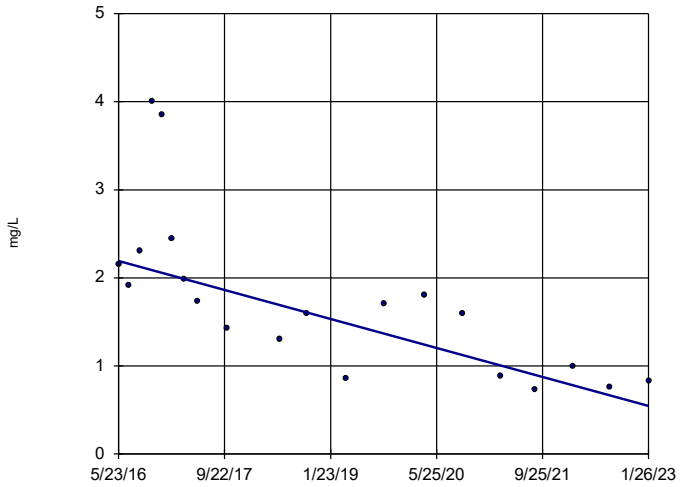
Constituent: Boron Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

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

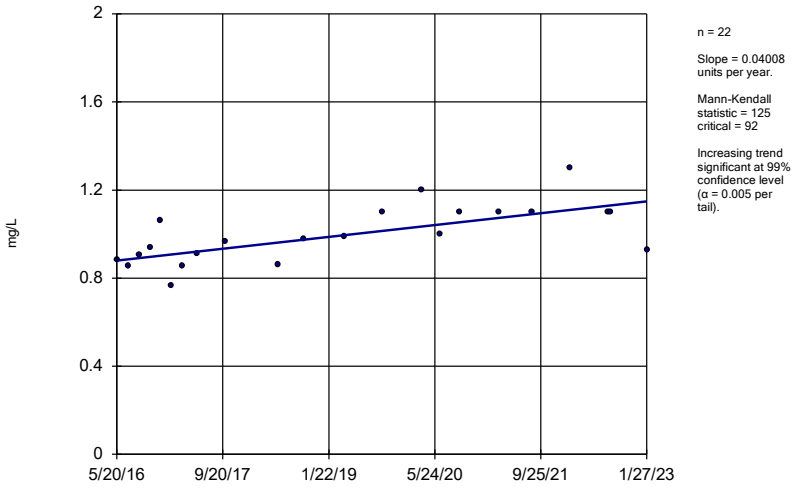
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

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).

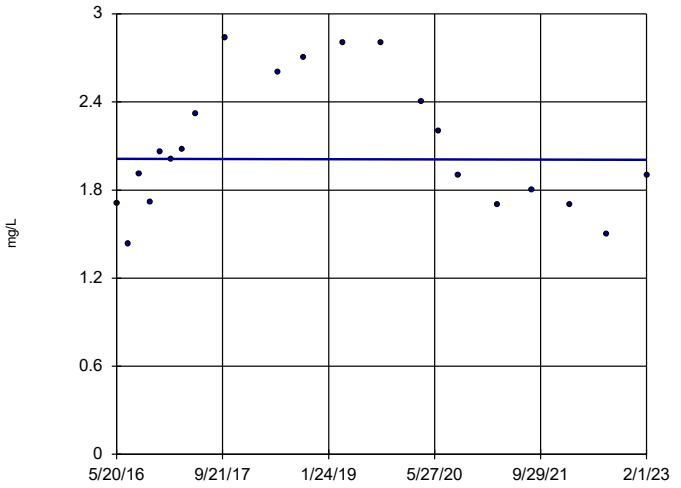
Constituent: Boron Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

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).

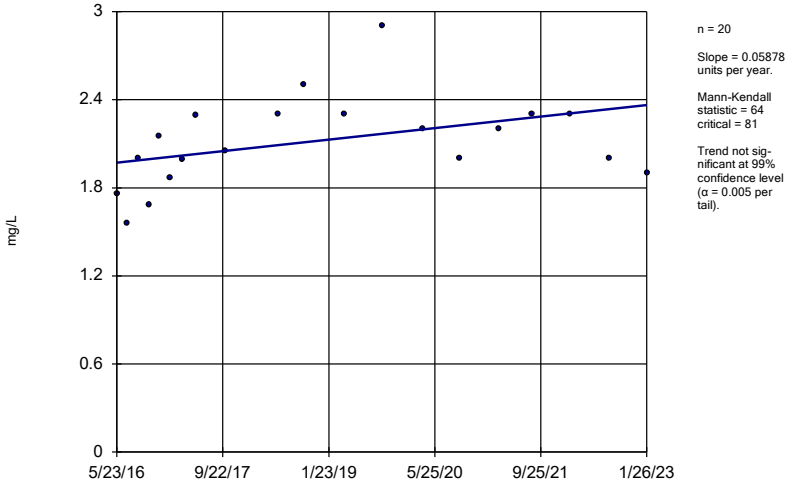
Constituent: Boron Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

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).

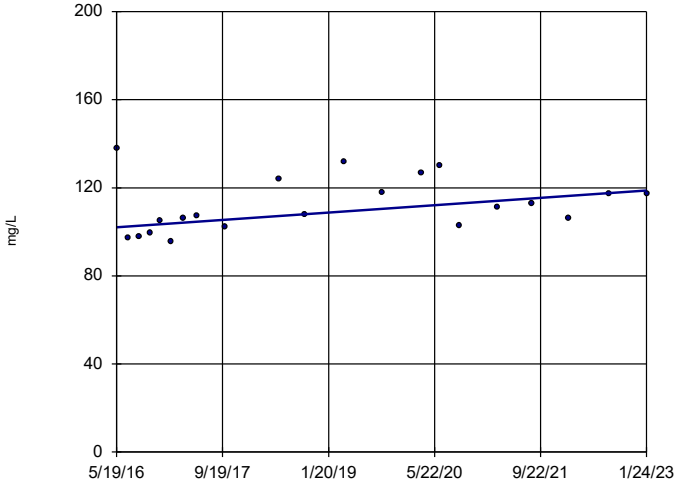
Constituent: Boron Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

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

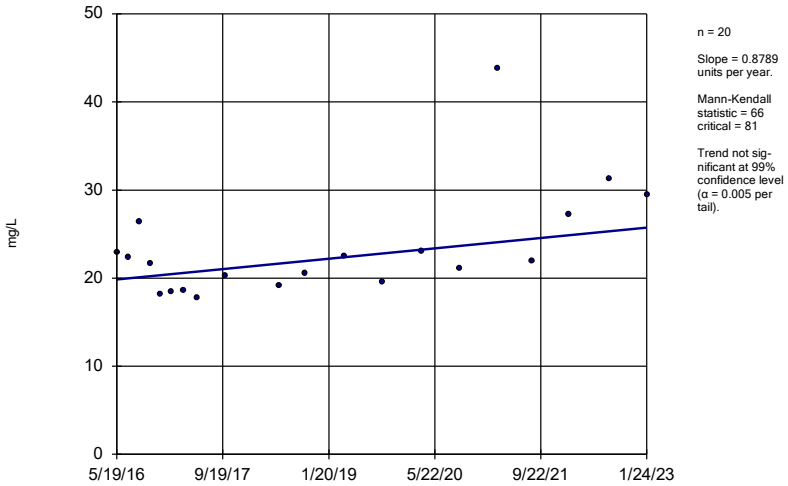
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

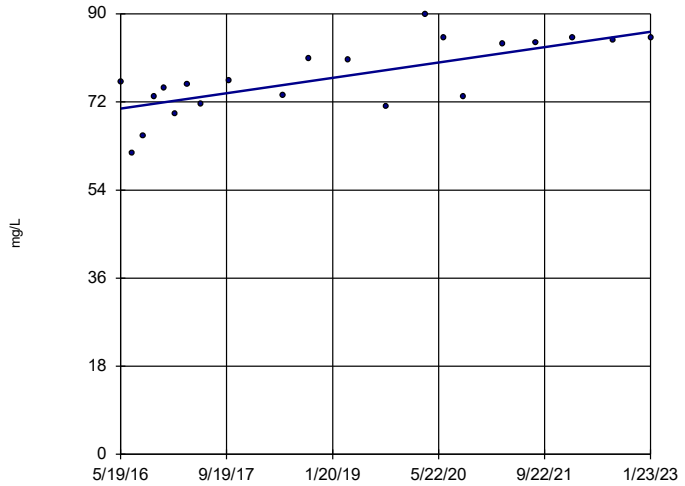
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

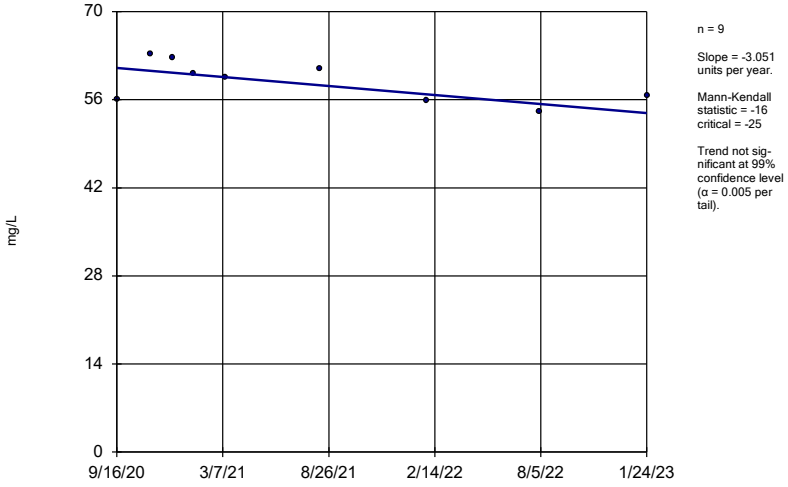
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

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

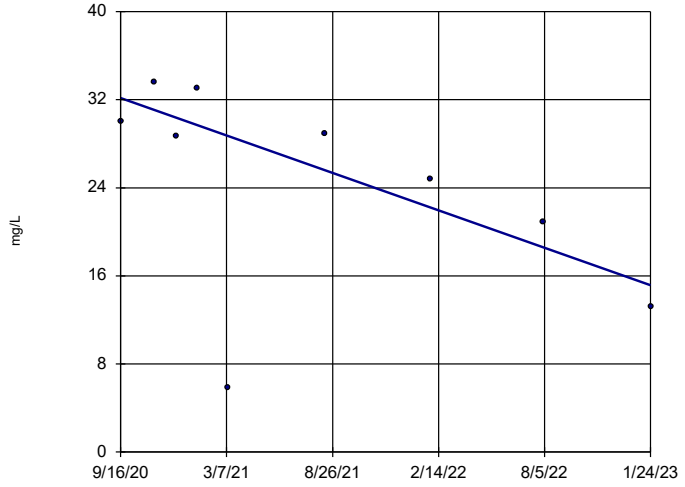
Trend not significant at 99% confidence level (α = 0.005 per tail).

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.

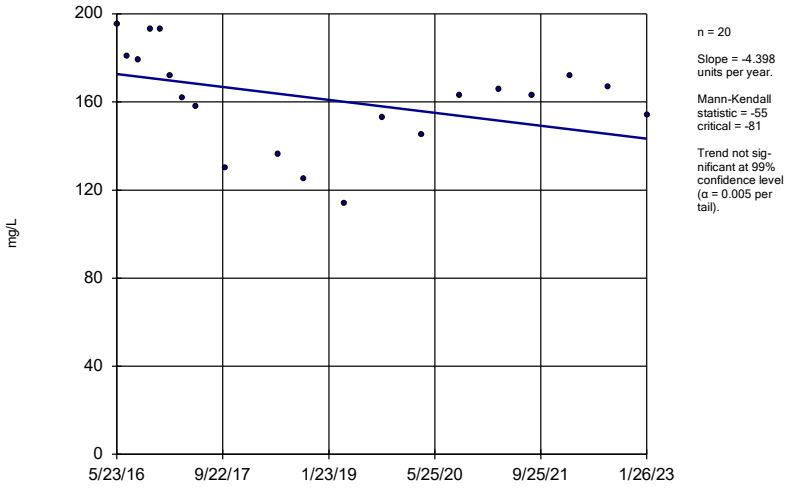
Mann-Kendall statistic = -20
critical = -25

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

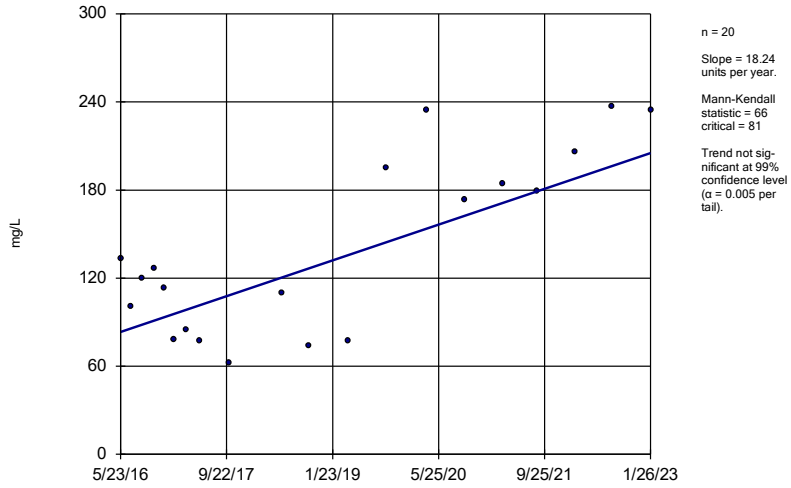
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

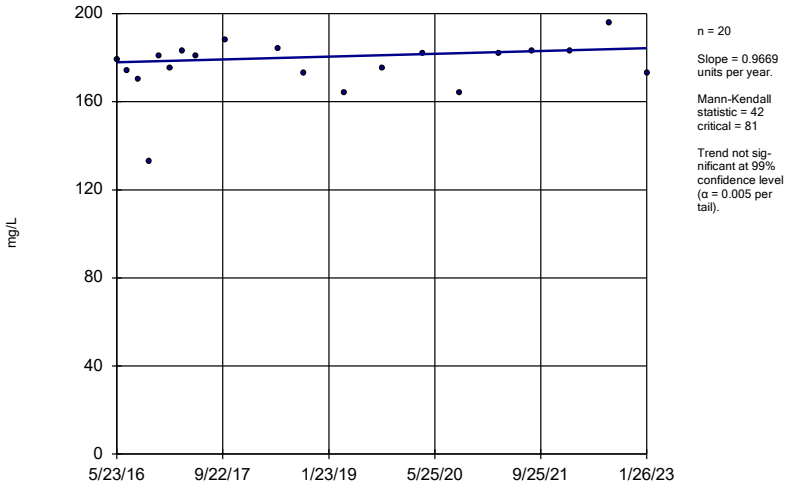
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

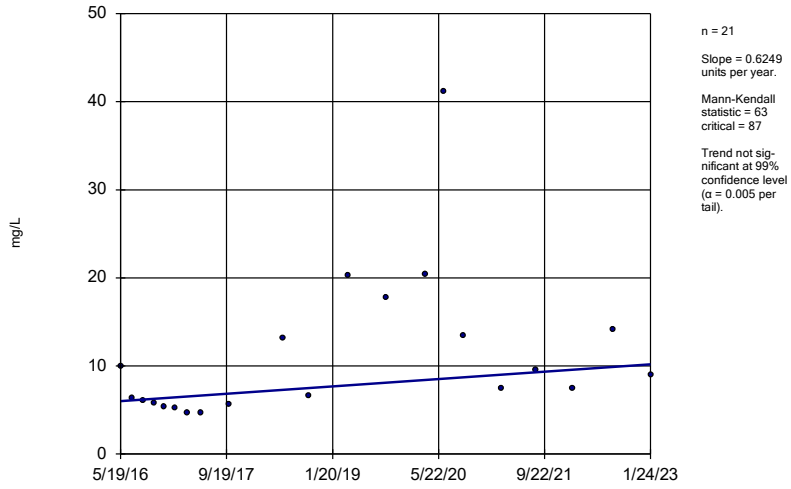
Trend not significant at 99% confidence level (α = 0.005 per tail).

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.

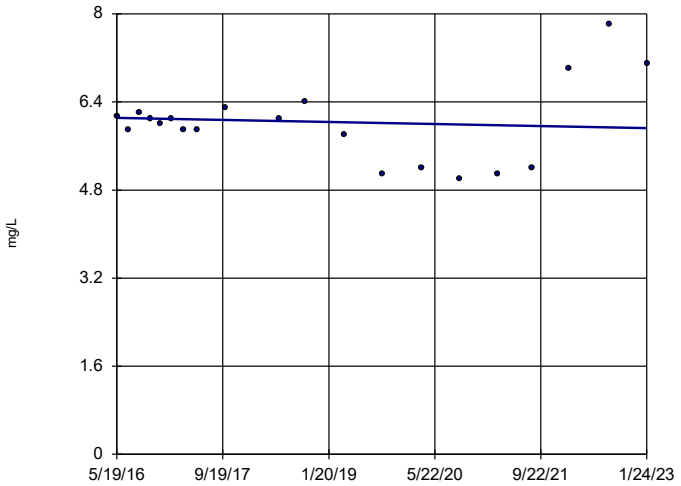
Mann-Kendall statistic = 63
critical = 87

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

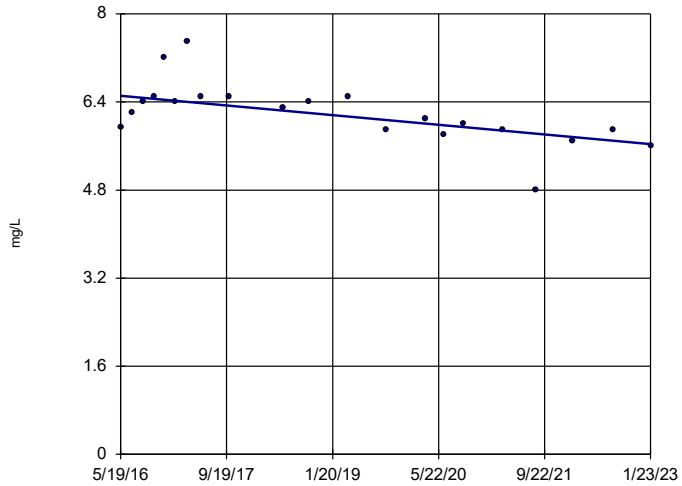
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

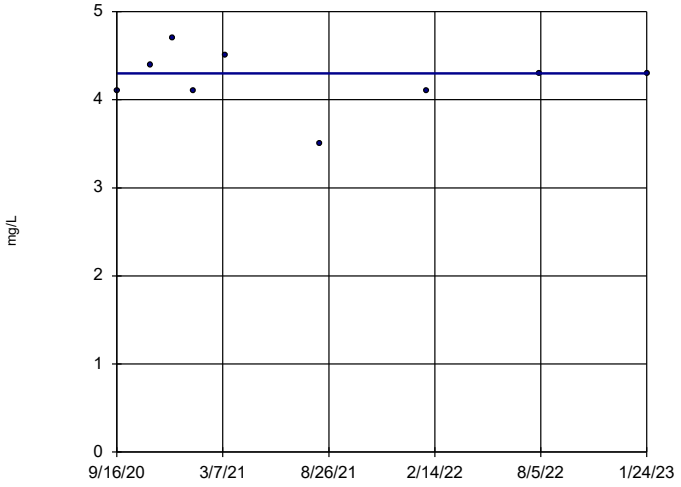
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

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

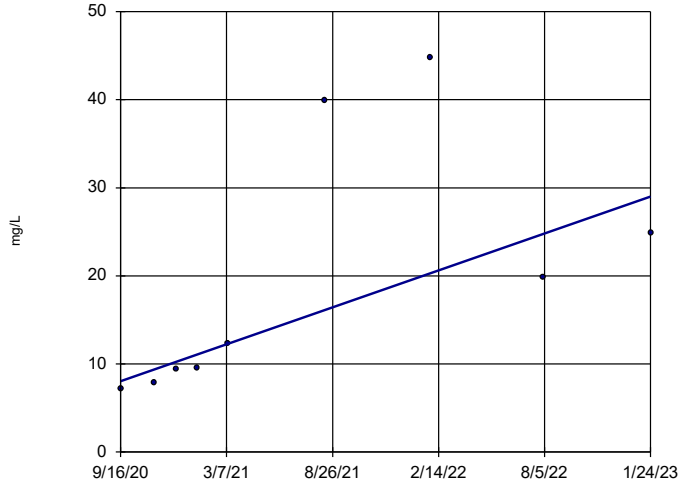
Trend not significant at 99% confidence level (α = 0.005 per tail).

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.

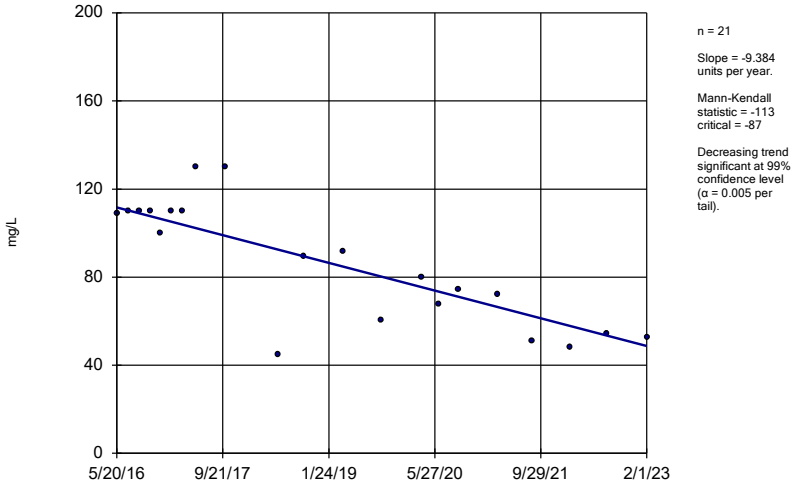
Mann-Kendall statistic = 28
critical = 25

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

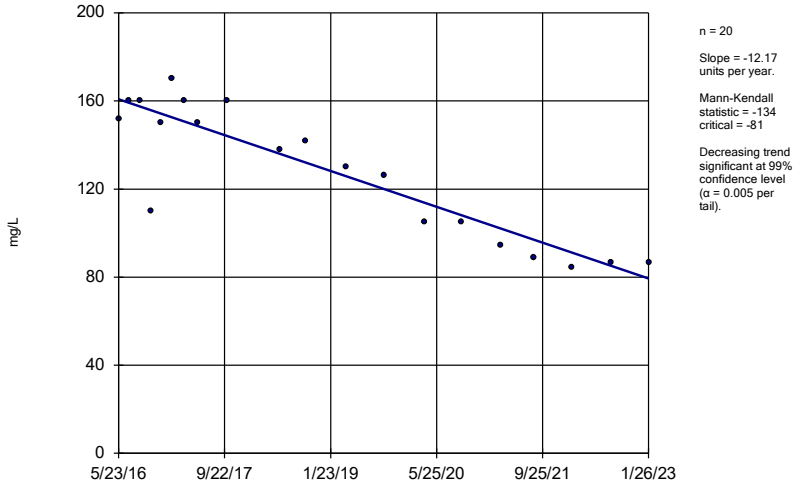
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

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

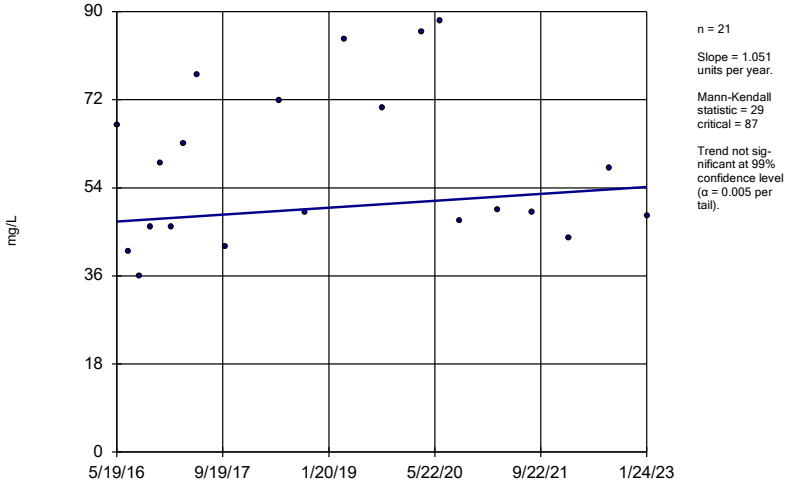
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

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

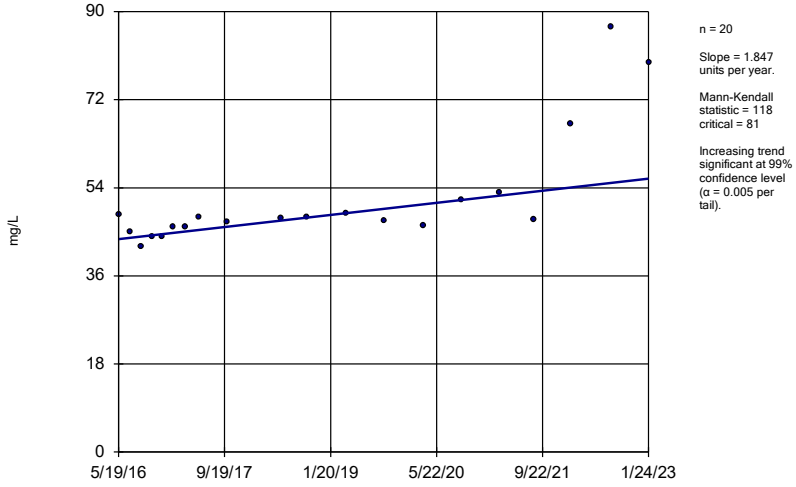
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

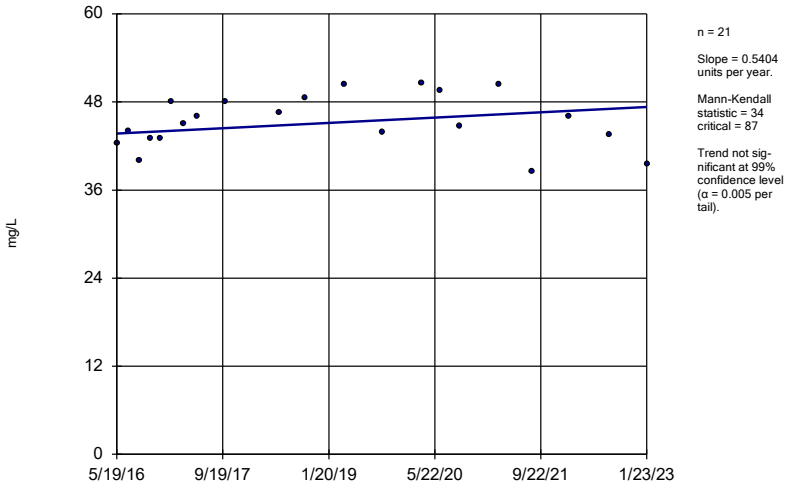
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-3 (bg)



n = 21

Slope = 0.5404 units per year.

Mann-Kendall statistic = 34
critical = 87

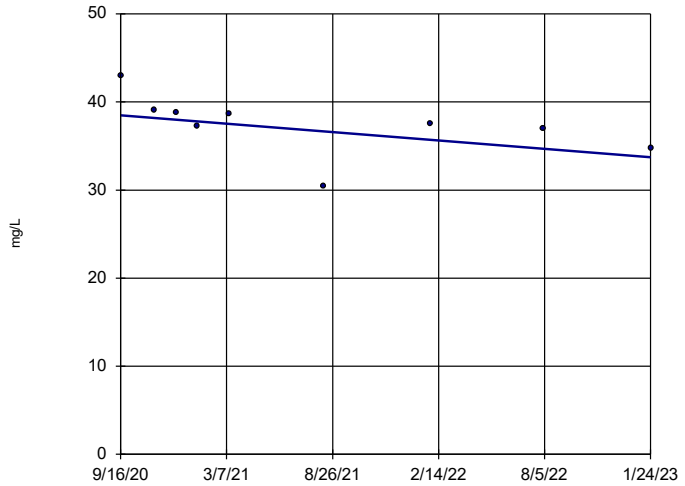
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

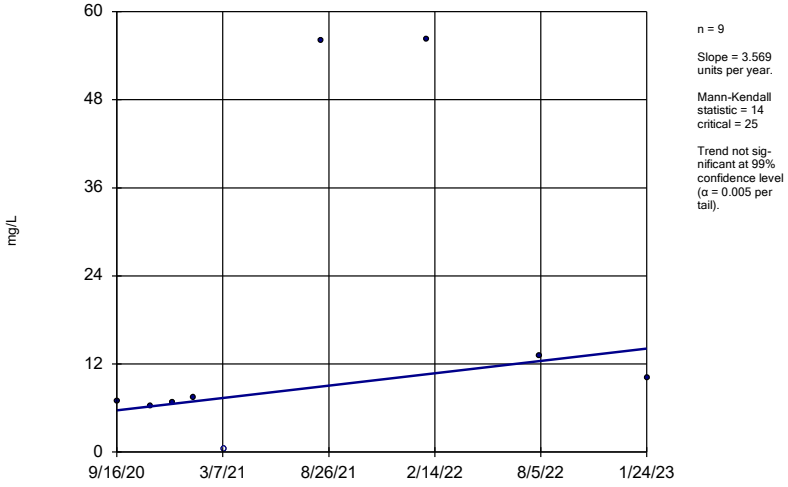
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

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

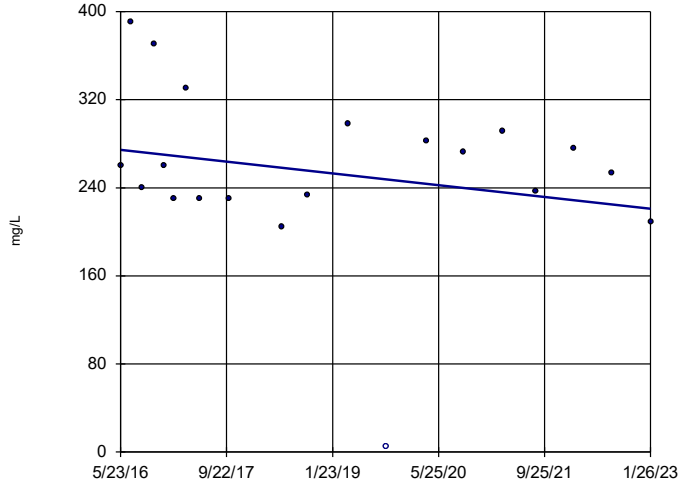
Trend not significant at 99% confidence level (α = 0.005 per tail).

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.

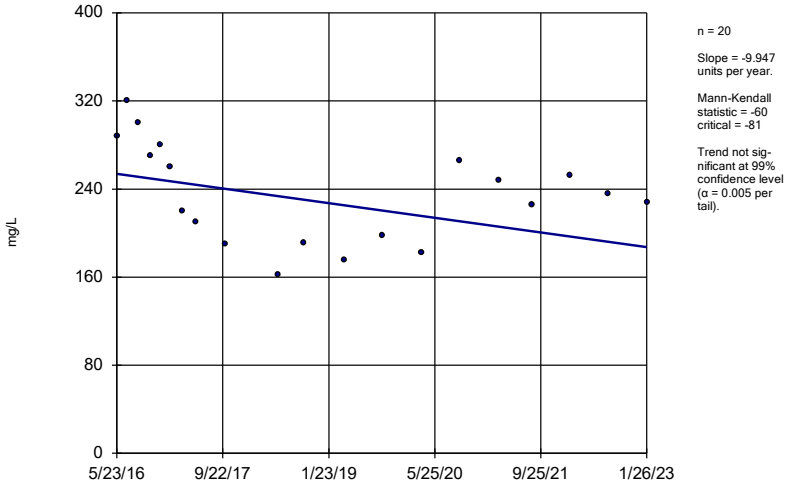
Mann-Kendall statistic = -34
critical = -81

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).

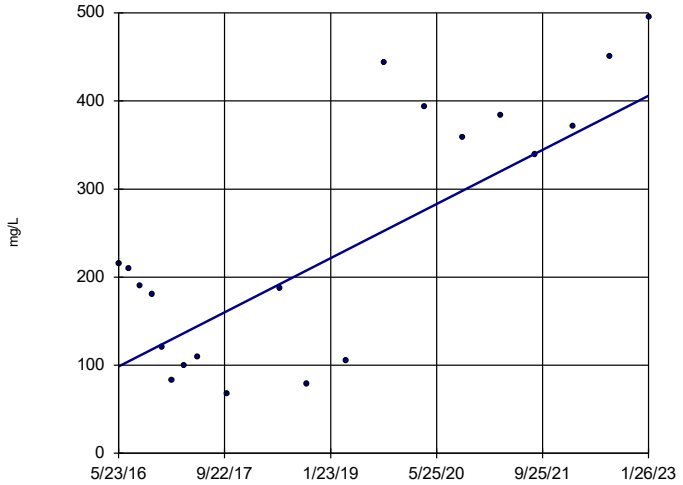
Constituent: Sulfate Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

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).

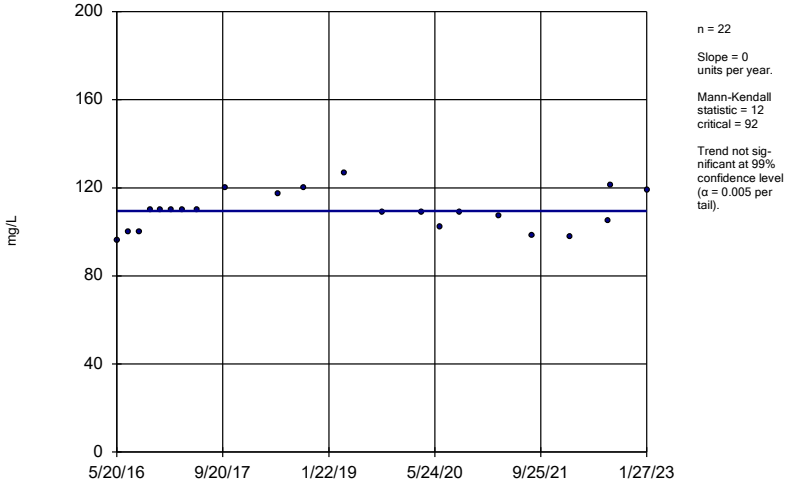
Constituent: Sulfate Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

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).

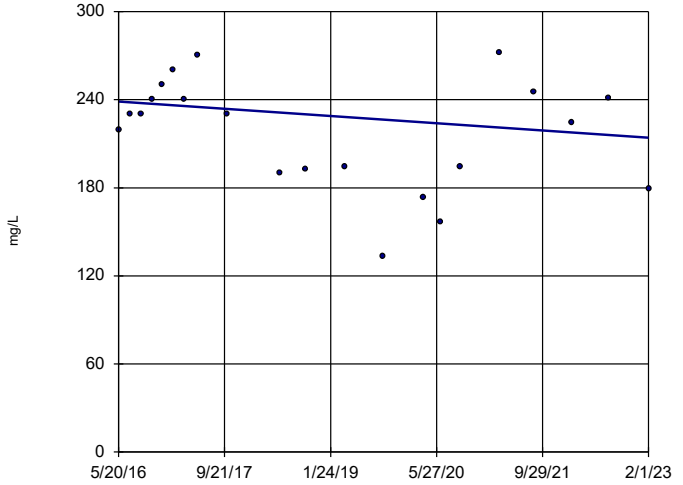
Constituent: Sulfate Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

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

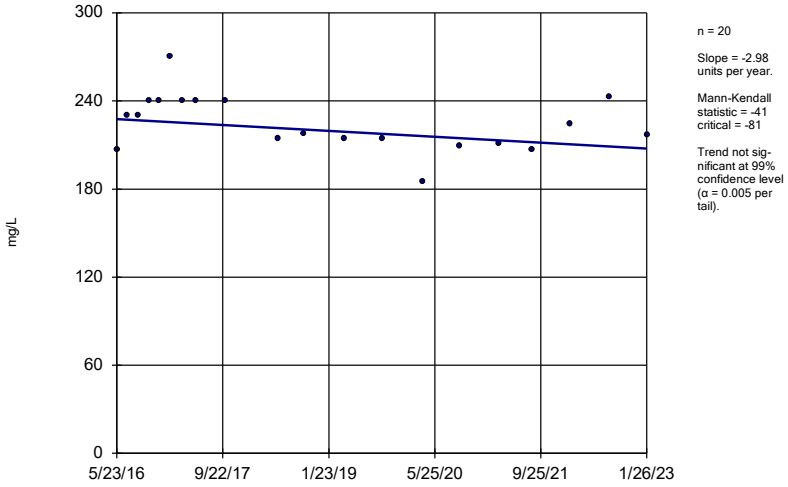
Trend not significant at 99% confidence level (α = 0.005 per tail).

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).

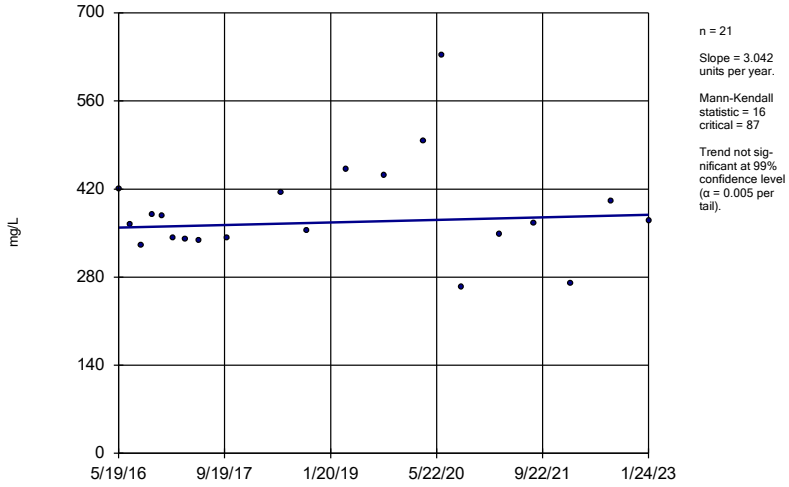
Constituent: Sulfate Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

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).

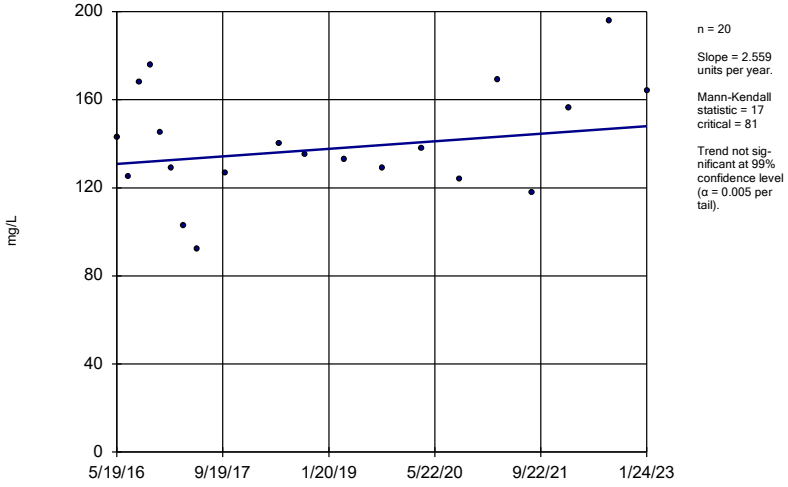
Constituent: Total Dissolved Solids Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

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).

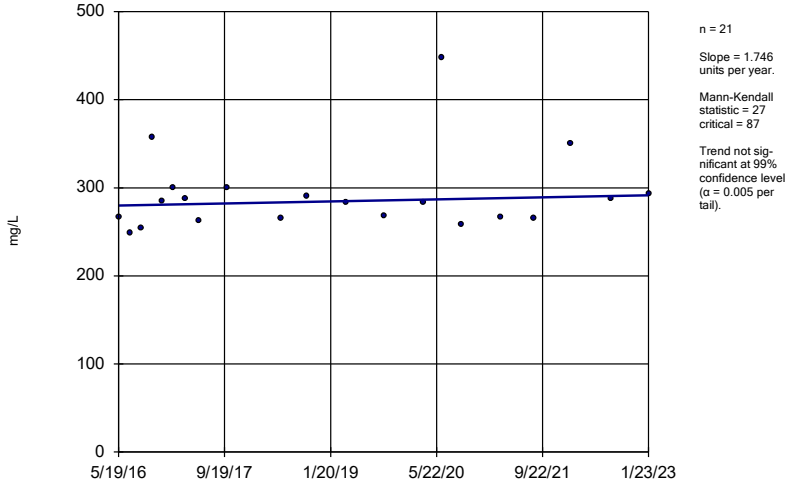
Constituent: Total Dissolved Solids Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

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

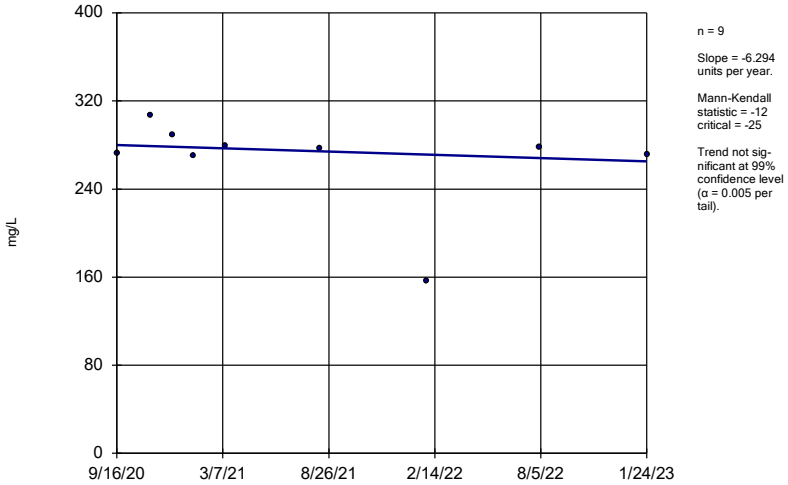
Trend not significant at 99% confidence level (α = 0.005 per tail).

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).

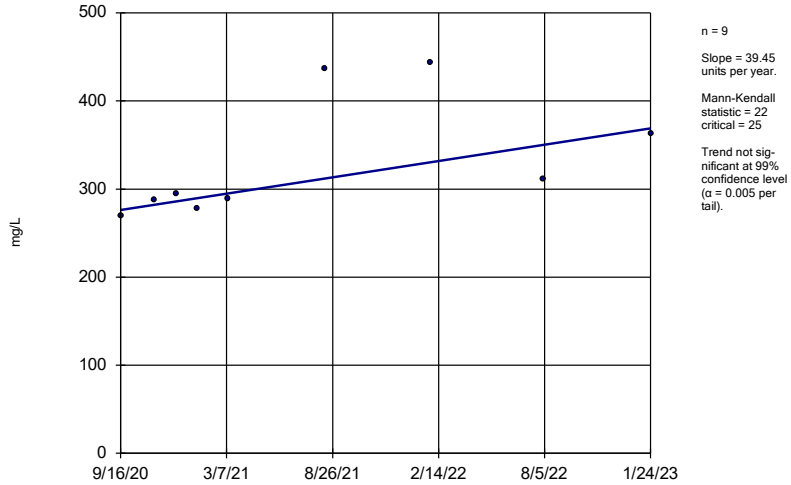
Constituent: Total Dissolved Solids Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

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).

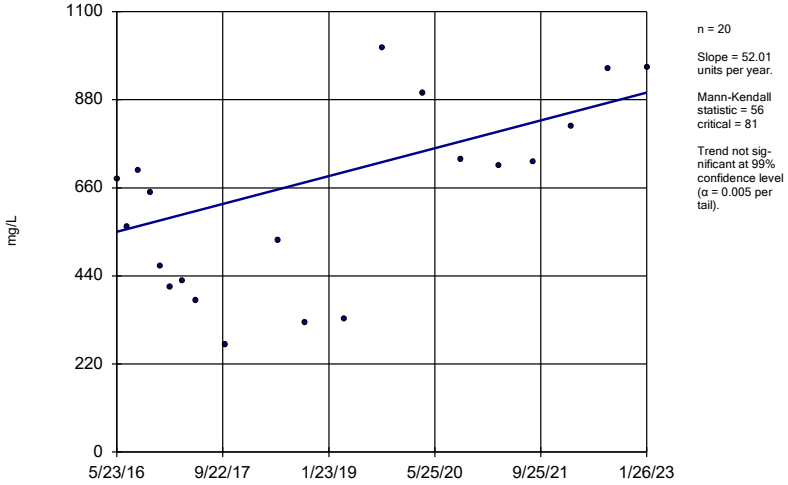
Constituent: Total Dissolved Solids Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

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).

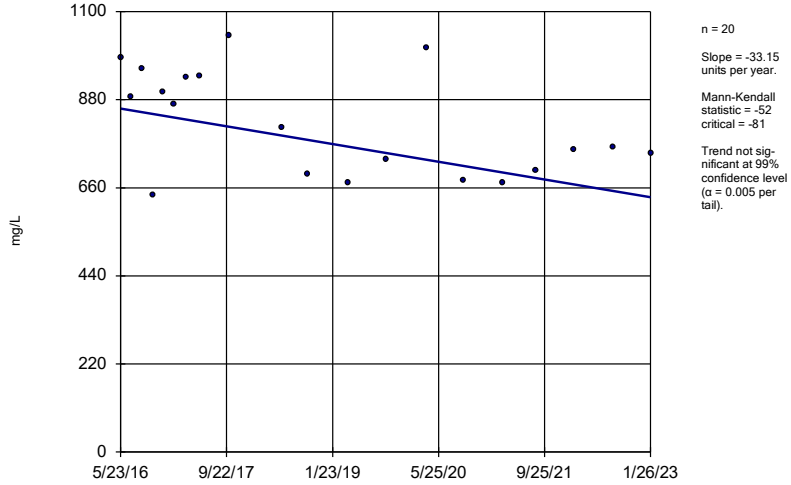
Constituent: Total Dissolved Solids Analysis Run 4/14/2023 12:41 PM View: Appendix III - Trend Tests

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

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.

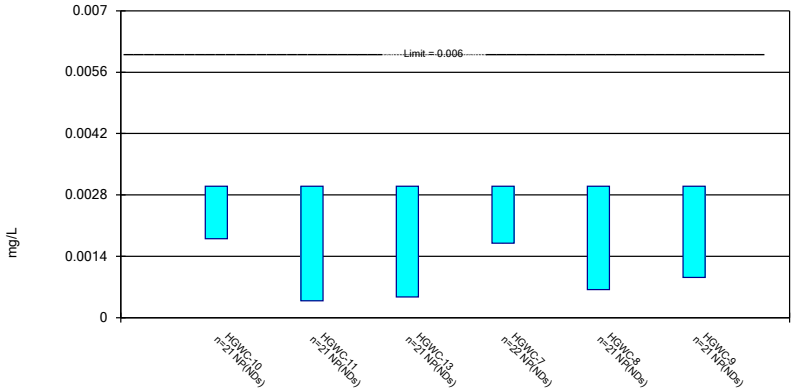
Confidence Intervals - All Results

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)

Non-Parametric Confidence Interval

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

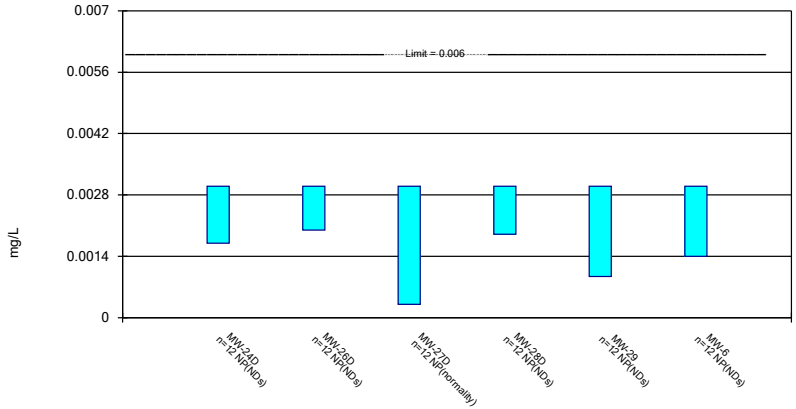


Constituent: Antimony Analysis Run 4/14/2023 1:07 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

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

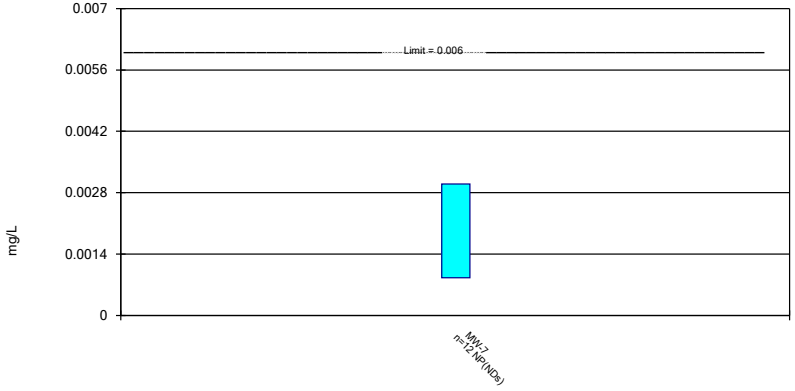


Constituent: Antimony Analysis Run 4/14/2023 1:07 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

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

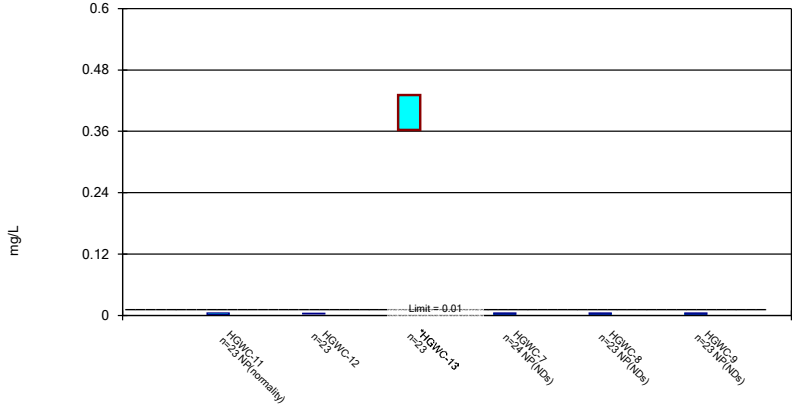


Constituent: Antimony Analysis Run 4/14/2023 1:07 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

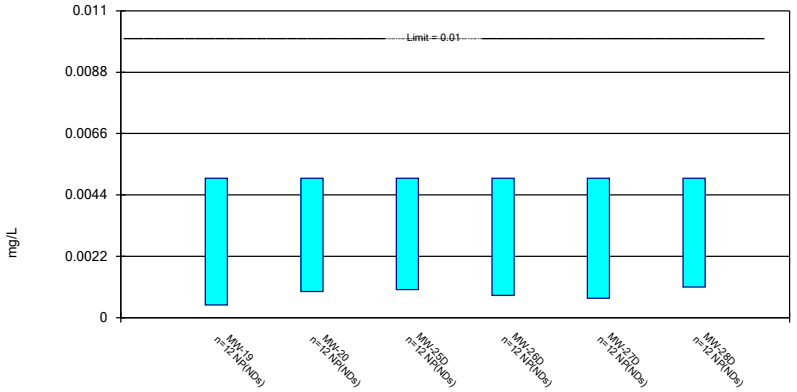
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



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.

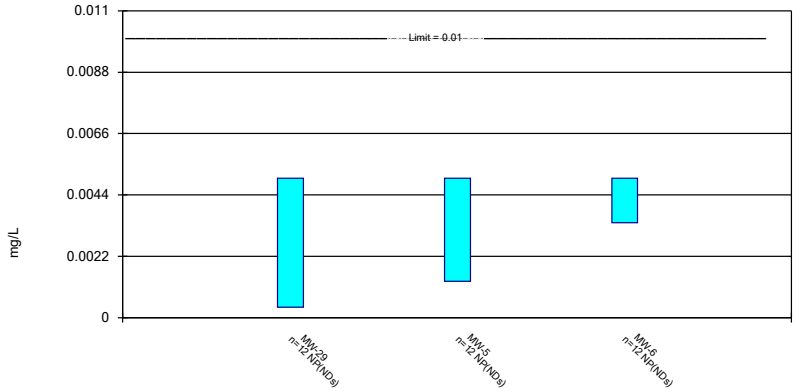


Constituent: Arsenic Analysis Run 4/14/2023 1:07 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

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

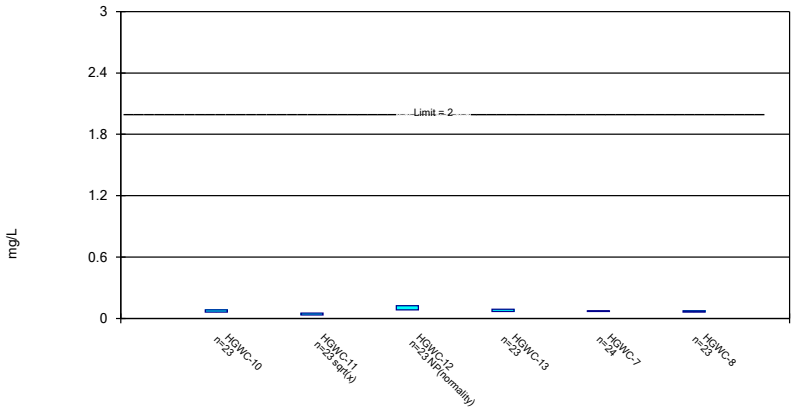


Constituent: Arsenic Analysis Run 4/14/2023 1:07 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

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.

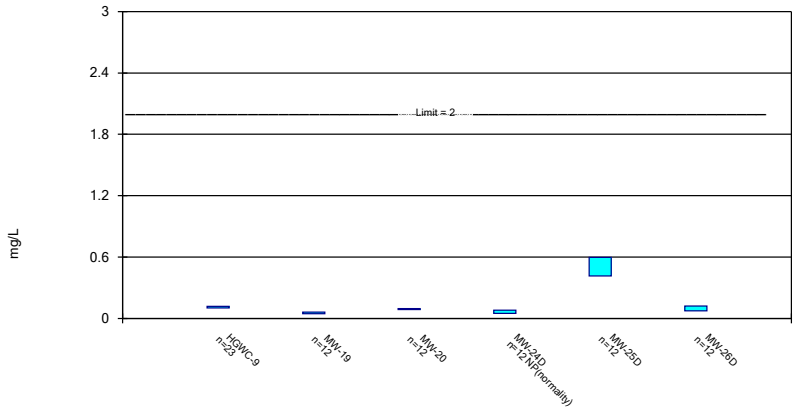


Constituent: Barium Analysis Run 4/14/2023 1:07 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

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.



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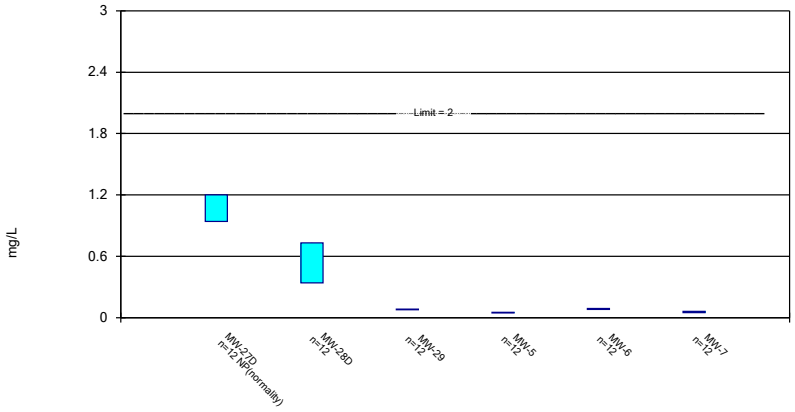
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

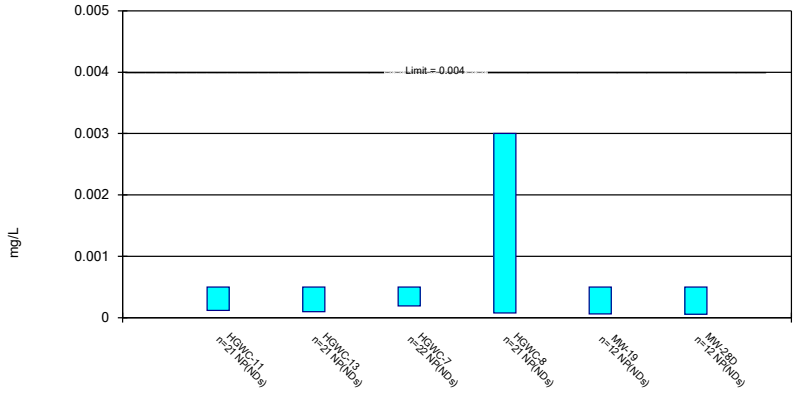
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



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

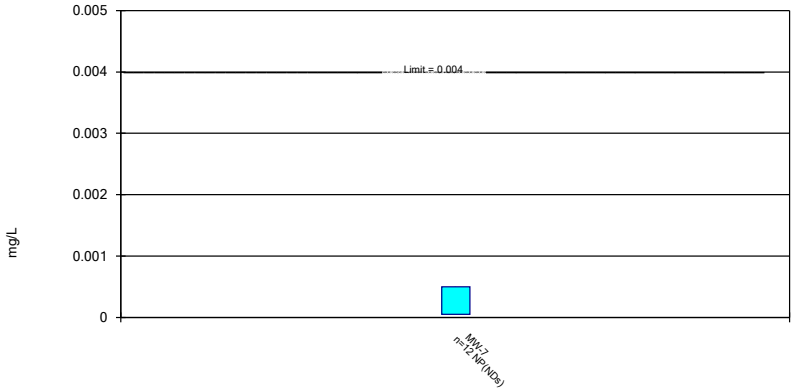
Compliance Limit is not exceeded. Per-well alpha = 0.01.



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

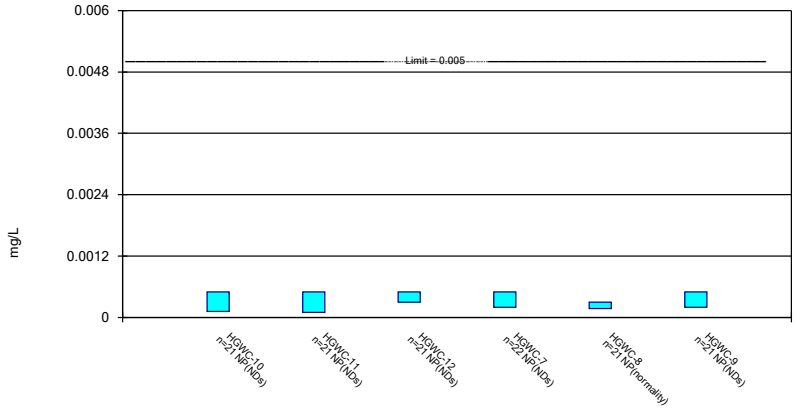
Compliance Limit is not exceeded. Per-well alpha = 0.01.



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

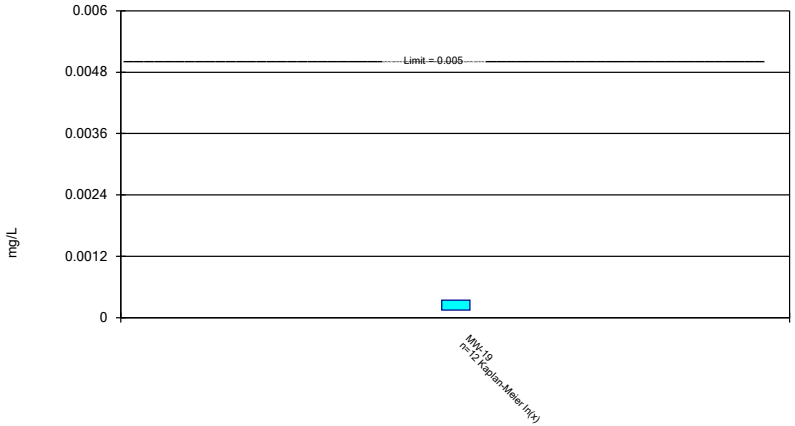
Compliance Limit is not exceeded. Per-well alpha = 0.01.



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

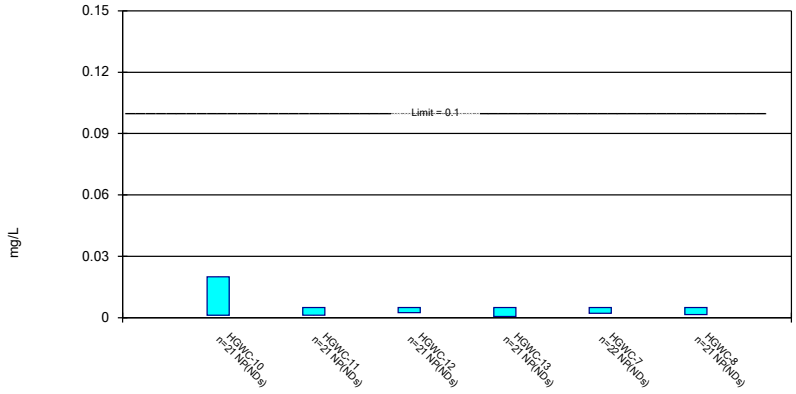
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



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

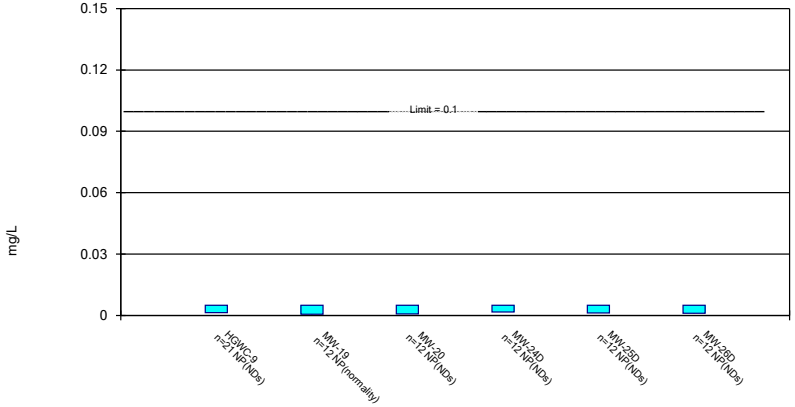
Compliance Limit is not exceeded. Per-well alpha = 0.01.



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

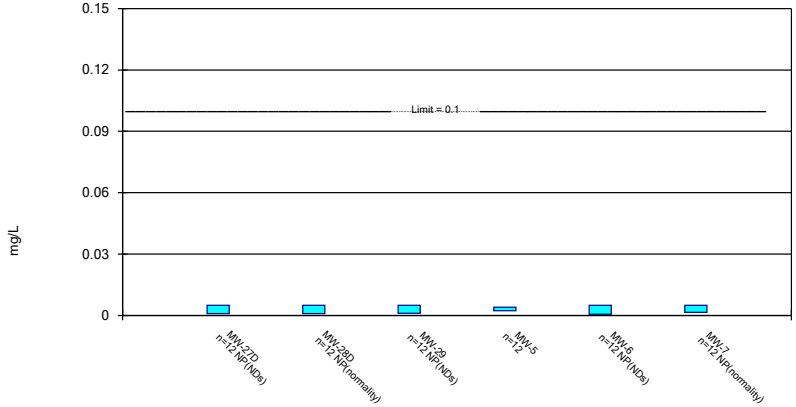
Compliance Limit is not exceeded. Per-well alpha = 0.01.



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

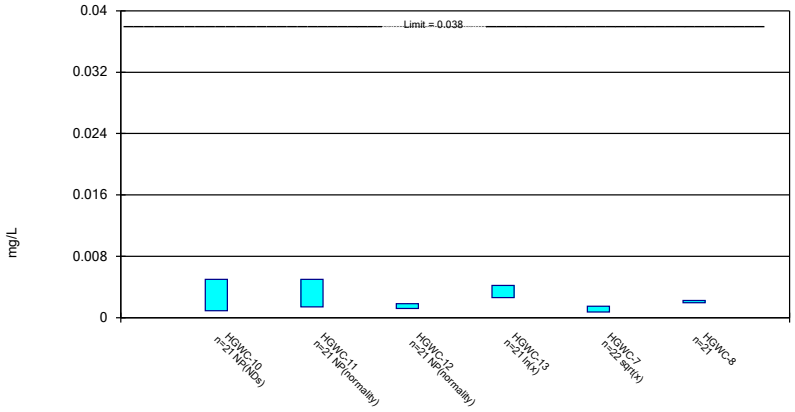
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



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.

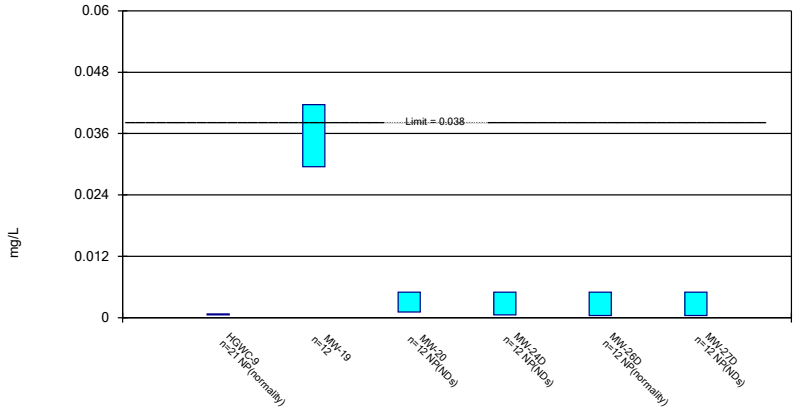


Constituent: Cobalt Analysis Run 4/14/2023 1:07 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

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.

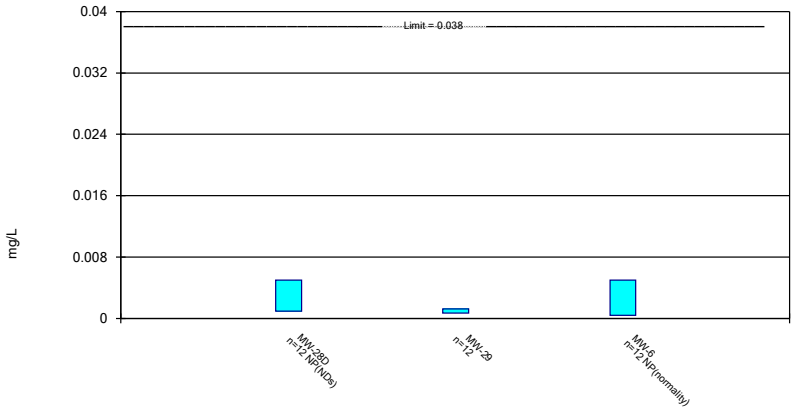


Constituent: Cobalt Analysis Run 4/14/2023 1:07 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

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.

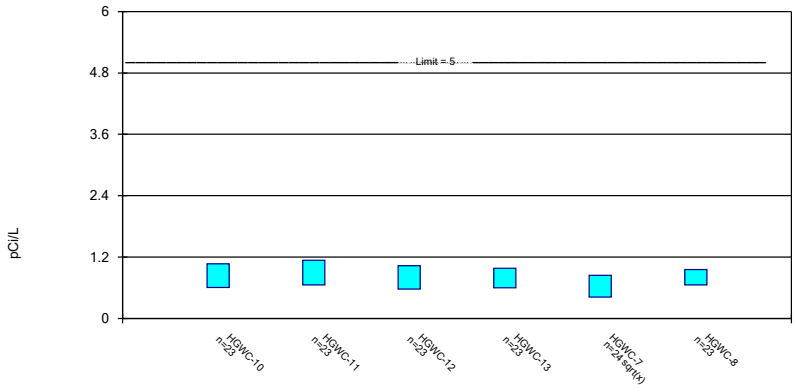


Constituent: Cobalt Analysis Run 4/14/2023 1:07 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric Confidence Interval

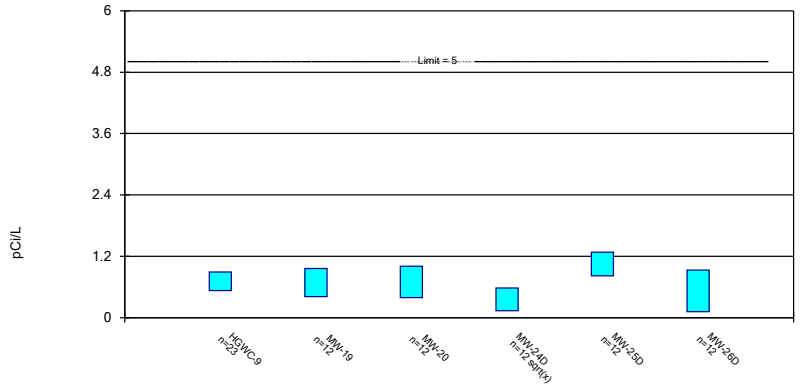
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



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

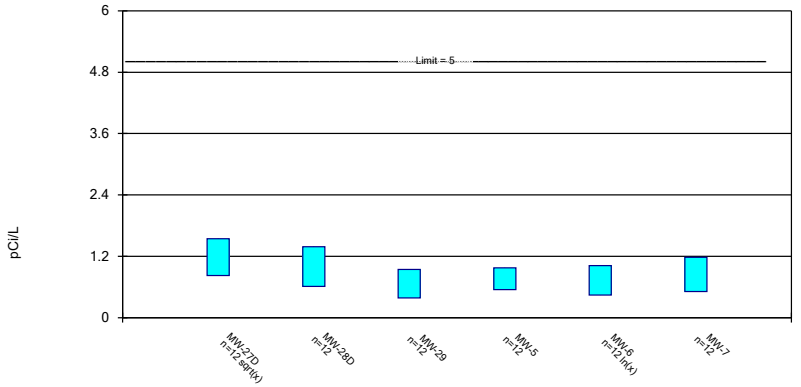
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



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

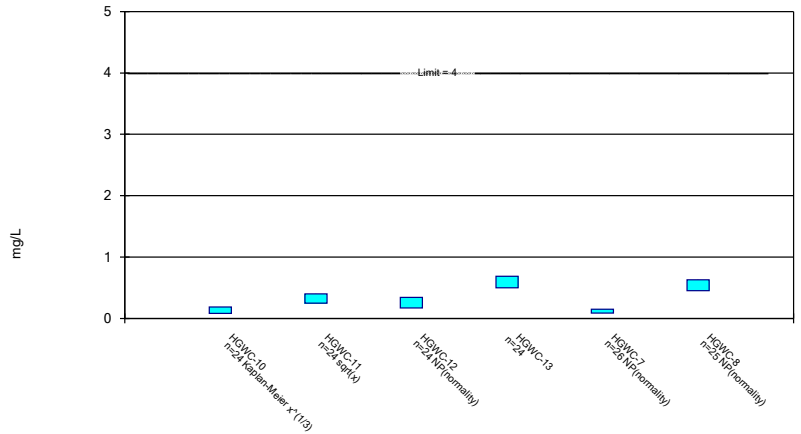
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



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

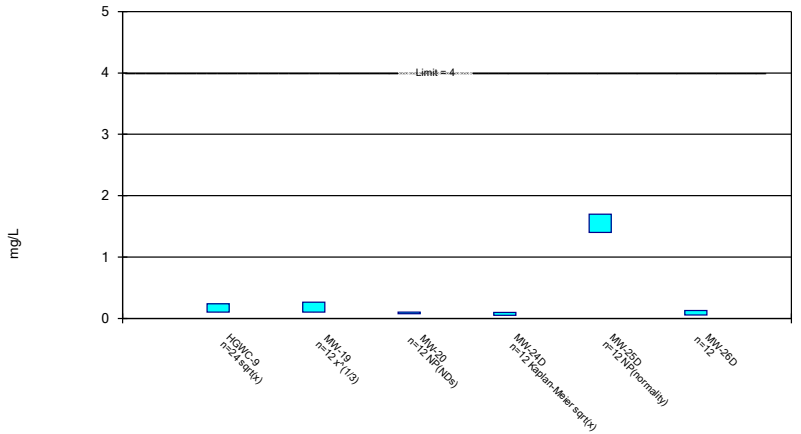
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



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

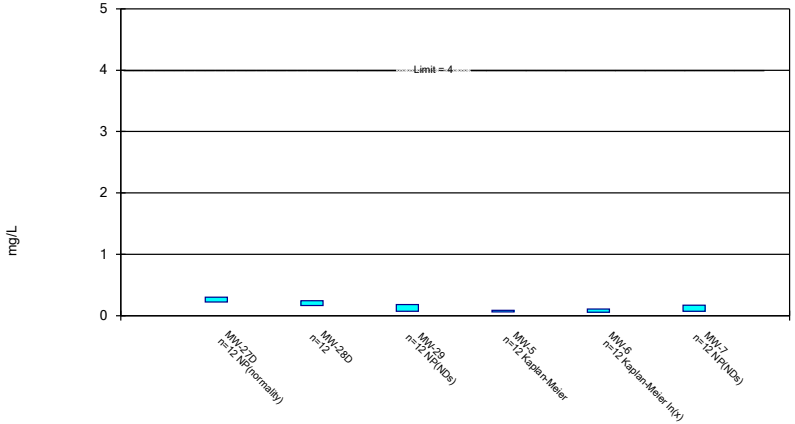
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



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

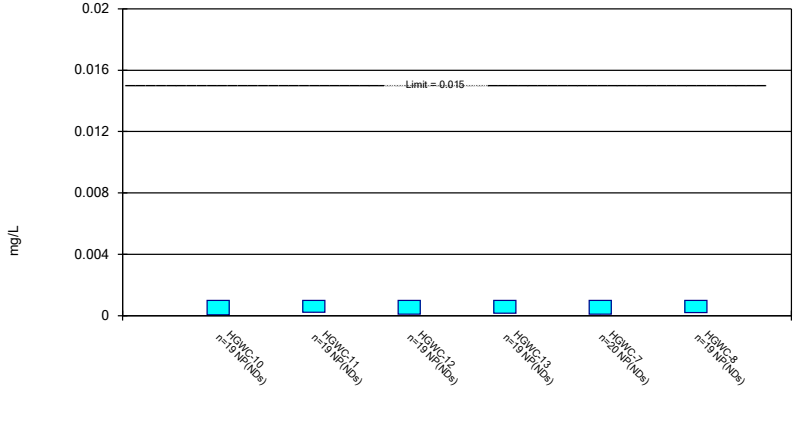
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Non-Parametric Confidence Interval

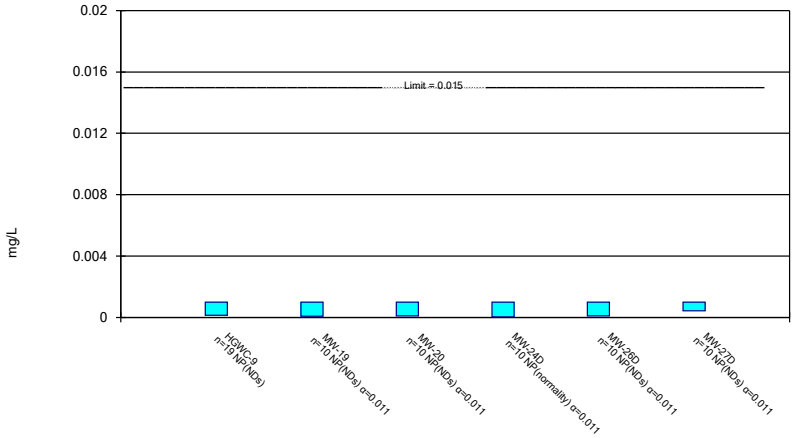
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Non-Parametric Confidence Interval

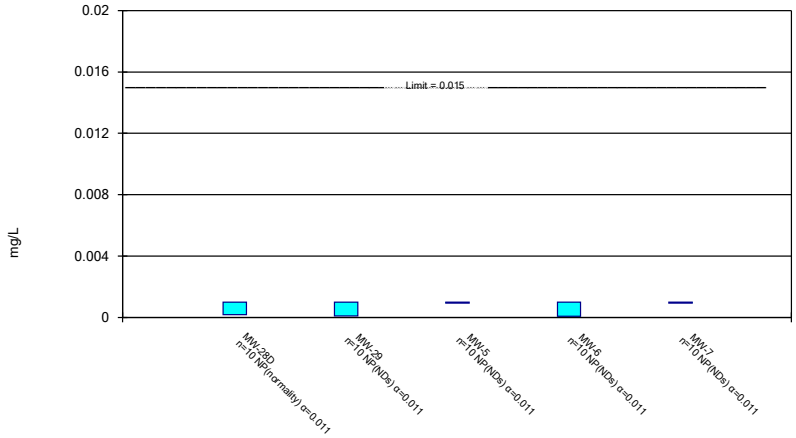
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Lead Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Non-Parametric Confidence Interval

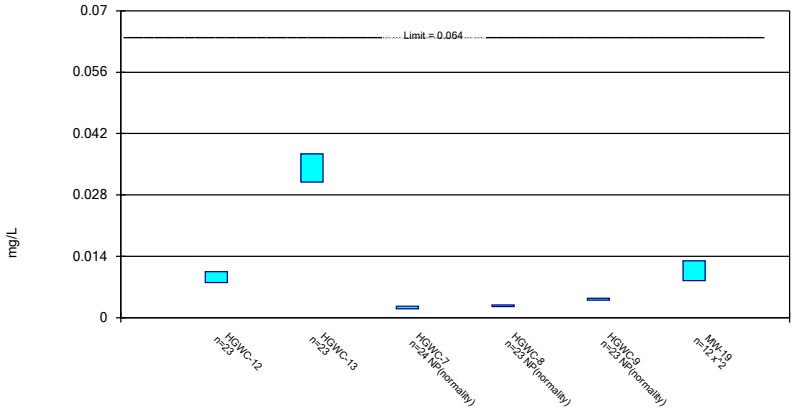
Compliance Limit is not exceeded.



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.

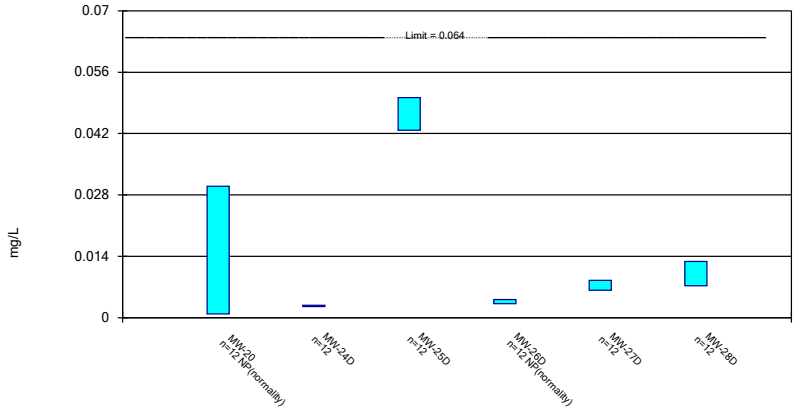


Constituent: Lithium Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

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.

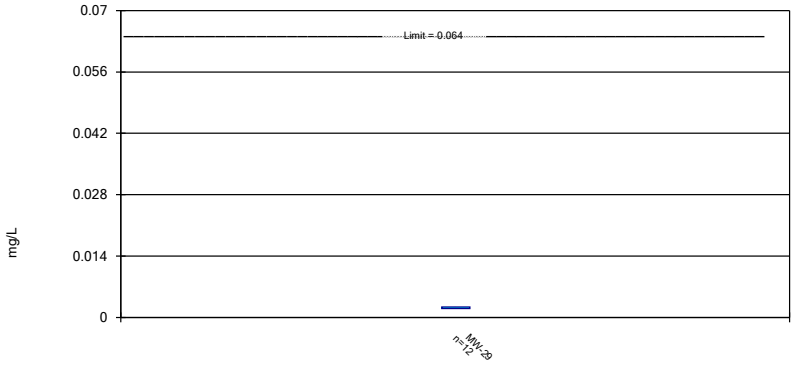


Constituent: Lithium Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

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.

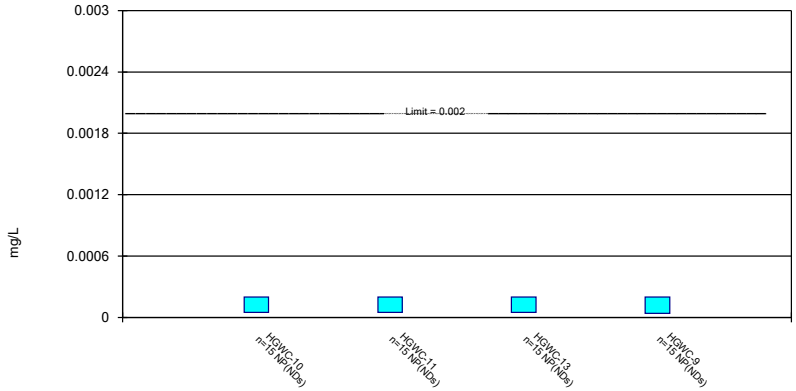


Constituent: Lithium Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

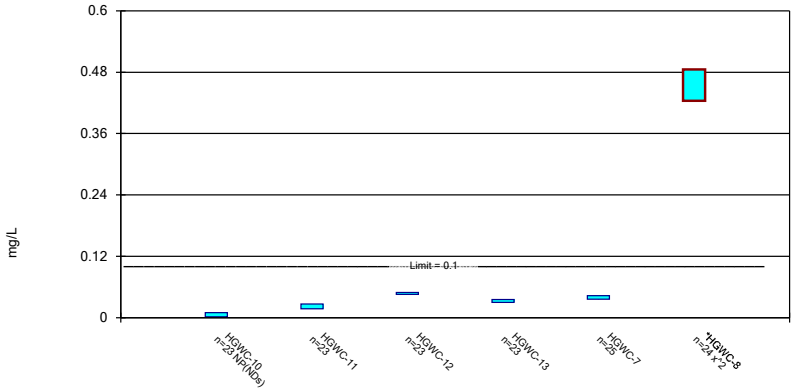
Compliance Limit is not exceeded. Per-well alpha = 0.01.



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

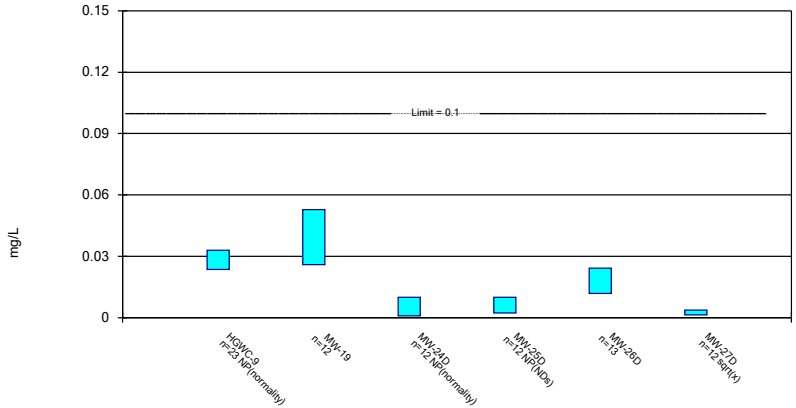
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

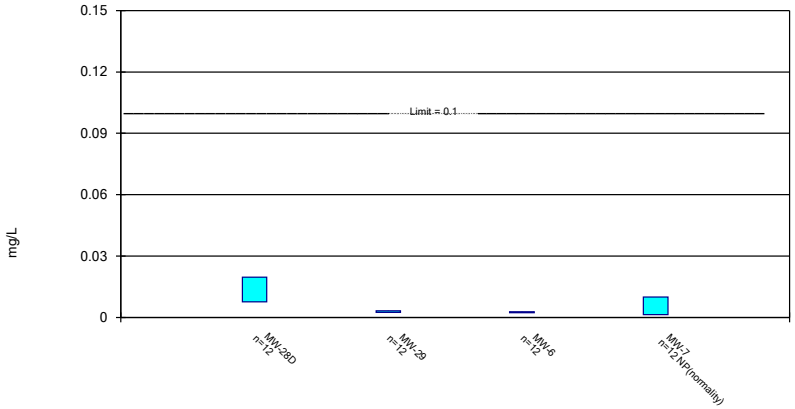
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

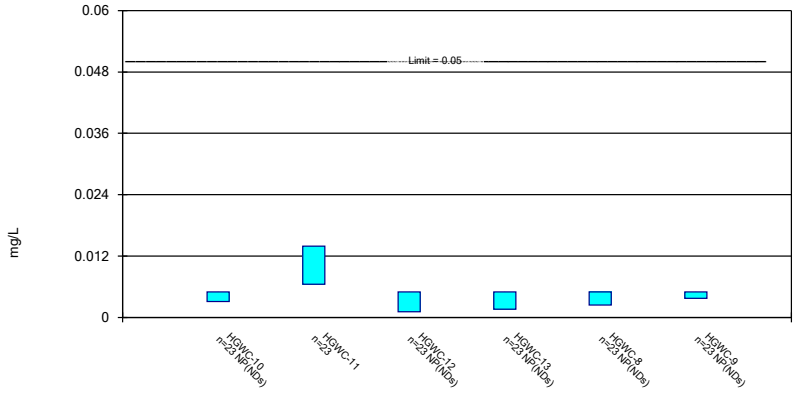
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

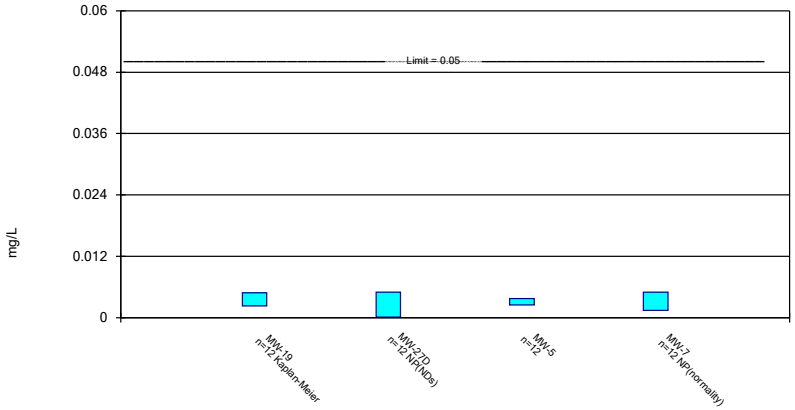
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



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

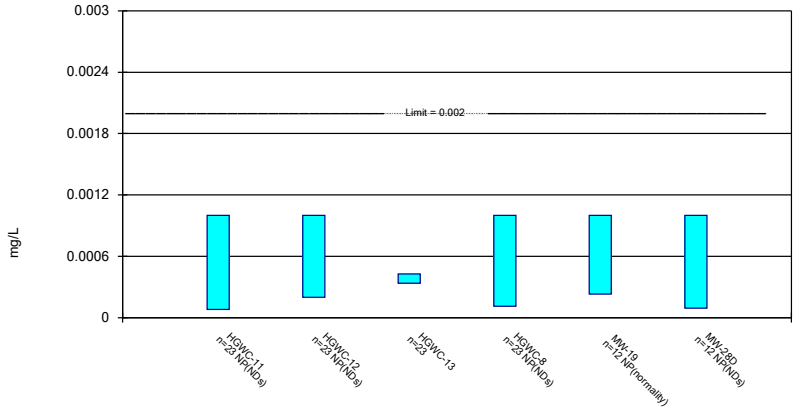
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

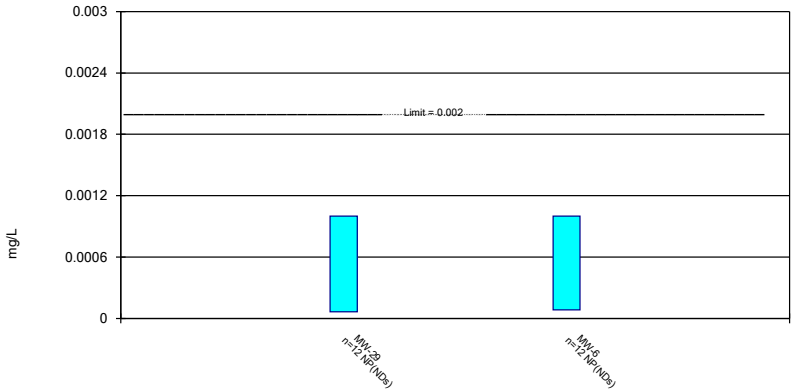
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Thallium Analysis Run 4/14/2023 1:08 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

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)

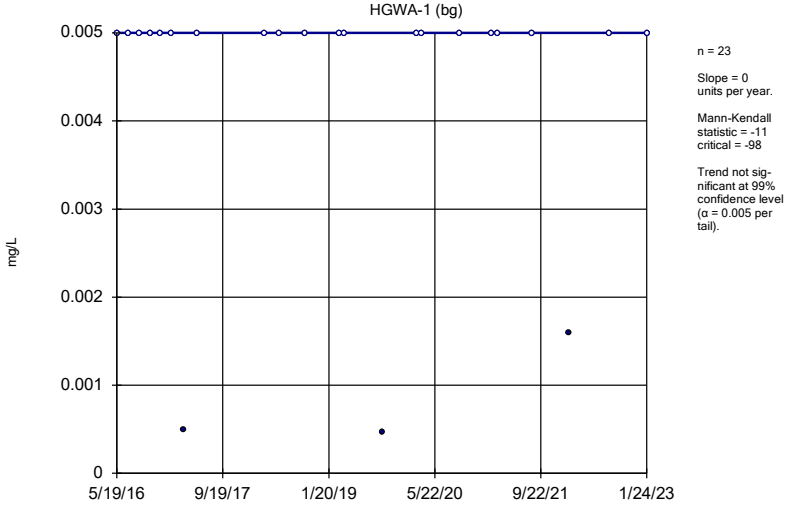
Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 4/14/2023, 1:16 PM

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

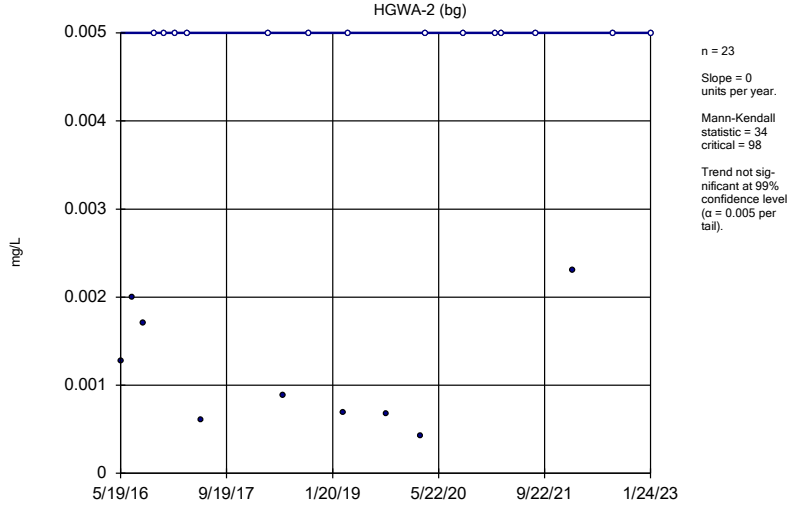
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

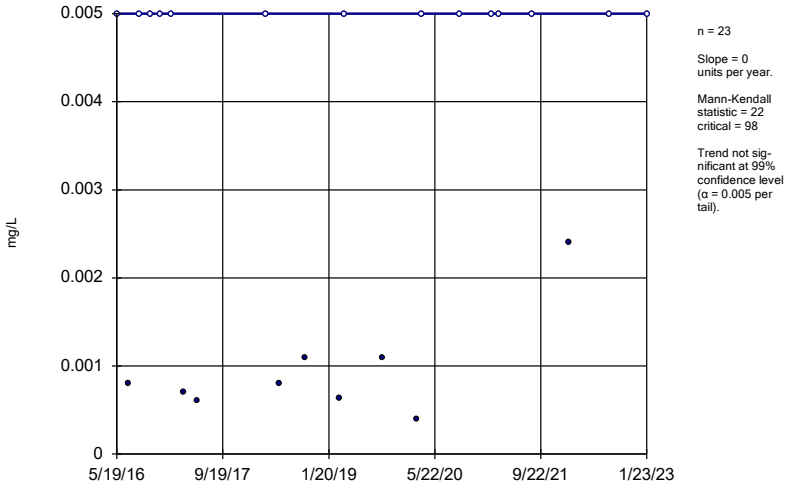
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

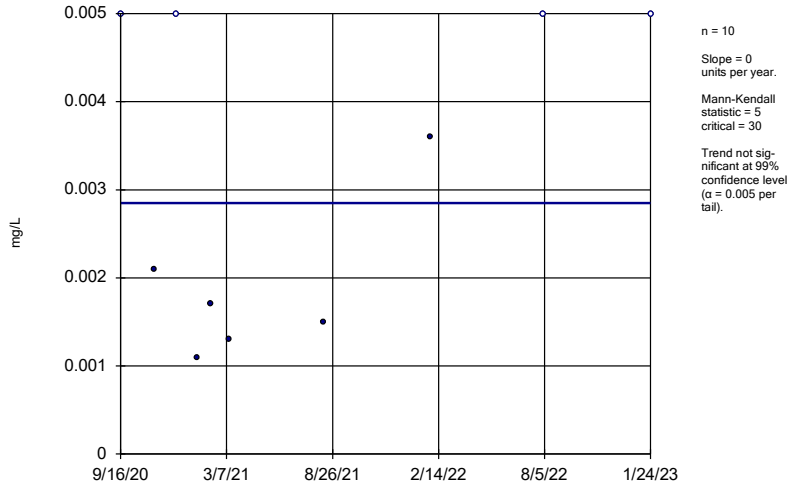
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

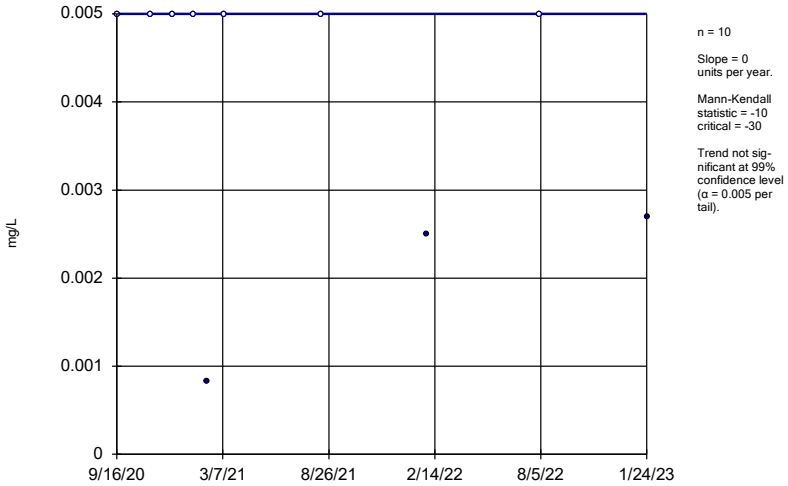
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

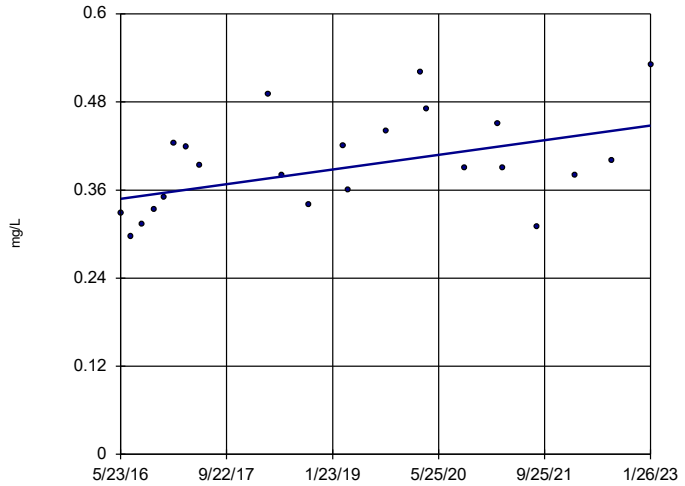
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

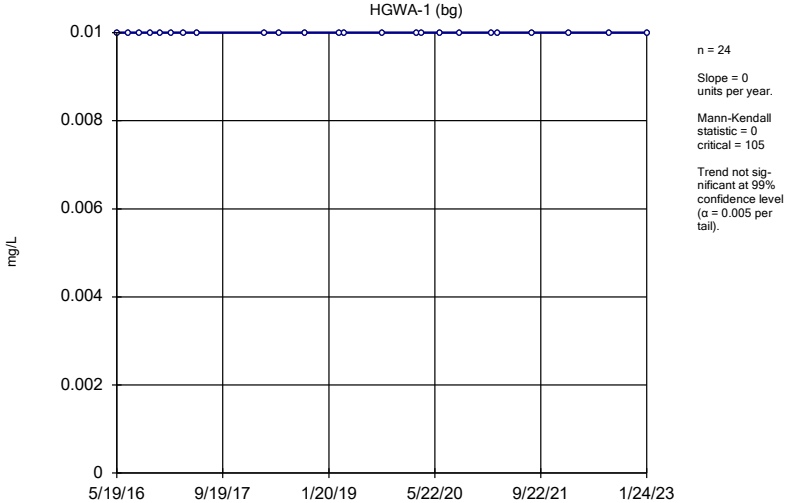
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

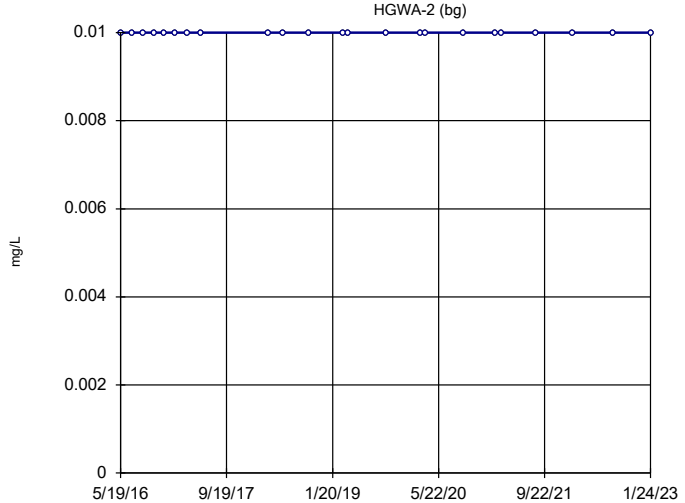
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

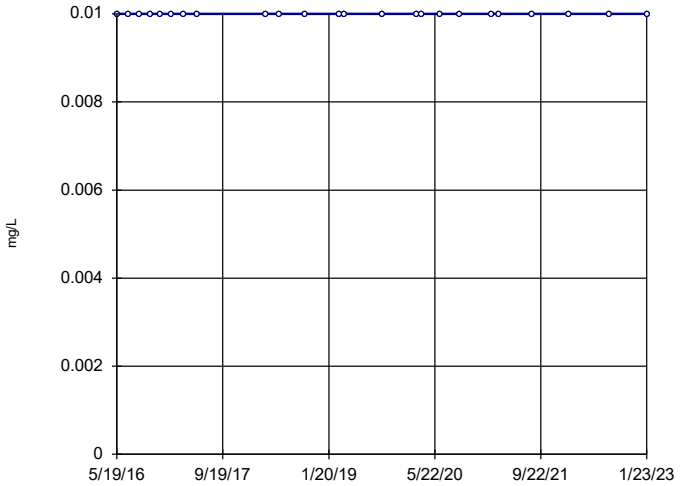
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

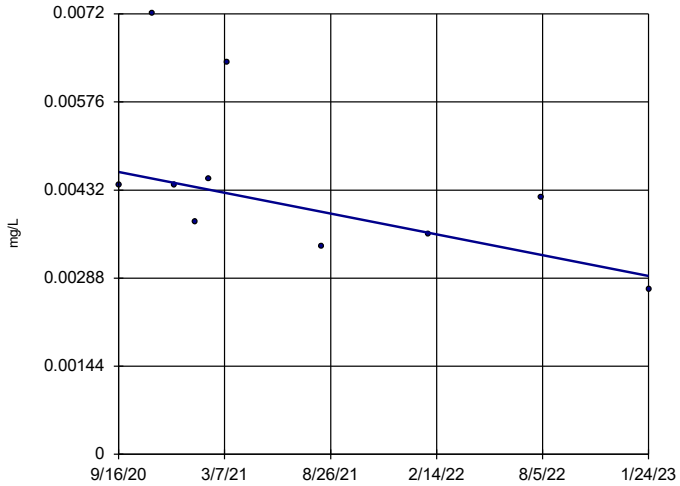
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

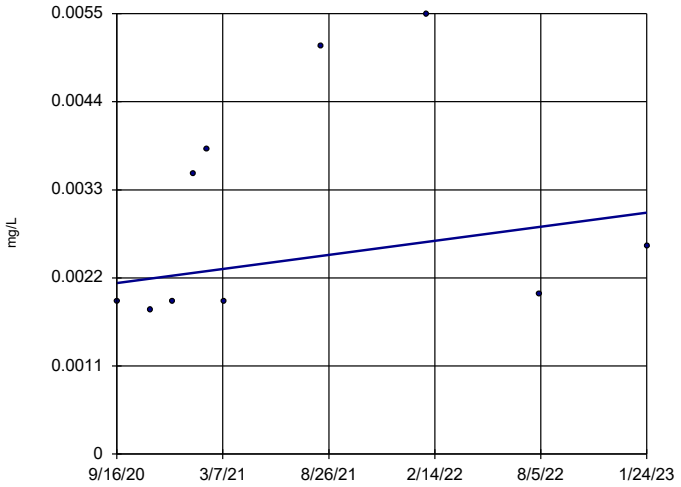
Trend not significant at 99% confidence level (α = 0.005 per tail).

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

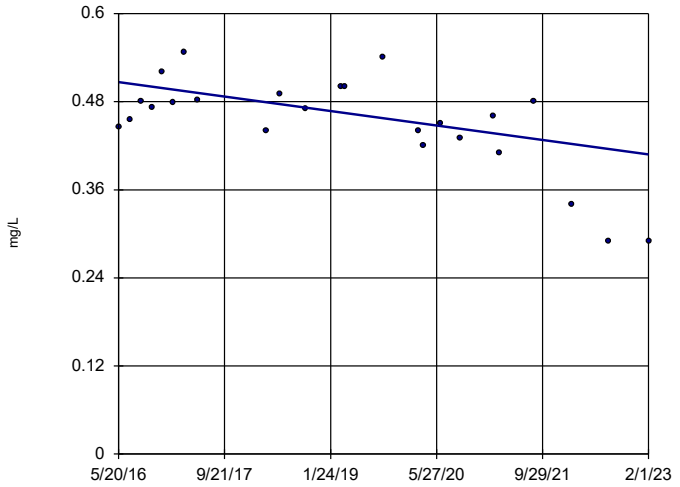
Trend not significant at 99% confidence level (α = 0.005 per tail).

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