Prepared for

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

2021 SEMIANNUAL GROUNDWATER MONITORING & CORRECTIVE ACTION REPORT

GEORGIA POWER COMPANY
PLANT HAMMOND ASH POND 1 (AP-1)

Prepared by

Geosyntec consultants

engineers | scientists | innovators

1255 Roberts Boulevard, Suite 200
Kennesaw, Georgia 30144

Project Number GW6581B

August 2021

Geosyntec
consultants

CERTIFICATION STATEMENT

This *2021 Semiannual Groundwater Monitoring & Corrective Action Report, Georgia Power Company - 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 40 CFR 257.90(e), and the Georgia Environmental Protection Division Rules for Solid Waste Management 391-3-4-.10 by a qualified groundwater scientist or engineer with Geosyntec Consultants.

August 31, 2021

Whitney B. Law
Georgia Professional Engineer No. 36641

Date

Geosyntec
consultants

SUMMARY

This summary of the *2021 Semiannual Groundwater Monitoring and Corrective Action Report* provides the status of the groundwater monitoring and corrective action program through July 2021 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 U.S. Environmental Protection Agency (USEPA) coal combustion residual (CCR) rule (40 Code of Federal Regulations [CFR] 257 Subpart D) (herein referred to as the CCR Rule).

Plant Hammond is located at 5963 Alabama Highway SW, approximately 10 miles west of Rome in Floyd County, Georgia. 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. CCR material resulting from power generation were historically transferred and stored at the site 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 monitoring system comprised of five upgradient and seven downgradient wells installed between October 2014 and August 2020 that meet 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 were established in January 2018 and January 2019, respectively. During the 2021 semiannual reporting period, the Site remained in assessment monitoring as corrective measures are being evaluated.

[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

During the 2021 semiannual reporting period, Geosyntec conducted two groundwater sampling events, one in February and one in March. Groundwater samples were submitted to Pace Analytical Services, LLC, for analysis. Per the CCR Rule, groundwater results for through March 2021 data were evaluated in accordance with the certified statistical methods. That evaluation showed statistically significant values of Appendix III[3] and Appendix IV[4] parameters in wells listed in the table below.

Appendix III Parameter	**March 2021**
Boron	HGWC-7, HGWC-8, HGWC-9, HGWC-10, HGWC-11, HGWC-12, HGWC-13
Calcium	HGWC-8, HGWC-9, HGWC-10, HGWC-12, HGWC-13
Chloride	HGWC-7, HGWC-8, HGWC-9, HGWC-12
Sulfate	HGWC-7, HGWC-8, HGWC-9, HGWC-10, HGWC-11, HGWC-12, HGWC-13
Total Dissolved Solids	HGWC-9, HGWC-13
Appendix IV Parameter[2]	**March 2021**
Arsenic	*Federal and State:* HGWC-13
Lithium	*Federal and State:* MW-25D
Molybdenum	*Federal and State:* HGWC-8 *State only:* HGWC-7, HGWC-9, HGWC-11, HGWC-12, HGWC-13, MW-19

Based on review of the Appendix III and Appendix IV statistical results completed for the groundwater monitoring and corrective action program from January through July 2021, 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.

[2] A state statistically significant level (SSL)-related constituent is determined by comparing the confidence intervals developed to either the constituent's maximum contaminant level (MCL), if available, or the calculated background interwell prediction limit. A federal SSL-related constituent is determined by comparing the confidence intervals developed to either the constituent's MCL, if available, the USEPA Regional Screen Level, if no MCL is available, or the calculated background interwell prediction limit.
[3] Boron, calcium, chloride, fluoride, pH, sulfate, and total dissolved solids (TDS)
[4] Antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, fluoride, lead, lithium, mercury, molybdenum, selenium, thallium, and radium 226 + 228

TABLE OF CONTENTS

EXECUTIVE SUMMARY i

1.0 INTRODUCTION 1
1.1 Site Description and Background 1
1.2 Regional Geology & Hydrogeologic Setting 2
1.2.1 Regional and Site Geology 2
1.2.2 Hydrogeologic Setting 3
1.3 Groundwater Monitoring Well Network 3

2.0 GROUNDWATER MONITORING ACTIVITIES 5
2.1 Monitoring Well Installation and Maintenance 5
2.2 Assessment Monitoring 5
2.3 Additional Groundwater and Surface Water Sampling 6

3.0 SAMPLING METHODOLOGY & ANALYSES 7
3.1 Groundwater Level Measurement 7
3.2 Groundwater Gradient and Flow Velocity 7
3.3 Groundwater Sampling Procedures 8
3.4 Laboratory Analyses 9
3.5 Quality Assurance & Quality Control Summary 9

4.0 STATISTICAL ANALYSIS 11
4.1 Statistical Methods 11
4.1.1 Appendix III Statistical Methods 11
4.1.2 Appendix IV Statistical Methods 12
4.2 Statistical Analyses Results 13
4.3 Delineation Data 14

5.0 MONITORING PROGRAM STATUS 15
5.1 Assessment Monitoring Status 15
5.2 Assessment of Corrective Measures 15

6.0 CONCLUSIONS & FUTURE ACTIONS 16

7.0 REFERENCES 17

LIST OF TABLES

Table 1 Monitoring Well Network Summary
Table 2 Groundwater Sampling Event Summary
Table 3 Summary of Groundwater and Surface Water Elevations
Table 4 Groundwater Gradient and Flow Velocity Calculations
Table 5 Summary of Groundwater Analytical Data
Table 6 Summary of Background Concentrations and Groundwater Protection Standards

LIST OF FIGURES

Figure 1 Site Location Map
Figure 2 Monitoring Well Network and Sampling Location Map
Figure 3 Potentiometric Surface Contour Map – February 2021
Figure 4 Potentiometric Surface Contour Map – March 2021

LIST OF APPENDICES

Appendix A Well Inspection Forms
Appendix B Semiannual Remedy Selection and Design Progress Report
Appendix C Laboratory Analytical and Field Sampling Reports
Appendix D Statistical Analysis Report

LIST OF ACRONYMS

ACM	Assessment of Corrective Measures
AP	ash pond
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.
GWPS	Groundwater Protection Standard
HAR	Hydrogeologic Assessment Report
K_h	horizontal hydraulic conductivity
MCL	Maximum Contaminant Level
mg/L	milligram per liter
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
USEPA	United States Environmental Protection Agency

1.0 INTRODUCTION

In accordance with the United States Environmental Protection Agency (USEPA) coal combustion residual (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 *2021 Semiannual Groundwater Monitoring & 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 2021 (referred to herein as the reporting period).

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

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. Since 2018, an SSL of lithium was first identified in the *2020 Semiannual Groundwater Monitoring and Corrective Action Report* (Geosyntec, 2020b). 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 in 2018, including annual and 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). The current reporting period data indicate that arsenic, lithium, and molybdenum concentrations are horizontally 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 will close 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 & 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, which 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 suggests 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. Based on observations of soil types and horizontal conductivity values, the movement of groundwater in the soil, and to some degree the highly weathered bedrock zone, can be characterized as low-to moderate permeability, porous media flow. Groundwater flow in the more competent underlying bedrock is characterized as fracture flow. Groundwater flow in the vicinity of AP-1 is to the east and south.

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.

The compliance monitoring well network for AP-1 consists of 12 monitoring wells. As part of the assessment monitoring program, ten delineation wells (MW-19, MW-20, MW-24D, MW-25D, MW-26D, MW-27D, MW-28D, MW-29, MW-30D, and MW-40D) have been installed since mid-2018 to characterize the nature and extent of arsenic, lithium,

and molybdenum in groundwater downgradient of AP-1. The delineation well network was supplemented in March 2019 by adding piezometers MW-5, MW-6, and MW-7to gauge water levels downgradient of AP-1. These three piezometers were suitably located downgradient of AP-1 and therefore reclassified as horizontal delineation wells. Pursuant to § 257.195(g)(1)(iv), the wells, classified as "delineation wells", will continue to be sampled concurrently with the compliance monitoring well network.

A network of piezometers has been installed at the Site that are used to gauge water levels to define groundwater flow direction and gradients. There are three existing(AP1A-1, MW-1, MW-8) and two reclassified (MW-30D and MW-40D) piezometers used to gauge groundwater levels upgradient and downgradient of AP-1. The piezometers may be sampled as needed to support the ACM program.

The locations of the compliance monitoring wells, delineation wells, and piezometers are shown on **Figure 2**; well construction details are listed in **Table 1**.

2.0 GROUNDWATER MONITORING ACTIVITIES

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

2.1 Monitoring Well Installation and Maintenance

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

The well and piezometer networks are inspected during each groundwater monitoring event using GA EPD Groundwater Well Integrity Form. Any issues identified with the wells (e.g., clogged weep holes within the outer protective casing, faded well identification signage, rusted locks and/or latches) are addressed before the following groundwater sampling event. The well inspection forms for the reporting period are provided in **Appendix A**.

2.2 Assessment Monitoring

Georgia Power initiated an assessment monitoring program for groundwater at AP-1 in January 2018. Statistical analyses of the 2018 assessment monitoring data identified an SSL of arsenic in well HGWC-13 and SSLs of molybdenum in wells HGWC-7, HGWC-8, HGWC-9, HGWC-11, HGWC-12, and HGWC-13 in excess of their associated federal and/or state groundwater protection standards (GWPS).

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. 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.

The annual Appendix IV sampling event for this reporting period was conducted in February 2021; the first semiannual assessment monitoring event for this reporting period was conducted in March 2021. The number of groundwater samples collected for analysis and the dates the samples were collected at AP-1 during this reporting period are summarized in **Table 2**.

During this reporting period, one additional background sample was collected at HGWA-43D and HGWA-44D in January 2021 to characterize background groundwater conditions. For this event, the samples were analyzed for the complete list of Appendix III and Appendix IV constituents. A similar sampling event was conducted in December 2020 at these two background wells, but the laboratory report was not received in time to include in the previous semiannual groundwater monitoring report. The laboratory report associated with both the December 2020 and January 2021 groundwater sampling events are provided in **Appendix C**.

2.3 Alternate Source Demonstration

An Alternate Source Demonstration (ASD) was prepared and submitted to GA EPD on January 29, 2021, to address the fluoride and lithium SSLs reported for well MW-30D and molybdenum SSL reported for well MW-40D. 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. In addition to being submitted to GA EPD under separate cover, the ASD was also included as an appendix to the *2020 Annual Groundwater Monitoring and Corrective Action Report* (Geosyntec, 2021).

2.4 Additional Groundwater Sampling

A supplemental groundwater sampling event was conducted during the reporting period to collect additional data in support of the continued evaluation of corrective measures as presented in the ACM Report. The supplementary data were collected in support of evaluating attenuation mechanisms and rates and aquifer capacity for attenuation. The scope of this additional effort is presented in the *Semiannual Remedy Selection and Design Progress Report* provided in **Appendix B**.

3.0 SAMPLING METHODOLOGY & 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 reporting period.

3.1 Groundwater Level Measurement

Prior to each sampling event, a synoptic round of depth to groundwater level measurements were recorded from the AP-1 wells and piezometers and used to calculate the corresponding groundwater elevations. The calculated groundwater elevations for the February 8, 2021 and March 10, 2021 events are presented in **Table 3**. The February 8 and March 10, 2021 elevations are generally representative of the groundwater elevations reported for prior monitoring events.

The groundwater elevation data were used to prepare potentiometric surface maps for the February 8, 2021 and March 10, 2021 events, which are presented on **Figures 3** and **4**, respectively. Groundwater in the AP-1 area flows under the influence of topography from slightly higher elevations on the north side of the Site in a generally easterly and southerly direction.

3.2 Groundwater Gradient and Flow Velocity

The groundwater hydraulic gradients within the uppermost aquifer beneath AP-1 were calculated using the groundwater elevation data from the February 8, 2021 and March 10, 2021 events. Hydraulic gradients were calculated along the flow path south of AP-1 between wells HGWC-13 and MW-7 and between wells 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 two measurement events. The general trajectory of the flow paths used in the calculations and associated potentiometric contour lines are shown on **Figures 3** and **4**.

The average hydraulic gradients along the southerly and easterly groundwater flow path lines associated with AP-1 are 0.024 feet per foot (ft/ft) and 0.027 ft/ft, respectively.

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**.

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

where:

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

K_h = Average hydraulic conductivity $\left(\frac{feet}{day}\right)$

i = Horizontal hydraulic gradient $\left(\frac{feet}{feet}\right)$

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 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 determined, and accounting for the averaged hydraulic gradient discussed above for the February 8, 2021, and March 10, 2021, events, the average groundwater flow velocity in the vicinity of AP-1 was calculated to be 2.0 ft/day (i.e., average of the southerly and easterly flow velocities). The flow velocity calculations are provided in **Table 4**.

3.3 Groundwater Sampling Procedures

Groundwater samples were collected from the compliance monitoring and delineation well networks using low-flow sampling procedures in accordance with 40 CFR 257.93(a). Eighteen of the 23 wells were purged and sampled using the dedicated bladder pump with tubing. Wells HGWC-10 and HGWC-11 were sampled using a peristaltic pump equipped with new disposable polyethylene tubing. Wells MW-27D, HGWA-43D, and HGWA-44D were sampled using non-dedicated bladder pump with disposable polyethylene tubing. All non-disposable equipment was decontaminated before use and between well locations.

A SmarTROLL or Aqua TROLL (In-Situ field instrument) was used to monitor and record field water quality parameters [i.e., pH, conductivity, oxidation-reduction potential (ORP), temperature, and dissolved oxygen (DO)] during well purging to verify stabilization prior to sampling. Turbidity was measured using a LaMotte 2020we portable turbidimeter. Groundwater samples were collected when 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. If turbidity remained above 10 NTU after three hours of purging, in conjunction with stabilized pH, conductivity, and ORP field measurements as previously specified, both an unfiltered and filtered groundwater sample was collected. An in-line 0.45-micron filter was used to collect the filtered sample; a new filter was used for each sample. The in-line filters were conditioned prior to filling sample bottles by allowing at least 2 filter volumes of water to pass through before transferring the water to the sample bottles. Sample bottles were placed in ice-packed coolers and submitted to Pace Analytical Services, LLC. (Pace Analytical) in Norcross, Georgia following chain-of-custody protocol. The field sampling and equipment calibration forms generated during the monitoring events conducted in February and March 2021 and supplemental monitoring events in December 2020 and January 2021 are provided in **Appendix C**.

3.4 Laboratory Analyses

Laboratory analyses were performed by Pace Analytical, which is accredited by the National Environmental Laboratory Accreditation Program (NELAP). Pace Analytical maintains a NELAP certification for the Appendix III and Appendix IV parameters analyzed for this project. Analytical methods used for groundwater sample analysis are listed in the analytical laboratory reports included in **Appendix C**.

The groundwater analytical results from the February and March 2021 monitoring events and supplemental monitoring event in December 2020 and January 2021 specifically for background wells HGWA-43D and HGWA-44D are summarized in **Table 5**. The Pace Analytical laboratory reports associated with the results presented in **Table 5** are provided in **Appendix C.**

3.5 Quality Assurance & 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, 2020a), and included the following: field duplicates, equipment blanks, and field blank samples. QA/QC samples were collected in laboratory-provided bottles

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 report is provided in **Appendix C** 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 March 2021 assessment monitoring event. The report generated from the analyses is provide in **Appendix D**. The March 2021 data were analyzed by Groundwater Stats Consulting (GSC).

4.1 Statistical Methods

Analytical data through the March 2021 assessment monitoring event were statistically analyzed in accordance with the PE-certified Statistical Analysis Method Certification (October 2017, revised January 2020). The Sanitas groundwater statistical software was used to perform the statistical analyses. Sanitas is a decision-support software package, that incorporates the statistical tests required of Subtitle C and D facilities by USEPA regulations and guidance as recommended in the USEPA document *Statistical Analysis of Groundwater Data at RCRA Facilities Unified Guidance* (Unified Guidance) (USEPA, 2009).

Appendix III statistical analysis was performed to assess if Appendix III constituents have returned to background levels. Appendix IV constituents were evaluated to assess if concentrations statistically exceeded the established state and federal GWPS. Detailed statistical methods used for Appendix III and Appendix IV constituents are discussed in the statistical analysis package provided in **Appendix D** and summarized in Sections 4.1.1 and 4.1.2. The GWPS were finalized pursuant to § 257.95(d)(2) and presented in **Table 6**.

4.1.1 Appendix III Statistical Methods

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 parameters. 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 parameter. The most recent sample from each downgradient well is compared to the background limit to assess whether there are significant statistical increases (SSIs). An "initial exceedance" occurs when an Appendix III constituent reported in the groundwater of a downgradient compliance monitoring well exceeds the constituent's associated PL. The 1-of-2

resample plan allows for collection of an independent resample. A confirmed exceedance is noted only when the resample confirms the initial exceedance by also exceeding the statistical limit. If the resample falls within its respective prediction limit, no exceedance is declared.

4.1.2 Appendix IV Statistical Methods

To statistically compare groundwater data to GWPS, confidence intervals are constructed for each of the detected Appendix IV constituents in each downgradient compliance and delineation monitoring well. Delineation wells were statistically analyzed when a minimum of 4 samples were available. 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 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 both the state and federal 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:

(1) The maximum contaminant level (MCL) established under §141.62 and 141.66.

(2) Where an MCL has not been established:

(i) Cobalt 0.006 mg/L;

(ii) Lead 0.015 mg/L;

(iii) Lithium 0.040 mg/L; and

(iv) Molybdenum 0.10 mg/L.

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

USEPA's updated GWPS have not yet been incorporated under GA EPD's CCR Rule. The GA EPD CCR Rule GWPS is:

(1) The federally established MCL.

(2) Where an MCL has not been established, the background concentration.

(3) Background levels for constituents where the background level is higher than the MCL.

Following the above federal and state rule requirements, GWPS have been established for statistical comparison of Appendix IV constituents and are presented in **Table 6**.

4.2 Statistical Analyses Results

Based on review of the Appendix III statistical analysis, groundwater conditions have not returned to background and assessment monitoring should continue. Based on the statistical analysis of Appendix IV constituents, the following constituents exceeded the state or federal GWPS for the March 2021 assessment monitoring event:

AP-1 (Federal CCR Rule):

- Arsenic: HGWC-13
- Lithium: MW-25D
- Molybdenum: HGWC-8

AP-1 (GA EPD CCR Rule):

- Arsenic: HGWC-13
- Lithium: MW-25D
- Molybdenum: HGWC-7, HGWC-8, HGWC-9, HGWC-11, HGWC-12, HGWC-13, and MW-19

The semiannual statistical evaluation results are consistent with the 2020 reporting year statistical results except that there was not an SSL exceedance of lithium in well HGWC-13 during this reporting period. Inclusion of delineation wells in statistical analyses started in 2020 due to sample size requirements. A groundwater exceedance notification acknowledging the March 2021 SSLs of arsenic, lithium, and molybdenum was placed in the Operating Record on July 30, 2021, pursuant to § 257.95(g).

4.3 Delineation Data

Based on the groundwater data presented herein, the identified SSLs for wells and constituents listed above have been horizontally and vertically delineated to below the state and federal GWPS as determined by confidence intervals (statistical analysis) prepared for the delineation wells discussed in the following paragraphs; results of the statistical analyses are provided in **Appendix D**. In select cases, as explained below, delineation by statistical analysis is pending.

The SSLs identified for arsenic (HGWC-13), lithium (MW-25D), and molybdenum (HGWC-7, HGWC-8, HGWC-9 HGWC-11, HGWC-12, HGWC-13, and MW-19) are horizontally delineated to below state and federal GWPS within the property boundary by delineation wells MW-5, MW-6, MW-7, MW-20, and MW-29.

The arsenic and molybdenum concentrations reported in well HGWC-13 are vertically delineated to below the applicable state and federal GWPS by well MW-24D. Similarly, wells MW-25D, MW-26D, MW-27D and MW-28D vertically delineate molybdenum SSLs in wells HGWC-11, HGWC-12, HGWC-9, HGWC-8 and HGWC-7, respectively (the location of MW-25D delineates both HGWC-11 and HGWC-12).

The molybdenum and lithium SSLs identified in MW-19 and MW-25D, respectively, are horizontally delineated to below the state GWPS by MW-7. Vertical delineation of these constituents is pending additional data collection and analysis prior to the installation of additional vertical delineation wells adjacent to MW-19 and MW-25D. However, based on findings related to deep wells on the Site as presented in the ASD submitted with the *2020 Annual Groundwater Monitoring and Corrective Action Report* (Geosyntec, 2021), it is also recommended to collect additional data and continue to evaluate these findings prior to installing additional deeper vertical delineation well(s) at MW-25D. A preliminary evaluation of the geochemical conditions in well MW-25D suggested that this well is not affected by AP-1 and appeared to show geochemical conditions similar to other deep wells with low recharge.

5.0 MONITORING PROGRAM STATUS

5.1 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 SSL concentrations of arsenic, lithium, and molybdenum in select AP-1 wells. Pursuant to § 257.195(g)(1)(iv), the additional delineation wells will continue to be sampled as part of the ongoing semiannual assessment groundwater monitoring program.

5.2 Assessment of Corrective Measures

The ACM efforts completed during the reporting period covered by this groundwater monitoring and corrective action report are presented in the *Semiannual Remedy Selection and Design Progress Report* provided in **Appendix B**. The semiannual progress report summarizes:

(i) the current conceptual site model applicable to evaluating groundwater corrective measures proposed in the ACM Report (Geosyntec, 2019b);

(ii) the analytical data obtained during supplemental ACM-specific field investigations;

(iii) the status of evaluating applicable corrective measures; and

(iv) the planned activities and anticipated schedule for the following semiannual reporting period.

Georgia Power will include future semiannual progress reports with each groundwater monitoring and corrective action report.

6.0 CONCLUSIONS & FUTURE ACTIONS

This *2021 Semiannual Groundwater Monitoring & Corrective Action Report* for Plant Hammond AP-1 was prepared to fulfill the requirements of USEPA's CCR Rule and GA EPD Rules for Solid Waste Management 391-3-4-.10. Statistical evaluations of the groundwater monitoring data for the AP-1 well network confirmed the continued presence of SSLs of arsenic in well HGWC-13 and lithium in well MW-25D above the state and federal GWPS. The analyses also identified SSLs of molybdenum in wells HGWC-7, HGWC-9, HGWC-11, HGWC-12, HGWC-13, and MW-19 above the state GWPS, and an SSL of molybdenum in well HGWC-8 above state and federal GWPS. Based on the most current data from this reporting period, as described in Section 4.3, the SSLs are vertically and horizontally delineated to below the state and federal GWPS within the property boundary. In select cases, as explained below, delineation by statistical analysis is pending.

The molybdenum and lithium SSLs identified in MW-19 and MW-25D, respectively, are horizontally delineated to below the state and federal GWPS by MW-7. Vertical delineation of these constituents is pending additionally data collection and analysis prior to the installation of additional vertical delineation wells adjacent to MW-19 and MW-25D. However, a preliminary evaluation of the geochemical conditions in well MW-25D suggested that this well is not affected by AP-1 and appeared to show geochemical conditions similar to other deep wells with low recharge. Georgia Power will continue routine monitoring of MW-19 and MW-25D and will implement the necessary measures to delineate Appendix IV constituents further vertically in the vicinity of these wells if/as conditions change.

Georgia Power will continue to monitor AP-1 groundwater under the assessment monitoring program and proceed with the evaluation of remedies presented in the ACM Report (Geosyntec, 2019b). The second semiannual assessment monitoring event is scheduled to occur in August 2021.

7.0 REFERENCES

Geosyntec Consultants, 2019a. *2018 Annual Groundwater Monitoring and Corrective Action Report – Plant Hammond Ash Ponds 1 & 2 (AP-1 and AP-2)*. January 2019.

Geosyntec Consultants, 2019b. *Assessment of Corrective Measures Report – Plant Hammond Ash Pond 1 (AP-1)*. June 2019.

Geosyntec Consultants, 2019c. *Hydrogeologic Assessment Report (Revision 1) – Plant Hammond Ash Pond 1 (AP-1)*. December 2019.

Geosyntec Consultants, 2020a. *Groundwater Monitoring Plan – Plant Hammond – Ash Pond 1 (AP-1)*. January 2020.

Geosyntec Consultants, 2020b. *2020 Semiannual Groundwater Monitoring and Corrective Action Report – Plant Hammond Ash Pond 1 (AP-1)*. August 2020.

Geosyntec Consultants, 2021. *2020 Annual Groundwater Monitoring and Corrective Action Report – Plant Hammond Ash Pond 1 (AP-1)*. January 2021.

Golder Associates, 2018. *Geologic and Hydrogeologic Report – Plant Hammond*. November 2018.

Kresic, Neven, 2007. *Hydrogeology and Groundwater Modeling, Second Edition*. CRC Press.

Sanitas: Groundwater Statistical Software, v. 9.6.05, 2018. Sanitas Technologies©, Boulder, Colorado.

USEPA, 2009. *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance*. Office of Resource Conservation and Recovery – Program Implementation and Information Division. March 2009.

USEPA, 2011. *Region IV Data Validation Standard Operating Procedures.* Science and Ecosystem Support Division. Region IV. Athens, GA. September 2011.

USEPA, 2015. Federal Register. Volume 80. No. 74. Friday April 17, 2015. Part II. Environmental Protection Agency. *40 CFR Parts 257and 261. Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from*

Electric Utilities; Final Rule. [EPA-HQ-RCRA–2009–0640; FRL–9919–44–OSWER]. RIN–2050–AE81. April.

USEPA, 2017. *National Functional Guidelines for Inorganic Superfund Methods Data Review*. Office of Superfund Remediation and Technology Innovation. OLEM 9355.0-135 [EPA-540-R-2017-001]. Washington, DC. January 2017.

TABLES

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

Well ID	Hydraulic Location	Installation Date	Northing [1]	Easting [1]	Ground Surface Elevation (ft)	Top of Casing Elevation [2] (ft)	Top of Screen Elevation [2] (ft)	Bottom of Screen Elevation [2] (ft)	Well Depth (ft BTOC) [3]	Screen Interval Length (ft)
Compliance 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
Delineation 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
Piezometer										
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	32.28	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

Notes:
ft = feet
ft BTOC = feet below top of casing
(1) Coordinates in North American Datum (NAD) 1983, State Plane, Georgia-West, feet. Survey completed by GEL Solutions dated May 19, 2020 and September 10, 2020 (for wells HGWA-43D and HGWA-44D).
(2) Elevations referenced to the North American Vertical Datum of 1988 (NAVD88). Survey completed by GEL Solutions dated May 19, 2020 and September 10, 2020 (for wells HGWA-43D and HGWA-44D).
(3) 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	December 15, 2020	January 19-20, 2021	February 8-22, 2021	March 10-17, 2021	Status of Monitoring Well
Purpose of Sampling Event:		**Supplemental**	**Supplemental**	**App. IV Annual**	**Assessment**	
Compliance Monitoring Well						
HGWA-1	Upgradient	--	--	X	X	Assessment
HGWA-2	Upgradient	--	--	X	X	Assessment
HGWA-3	Upgradient	--	--	X	X	Assessment
HGWA-43D	Upgradient	X	X	X	X	Assessment
HGWA-44D	Upgradient	X	X	X	X	Assessment
HGWC-7	Downgradient	--	--	X	X	Assessment
HGWC-8	Downgradient	--	--	X	X	Assessment
HGWC-9	Downgradient	--	--	X	X	Assessment
HGWC-10	Downgradient	--	--	X	X	Assessment
HGWC-11	Downgradient	--	--	X	X	Assessment
HGWC-12	Downgradient	--	--	X	X	Assessment
HGWC-13	Downgradient	--	--	X	X	Assessment
Delineation Monitoring Well						
MW-5	Downgradient	--	--	X	X	Assessment
MW-6	Downgradient	--	--	X	X	Assessment
MW-7	Downgradient	--	--	X	X	Assessment
MW-19	Downgradient	--	--	X	X	Assessment
MW-20	Downgradient	--	--	X	X	Assessment
MW-24D	Downgradient	--	--	X	X	Assessment
MW-25D	Downgradient	--	--	X	X	Assessment
MW-26D	Downgradient	--	--	X	X	Assessment
MW-27D	Downgradient	--	--	X	X	Assessment
MW-28D	Downgradient	--	--	X	X	Assessment
MW-29	Downgradient	--	--	X	X	Assessment

Table 3

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

Well ID	Top of Casing Elevation [1,2] (ft)	February 8, 2021		March 10, 2021	
		Depth to Water (ft BTOC)	Groundwater Elevation [1] (ft)	Depth to Water (ft BTOC)	Groundwater Elevation [1] (ft)
Compliance Monitoring Well Network					
HGWA-1	595.21	13.76	581.45	10.94	584.27
HGWA-2	587.92	8.10	579.82	7.08	580.84
HGWA-3	587.74	7.71	580.03	6.68	581.06
HGWA-43D	595.08	13.71	581.37	10.85	584.23
HGWA44D	594.79	13.60	581.19	11.18	583.61
HGWC-7	579.18	4.49	574.69	5.11	574.07
HGWC-8	579.82	4.83	574.99	5.29	574.53
HGWC-9	580.36	15.23	565.13	14.05	566.31
HGWC-10	579.37	14.90	564.47	13.75	565.62
HGWC-11	580.67	17.07	563.60	15.68	564.99
HGWC-12	580.73	17.15	563.58	15.82	564.91
HGWC-13	595.76	22.31	573.45	22.25	573.51
Delineation Monitoring Well					
MW-5	581.14	18.45	562.69	16.90	564.24
MW-6	581.84	18.78	563.06	17.19	564.65
MW-7	577.73	15.79	561.94	14.07	563.66
MW-19	580.65	13.50	567.15	12.68	567.97
MW-20	579.00	14.40	564.60	13.28	565.72
MW-24D	595.68	28.37	567.31	27.54	568.14
MW-25D	580.59	16.98	563.61	15.63	564.96
MW-26D	580.41	15.34	565.07	14.17	566.24
MW-27D	579.70	4.78	574.92	5.16	574.54
MW-28D	579.08	4.48	574.60	5.11	573.97
MW-29	575.06	4.48	570.58	5.34	569.72
Piezometer					
AP1A-1	587.44	6.51	580.93	6.98	580.46
MW-1	588.66	7.74	580.92	8.28	580.38
MW-8	586.93	20.30	566.63	19.02	567.91
MW-30D	578.59	2.12	576.47	2.29	576.30
MW-40D	578.92	133.35	445.57	132.92	446.00
Surface Water Gauging Location					
AP-1	--	--	580.86	--	579.90
Coosa River	--	--	561.30	--	563.10

Notes:

-- = not applicable

ft = feet

ft BTOC = feet below top of casing

(1) Elevations referenced to the North American Vertical Datum of 1988 (NAVD88).

(2) Survey data recorded May 19, 2020 and September 10, 2020 (for wells HGWA-43D and HGWA-44D).

Table 4

Groundwater Gradient and Flow Velocity Calculations

Plant Hammond AP-1, Floyd County, Georgia

	February 8, 2021				March 10, 2021				
Flow Path Direction [(1)]	**h_1 (ft)**	**h_2 (ft)**	**Δl (ft)**	**Δh/Δl (ft/ft)**	**h_1 (ft)**	**h_2 (ft)**	**Δl (ft)**	**Δh/Δl (ft/ft)**	**Average Δh/Δl (ft/ft)**
Southerly Flow Path (HGWC-13 to MW-7)	573.45	561.94	450	0.026	573.51	563.66	450	0.022	0.024
Easterly Flow Path (HGWC-8 to MW-20)	574.99	564.60	350	0.030	574.53	565.72	350	0.025	0.027

			Average		
Flow Path Direction [(1)]	**K_h (ft/d)**	**n**	**Δh/Δl (ft/ft)**	**V (ft/d)[(2)]**	**V (ft/d)[(3)]**
Southerly Flow Path (HGWC-13 to MW-7)	11.82	0.15	0.024	1.9	2.0
Easterly Flow Path (HGWC-8 to MW-20)	11.82	0.15	0.027	2.2	

Notes:

ft = feet

ft/d = feet per day

ft/ft = feet per foot

h_1, h_2 = point of interpreted groundwater elevation

Δh/Δl = hydraulic gradient

K_h = horizontal hydraulic conductivity

Δl = distance between location 1 and 2

n = effective porosity

V = groundwater flow velocity

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

(2) Groundwater flow velocity equation: $V = [K_h * (\Delta h/\Delta l)] / n$

(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-1	HGWA-2	HGWA-2	HGWA-3	HGWA-3	HGWA-43D	HGWA-43D	HGWA-43D	HGWA-43D	HGWA-44D	HGWA-44D	HGWA-44D	HGWA-44D
	Sample Date:	2/8/2021	3/10/2021	2/9/2021	3/11/2021	2/9/2021	3/11/2021	12/15/2020	1/19/2021	2/9/2021	3/11/2021	12/15/2020	1/19/2021	2/9/2021	3/10/2021
	Parameter [1,2,3]														
APPENDIX III	Boron	--	0.015 J	--	0.056	--	0.015 J	0.052 J	0.049 J	--	0.060	0.31	0.40	--	0.39
	Calcium	--	111	--	43.8	--	83.8	62.6	60.1	--	59.6	28.7	33.0	--	5.9
	Chloride	--	7.4	--	5.1	--	5.9	4.7	4.1	--	4.5	9.4	9.5	--	12.3
	Fluoride	0.078 J	0.079 J	<0.050	0.10	0.074 J	<0.050	0.21	0.16	0.19	0.20	0.67	0.74	0.44	0.65
	pH	7.11	6.95	5.42	5.8	7.23	7.33	7.39	7.39	7.44	7.46	7.87	7.86	7.84	7.92
	Sulfate	--	49.6	--	52.9	--	50.4	38.8	37.3	--	38.6	6.7	7.4	--	<0.50
	TDS	--	348	--	169	--	267	289	270	--	279	295	278	--	289
APPENDIX IV	Antimony	<0.00028	<0.00028	0.00062 J	<0.00028	0.00031 J	<0.00028	0.00031 J	0.00029 J	0.00037 J	0.00057 J	0.00047 J	0.00067 J	0.00042 J	0.00037 J
	Arsenic	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	0.0011 J	0.0017 J	0.0013 J	<0.00078	<0.00078	0.00083 J	<0.00078
	Barium	0.032	0.030	0.12	0.070	0.13	0.13	0.29	0.32	0.34	0.32	0.39	0.41	0.46	0.26
	Beryllium	<0.000046	<0.000046	0.00014 J	0.000086 J	<0.000046	<0.000046	<0.000046	<0.000046	<0.000046	<0.000046	<0.000046	<0.000046	<0.000046	<0.000046
	Cadmium	<0.00012	<0.00012	0.00016 J	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012
	Chromium	<0.00055	<0.00055	<0.00055	<0.00055	<0.00055	<0.00055	<0.00055	<0.00055	0.00095 J	<0.00055	0.00072 J	0.0011 J	0.00066 J	<0.00055
	Cobalt	<0.00038	<0.00038	0.02	0.013	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038
	Fluoride	0.078 J	0.079 J	<0.050	0.1	0.074 J	<0.050	0.21	0.16	0.19	0.20	0.67	0.74	0.44	0.65
	Lead	0.000058 J	<0.000036	0.000094 J	0.000076 J	<0.000036	<0.000036	0.000082 J	0.000044 J	0.00029 J	0.000094 J	0.00011 J	0.00019 J	0.0001 J	<0.000036
	Lithium	0.00086 J	0.00090 J	0.0012 J	0.0011 J	0.0032 J	0.0035 J	0.0019 J	0.0025 J	0.0026 J	0.0022 J	0.028 J	0.034	0.026 J	0.030
	Mercury	<0.000078	--	<0.000078	--	<0.000078	--	<0.000078	<0.000078	<0.000078	--	<0.000078	<0.000078	<0.000078	--
	Molybdenum	<0.00069	<0.00069	<0.00069	<0.00069	<0.00069	<0.00069	0.0044 J	0.0038 J	0.0045 J	0.0064 J	0.0019 J	0.0035	0.0038 J	0.0019 J
	Comb. Radium 226/228	<0.223	<0.000	<0.721	<0.737	<0.447	<0.128	<1.04	<0.685	<0.138	<1.51	<0.700	<0.790	<0.486	<0.811
	Selenium	<0.0016	0.0047 J	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
	Thallium	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014

Notes:
-- = Parameter was not analyzed
TDS = total dissolved solids
J = Indicates the parameter was estimated and detected between the method detection limit (MDL) and the reporting limit (RL).
(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 6020B, mercury was analyzed by EPA Method 7470A, anions were analyzed by EPA Method 300.0, TDS was analyzed by SM2540C-2011, alkalinity was analyzed by Standard Method 2320B-2011, sulfide was analyzed by Standard Method 4500-S2D-2011, and combined radium by EPA Methods 9315/9320.
(3) The pH value presented was recorded at the time of sample collection in the field.

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

	Well ID:	HGWC-7	HGWC-7	HGWC-8	HGWC-8	HGWC-9	HGWC-9	HGWC-10	HGWC-10	HGWC-11	HGWC-11	HGWC-12	HGWC-12	HGWC-13	HGWC-13
	Sample Date:	2/10/2021	3/15/2021	2/16/2021	3/15/2021	2/16/2021	3/16/2021	3/3/2020	3/12/2021	2/12/2021	3/16/2021	2/12/2021	3/16/2021	2/22/2021	3/17/2021
	Parameter [1,2,3]														
APPENDIX III	Boron	--	1.1	--	1.7	--	2.2	--	0.64	--	0.53	--	1.9	--	0.89
	Calcium	--	113	--	156	--	182	--	146	--	132	--	166	--	184
	Chloride	--	44.5	--	72.4	--	94.7	--	35.0	--	11.5	--	56.8	--	31.4
	Fluoride	0.085	0.086 J	0.47	0.51	0.096 J	0.098 J	0.08 J	0.054 J	0.17	0.21	0.19	0.2	0.55	0.65
	pH	7.29	7.19	7.16	7.09	7.26	7.1	6.83	6.76	7.27	5.95	6.23	7.15	7.27	7.33
	Sulfate	--	107	--	272	--	211	--	120	--	291	--	248	--	384
	TDS	--	370	--	614	--	672	--	490	--	558	--	614	--	716
APPENDIX IV	Antimony	<0.00028	<0.00028	0.00064 J	<0.00028	0.00043 J	<0.00028	0.00065 J	<0.00028	<0.00028	<0.00028	<0.00028	<0.00028	0.00047 J	0.00049 J
	Arsenic	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	0.002 J	0.0017 J	0.0045 J	0.0038 J	0.45	0.39
	Barium	0.069	0.074	0.069	0.063	0.11	0.11	0.06	0.058	0.039	0.035	0.090	0.084	0.061	0.056
	Beryllium	0.000081 J	0.00019 J	0.000071 J	0.000078 J	<0.000046	<0.000046	<0.000046	<0.000046	<0.000046	0.000081 J	<0.000046	<0.000046	0.000097 J	0.000090 J
	Cadmium	<0.00012	<0.00012	0.00037 J	0.00017 J	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012
	Chromium	0.0014 J	0.0021 J	<0.00055	0.0082 J	0.00067 J	<0.00055	<0.00055	<0.00055	<0.00055	<0.00055	<0.00055	<0.00055	<0.00055	<0.00055
	Cobalt	0.00081 J	0.0014 J	0.002 J	0.0019 J	0.00061 J	0.00069 J	<0.00038	<0.00038	<0.00038	<0.00038	0.0012 J	0.0012 J	0.003 J	0.0029 J
	Fluoride	0.085	0.086 J	0.47	0.51	0.096 J	0.098 J	0.08 J	0.054 J	0.17	0.21	0.19	0.2	0.55	0.65
	Lead	0.00056 J	0.0013	0.000086 J	0.00011 J	0.0002 J	0.00027 J	<0.000036	<0.000036	<0.000036	0.000099 J	0.000067 J	0.000089 J	0.00018J	0.00015 J
	Lithium	0.0032 J	0.0038 J	0.0027 J	0.0029 J	0.0045 J	0.0046 J	<0.00081	<0.00081	<0.00081	<0.00081	0.0094 J	0.0081 J	0.032	0.031
	Mercury	<0.000078	--	<0.000078	--	<0.000078	--	<0.000078	--	<0.000078	--	<0.000078	--	<0.000078	--
	Molybdenum	0.051	0.047	0.46	0.41	0.035	0.035	<0.00069	0.00070 J	0.023	0.015	0.048	0.044	0.036	0.035
	Comb. Radium 226/228	<0.281	<0.666	<0.764	<1.30	<1.17	<0.446	1.91	<1.12	1.1	<1.71	<0.236	<0.245	1.02	<1.45
	Selenium	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.00014	<0.0016	0.0079 J	0.015	<0.0016	<0.0016	<0.0016	<0.0016
	Thallium	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.000078	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	0.0003	0.00037 J

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

	Well ID:	MW-5	MW-5	MW-6	MW-6	MW-7	MW-7	MW-19	MW-19	MW-20	MW-20	MW-24D	MW-24D	MW-25D	MW-25D
	Sample Date:	2/16/2021	3/16/2021	2/16/2021	3/16/2021	2/15/2021	3/15/2021	2/12/2021	3/17/2021	2/11/2021	3/15/2021	2/16/2021	3/17/2021	2/12/2021	3/16/2021
	Parameter [1,2,3]														
APPENDIX III	Boron	--	0.037 J	--	0.81	--	0.16	--	0.69	--	0.12	--	0.49	--	0.4
	Calcium	--	71.8	--	184	--	76.9	--	130	--	121	--	102	--	24.8
	Chloride	--	1.4	--	49.8	--	6.8	--	19.8	--	31.1	--	42.9	--	29.2
	Fluoride	0.051 J	<0.050	0.059 J	0.060 J	<0.050	<0.050	0.16	0.18	<0.050	<0.050	<0.050	<0.050	1.6	1.7
	pH	5.95	5.78	7.00	6.96	6.77	6.66	6.36	6.34	6.93	6.97	7.69	7.66	7.77	7.76
	Sulfate	--	162	--	189	--	92.1	--	260	--	109	--	137.0	--	9.4
	TDS	--	333	--	600	--	293	--	543	--	406	--	420	--	347
APPENDIX IV	Antimony	<0.00028	<0.00028	<0.00028	<0.00028	0.0021 J	<0.00028	<0.00028	<0.00028	<0.00028	<0.00028	<0.00028	<0.00028	<0.00028	<0.00028
	Arsenic	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	0.00094 J	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078
	Barium	0.05	0.046	0.09	0.081	0.048	0.053	0.051	0.049	0.093	0.096	0.062	0.055	0.46	0.51
	Beryllium	<0.000046	<0.000046	<0.000046	<0.000046	<0.000046	<0.000046	<0.000046	<0.000046	<0.000046	<0.000046	<0.000046	<0.000046	<0.000046	<0.000046
	Cadmium	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	0.0002 J	0.00016 J	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012
	Chromium	0.0032 J	0.0024 J	<0.00055	<0.00055	0.0015 J	0.0018 J	0.00059 J	0.0022 J	<0.00055	0.00068 J	<0.00055	0.0017 J	<0.00055	<0.00055
	Cobalt	<0.00038	<0.00038	0.00045 J	0.00042 J	<0.00038	<0.00038	0.037	0.037	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038
	Fluoride	0.051 J	<0.050	0.059 J	0.060 J	<0.050	<0.050	0.16	0.18	<0.050	<0.050	<0.050	<0.050	1.6	1.7
	Lead	<0.000036	<0.000036	0.000084 J	0.000036 J	<0.000036	<0.000036	0.000071 J	0.000038 J	0.000039 J	0.00010 J	0.00012 J	0.000040 J	<0.000036	<0.000036
	Lithium	<0.00081	<0.00081	<0.00081	<0.00081	<0.00081	<0.00081	0.012 J	0.012 J	0.001 J	0.0011 J	0.0028 J	0.0027 J	0.045	0.049
	Mercury	<0.000078	--	<0.000078	--	<0.000078	--	<0.000078	--	<0.000078	--	<0.000078	--	<0.000078	--
	Molybdenum	<0.00069	<0.00069	0.0025 J	0.0023 J	0.0015 J	0.0015 J	0.046	0.043	<0.00069	<0.00069	0.00096 J	0.0010 J	<0.00069	<0.00069
	Comb. Radium 226/228	<0.466	<'1.22	<0.198	<0.727	<0.892	<0.386	<0.764	<0.466	<0.334	<1.24	<0.156	<0.174	1.17	<0.742
	Selenium	0.0035	0.0026 J	<0.0016	<0.0016	<0.0016	0.0021 J	0.0021 J	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
	Thallium	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	0.00019 J	0.00026 J	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014

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

	Well ID:	MW-26D	MW-26D	MW-27D	MW-27D	MW-28D	MW-28D	MW-29	MW-29
	Sample Date:	2/16/2021	3/17/2021	2/16/2021	3/12/2021	2/10/2021	3/15/2021	2/15/2021	3/15/2021
	Parameter [1,2,3]								
APPENDIX III	Boron	--	2.1	--	0.13	--	0.36	--	1.20
	Calcium	--	175	--	28	--	66.1	--	145.0
	Chloride	--	95.3	--	31.3	--	35.8	--	73.6
	Fluoride	0.071 J	0.072 J	0.25	0.24	0.16	0.24	<0.050	<0.050
	pH	7.27	7.14	7.96	7.88	7.54	7.61	7.09	7.05
	Sulfate	--	212	--	7.4	--	50.1	--	148
	TDS	--	738	--	215	--	293	--	555
APPENDIX IV	Antimony	<0.00028	<0.00028	0.00038 J	<0.00028	0.0019 J	<0.00028	0.00094 J	<0.00028
	Arsenic	0.0008 J	<0.00078	0.001 J	<0.00078	0.0011 J	<0.00078	<0.00078	<0.00078
	Barium	0.093	0.094	1	1.1	0.26	0.45	0.081	0.078
	Beryllium	<0.000046	<0.000046	<0.000046	<0.000046	0.000054 J	0.000048 J	<0.000046	<0.000046
	Cadmium	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012
	Chromium	0.001 J	0.0015 J	0.00082 J	<0.00055	0.0014 J	0.00078 J	<0.00055	<0.00055
	Cobalt	0.00045 J	0.00044 J	0.0004 J	<0.00038	<0.00038	<0.00038	0.00097 J	0.0011 J
	Fluoride	0.071 J	0.072 J	0.25	0.24	0.16	0.24	<0.050	<0.050
	Lead	0.00008 J	<0.000036	0.00043 J	<0.000036	0.00044 J	0.00034 J	0.000052 J	<0.000036
	Lithium	0.0038 J	0.0040 J	0.0078 J	0.0090 J	0.0092 J	0.013 J	0.0024 J	0.0022 J
	Mercury	<0.000078	--	<0.000078	--	<0.000078	--	<0.000078	--
	Molybdenum	0.022	0.023	0.0019 J	0.00080 J	0.02	0.013	0.0029 J	0.0031 J
	Comb. Radium 226/228	<'0.505	<0.165	1.21	<0.649	0.201	<0.564	<1.17	<0.436
	Selenium	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
	Thallium	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014

Table 6

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

Analyte	Units	Background[(1)]	Federal GWPS[(2)]	State GWPS[(3)]
Antimony	mg/L	0.003	0.006	0.006
Arsenic	mg/L	0.005	0.01	0.01
Barium	mg/L	0.46	2	2
Beryllium	mg/L	0.0005	0.004	0.004
Cadmium	mg/L	0.0005	0.005	0.005
Chromium	mg/L	0.0079	0.1	0.1
Cobalt	mg/L	0.038	0.038	0.038
Fluoride	mg/L	0.74	4	4
Lead	mg/L	0.001	0.015	0.001
Lithium	mg/L	0.034	0.04	0.034
Mercury	mg/L	0.0005	0.002	0.002
Molybdenum	mg/L	0.01	0.1	0.01
Selenium	mg/L	0.005	0.05	0.05
Thallium	mg/L	0.001	0.002	0.002
Combined Radium-226/228	pCi/L	4.36	5	5

Notes:

mg/L = milligrams per liter

pCi/L = picocuries per liter

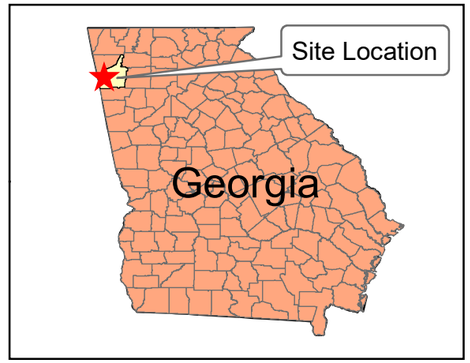
(1) The background limits were used when determining the groundwater protection standard (GWPS) under 40 CFR §257.95(h) and Georgia Environmental Protection Division (EPD) Rule 391-3-4-.10(6)(a).

(2) Under 40 CFR §257.95(h)(1-3) the GWPS is: (i) the maximum contaminant level (MCL) established under 141.62 and 141.66 of this title; (ii) where an MCL has not been established a rule-specific GWPS is used; or (iii) background concentrations for constituents were the background level is higher than the MCL or rule-specified GWPS.

(3) Under the existing Georgia EPD rules, the GWPS is: (i) the MCL, (ii) where the MCL is not established, the background concentration, or (iii) background concentrations for constituents were the background level is higher than the MCL.

FIGURES

N



Notes:
1. Aerial photograph source: Google Earth Pro, August 2019.

0 400 800 1,600

SCALE IN FEET

SITE LOCATION MAP

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

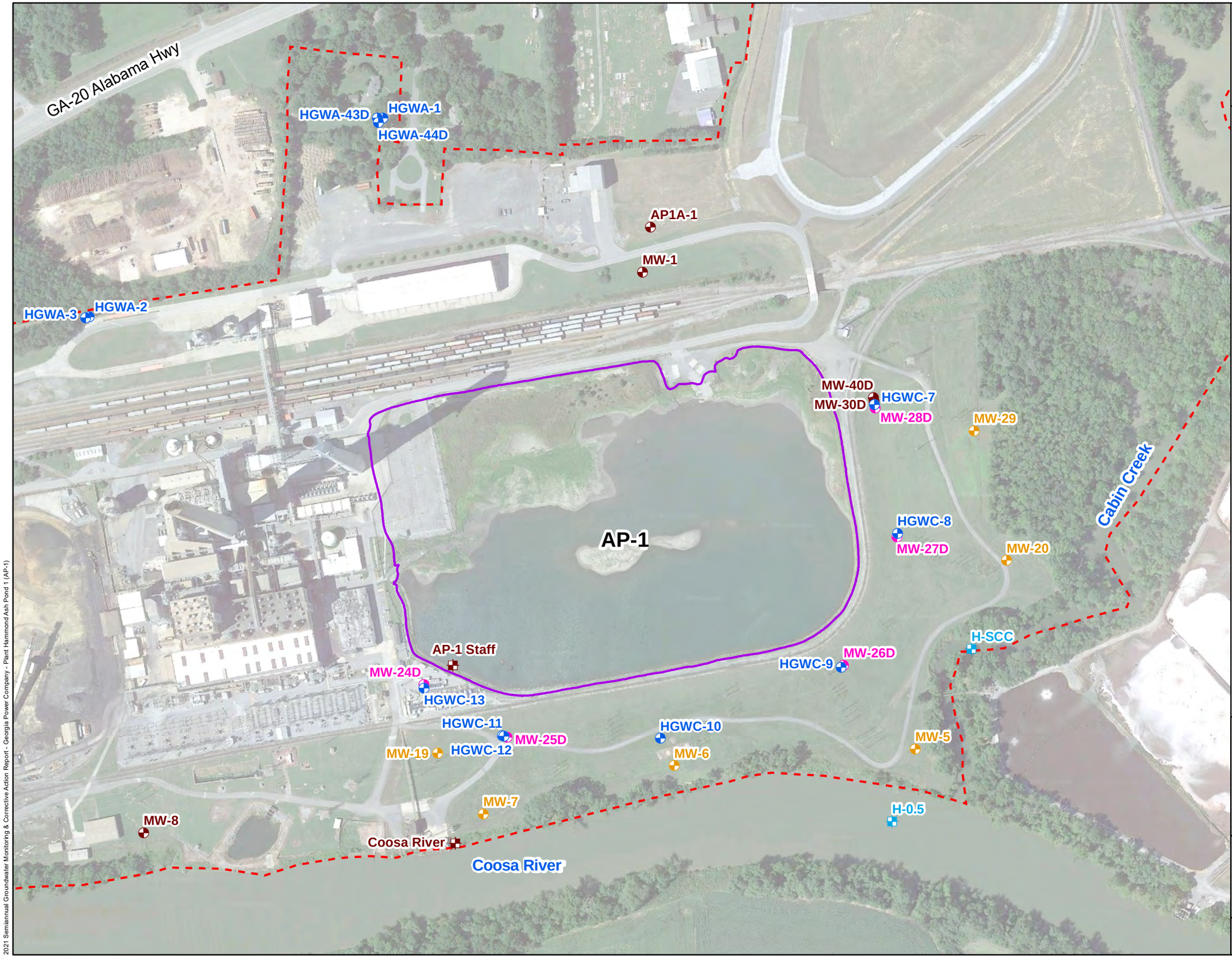
Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA | AUGUST 2021

FIGURE 1

2021 Semiannual Groundwater Monitoring & Corrective Action Report - Georgia Power Company - Plant Hammond Ash Pond 1 (AP-1)



N

LEGEND

- Compliance Monitoring Well
- Horizontal Delineation Well
- Vertical Delineation Well
- Piezometer
- Surface Water Level Gauge Point
- Surface Water Sample Point
- Approximate AP-1 Boundary
- Plant Hammond Property Boundary

Note:
1. Aerial photograph source: Google Earth Pro, August 2019.

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

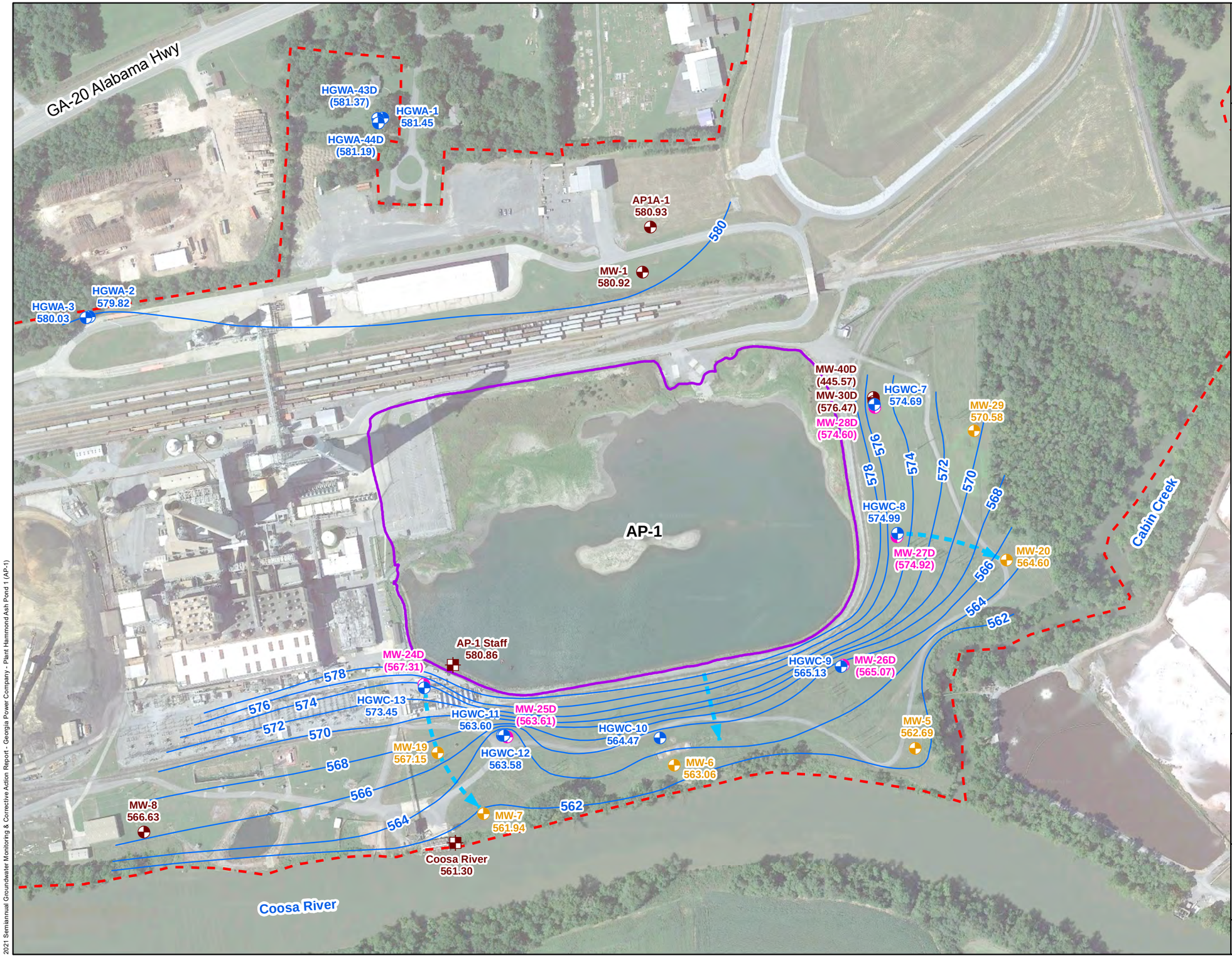
Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA | AUGUST 2021

FIGURE 2

2021 Semiannual Groundwater Monitoring & Corrective Action Report - Georgia Power Company - Plant Hammond Ash Pond 1 (AP-1)



N

LEGEND

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

Notes:
1. Water level elevation recorded on February 8, 2021. Elevation provided in feet (ft) referenced to the North American Vertical Datum (NAVD) 88.
2. Groundwater elevation in parentheses were not used in development of groundwater contours due to wells being screened at a different elevation in the formation/aquifer.
3. Surface water elevations from AP-1 was not used in development of the potentiometric surface map.
4. Aerial photograph source: Google Earth Pro, August 2019.

0 150 300 600

SCALE IN FEET

GEORGIA REGISTERED No. PE036543 PROFESSIONAL ENGINEER WHITNEY B. LAW

POTENTIOMETRIC SURFACE CONTOUR MAP - FEBRUARY 2021

GEORGIA POWER COMPANY
PLANT HAMMOND
ROME, FLOYD COUNTY, GEORGIA

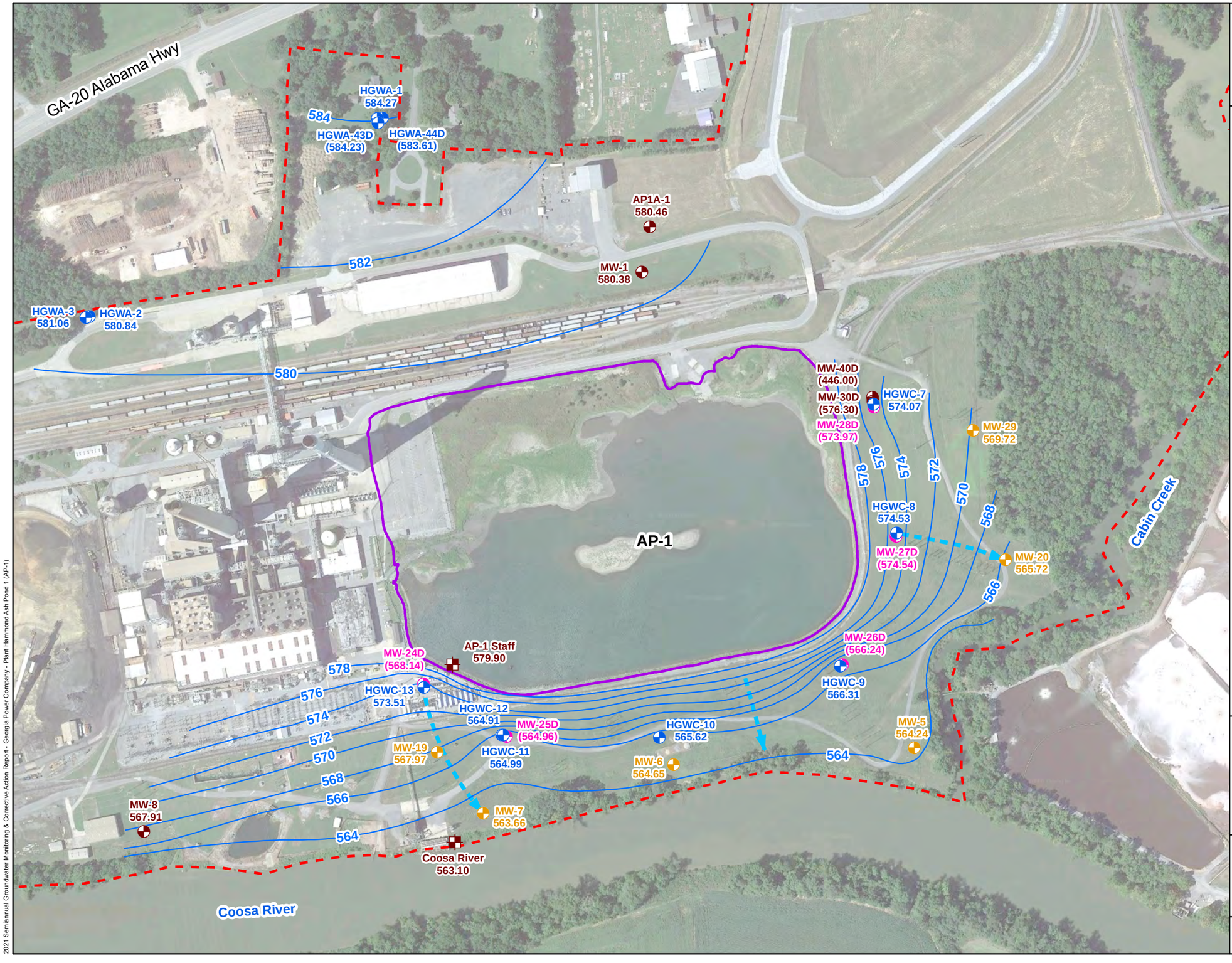
Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA | AUGUST 2021

FIGURE 3

2021 Semiannual Groundwater Monitoring & Corrective Action Report - Georgia Power Company - Plant Hammond Ash Pond 1 (AP-1)



2021 Semiannual Groundwater Monitoring & Corrective Action Report - Georgia Power Company - Plant Hammond Ash Pond 1 (AP-1)

N

LEGEND

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

Notes:
1. Water level elevation recorded on March 10, 2021. Elevation provided in feet (ft) referenced to the North American Vertical Datum (NAVD) 88.
2. Groundwater elevation in parentheses were not used in development of groundwater contours due to wells being screened at a different elevation in the formation/aquifer.
3. Aerial photograph source: Google Earth Pro, August 2019.

0 150 300 600

SCALE IN FEET

GEORGIA REGISTERED No. PE036511 PROFESSIONAL ENGINEER WHITNEY B. LAW

POTENTIOMETRIC SURFACE CONTOUR MAP - MARCH 2021

GEORGIA POWER COMPANY
PLANT HAMMOND
ROME, FLOYD COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA | AUGUST 2021

FIGURE 4

APPENDIX A

Well Inspection Forms

February 2021

Groundwater Monitoring Well Integrity Form

Site Name: Hammond
Permit Number:
Well ID: HGWA-1
Date, field conditions: 2/8/21 50°F sunny

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Hammond AP 112
Permit Number:
Well ID: HGWA-2
Date, field conditions: 2/9/21 cdd, sunny

		yes	no	n/a
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 and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Hammond
Permit Number:
Well ID: HgW A-3
Date, field conditions: 2/9/21, cold sunny

		yes	no	n/a
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 and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name
Permit Number Hammond
Well ID HGWA-CDD
Date, field conditions 2/9/21 60°F SUNNY

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?		✓	
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		✓
c	Does the well require redevelopment (low flow, turbid)?	✓		
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hammond
Permit Number:
Well ID: NCNA-4YD
Date, field conditions: 2/9/21 60°F Sunny

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:**			
a	Does well recharge adequately when purged?		✓	
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			✓
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Hammond
Permit Number:
Well ID: HGWC-7
Date, field conditions: 2/10/21, Sunny, Cold

		yes	no	n/a
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 and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Hammond
Permit Number:
Well ID: HGWC-8
Date, field conditions: 2/16/2021 snowy, cold

		yes	no	n/a
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 and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:**			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Hammond
Permit Number:
Well ID: HgWC-9
Date, field conditions: 2/16/21 cold, cloudy

		yes	no	n/a
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 and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: plant Hammond APH
Permit Number:
Well ID: HGWC-10
Date, field conditions: 2/4/2021, cloudy, cool

		yes	no	n/a
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 and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:				
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			✓
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hammond
Permit Number:
Well ID: 116.WC-11
Date, field conditions: 2/17/21, sunny, cold

		yes	no	n/a
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 and does the well require protection from traffic?	–		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			✓
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Hammond
Permit Number:
Well ID: HGWC-12
Date, field conditions: 2/17/21, sunny, cold

		yes	no	n/a
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 and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Hammond APC
Permit Number:
Well ID: HGWC-13
Date, field conditions: 2/8/2024, Rainy, cool

		yes	no	n/a
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 and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name Hammond
Permit Number
Well ID MW-5
Date, field conditions 2/16/11 25°F sunny

		yes	no	n/a
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 and does the well require protection from traffic?	✓ (E9)		✓
d	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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hammond
Permit Number:
Well ID: MW-6
Date, field conditions: 2/16/21 25°F sunny

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:**			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name Hammond
Permit Number
Well ID MW-7
Date, field conditions ~~DATE~~ 2/15/21, cold, rainy

		yes	no	n/a
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 and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Hammond AP-1
Permit Number:
Well ID: MW-19
Date, field conditions: Wet, Rain 2-12-2021

		yes	no	n/a
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 and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:				
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			

7 Corrective actions as needed, by date:
None at this time.

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Hammond
Permit Number:
Well ID: ~~MW-19~~ MW-20
Date, field conditions: 2/12/21 cold, sunny

		yes	no	n/a
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 and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Harrisburg
Permit Number:
Well ID: MW - 24D
Date, field conditions: 2/16/21 25°F overcast

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:				
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Hammond
Permit Number:
Well ID: MW-25D
Date, field conditions: 2/17/21 sunny, cold

		yes	no	n/a
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 and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hammond
Permit Number:
Well ID: MW-26D
Date, field conditions: 2/16/21 25°F sunny

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:**			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hummerd
Permit Number:
Well ID: MW-27D
Date, field conditions: 2/16/21, snowy, cold

		yes	no	n/a
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 and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?		see	✓
c	Does the well require redevelopment (low flow, turbid)?	✓		
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Hammond
Permit Number:
Well ID: MW-28D
Date, field conditions: 2/10/21 cold, sunny

		yes	no	n/a
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 and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hammond
Permit Number:
Well ID: MW-29
Date, field conditions: 7/15/21, rainy, cold

		yes	no	n/a
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 and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name Hammond
Permit Number
Well ID AP1A-1
Date, field conditions 2/8/2019 50°F SUNNY

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?			✓
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			✓
c	Does the well require redevelopment (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hammond
Permit Number:
Well ID: MW-1
Date, field conditions: 2/8/21

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:**			
a	Does well recharge adequately when purged?			✓
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			✓
c	Does the well require redevelopment (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Hammond
Permit Number:
Well ID: MW 8
Date, field conditions: 2/8/24 sunny

		yes	no	n/a
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 and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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)	✓		X
5	**Sampling: Groundwater Wells Only:**			
a	Does well recharge adequately when purged?			✓
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			✓
c	Does the well require redevelopment (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hammond
Permit Number:
Well ID: MW-30D
Date, field conditions: 2/8/24 50°F SUNNY

		yes	no	n/a
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 and does the well require protection from traffic?	✓		✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:**			
a	Does well recharge adequately when purged?			✓
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			✓
c	Does the well require redevelopment (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hammond
Permit Number:
Well ID: MW-110D
Date, field conditions: 2/8/22 50°F sunny

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?			✓
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			✓
c	Does the well require redevelopment (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

March 2021

Groundwater Monitoring Well Integrity Form

Site Name: Hammon A
Permit Number:
Well ID: HGWA-1
Date, field conditions: 3/10/2020 65°F SUNNY

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hammond
Permit Number:
Well ID: NGWA-2
Date, field conditions: 3/10/2021 65°F sunny

		yes	no	n/a
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 and does the well require protection from traffic?	~~✓~~		✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hammond
Permit Number:
Well ID: HGWA-3
Date, field conditions: 3/10/2021 65°F Sunny

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:**			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hammond
Permit Number:
Well ID: HGWA-43D
Date, field conditions: 3/10/2021 65°F sunny

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:**			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			✓
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hammond
Permit Number:
Well ID: HGWA-44D
Date, field conditions: 3/10/2021 65°F sunny

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			✓
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hammond
Permit Number:
Well ID: HGWC-7
Date, field conditions: 3/10/604

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?			
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			
c	Does the well require redevelopment (low flow, turbid)?			
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hammond
Permit Number:
Well ID: NGWC-8
Date, field conditions: 3/10/2021 65°F sunny

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?			
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			
c	Does the well require redevelopment (low flow, turbid)?			
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hammond
Permit Number:
Well ID: HGWC-9
Date, field conditions: 3/16/2021 65°F cloudy

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?			
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			
c	Does the well require redevelopment (low flow, turbid)?			
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hammond
Permit Number:
Well ID: HGWC-10
Date, field conditions: 3/10/2021 65°F SUNNY

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?			
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			
c	Does the well require redevelopment (low flow, turbid)?			
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hammond
Permit Number:
Well ID: NGWC-11
Date, field conditions: 3/10/2021 65°F SUNNY

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?			
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			
c	Does the well require redevelopment (low flow, turbid)?			
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hammond 1
Permit Number:
Well ID: HGWC-12
Date, field conditions: 3/10/2021 65°F SUNNY

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hammond
Permit Number:
Well ID: HGWC-13
Date, field conditions: 3/10/2021 65°F sunny

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name Hammond
Permit Number
Well ID MW-5
Date, field conditions 3/10/2024 65°F SUNNY

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hammond
Permit Number:
Well ID: MW-6
Date, field conditions: 3/10/2021 65°F SUNNY

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hammond
Permit Number:
Well ID: MW-7
Date, field conditions: 3/10/2021 65°F SUNNY

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hammond
Permit Number:
Well ID: MW-19
Date, field conditions: 3/10/2021 65°F SUNNY

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hammond
Permit Number:
Well ID: MW-20
Date, field conditions: 7/16/2021 65°F SUNNY

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hammond
Permit Number:
Well ID: MW-24D
Date, field conditions: 3/10/2021 65°F sunny

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name Hammond
Permit Number
Well ID MW-25D
Date, field conditions 3/6/2021 65°F sunny

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Harmony
Permit Number:
Well ID: MW-26D
Date, field conditions: 3/10/2021 65°F rainy

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hammond
Permit Number:
Well ID: MW-27D
Date, field conditions: 7/15/2021 C50F sunny

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?		✓	
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			✓
c	Does the well require redevelopment (low flow, turbid)?	✓		
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Nammoth
Permit Number:
Well ID: MW-29D
Date, field conditions: 3/10/2021 65°F sunny

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hammond
Permit Number:
Well ID: MW-29
Date, field conditions: 3/10/2021 C50F sunny

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: I-Hammond
Permit Number:
Well ID: AP1A--1
Date, field conditions: 3/16/2024 65°F sunny

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?			✓
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			✓
c	Does the well require redevelopment (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hammond
Permit Number:
Well ID: MW-1
Date, field conditions: 3/10/2021

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		✓
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			✓
c	Does the well require redevelopment (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Hammond
Permit Number:
Well ID: MW-8
Date, field conditions: 3/10/21 sunny

		yes	no	n/a
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 and does the well require protection from traffic?	-		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?			✓
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			✓
c	Does the well require redevelopment (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hammond
Permit Number:
Well ID: MW-30D
Date, field conditions: 7/10/2021 65°F SUNNY

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?			✓
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			✓
c	Does the well require redevelopment (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name Hammond
Permit Number
Well ID MW-40D
Date, field conditions 3/10/2021

		yes	no	n/a
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 and does the well require protection from traffic?			✓
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
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 and is the lock 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: Groundwater Wells Only:			
a	Does well recharge adequately when purged?			✓
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			✓
c	Does the well require redevelopment (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

APPENDIX B

Semiannual Remedy Selection and Design Progress Report

Prepared for

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

SEMIANNUAL REMEDY SELECTION AND DESIGN PROGRESS REPORT

PLANT HAMMOND ASH POND 1 (AP-1)

Prepared by

engineers | scientists | innovators

1255 Roberts Boulevard, Suite 200
Kennesaw, Georgia 30144

Project Number GW6581B

August 2021

SEMIANNUAL REMEDY SELECTION AND DESIGN PROGRESS REPORT

GEORGIA POWER COMPANY - PLANT HAMMOND

ASH POND 1 (AP-1)

This *Semiannual Remedy Selection and Design Progress Report, Georgia Power Company - Plant Hammond, Ash Pond 1 (AP-1),* has been prepared in accordance with the United States Environmental Protection Agency coal combustion residual rule, specifically 40 Code of Federal (CFR) 257.97(a) and the Georgia Environmental Protection Division Rules for Solid Waste Management 391-3-4-.10(6)(a). This report describes the progress made during the first semiannual period of 2021 in selecting and designing a remedy previously documented in the *Assessment of Corrective Measures Report – Plant Hammond Ash Pond 1 (AP-1).*

Report Prepared by:

Whitney B. Law, P.E.
Georgia Professional Engineer No. 036641

August 31, 2021
Date

Geosyntec consultants

TABLE OF CONTENTS

1.0 INTRODUCTION 1
1.1 Purpose 1
1.2 Site Background and Overview of AP-1 Pond Closure 1
1.3 Regulatory Program Status and Nature and Extent 2
1.4 Corrective Measures Evaluated 4
1.5 Risk Evaluation 5

2.0 SUMMARY OF WORK COMPLETED 7
2.1 Field Activities 7
2.2 Data Analysis Activities 7

3.0 SUMMARY OF RESULTS 9
3.1 Summary of Unconsolidated Aquifer Solids Analysis 9
3.1.1 Anion and Cation Exchange Capacity 9
3.1.2 Total Sulfur, Total Sulfide, and Total Organic Carbon 9
3.1.3 Total Metals and Whole Rock Analyses 10
3.2.4 XRD and SEM/EDXA Analyses 11

4.0 UPDATED CONCEPTUAL SITE MODEL 12

5.0 UPDATED EVALUATION OF CORRECTIVE MEASURES 13

6.0 PLANNED ACTIVITIES & ANTICIPATED SCHEDULE 15

7.0 REFERENCES 16

LIST OF TABLES

Table 1 Monitoring Well Network Summary
Table 2 Evaluation of Remedial Technologies
Table 3 Proposed ACM Supplementary Data Analyses and Collection Tasks for Second Semiannual Period 2021

LIST OF FIGURES

Figure 1 Site Location Map
Figure 2 Monitoring Well Network and Sampling Location Map
Figure 3 Iso-Concentration Map, Arsenic – March 2021
Figure 4 Iso-Concentration Map, Lithium – March 2021
Figure 5 Iso-Concentration Map, Molybdenum – March 2021

LIST OF APPENDICES

Appendix A Field Sampling/Boring Log for DPT-07
Appendix B SiREM Aquifer Solids Analytical Report

LIST OF ACRONYMS

ACM	Assessment of Corrective Measures
AEC	anion exchange capacity
Al	aluminum
AP	ash pond
As	arsenic
CCR	coal combustion residuals
CEC	cation exchange capacity
CFR	Code of Federal Regulations
Co	cobalt
CSM	conceptual site model
DPT	direct push technology
EDXA	energy dispersive x-ray analysis
ft bgs	feet below ground surface
GA EPD	Georgia Environmental Protection Division
GWPS	Groundwater Protection Standard
K_h	horizontal hydraulic conductivity
Li	lithium
meq/L	milliequivalents per liter
mg/L	milligrams per liter
MNA	monitored natural attenuation
Mo	molybdenum
Pb	lead
PRB	permeable reactive barriers
SEM	scanning electron microscopy
SEP	sequential extraction procedure
SSI	statistically significant increase
SSL	statistically significant level
TOC	total organic carbon
USEPA	United States Environmental Protection Agency
WRA	Whole Rock Analysis
XRD	x-ray diffraction
XRF	x-ray fluorescence

1.0 INTRODUCTION

1.1 Purpose

This *Semiannual Remedy Selection and Design Progress Report* (the semiannual progress report) was prepared for Georgia Power Company (Georgia Power) Plant Hammond Ash Pond 1 (AP-1 or Site) in accordance with the United States Environmental Protection Agency (USEPA) coal combustion residual rule (CCR Rule) (40 Code of Federal Regulations [CFR] 257 Subpart D), specifically 40 CFR 257.97(a), and the Georgia Environmental Protection Division (GA EPD) Rules for Solid Waste Management 391-3-4-.10(6)(a). This semiannual progress report describes the progress made since the issuance of the prior semiannual progress report in selecting and designing a remedy. Potentially applicable groundwater corrective measures were previously described in the *Assessment of Corrective Measures Report – Plant Hammond Ash Pond 1 (AP-1)* (Geosyntec, 2019a) (ACM Report).

The purpose of the ACM Report (and subsequent semiannual progress reports) is to document the process of evaluating and selecting corrective measure(s) to improve groundwater quality. This process is typically iterative and may be composed of multiple steps to analyze the effectiveness of corrective measures to. Once potential corrective measures are identified, they are further evaluated using the criteria outlined in § 257.96(c) and Rule 391-3-4-.10(6)(a). The selected corrective measure must meet the additional protection criteria outlined in § 257.97 and corresponding Rule 391-3-4-.10(6)(a). Pursuant to § 257.97(a) and Rule 391-3-4-.10(6)(a), semiannual progress reports have been regularly submitted to document the efforts of evaluating and progressing towards selecting a groundwater corrective measure (Geosyntec, 2019b, 2020a, 2020b).

1.2 Site Background and Overview of AP-1 Pond Closure

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 four coal-fired electric generating units at Plant Hammond are decommissioned and electricity is no longer produced at the Site.

AP-1 is a 35-acre surface impoundment 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 will close AP-1 through removal of the CCR materials 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 compliance website. Closure permit No. 057-023D(CCR) was approved by GA EPD on June 22, 2020.

1.3 Regulatory Program Status and Nature and Extent

CCR compliance groundwater monitoring-related activities have been performed for AP-1 since May 2016 pursuant to the CCR Rule. Georgia Power initiated an assessment monitoring program in January 2018 after identifying statistically significant increases (SSIs) of Appendix III parameters in groundwater.

Statistical analyses of the Appendix IV assessment monitoring groundwater data collected in 2018 identified statistically significant levels (SSLs) of molybdenum (Mo) and arsenic (As) at concentrations exceeding the state or federal groundwater protection standards (GWPS). Pursuant to § 257.96, Georgia Power initiated an ACM for AP-1 in January 2019. The ACM Report was submitted to GA EPD in June 2019 and posted to the CCR compliance website in July 2019. Since July 2019, an SSL of lithium (Li) at concentrations above the state and federal GWPS was identified in August 2020.

Since the ACM was initiated, ten delineation monitoring wells have been installed to horizontally and vertically delineate As, Li, and Mo SSLs downgradient of AP-1. The delineation well network was supplemented in March 2019 by incorporating existing downgradient piezometers MW-5, MW-6, and MW-7, which were originally installed in 2014. Additionally, two compliance monitoring wells (HGWA-43D and HGWA-44D) were installed in August 2020 to provide additional data to characterize background groundwater quality and flow conditions in deeper zones of the aquifer. The well network is shown on **Figure 2**; **Table 1** provides well construction details.

Statistical analysis of the March 2021 semiannual assessment monitoring groundwater data identified SSLs of the below Appendix IV constituents at concentrations exceeding the noted state or federal GWPS. Details are provided in the *2021 Semiannual Groundwater Monitoring and Corrective Action Report* (2021 Semiannual Report) (Geosyntec, 2021d).

AP-1 (Federal CCR Rule):

- As: HGWC-13;
- Li: MW-25D;
- Mo: HGWC-8

AP-1 (GA EPD CCR Rule):

- As: HGWC-13;
- Li: MW-25D;
- Mo: HGWC-7, HGWC-8, HGWC-9, HGWC-11, HGWC-12, HGWC-13, and MW-19.

Based on the groundwater data reported in the 2021 Semiannual Report (Geosyntec, 2021d), identified SSLs have been horizontally and vertically delineated to below the state and federal GWPS as determined by confidence intervals (statistical analysis) in the listed delineation wells. The groundwater data from the March 2021 semiannual assessment monitoring event were used to generate the As, Li, and Mo iso-concentration maps presented on **Figure 3** through **Figure 5**.

- HGWC-7 – Mo is horizontally delineated by MW-29 and vertically by MW-28D.
- HGWC-8 – Mo is horizontally delineated by MW-20 and vertically by MW-27D.
- HGWC-9 – Mo is horizontally delineated by MW-5 and vertically by MW-26D.
- HGWC-11 – Mo is horizontally delineated by MW-7 and vertically by MW-25D.
- HGWC-12 – Mo is horizontally delineated by MW-7 and vertically by MW-25D.
- HGWC-13 – Mo is horizontally delineated by MW-7 and vertically by MW-24D; As is horizontally delineated by MW-19 and vertically by MW-24D.

The Mo and Li SSLs identified in MW-19 and MW-25D, respectively, are horizontally delineated to below the state GWPS by MW-7. Vertical delineation of these constituents may require the installation of additional wells adjacent to MW-19 and MW-25D and is currently under evaluation. However, based on findings related to deep wells on the Site

as presented in the *Alternate Source Demonstration – Fluoride, Lithium, Molybdenum*, submitted with the *2020 Annual Groundwater Monitoring and Corrective Action Report* (Geosyntec, 2021a), it is also recommended to collect additional data and continue to evaluate these findings prior to installing additional deeper vertical delineation well(s) at MW-25D. A preliminary evaluation of the geochemical conditions in well MW-25D suggested that this well is not affected by AP-1 and appeared to show geochemical conditions similar to other deep wells with low recharge.

Pursuant to § 257.96, groundwater in the vicinity of AP-1 continues to be monitored during the ACM phase in accordance with the established assessment monitoring program.

1.4 Corrective Measures Evaluated

As discussed in the ACM Report, the following corrective measures were initially considered to be potentially feasible for use at AP-1. A comparative screening of the corrective measures is provided in **Table 2**.

1. Geochemical Manipulation (In-Situ Injection)
2. Hydraulic Containment (Pump and Treat)
3. Monitored Natural Attenuation (MNA)
4. Permeable Reactive Barrier (PRB)
5. Phytoremediation
6. Subsurface Vertical Barrier Walls

However, the PRB and vertical barrier wall corrective measures have since been removed from consideration based on data evaluations presented in the August 2020 semiannual progress report (Geosyntec, 2020).

Georgia Power proactively initiated adaptive site management as outlined in the ACM Report to support the groundwater remedy selection process and address potential changes in site conditions (e.g., successful reduction of constituent concentrations or changing trends) as appropriate during the ash pond closure. The adaptive site management approach will take existing site conditions, including natural attenuation mechanisms, into account.

Characterization activities to evaluate attenuation mechanisms at the Site include collection of data necessary to progressively evaluate the existing and long-term effectiveness of these processes in the aquifer and reduce uncertainty for decision making

at each screening step as listed in the USEPA guidelines for MNA of inorganic constituents (USEPA, 1999, 2007, and 2015). The 1999 MNA guidance originally introduced the "tiered approach" with three tiers of site-specific information, or lines of evidence, to evaluate the appropriate use of MNA at certain sites (USEPA, 1999). In 2007, the USEPA issued MNA technical guidance specific to inorganic contaminants (USEPA, 2007) that contained four "tiers." The 2015 MNA guidance retains these four "tiers," but describes them as "phases" as described below (USEPA, 2015). This 2015 MNA document for inorganic contaminants expands on and is designed to be a companion to the 1999 and 2007 MNA guidance.

- Phase I: Demonstration that the groundwater plume is *not expanding*.
- Phase II: Determination that the *mechanism and rate* of the attenuation process are sufficient.
- Phase III: Determination that the *capacity* of the aquifer is sufficient to attenuate the mass of contaminant within the plume and the *stability* of the immobilized contaminant is sufficient to resist re-mobilization.
- Phase IV: Design of a *performance monitoring program* based on an understanding of the mechanism of the attenuation process, and establishment of contingency remedies tailored to site-specific characteristics.

Georgia Power will address Phase IV, as appropriate, during the development of the future corrective action monitoring plan, after the final remedy selection report.

The data collection approach and the data interpretation presented within this semiannual progress report are informed by this phased MNA guidance. It is noted, however, that the characterization data collected under this approach are also used to refine the conceptual site model (CSM) and evaluate other retained potential corrective measures.

1.5 Risk Evaluation

In addition to the assessment monitoring program at the Site, Georgia Power conducted a human health and ecological risk evaluation to evaluate As, Li, and Mo SSLs in groundwater at AP-1. The evaluation provides one of many lines of evidence that will be evaluated and factored into the remedy selection process, which will be completed in accordance with § 257.97. Based upon this evaluation, concentrations of As, Li, and Mo detected in groundwater at AP-1 between May 2016 and June 2020 are not expected to pose a risk to human health or the environment (Geosyntec, 2021b). Data collected since

June 2020 are consistent with data used in the risk evaluation; therefore, the conclusion provided in the 2020 *Risk Evaluation Report – Georgia Power Company – Plant Hammond Ash Pond 1* (Geosyntec, 2021c) are supported by current conditions.

2.0 SUMMARY OF WORK COMPLETED

The following summarizes the field investigations and data evaluations completed since the issuance of the prior semiannual progress report in January 2021 (Geosyntec, 2021c). The routine Appendix IV assessment and semiannual assessment monitoring events conducted in February 2021 and March 2021, respectively, are discussed in the 2021 Semiannual Report (Geosyntec, 2021d).

2.1 Field Activities

As described in the previous semiannual progress report, Geosyntec completed an analysis of the aquifer matrix samples collected in August 2020 from the saturated unconsolidated zone at six locations using a direct-push technology (DPT) rig in the vicinity of AP-1. A supplementary (seventh) aquifer solid sample was collected via a DPT rig near (i.e., north of) monitoring well location HGWC-13 on January 28, 2021. The sample was collected at a depth approximately coinciding with the screened interval of HGWC-13. The seven DPT locations are depicted on **Figure 2**. Boring logs of the previous six locations (DPT-01 through DPT-06) were provided with the previous semiannual progress report. The boring/field sampling log of location DPT-07 is provided in **Appendix A** of the current semiannual progress report.

In addition to collecting the aquifer solid sample from location DPT-07, which was shipped to SiREM laboratories located in Guelph, Ontario (SiREM), Geosyntec collected a groundwater sample on May 26, 2021, from background location HGWA-1 for use in batch sorption and desorption studies that are currently being conducted at SiREM.

2.2 Data Analysis Activities

The aquifer matrix sample from DPT-07 was sent to SiREM to evaluate attenuation mechanisms, rates and capacity, as well as the mineralogical characterization by application of the following analytical/testing methods, which were described in the January 2021 semiannual progress report.

- *Cation and Anion Exchange Capacity*
- *Total Sulfur, Sulfide*
- *Organic Carbon Content*
- *Total Metals Concentrations*

- *X-Ray Diffraction (XRD), Scanning Electron Microscopy (SEM) and Energy Dispersive X-Ray Analysis (EDXA)*

Data obtained from these analyses are used to evaluate the viability of select corrective measures (i.e., MNA , in-situ redox controls and, to a lesser degree, phytoremediation).

Based on the low total As concentration determined in sample DPT-07 (see Section 3), a stored DPT sample (i.e., DPT-04 XRF_AP1), collected in October 2018 near well HGWC-13, was submitted to Eurofins/TestAmerica laboratory in Knoxville, Tennessee, for sequential extraction procedure (SEP) of As. The sample was collected from a depth increment coinciding with the screened interval of HGWC-13 that exhibited an elevated As concentration based on field screening using an x-ray fluorescence (XRF) spectrometer. SEP assesses the geochemical fractionation of trace elements within aquifer solids and will be described in more detail during the next semiannual progress report. In addition to SEP analysis, the DPT sample collected in 2018 will be characterized using the analytical/testing methods listed above.

3.0 SUMMARY OF RESULTS

The following presents the results of the data analysis efforts outlined in Section 2.

3.1 Summary of Unconsolidated Aquifer Solids Analysis

A brief summary of the aquifer solids results for sample DPT-07 is provided below, and the complete SiREM report is included in **Appendix B** of this report. Results of the DPT sample collected in 2018 (i.e., DPT-04 XRF_AP1) and in the results for the batch sorption and desorption studies will be reported in the next semiannual progress report.

3.1.1 Anion and Cation Exchange Capacity

The cation exchange capacity (CEC) of soils is dependent on the amount and type of clay minerals, organic matter, and amorphous minerals, while the sources of anion exchange capacity (AEC) in soils include clay minerals (primarily 1:1 clays such as kaolinite), metal oxides, and amorphous materials. In general, the CEC of a soil is higher than the AEC, but highly weathered and acidic soils can have substantial AEC (Sparks, 1995).

The CEC for sample DPT-07 is 7.83 milliequivalents per 100 grams (meq/100 g) and the AEC is 5.13 meq/100 g (**Appendix B**). Given the low total organic carbon content of this sample, the ion exchange capacities appear to be mostly dominated by clay minerals and metal oxides (likely both crystalline and amorphous – see discussion below in Section 3.1.4).

3.1.2 Total Sulfur, Total Sulfide, and Total Organic Carbon

The presence of sulfur, and especially sulfide in the aquifer materials may give an indication whether metals prone to precipitation as sulfides or co-precipitation with sulfidic minerals, might be present in the aquifer matrix. Organic carbon, if present, can contribute to the CEC and AEC of a soil.

The total sulfur content in sample DPT-07 is low at 0.022% and total sulfide was non-detect (<0.04%) in this boring (**Appendix B**). The TOC content of sample DPT-07 is also low at 0.07%. This is not unexpected given that the materials were collected at depth within the aquifer matrix composed of residuum (i.e., clays) and partially weathered bedrock. Therefore, organic carbon is not expected to play a major role in the attenuation of site-specific constituents.

3.1.3 Total Metals and Whole Rock Analyses

The total metals results are summarized in the table presented on page 5 of the SiREM report included in **Appendix B.** The metals include the site-specific constituents of interest Mo, Li, and As, as well as Co, which is included for comparison purposes with nearby units (e.g., AP-2) where SSLs for Co have been reported in groundwater. Co results are not relevant to AP-1 and are not further discussed in this report. In addition, Fe, Al, and Mn were also analyzed to give an indication whether oxides/oxyhydroxides of these metals may be present, since these mineral phases can be a significant source of attenuation capacity for metal(loid)s.

As can be seen in this table, the aquifer materials from DPT-07 contain relatively low concentrations of site-specific constituents of interest. Molybdenum was detected at 1.4 micrograms per gram (µg/g), which is equivalent to milligrams per kilogram (mg/kg), Li was detected at 24 mg/kg, and As was detected at 7.8 mg/kg. Concentrations of these constituents in boring DPT-07 are generally consistent with background conditions. Concentrations of As and Mo are a little higher than background while the Li concentration is lower, but all are within the same order of magnitude.

As expected for residuum and highly weathered bedrock materials, and similar to other borings collected at the Site, the Fe and Al contents are substantial, with an Fe concentration of 20,000 mg/kg (2.0%) and an Al concentration of 42,000 mg/kg (4.2%). This is indicative of the abundant presence of Fe- and Al-oxides and hydroxides as well as clay minerals, which provide substantial attenuation capacity for site-specific constituents reporting SSLs. The manganese concentration in boring DPT-07 was low at 100 mg/kg.

Whole Rock Analysis (WRA) was included as a chemical assay to confirm and reconcile the quantitative mineral analysis obtained through XRD. While the name might imply "rock" samples, the analysis was conducted on the unconsolidated DPT boring and not competent bedrock. The WRA of these aquifer materials summarized in the table presented on page 6 of the SiREM report (**Appendix B**) confirm the presence of major mineral phases. Quartz was the most abundant mineral phase detected in boring DPT-07 at 80.8%, with Al-oxide and Fe-oxide concentrations coming in as the second most abundant mineral phases at 9.02% and 3.21%, respectively. Other oxides, especially containing potassium, titanium and magnesium are also detected, albeit at lower concentrations of generally less than 1.%.

3.1.4 XRD and SEM/EDXA Analyses

XRD as well as SEM/EDXA analyses were completed to characterize both the crystalline and non-crystalline phases of the unconsolidated aquifer matrix. Overall, the mineralogy of the aquifer matrix reflects the abundance of quartz, kaolinite, muscovite, albite, and microcline, and includes minerals that provide ample surface area and ion exchange capacities to attenuate both cationic as well as anionic constituents.

As expected, (and confirmed through WRA), the quantitative XRD analysis (see page 7 in **Appendix B**) indicated that the largest percentage of the aquifer matrix in boring DPT-07 is made up of quartz at 68.9% (by weight). The second-highest percentage of the mineralogy was characterized as the 1:1 clay mineral kaolinite at 15.8% (by weight) and the 2:1 clay mineral muscovite at 10.9% (by weight). Muscovite provides substantial surface area for sorption.

Other minerals detected in boring DPT-07 include the feldspar minerals albite and microcline (at 1.8% and 1.9%, respectively).

The SEM/EDXA images and results are included as pages 22 through 28 in the SiREM report (**Appendix B**). SEM/EDXA has the advantage of also identifying amorphous (i.e., non-crystalline) phases that cannot be identified using XRD. It therefore supplements the XRD results.

The main minerals identified include quartz, the clay minerals kaolinite, muscovite, and chlorite, other silicates such as zircon, titanium-containing minerals such as rutile and ilmenite, and mixtures of Fe-oxides and oxyhydroxides with kaolinite. These mineral and amorphous phases suggest that ample attenuation sites are potentially available within the aquifer matrix for site-specific constituents.

4.0 UPDATED CONCEPTUAL SITE MODEL

AP-1 will be closed by removal of CCR materials from the unit, thereby providing a source control measure that reduces potential for migration of CCR-related constituents to groundwater. The CSM indicates that, under current conditions, the groundwater exceedances are contained onsite, and that some of the exceedances are due to (a) source(s) other than AP-1 as briefly referenced in Section 1.3. Data collected since the previous progress report are consistent with and support the CSM described in the January 2021 progress update.

5.0 UPDATED EVALUATION OF CORRECTIVE MEASURES

Based on the data collected to date, the following four potential corrective measures will be retained for further evaluation:

- Geochemical Injections:
    - Geochemical injections include the use of an injection well network, or other means of introducing reagents or air into the subsurface, to provide suitable reagents for either anaerobic or aerobic attenuation of As and Mo. Under anaerobic conditions, As would be attenuated within sparingly soluble sulfide minerals; this approach might also increase the attenuation of Mo. Under aerobic conditions, soluble iron or manganese and oxygen (either via air sparging or through a chemical oxidant) would be injected to promote the formation of iron or manganese (oxy-) hydroxides for subsequent sorption of As (and potentially, Mo) onto these mineral phases. This corrective measure may not be effective for treating Li in groundwater. This approach would mainly be evaluated for use within a relatively small area around well HGWC-13 to potentially address As, which appears to be attenuated within this area as demonstrated by horizontal and vertical delineation wells. This area is currently inaccessible due to the operation of a temporary water treatment system that will be in use for the duration of pond dewatering during pond closures at the Site. Logistical arrangements will be required to implement this corrective measure.
- Hydraulic Containment:
    - Hydraulic containment refers to the use of groundwater extraction to induce a hydraulic gradient for hydraulic capture or control the migration of impacted groundwater. This approach uses extraction wells or trenches to capture groundwater, which may subsequently require above-ground treatment and permitted discharge to a receiving water feature, reinjection into the groundwater, or reuse. Groundwater extraction and above-ground treatment is potentially a viable option within the alluvium as a supplemental or adaptive measure to treat groundwater near compliance wells if warranted by site conditions. However, it may not be suited or effective for extraction to treat groundwater near deeper wells with slow aquifer recharge.

- Monitored Natural Attenuation:
    - MNA relies on natural attenuation processes to achieve site-specific remediation objectives within a reasonable time frame relative to more active methods. Under certain conditions (e.g., through sorption, mineral precipitation or oxidation-reduction (redox) reactions), MNA effectively reduces the dissolved concentrations of inorganic constituents in groundwater. The characterization of aquifer solids presented in the previous and the current progress reports suggests that the aquifer matrix has substantial attenuation capacity for the various constituents of interest at the Site. Therefore, MNA remains a viable corrective measure.
- Phytoremediation:
    - Phytoremediation uses trees and other plants to uptake or immobilize constituents, including As, Mo, and Li, or achieve hydraulic control without the need for an above-ground water treatment system and infrastructure. Within the context of AP-1, this corrective measure would likely use an engineered (proprietary) TreeWell® phytoremediation system along the point of compliance or downgradient edge of the impacted groundwater for hydraulic control. The use of an engineered phytoremediation system has been considered and data collected to date have not eliminated the use of this approach. However, its implementation appears to be unlikely under current circumstances, mostly due to logistical challenges with tree plantings. The area downgradient of AP-1 contains high-voltage power lines that will remain in place and would substantially limit the footprint that could be used for tree plantings. It may still be viable as a supplemental measure to another corrective measure.

Continued groundwater monitoring and updates to the statistical analyses will further refine the CSM and allow for the continued evaluation of an appropriate groundwater corrective measure at the Site.

6.0 PLANNED ACTIVITIES & ANTICIPATED SCHEDULE

The proposed closure by removal approach provides a source control measure that reduces the potential for migration of CCR constituents to groundwater. During the pond closure by removal of CCR, temporary changes in site conditions may occur that must be considered as part of remedy selection. Georgia Power proactively initiated adaptive site management as outlined in the ACM Report (Geosyntec, 2019a) to support the remedial strategy and address potential changes in site conditions as appropriate. The adaptive site management approach may be adjusted over the Site's life cycle as new site information and technologies become available. To this end, Georgia Power will continue its data collection efforts as necessary in support of efforts to refine the CSM and to further evaluate the feasibility of the corrective measures retained for further evaluation. Once sufficient data are available to make technically sound decisions regarding the ability to implement one or more specific corrective measures, necessary steps will be taken to design and implement a remedy for AP-1 in accordance with § 257.98.

Supplementary data collection and evaluation activities proposed to be completed during the next semiannual reporting period are presented in **Table 3**.

- *Complete batch sorption and desorption studies using unconsolidated aquifer solids and site-specific groundwater to evaluate the attenuation capacity of constituents of interest and attenuation rates in support of evaluating MNA consistent with USEPA's four-phase approach.*

- *Complete evaluation of conceptual layouts of phytoremediation and hydraulic containment corrective measures to evaluate hydraulic capture zones under anticipated closure conditions.*

- *Continue evaluation of Mo and Li in delineation wells MW-19 and MW-25D, respectively, to determine if additional vertical delineation wells are necessary.*

Georgia Power will continue to prepare semiannual progress reports to document AP-1 groundwater conditions, results associated with additional data collection, and the progress in selecting and designing a groundwater remedy in accordance with § 257.97(a). Georgia Power will include future semiannual progress reports in routine groundwater monitoring and corrective action reports. Record keeping, notifications, and publicly accessible internet site requirements for the semiannual progress reports will be provided in accordance with § 257.105(h)(12), § 257.106(h)(9), and § 257.107(h)(9), respectively.

7.0 REFERENCES

Geosyntec Consultants, 2019a. *Assessment of Corrective Measures Report – Plant Hammond Ash Pond 1 (AP-1)*. June 2019.

Geosyntec Consultants. 2019b. *2018 Annual Groundwater Monitoring and Corrective Action Report - Plant Hammond Ash Pond 1 (AP-1).* January 2019.

Geosyntec Consultants, 2020. *Semiannual Remedy Selection and Design Progress Report – Plant Hammond Ash Pond 1 (AP-1)*. August 2020.

Geosyntec Consultants. 2021a. *2020 Annual Groundwater Monitoring and Corrective Action Report - Plant Hammond Ash Pond 1 (AP-1).* January 2021.

Geosyntec Consultants. 2021b. *Risk Evaluation Report – Plant Hammond Ash Pond 1, Rome, Floyd County, Georgia.* January 2021.

Geosyntec Consultants, 2021c. *Semiannual Remedy Selection and Design Progress Report – Plant Hammond Ash Pond 1 (AP-1)*. January 2021.

Geosyntec Consultants. 2021d. *2021 Semiannual Groundwater Monitoring and Corrective Action Report - Plant Hammond Ash Pond 1 (AP-1).* August 2021.

Sparks D.L. 1995. *Environmental Soil Chemistry*. Academic Press, Inc.

USEPA (1999). *Use of Monitored Natural Attenuation at Superfund, RCRA Corrective Action, and Underground Storage Tank Sites*. Office of Solid Waste and Emergency Response; Directive 9200.4-17P. April 1999.

USEPA (2007). *Monitored Natural Attenuation of Inorganic Contaminants in Ground Water. Volume 1 – Technical Basis for Assessment.* National Risk Management Laboratory. EPA/600/R-07/139. October 2007.

USEPA (2015). Use of Monitored Natural Attenuation for Inorganic Contaminants in Groundwater at Superfund Sites, Office of Solid Waste and Emergency Response Directive 9283.1-36, August 2015.

TABLES

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

Well ID	Hydraulic Location	Installation Date	Northing [1]	Easting [1]	Ground Surface Elevation [2] (ft)	Top of Casing Elevation [2] (ft)	Top of Screen Elevation [2] (ft)	Bottom of Screen Elevation [2] (ft)	Well Depth (ft BTOC) [3]	Screen Interval Length (ft)
Compliance 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	1940753.80	592.08	595.08	544.08	534.08	61.25	10
HGWA-44D	Upgradient	8/25/2020	1550409.13	1940756.18	592.01	594.79	491.76	481.76	113.28	10
HGWC-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
Piezometer										
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	32.28	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
Delineation 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	570.96	532.91	522.91	48.38	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. Survey completed by GEL Solutions certified May 19, 2020. HGWA-43D and HGWA-44D survey data certified September 10, 2020.
(2) Elevations referenced to the North American Vertical Datum of 1988 (NAVD88). Survey completed by GEL Solutions certified May 19, 2020. HGWA-43D and HGWA-44D survey data certified September 10, 2020.
(3) Total well depth accounts for sump if data provided on well construction logs.

Table 2
Evaluation of Remedial Technologies
Plant Hammond AP-1, Floyd County, Georgia

Geosyntec consultants

	Regulatory Citation for Criteria:	40 CFR 257.96(C)(1)	
Corrective Measure	**Description**	**Performance**	**Reliability**
Geochemical Approaches (In-Situ Injection)	Use of an injection well network, or other means of introducing reagents or air into the subsurface, to provide suitable reagents for either anaerobic or aerobic attenuation of arsenic (As) and molybdenum (Mo). Under anaerobic conditions, As would be attenuated within sparingly soluble sulfide minerals; this approach might also increase the attenuation of Mo. Under aerobic conditions, soluble iron or manganese and oxygen (either via air sparging or through a chemical oxidant) would be injected to promote the formation of iron or manganese (oxy-) hydroxides for subsequent sorption of As (and potentially, Mo) onto these mineral phases. If sufficient iron is present in groundwater, the use of air sparging alone may be considered to precipitate iron (oxy-) hydroxides for sorption. In-situ chemical oxidation (ISCO) or in-situ chemical reduction (ISCR) can be used to chemically alter the redox environment in the subsurface to affect the mobility of certain inorganic compounds, including As. This corrective measure is not effective for treating lithium (Li) in groundwater.	The effective immobilization of As has been shown under aerobic and anaerobic conditions; however, the anaerobic approach (involving the injection of an electron donor together with iron or manganese and sulfur) requires careful study and testing. While aerobic approaches are somewhat less complex, additional aquifer characterization is needed to further evaluate these options. It is currently not well understood whether molybdenum can be efficiently attenuated using in-situ redox manipulations due to slow reaction kinetics. Mo attenuation under both aerobic and anaerobic conditions needs to be further evaluated but is expected to occur. Mo is more strongly sorbed to aluminum oxides than other metal oxides, and it is generally less sorptive and more mobile compared to As.	Reliability dependent on permeability of the subsurface and the amount and distribution of secondary iron or manganese (oxy-) hydroxides (for aerobic approach), or electron donors and soluble iron or manganese and sulfur that can be consistently distributed (for anaerobic approach). Reliable technology if injected materials can be distributed throughout the impacted aquifer. Bench- and/or pilot-scale treatability testing programs are needed to understand the biogeochemical processes that would effectively reduce migration of As and Mo in groundwater.
Hydraulic Containment	Hydraulic containment refers to the use of groundwater extraction to induce a hydraulic gradient for hydraulic capture or control the migration of impacted groundwater. This approach uses extraction wells or trenches to capture groundwater, which may subsequently require above-ground treatment and permitted discharge to a receiving water feature, reinjection into the groundwater, or reuse (e.g., land application, CCR conditioning, etc.). It is applicable to a variable mix of inorganic constituents, including dissolved As, Li, and Mo.	Hydraulic containment is effective, but it is unclear whether full groundwater remediation can be achieved without further understanding attenuation mechanisms at the Site. At AP-1, implementation of the corrective measure is contingent on completing additional assessment activities (i.e. high-resolution site characterization, additional pump tests, flow modeling, and capture zone analysis). This is needed to refine the constituent distribution in the subsurface to target specific zones for pumping for improved mass recovery efficiency/ effectiveness and to further evaluate the potential remedy performance.	Generally reliable for hydraulic containment, but uncertainty exists whether groundwater remediation goals can be achieved within a reasonable time frame without further understanding attenuation mechanisms.
Monitored Natural Attenuation (MNA)	MNA relies on natural attenuation processes to achieve site-specific remediation objectives within a reasonable time frame relative to more active methods. Under certain conditions (e.g., through sorption, mineral precipitation or oxidation-reduction reactions), MNA effectively reduces the dissolved concentrations of inorganic constituents in groundwater. Attenuation mechanisms for inorganic constituents at CCR sites, including As, Li, and Mo at AP-1, are either physical (e.g. dilution, dispersion, flushing, and related processes) or chemical (sorption or oxidation reduction reactions). Chemical attenuation processes include precipitation, and sorption reactions such as adsorption on the surfaces of soil minerals, absorption into the matrix of soil minerals, or partitioning into organic matter. Further, oxidation-reduction (redox) reactions, via abiotic or biotic processes, can transform the valence states of some inorganic constituents to less soluble and thus less mobile forms. For As and Mo, the main attenuation processes include sorption to iron and manganese oxides (As and Mo), and formation of sparingly soluble sulfide minerals (As). The main attenuation processes for Li is dilution and dispersion.	Physical and chemical MNA mechanisms for arsenic and molybdenum, including dilution, dispersion, sorption, and oxidation reduction reactions can be effective at achieving groundwater protection standards (GWPS) within a reasonable time frame. Attenuation processes for As and Mo are already occurring at the site as evidenced by groundwater data from the delineation wells. Source control will improve the mass balance such that the buffer capacity of the aquifer is unlikely to be exhausted, and the attenuation processes already at work for As, Li, and Mo at AP-1 will further enhance ongoing MNA.	Reliable as long as the aquifer conditions that result in As, Li, and Mo attenuation remain favorable and/or are being enhanced and sufficient attenuation capacity is present. MNA is reliable and can either be used as a stand-alone corrective measure for groundwater impacted by dissolved As and/or Mo, or in combination with a second technology.
Permeable Reactive Barrier	Permeable reactive barrier (PRB) technology typically involves the installation of a permeable subsurface wall constructed with reactive media for the removal of constituents as groundwater passes through. Either ZVI-Carbon matrix or solid carbon (bio-barrier) are currently proposed for the concurrent removal of As and Mo. The carbon could be composed of peat moss, mulch or another carbon source. Exact placement of the PRB is determined by site-specific characterization. PRB walls are typically keyed into the bedrock. While the shallow groundwater in the residuum and fractured bedrock is connected to the groundwater in more competent bedrock, the higher permeability/conductivity of the PRB is not expected to impede groundwater flow. PRBs can also be constructed as “funnel and gate” systems, where a barrier wall directs groundwater to a smaller “treatment gate” filled with reactive media. PRBs are ineffective at treating Li due to the chemistry and the inability for Li to sorb or precipitate.	PRBs have been shown to effectively address As in groundwater, but additional testing is required for Mo to select the appropriate reactive media. The approach is expected to achieve GWPS for both constituents as impacted groundwater passes through the reactive barrier. Mo redox kinetics may be slow and hence a thicker wall might be needed relative to solely treating for As. Furthermore, additional testing is required to select the appropriate sorptive media mix, especially related to Mo. However, PRB media is ineffective for treating Li.	Reliable groundwater corrective measure technology for select inorganics, but loss of reactivity over time may require re-installation depending on the duration of the remedy. Additional data collection, including conducting a bench and/or pilot study, is needed to better characterize current attenuation mechanisms and/or select the appropriate reactive media mix for a PRB wall.
Phytoremediation / *TreeWells*	Phytoremediation uses trees and other plants to uptake or immobilize constituents or achieve hydraulic control without the need for an above-ground water treatment system and infrastructure. Within the context of AP-1, this corrective measure would likely use an engineered (proprietary) TreeWell® phytoremediation system along the point of compliance or downgradient edge of the impacted groundwater for hydraulic control. The system promotes root development to the targeted groundwater zone (depth), allowing for hydraulic control of impacted groundwater. In addition, immobilization of As, Li, and Mo within the root zone as well as incidental uptake of dissolved As, Li, and Mo with groundwater is expected to occur concurrent with hydraulic control.	Once established (typically at the end of the third growing season), a TreeWell system is effective for providing hydraulic containment of groundwater, and potential reduction of As and Mo concentrations through immobilization and/or uptake and sequestration in the tree biomass; however, the main purpose is to provide hydraulic control. Given the current groundwater flow velocities, the approach is currently not considered viable. However, changing site conditions may make the corrective measure viable for the area downgradient of AP-1. Additional aquifer testing and/or groundwater flow modeling may be needed to confirm the suitability at that time.	Engineered phytoremediation is a proven technology where hydrogeologic factors are taken into account (e.g., hydraulic conductivity, flow velocity, depth to impacted groundwater zone, etc.). This is considered an active remedial approach through the use of trees as the "pumps" driving the system. Careful design will be needed to select the proper species, which will include consideration of groundwater chemistry, plant uptake of constituents, and groundwater flow modeling to evaluate the required number and placement of TreeWell units.
Subsurface Vertical Barrier Walls	This approach involves placing a barrier to groundwater flow in the subsurface, frequently around a source area, to prevent future migration of dissolved constituents in groundwater from beneath the source to downgradient areas. In general, barrier walls are designed to provide containment; localized treatment achieved through the sorption or chemical precipitation reactions from construction of the walls are incidental to the design objective. Barrier walls can also be used in downgradient applications to limit discharge to a surface water feature or to reduce aquifer recharge from an adjacent surface water feature when groundwater extraction wells are placed near one. A variety of barrier materials can be used, including cement and/or bentonite slurries, geomembrane composite materials, or driven materials such as steel or vinyl sheet pile. Groundwater extraction from upgradient of the barrier is required to avoid groundwater mounding behind the barrier.	Barrier walls are a proven technology for seepage control and/or groundwater cutoff at impoundments. Slurry walls are limited by the depth of installation; sheet piling and trenching are typically limited to depths of approximately 50 feet belowground surface (ft bgs); specialty drilling/installation techniques can achieve depths greater up to approximately 90 ft bgs. However, site-specific geologic and technology-specific considerations may limit this depth to shallower installations. Within the context of AP-1, a barrier wall might be used in conjunction with a “funnel and gate” system for a PRB rather than a stand-alone technology. As such, groundwater with As, Li, and Mo above GWPS could either be directed to “treatment gates” for passive treatment (in a PRB) or migration of impacted groundwater could be minimized via barrier wall installation. Additional subsurface investigations, aquifer testing, and compatibility testing with site-specific groundwater will be needed.	Generally reliable as a barrier to groundwater flow; however, treatment of downgradient groundwater is incidental and not the primary objective.

Table 2
Evaluation of Remedial Technologies
Plant Hammond AP-1, Floyd County, Georgia

	40 CFR 257.96(C)(1)	40 CFR 257.96(C)(1)	40 CFR 257.96(C)(2)
Corrective Measure	**Ease of Implementation**	**Potential Impacts**	**Time Requirement to Begin/Complete**
Geochemical Approaches (In-Situ Injection)	Moderate. Installation of injection well network or other injection infrastructure would be required. Alternative installation approaches may be considered, such as along the downgradient edge of impacted groundwater, which would function similar to a PRB application. Potential for clogging of aquifer matrix and/or injection well infrastructure. Chemical distribution during injections (i.e., radius of influence) needs to be evaluated.	Minimal impacts are expected if remedy works as designed, based on a thorough pre-design investigation, geochemical modeling, and bench/pilot study results. Redox-altering processes have the potential to mobilize naturally-occurring constituents as an unintended consequence if not properly studied and implemented.	Installation of the injection network can be accomplished relatively quickly (1 to 2 months). However, a thorough pre-design investigation, geochemical modeling, and/or bench- and/or pilot-testing will be required to obtain design parameters prior to design and construction of the corrective measure, which may take up to 24 months. Once installed, the time required to achieve GWPS within the treatment area may be relatively quick but depends on the attenuation process kinetics of each targeted constituent. The time for complete distribution of the injected materials throughout the treatment area is also variable.
Hydraulic Containment	Moderate. Proven approach, and supplemental installation of extraction wells/trenches is fairly straightforward. The extracted groundwater may potentially require an above-ground treatment system. A variety of sorption and precipitation approaches exist for ex-situ treatment of As and Mo; currently reported Li groundwater concentrations may not warrant treatment to meet ecological standards for discharge. Operation and maintenance (O&M) requirements are expected to include upkeep of infrastructure components (pumps, pipes, tanks, instrumentation and controls, above-ground treatment system) and handling of treatment residuals.	Moderate. The main potential impacts are related to the presence and operation of an on-site above-ground water treatment facility and related infrastructure to convey and treat extracted groundwater. Pumping activity may unintentionally alter the geochemistry within the hydraulic capture zone.	Installation of extraction wells and/or trenches can be accomplished relatively quickly (1 to 2 months). However, additional aquifer testing, system design and installation, and permit approval may be required, which may take up to 24 months. The initiation of the approach would be contingent on the start-up of the wastewater treatment infrastructure. Hydraulic containment can be achieved relatively quickly after startup of the extraction system, but uncertainty exists with respect to the time to achieve GWPS without additional data collection to better understand attenuation mechanisms for As and Mo.
Monitored Natural Attenuation (MNA)	Reasonably implementable with respect to infrastructure, but moderate to complex with respect to documentation. Proven approach, but additional data are needed to show that the existing attenuation capacity is sufficient to meet site objectives within a reasonable timeframe. A monitoring well network already exists to implement future groundwater monitoring efforts.	None. MNA relies on the natural processes active in the aquifer matrix to reduce constituent concentrations without disturbing the surface or the subsurface.	The infrastructure to initiate MNA is already in place. Demonstrating attenuation mechanisms and capacity can be time-consuming and can take up to 24 months. Under current conditions, MNA appears to already be sufficiently operational to attenuate site-specific constituents, and MNA is expected to continue to be successful following pond closure. Engineering measures will be implemented during closure of AP-1 to minimize potential impacts to the subsurface during closure activities and routine groundwater monitoring will be used to verify that groundwater impacts remain stable or decrease over time. A contingency plan will be developed to address potential impacts during and after pond closure should MNA not be successful as a stand-alone corrective measure.
Permeable Reactive Barrier	Moderate to difficult. Trenching would be required to install a mix of reactive materials in the subsurface. Continuous trenching may be the most feasible construction method. Installation methods and materials are readily available. Once installed, treatment will be passive and O&M requirements are minimal if replacement of the PRB is not necessary. Depth to competent bedrock varies on a small-scale (feet to tens of feet) spatially depending on the weathering characteristics of the fractured bedrock, limiting the feasibility of constructing a PRB along the entire length and depth of the affected areas	Minimal impacts are expected following the construction of the remedy. However, ZVI has the potential to create anaerobic conditions downgradient of the PRB wall that may mobilize redox-sensitive naturally-occurring constituents. These conditions need to be carefully monitored. Short-term impacts during the construction of the remedy can be mitigated through appropriate planning and health and safety measures.	Installation of a PRB can be accomplished relatively quickly (6 to 12 months), depending on the final location and configuration. However, bench- and/or pilot-testing would be required to obtain design parameters prior to design and construction of the remedy, which may take up to 24 months. Once installed, the time to achieve GWPS downgradient of the PRB is anticipated to be relatively quick.
Phytoremediation / *TreeWells*	Reasonably implementable to moderate. Engineered approach has been proven effective, and specific depth zones can be targeted. Trees are installed as "tree wells" in a large diameter boring to get the roots deep enough to intercept impacted groundwater flow paths. Area must be clear of above and below-ground structures (i.e., power lines), which would be a challenge at AP-1. The system, once established (approximately three growing seasons), is a self-maintaining, sustainable remedial system that has no external energy requirements and little maintenance (i.e., efforts normally associated with landscaping).	Minimal impacts are expected. In fact, there are several positive impacts expected, including enhanced aesthetics, wildlife habitat, and limited energy consumption.	The design phase will require some groundwater modeling for optimal placement of the TreeWell units, which may take up to 6 months. Depending on the number of required units, the installation effort is expected to last several weeks. Hydraulic capture/control is expected approximately three years after planting and system performance is expected to further improve over time.
Subsurface Vertical Barrier Walls	Moderate to difficult. Trenching will be required to fill in the various slurry mixes; alternatively, sheet pile installations can be accomplished without excavation of trenches. The application of barrier walls is limited by the depth of installation, which similar to PRBs, should be keyed into a low permeability layer such as a thick clay layer or bedrock. Installation methods and materials are readily available. Once installed, above-ground infrastructure to pump and treat groundwater will be required. O&M requirements are expected to include upkeep of infrastructure components (pumps, pipes, tanks, instrumentation and controls, above-ground treatment system) and handling of treatment residuals. Depth to competent bedrock varies on a small-scale (feet to tens of feet) spatially depending on the weathering characteristics of the fractured bedrock, limiting the feasibility of constructing a PRB along the entire length and depth of the affected areas	Minimal impacts are expected following the construction of the remedy. Short-term impacts during the construction of the remedy can be mitigated through appropriate planning and health and safety measures. Changes to groundwater flow patterns due to installation of the barrier wall are expected, which can affect other aspects of groundwater corrective action. Pumping activity may unintentionally alter the geochemistry within the hydraulic capture zone that may result in the mobilization of other constituents that may require treatment.	Installation of a barrier wall can be accomplished relatively quickly (6 to 12 months), depending on the final location and configuration. However, some design phase and additional aquifer and compatibility testing will be required, which may take up to 24 months. Once installed, preventing migration of constituents dissolved in groundwater is anticipated to be relatively quick. Since this approach does not treat the downgradient area of impacted groundwater but prevents migration from a source area, it will likely have to be maintained long-term and coupled with other approaches.

Table 2
Evaluation of Remedial Technologies
Plant Hammond AP-1, Floyd County, Georgia

Geosyntec consultants

	40 CFR 257.96(C)(3)			
Corrective Measure	**Institutional Requirements**	**Other Env or Public Health Requirements**	**Relative Costs**	**Evaluation of Retainage**
Geochemical Approaches (In-Situ Injection)	Deed restrictions may be necessary until in-situ treatment has achieved GWPS. A new UIC permit (for in-situ injections) would be required to implement this corrective measure. No other institutional requirements are expected at this time.	Based on the results of the Risk Evaluation Report (Geosyntec, 2021a), SSL-related constituents (As, Li, Mo) evaluated from AP-1 are not expected to pose a risk to human health or the environment; therefore, no further risk evaluation for groundwater is warranted based on the current data set. Georgia Power will proactively evaluate the data and update this evaluation, if necessary. Potential for mobilization of redox-sensitive constituents exists during implementation of an anerobic attenuation approach. Following installation, the remedy is passive.	Medium (depending on expanse of injection network required and injectate volume required per derived design parameters)	Retained for further analysis; feasible around well HGWC-13 to attenuate elevated As concentrations in a localized area through the formation of sparingly soluble minerals due to the extent of groundwater detections; a separate corrective measure would likely need to be used to address Li identified in isolated areas and Mo conditions reported in the larger portion of the anticipated treatment area downgradient of AP-1.
Hydraulic Containment	Depending on the effluent management strategy, modifications to the existing NPDES permit may be required, or obtaining a new underground injection control (UIC) permit may be needed if groundwater reinjection is chosen. In addition, deed restrictions may be required as long as groundwater conditions are above regulatory standards for unrestricted use.	Based on the results of the Risk Evaluation Report (Geosyntec, 2021a), SSL-related constituents (As, Li, Mo) evaluated from AP-1 are not expected to pose a risk to human health or the environment; therefore, no further risk evaluation for groundwater is warranted based on the current data set. Georgia Power will proactively evaluate the data and update this evaluation, if necessary. Above-ground treatment components may need to be present for an extended period of time, generating residuals requiring management and disposal.	Medium to high (depending on remedy duration, complexity of above-ground treatment system, and volume of water processed)	Retained for further analysis; could be considered an effective measure to maintain hydraulic control upgradient of the Coosa River and Cabin Creek should closure construction activities require an interim groundwater treatment configuration.
Monitored Natural Attenuation (MNA)	MNA may require the implementation of institutional controls, such as deed restrictions, to preclude potential exposure to groundwater within the footprint of impacted groundwater until GWPS are achieved.	Little to no physical disruption to remediation areas and no adverse construction-related impacts are expected on the surrounding community. Based on the results of the Risk Evaluation Report (Geosyntec, 2021a), SSL-related constituents (As, Li, Mo) evaluated from AP-1 are not expected to pose a risk to human health or the environment; therefore, no further risk evaluation for groundwater is warranted based on the current data set. Georgia Power will proactively evaluate the data and update this evaluation, if necessary.	Low to medium	Retained for further analysis; may be used as a stand-alone corrective measure or in conjunction with other potential groundwater corrective measures following source control.
Permeable Reactive Barrier	Deed restrictions may be necessary for groundwater areas upgradient of the PRB (if not installed along the waste boundary). No other institutional requirements are expected at this time.	Based on the results of the Risk Evaluation Report (Geosyntec, 2021a), SSL-related constituents (As, Li, Mo) evaluated from AP-1 are not expected to pose a risk to human health or the environment; therefore, no further risk evaluation for groundwater is warranted based on the current data set. Georgia Power will proactively evaluate the data and update this evaluation, if necessary. Following installation, the remedy is passive. However, certain treatment media (such as ZVI) have the potential to mobilize naturally-occurring constituents downgradient of the PRB.	Medium to high (for installation) - minimal O&M requirements if replacement is not necessary	Not retained for further analysis; PRB media is ineffective to treat Li; depth to competent bedrock varies on a small-scale (feet to tens of feet) limiting the feasibility of constructing a PRB along the entire length and depth of the affected areas; does not address downgradient groundwater when installed along the compliance boundary; potential for increased maintenance due to potential biofouling and mineral precipitation.
Phytoremediation / *TreeWells*	Deed restrictions may be necessary for groundwater areas upgradient of the TreeWell system. No other institutional requirements are expected at this time.	Based on the results of the Risk Evaluation Report (Geosyntec, 2021a), SSL-related constituents (As, Li, Mo) evaluated from AP-1 are not expected to pose a risk to human health or the environment; therefore, no further risk evaluation for groundwater is warranted based on the current data set. Georgia Power will proactively evaluate the data and update this evaluation, if necessary. Following installation, the remedy is passive and does not require external energy.	Medium (for installation) - minimal O&M requirements	Retained for further analysis; feasible through placement of TreeWell units downgradient of AP-1; likely needs to be used in conjunction with other potential groundwater corrective measures (e.g., geochemical injections) to address As in vicinity of HGWC-13; could be considered an effective measure to maintain hydraulic control upgradient of the Coosa River and Cabin Creek should closure construction activities require an interim groundwater treatment configuration. Besides providing hydraulic control, trees would take up As and Li through groundwater uptake. Implementation challenges remain due to existing high-voltage power lines.
Subsurface Vertical Barrier Walls	Deed restrictions may be necessary for groundwater areas downgradient of the barrier wall until remedial goals are met. No other institutional requirements are expected at this time.	Based on the results of the Risk Evaluation Report (Geosyntec, 2021a), SSL-related constituents (As, Li, Mo) evaluated from AP-1 are not expected to pose a risk to human health or the environment; therefore, no further risk evaluation for groundwater is warranted based on the current data set. Georgia Power will proactively evaluate the data and update this evaluation, if necessary. Due to the need for groundwater extraction associated with barrier walls, above-ground treatment components may need to be present for an extended period of time, generating residuals requiring management and disposal.	Medium to high (depending on length and depth of wall, remedy duration and complexity of above-ground treatment system)	Not retained for further analysis; depth to competent bedrock varies on a small-scale (feet to tens of feet) limiting the feasibility of constructing a barrier wall along the entire length and depth of the affected areas; does not address downgradient groundwater when installed along the compliance boundary.

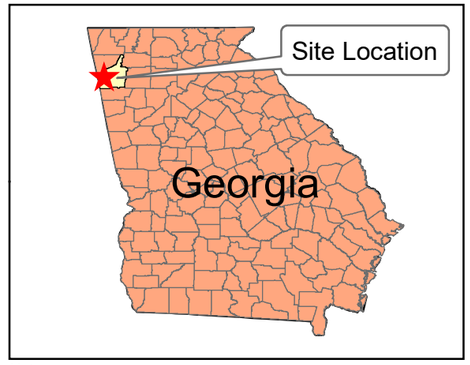
Table 3
Proposed ACM Supplementary Data Analyses and Collection Tasks for Second Semiannual Period 2021
Plant Hammond AP-1, Floyd County, Georgia

Data Collection Event	Applicable CMs (1)	Applicability/Rationale	Field Component	Parameters of Interest (POI)	Analytical Lab Performing Analysis
Complete batch sorption and desorption studies using unconsolidated aquifer matrix samples and site-specific groundwater	1, 3	Evaluation of the sorption capacity of key constituents of interest and results for attenuation mechanism and rates in support of evaluating MNA with respect to USEPA's four-tier approach	Field collection of materials (i.e., aquifer solids and groundwater) already completed during current reporting period.	Site-specific constituents (i.e., Mo, Li, As) as well as pH and oxidation/reduction (redox) potential.	SiREM and subcontracted labs
Perform a conceptual-level feasibility study of applied corrective measures	2, 4	Evaluate potential hydraulic capture zones using either phytoremediation or mechanical groundwater extraction systems (extraction well gallery); determine conceptual layouts to achieve hydraulic capture in target areas.	Not Applicable (Desktop Study)	Conceptually determine layouts for phytoremediation or extraction well gallery to provide effective hydraulic containment while minimizing additional infrastructure or land requirements.	No lab data required; Geosyntec desktop analyses
Continue evaluation of Mo and Li in delineation wells MW-19 and MW-25D, respectively	1, 2, 3, 4	Determine if additional vertical delineation wells are necessary or demonstrate that these impacts are from a source other than AP-1	Not Applicable (Desktop Study)	Appendix III and IV constituents, major cations/anions, iron, and manganese	No lab data required; Geosyntec desktop analyses

Note:
(1) Corrective Measure (CM) Codes:
1 - Geochemical Injections
2 - Hydraulic Containment
3 - Monitored Natural Attenuation (MNA)
4 - Phytoremediation (TreeWells®)

FIGURES

N



Notes:
1. Aerial photograph source: Google Earth Pro, August 2019.

0 400 800 1,600

SCALE IN FEET

SITE LOCATION MAP

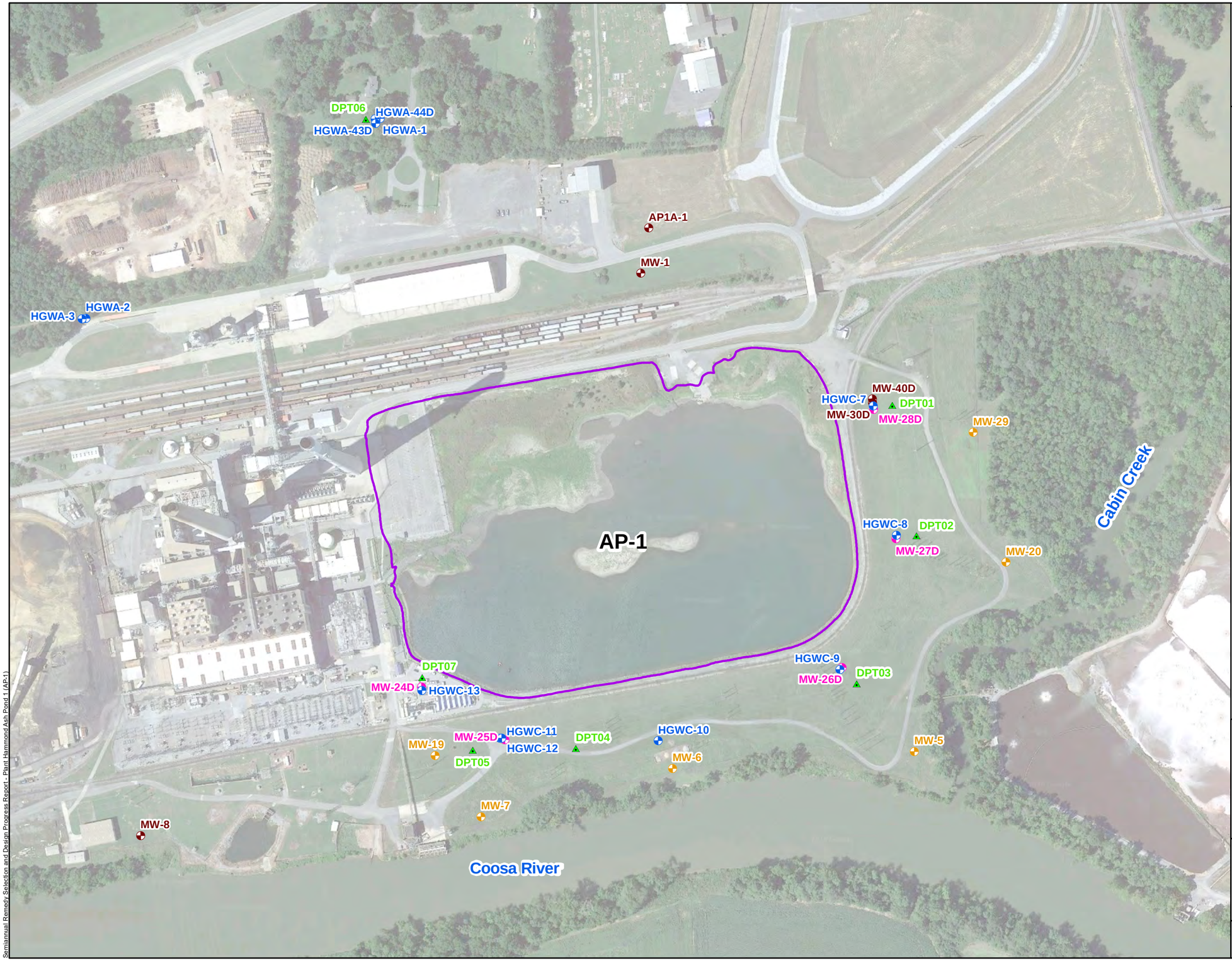
GEORGIA POWER COMPANY
PLANT HAMMOND AP-1
FLOYD COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA | AUGUST 2021

FIGURE 1



N

LEGEND

- Compliance Monitoring Well
- Horizontal Delineation Monitoring Well
- Vertical Delineation Monitoring Well
- Piezometer
- DPT Borehole (unsurveyed location)
- Approximate AP-1 Boundary

Note:
1. Aerial photograph source: Google Earth Pro, August 2019.

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

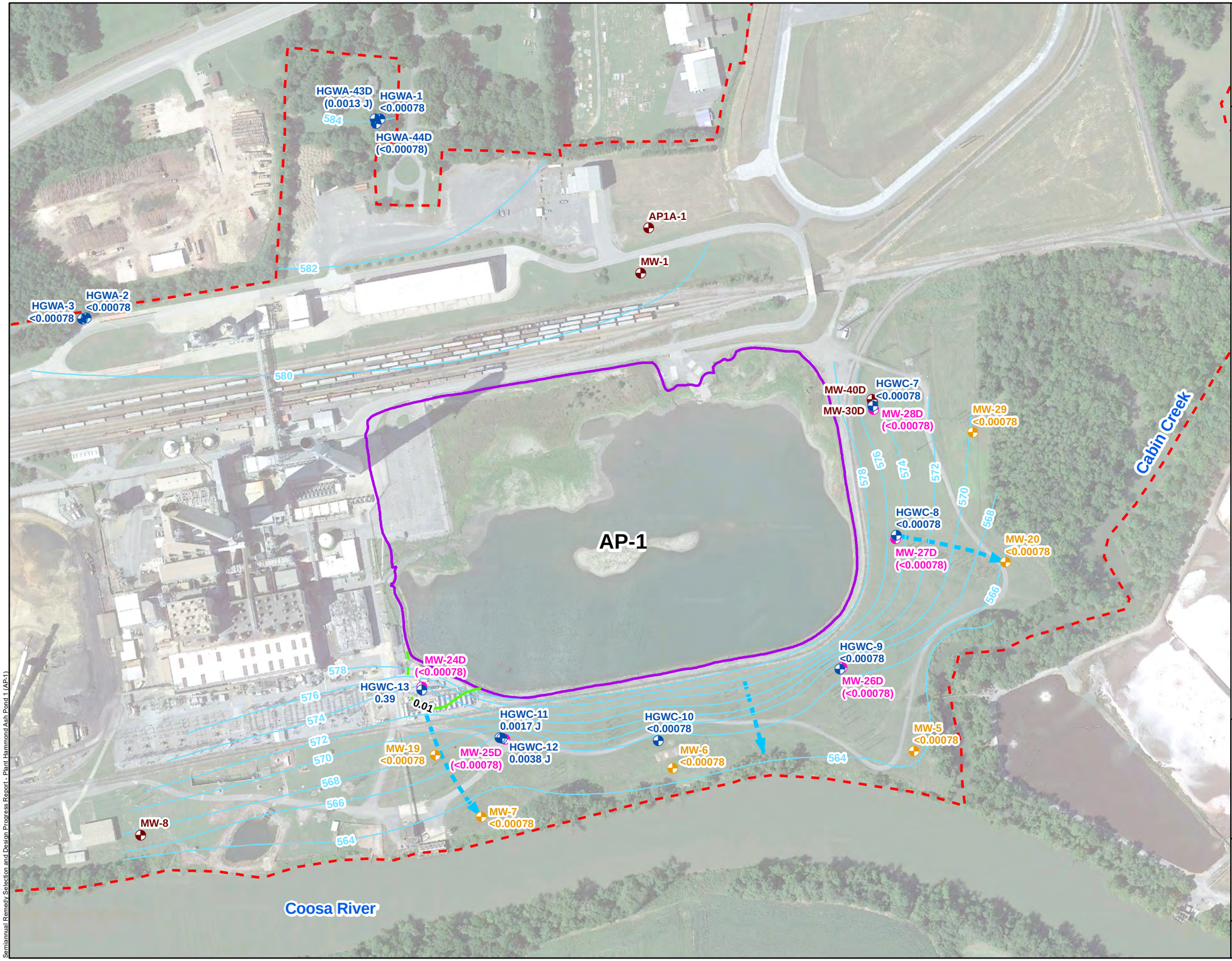
Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA | AUGUST 2021

FIGURE 2

Semiannual Remedy Selection and Design Progress Report - Plant Hammond Ash Pond 1 (AP-1)



Semiannual Remedy Selection and Design Progress Report - Plant Hammond Ash Pond 1 (AP-1)

N

LEGEND

- Compliance Monitoring Well
- Horizontal Delineation Well
- Vertical Delineation Well (Not Used for Contouring)
- Piezometer
- State/Federal GWPS Arsenic Iso-Concentration Contour (mg/L) (dashed where inferred)
- Groundwater Elevation Iso-Contour
- Approximate Groundwater Flow
- Approximate AP-1 Boundary
- Approximate Plant Hammond Property Boundary

Notes:
1. Concentration data from groundwater samples collected during the March 2021 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 March 10, 2021. Elevation provided in feet (ft) referenced to the North American Vertical Datum (NAVD) 88.
3. State and federal Groundwater Protection Standard (GWPS) for arsenic is 0.01 mg/L.
4. Aerial photograph source: Google Earth Pro, August 2019.

0 150 300 600
Feet

SCALE IN FEET

ISO-CONCENTRATION MAP ARSENIC - MARCH 2021

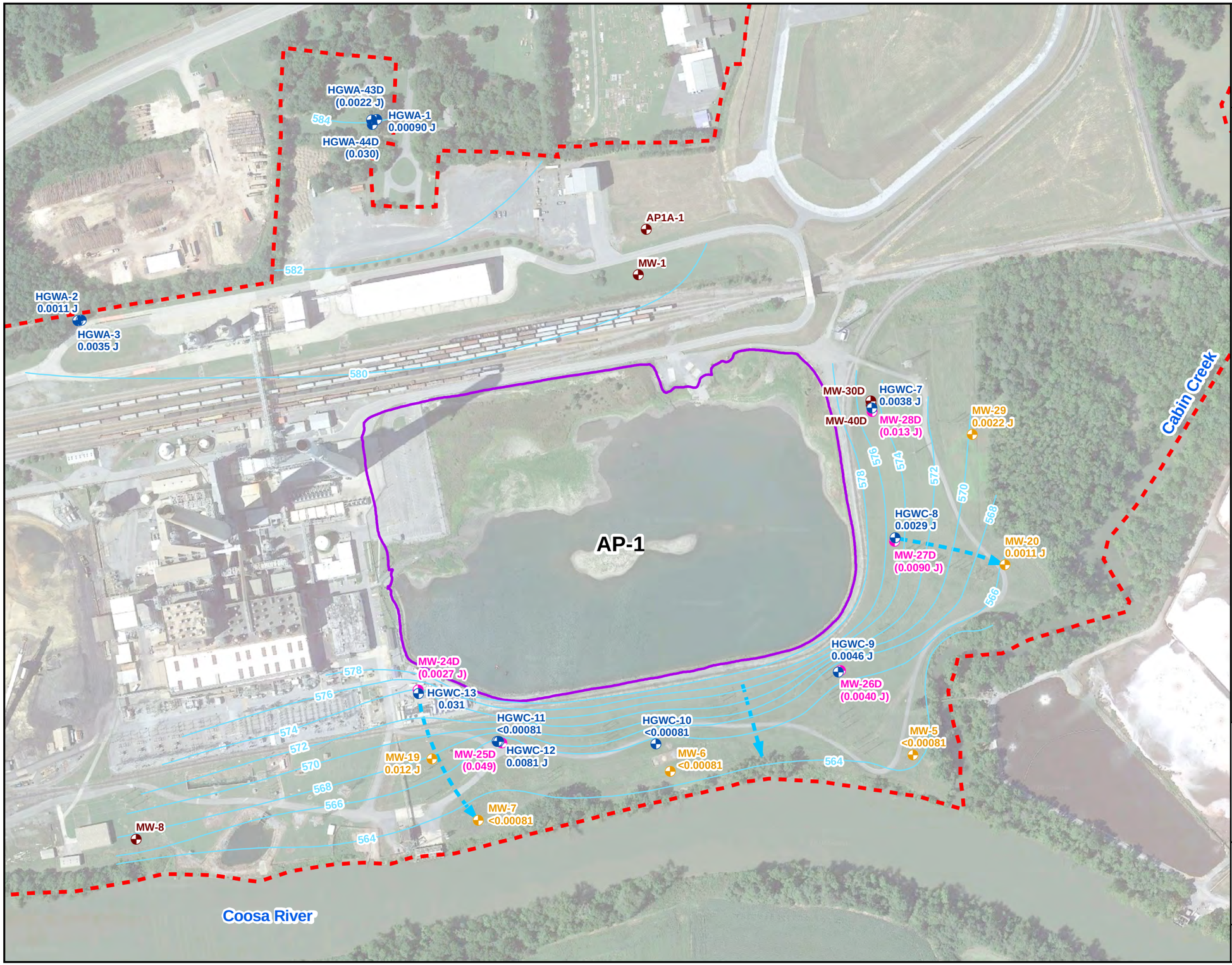
GEORGIA POWER COMPANY
PLANT HAMMOND AP-1
ROME, FLOYD COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA | AUGUST 2021

FIGURE 3



N

LEGEND

- Compliance Monitoring Well
- Horizontal Delineation Well
- Vertical Delineation Well (Not Used for Contouring)
- Piezometer
- Groundwater Elevation Iso-Contour
- Approximate Groundwater Flow
- Approximate AP-1 Boundary
- Approximate Plant Hammond Property Boundary

Notes:

1. Concentration data from groundwater samples collected during the March 2021 semiannual monitoring event. Surface water data collected in March 2021. 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 March 10, 2021. Elevation provided in feet (ft) referenced to the North American Vertical Datum (NAVD) 88.
3. The state Groundwater Protection Standard (GWPS) for lithium is 0.034 mg/L; the federal GWPS is 0.04 mg/L.
4. Detected concentrations do not exceed GWPS levels; therefore, no iso-concentration contours are presented.
5. Aerial photograph source: Google Earth Pro, August 2019.

0 300 600

SCALE IN FEET

ISO-CONCENTRATION MAP LITHIUM - MARCH 2021

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

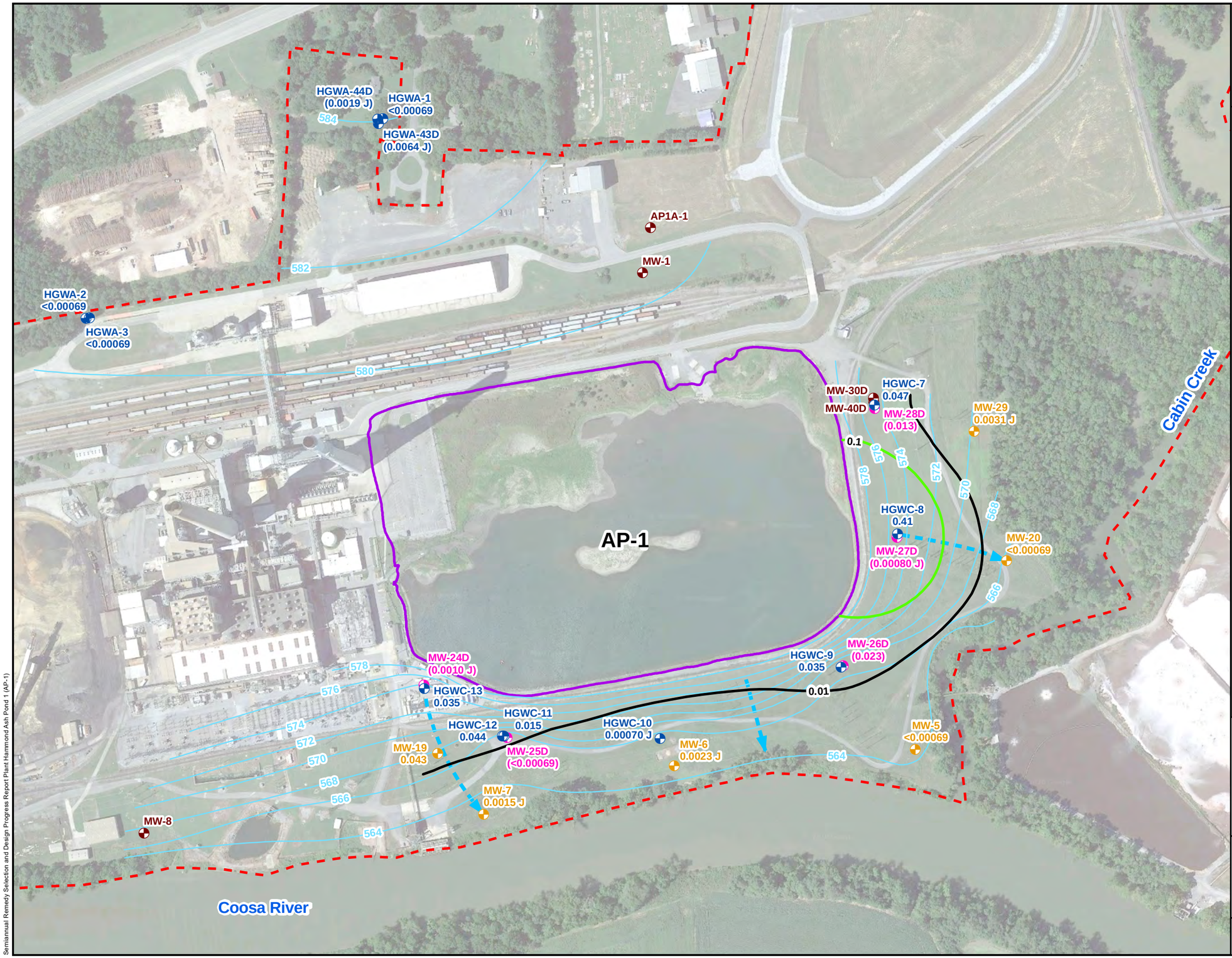
Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA | AUGUST 2021

FIGURE 4

Semiannual Remedy Selection and Design Progress Report - Plant Hammond Ash Pond 1 (AP-1)



N

LEGEND

- Compliance Monitoring Well
- Horizontal Delineation Well
- Vertical Delineation Well (Not Used for Contouring)
- Piezometer
- Federal GWPS Molybdenum Iso-Concentration Contour (mg/L)
- State GWPS Molybdenum Iso-Concentration Contour (mg/L)
- Groundwater Elevation Iso-Contour
- Approximate Groundwater Flow
- Approximate AP-1 Boundary
- Approximate Plant Hammond Property Boundary

Notes:

1. Concentration data from groundwater samples collected during the March 2021 semiannual monitoring event. Surface water data collected in March 2021. 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 March 10, 2021. Elevation provided in feet (ft) referenced to the North American Vertical Datum (NAVD) 88.
3. The state Groundwater Protection Standard (GWPS) for molybdenum is 0.010 mg/L; the federal GWPS is 0.10 mg/L.
4. Molybdenum concentrations for MW-26D and MW-28D for the most recent event are above the state GWPS. However, statistical analyses of the data have not identified Statistical Significant Levels of Molybdenum in these wells.
5. Aerial photograph source: Google Earth Pro, August 2019.

0 300 600

SCALE IN FEET

ISO-CONCENTRATION MAP MOLYBDENUM - MARCH 2021

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

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA | AUGUST 2021

FIGURE 5

Semiannual Remedy Selection and Design Progress Report Plant Hammond Ash Pond 1 (AP-1)

APPENDIX A

Field Sampling/Boring Log for DPT-07

Geosyntec consultants

BORING LOG

BORING NO.: DPT-07 PROJECT NO.: GWG591 PAGE 1 OF 2

SITE: Plant Hammond DATE: 1/28/21

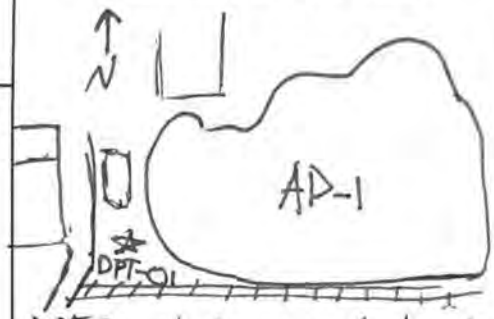
TOOLS AND METHOD: DPT BIT DIA: 1"

TOTAL DEPTH: 45' GROUNDWATER DEPTH: —

DRILLING COMPANY: Cascade RIG: Geoprobe

DRILLERS: Carry LOGGERS: Thomas Kessler

BOREHOLE LOCATION MAP



DPT Point By Water Treatment

LITHOLOGY LOG	DEPTH (ft)	GRAPHIC LOG	SAMPLE ID AND DEPTH	DRILLING LOG
~~0-5~~ 0-5 Sandy Clay, Brownish yellow (10YR 6/6) dry to moist, firm to hard, non plastic - medium plasticity (32-42)				Air vaced material, No sample
5-10 - SAA Silty Clay, reddish yellow (7.5yr 6/6) to Yellowish Brown (10YR 6/6) firm, dense, med. plasticity	5			
~~15-20~~ 10-15 Silty	10			
15-20 Silty Clay, light Brown (7.5YR 6/4), Soft, med. plasticity moist, gray mottling	15			
20-25 SAA, Soft to firm, moist, Color change Light gray (10YR 7/2) ~~[illegible]~~, Pale Brown mottling throughout	20			
25-30 Clay, Reddish Yellow (7.5YR 6/6) Dry to moist, Dense, Firm to Hard, med-low plasticity - med plasticity	25			
30-35 SAA, Hard, Color change yellowish red (5YR 5/8)	30			
35-40 Silty, Sandy Clay, Reddish Yellow (7.5YR 7/6 35' wet, firm to soft, med. plasticity, ~~poorly graded~~ uniform grain size	35			
	40			

Geosyntec consultants

BORING LOG

BORING NO.: DPT-07 PROJECT NO.: GWC5881 PAGE 1 OF 2

SITE: Plant Hammond DATE: 1/28/21

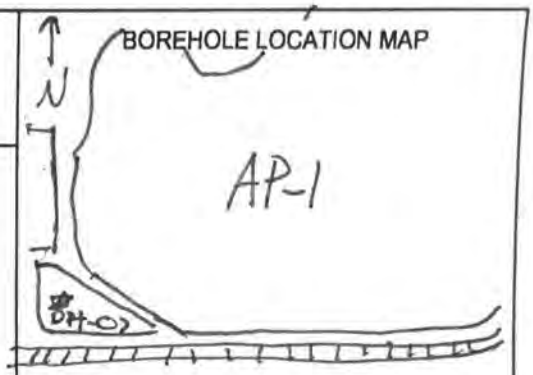
TOOLS AND METHOD: Sonic BIT DIA: 4"

TOTAL DEPTH: _____ GROUNDWATER DEPTH: —

DRILLING COMPANY: Cascadr RIG: Geoprobe

DRILLERS: Corey LOGGERS: Thomas Kressler

BOREHOLE LOCATION MAP



LITHOLOGY LOG	DEPTH (ft)	GRAPHIC LOG	SAMPLE ID AND DEPTH	DRILLING LOG
40-45 Sand, wet, Strong Brown (7.5YR5/8), loose	45			Samples 37-42 DPT-07A (Bags) 1508 DPT-07B (Canister) 1542 DPT-07C (Canister) 1614

APPENDIX B

SiREM Aquifer Solids Analytical Report

SiREM
Leading Science · Lasting Solutions

130 Stone Rd. W
Guelph, ON N1G 3Z2
(519) 822-2265

Certificate of Analysis
SiREMNA™ Parameters

Customer: Geosyntec Consultants Inc.

SiREM Reference: S-7677

Customer Project ID: Hammond AP-1 ACP Evaluation

Final Report Issued: 9 August 2021

Site Sampling Date: 28 January 2021

INTRODUCTION

Geosyntec Consultants Inc. (Geosyntec) retained SiREM to perform SiREMNA™ testing including anion exchange capacity (AEC), cation exchange capacity (CEC), total sulfur, total sulfide, organic carbon content, total metals, X-Ray Diffraction (XRD) and Scanning Electron Microscopy (SEM) with Energy Dispersive X-Ray analysis (EDXA) from geologic materials collected at the Hammond AP-1 ACP Site (the Site).

Site geologic materials were collected on 28 January 2021. SiREM received the samples on 23 March 2021 in good condition with a measured temperature of 14°C. Refer to Attachment A for Chain of Custody documentation received with the samples.

The site materials were stored in a cold room at 4°C upon arrival until testing commenced. On 25 March 2021 geologic material samples were individually homogenized and subsampled in a chemical fume hood prior to shipping to an external laboratory for analysis. The samples were shipped to external laboratories for analysis as outlined in the summary table below. Prior to performing the XRD analysis, SGS performed whole rock analysis on the samples to have as a reference for the mineral identification by XRD. Refer to Attachment B for the original external laboratory reports.

METHOD SUMMARY TABLE

Parameter	Method	Laboratory
Total sulfur, total sulfide and organic carbon content	ASTM E1915-13	SGS, Lakefield, Ontario
Total metals	EPA 200.8	
Whole Rock Analysis	Borate Fusion and Xray Fluorescence Spectrometry	
XRD	Rietveld refinement method	
SEM and EDXA	SGS Internal method	
CEC	EPA method SW9081	SGS, Guelph, Ontario
AEC	Modified EPA method SW9081	Specialty Analytical, Clackamas, Oregon

METHOD REFERENCES

ASTM W1915-13: Standard Test Methods for Analysis of Metal Bearing Ores and Related Materials for Carbon, Sulfur, and Acid-Base Characteristics

EPA 200.8: Determination of Trace Elements in Waters and Wastes by Inductively Coupled Plasma-Mass Spectrometry

The Rietveld Method of Mineral Identification by XRD (ME-LR-MIN-MET-MN-D05) is the method used by SGS and is accredited to the requirements of ISO/IEC 17025

Borate Fusion and Xray Fluorescence Spectrometry is the method used by SGS and is accredited to the requirements of ISO/IEC 17025

SEM-EDS analysis is conducted using the Tescan Vega II SEM which is equipped with an Oxford EDS detector

EPA 9081: Cation-Exchange Capacity of Soils (Sodium Acetate)

Modified EPA 9081: Anion-Exchange Capacity of Soils. Sodium nitrate used in place of sodium acetate to exchange anions, washed with isopropyl alcohol and nitrate extracted with sodium chloride. Nitrate analyzed by SM4500-NO_3-F.

TABLES

SiREM
Leading Science · Lasting Solutions

130 Stone Rd. W
Guelph, ON N1G 3Z2
(519) 822-2265

Analytical Results

SiREM File Reference: S-7677

Client: Geosyntec Consultants Inc.
Client Project Number: GW6581B/14;GW6581/22
Date Samples Received: March 23, 2021
Date Samples Analyzed: April 4, 12, 13 and 29, 2021

Client Sample ID	Laboratory Sample ID	Client Sample Date	Anion Exchange Capacity	Cation Exchange Capcity	Total Sulfur	Total Sulfide	Total Organic Carbon
			meq/100g	meq/100g	%	%	%
DPT07_AP1_012821_32-42	21-3166	28-Jan-21	5.13	7.83	0.022	< 0.04	0.07

Comments:
% - percent
< - compound not detected, the associated value is the detection limit
meq/100g - milliequivalents per 100 grams

Analyst:

Kela Ashworth, B.Sc.
Senior Laboratory Technician

Results approved:

Michael Healey, B.Sc.
Laboratory Supervisor I

Date:

9-Aug-21

SiREM
Leading Science · Lasting Solutions

130 Stone Rd. W
Guelph, ON N1G 3Z2
(519) 822-2265

Analytical Results - Total Metals

SiREM File Reference: S- S-7677

Client: Geosyntec Consultants Inc.
Client Project Number: GW6581B/14;GW6581/22
Date Samples Received: March 23, 2021
Date Samples Analyzed: April 15, 2021

Client Sample ID	Laboratory Sample ID	Client Sample Date	Molybdenum	Lithium	Cobalt	Arsenic	Iron	Aluminum	Manganese
			µg/g	µg/g	µg/g	µg/g	µg/g	µg/g	µg/g
DPT07_AP1_012821_32-42	21-3166	28-Jan-21	1.4	24	7.0	7.8	20,000	42,000	100

Comments:
µg/g - microgram per gram

Analyst:

Kela Ashworth, B.Sc.
Senior Laboratory Technician

Results approved:

Michael Healey, B.Sc.
Laboratory Supervisor I

Date:

9-Aug-21

SiREM
Leading Science · Lasting Solutions

130 Stone Rd. W
Guelph, ON N1G 3Z2
(519) 822-2265

Analytical Results - Whole Rock Analysis

SiREM File Reference: S- S-7677

Client: Geosyntec Consultants Inc.
Client Project Number: GW6581B/14;GW6581/22
Date Samples Received: March 23, 2021
Date Samples Analyzed: April 6, 2021

Client Sample ID	Laboratory Sample ID	Client Sample Date	Quartz (SiO2)	Aluminum Oxide (Al2O3)	Ferric Oxide (Fe2O3)	Magnesium Oxide (MgO)	Calcium Oxide (CaO)	Sodium Oxide (Na2O)	Potassium Oxide (K2O)	Titanium Dioxide (TiO2)	Phosphorous Pentoxide (P2O5)	Manganese Oxide (MnO)	Chromium (III) Oxide (Cr2O3)	Vanadium Oxide (V2O5)	Loss on Ignition
			%	%	%	%	%	%	%	%	%	%	%	%	%
DPT07_AP1_012821_32-42	21-3166	28-Jan-21	80.8	9.02	3.21	0.29	0.12	0.10	1.07	0.90	0.04	0.01	< 0.01	0.02	4.02

Comments:
< - compound not detected, the associated value is the detection limit
% - percent

Analyst:

Kela Ashworth, B.Sc.
Senior Laboratory Technician

Results approved:

Michael Healey, B.Sc.
Laboratory Supervisor I

Date:

9-Aug-21

130 Stone Rd. W
Guelph, ON N1G 3Z2
(519) 822-2265

Analytical Results - Rietveld Quantitative X-Ray Diffraction

SiREM File Reference: S- S-7677

Client: Geosyntec Consultants Inc.
Client Project Number: GW6581B/14;GW6581/22
Date Samples Received: March 23, 2021
Date Samples Analyzed: April 16, 2021

Client Sample ID	Laboratory Sample ID	Client Sample Date	Quartz	Kaolinite	Muscovite	Microcline	Rutile	Albite	Anatase
			wt %	wt %	wt %	wt %	wt %	wt %	wt %
DPT07_AP1_012821_32-42	21-3166	28-Jan-21	68.9	15.8	10.9	1.9	0.4	1.8	0.2

Comments:
wt % - weight percent

Analyst:

Kela Ashworth, B.Sc.
Senior Laboratory Technician

Results approved:

Michael Healey, B.Sc.
Laboratory Supervisor I

Date:

9-Aug-21

ATTACHMENT A: Chain of Custody Documentation

SiREM

Chain-of-Custody Form

siremlab.com

130 Stone Road West
Guelph ON, Canada N1G 3Z2
(519) 822-2265

Lab # S-7677

*Project Name: Hammond AP1 AP2 AP3 ACM evaluation	*Project #: GW6581B/14; GW6581/22
*Project Manager: Whitney Law	*Company: Geosyntec Consultants
*Email Address: wlaw@geosyntec.com	
Address (Street): 1255 Roberts Blvd, NW, Suite 200	
City: Kennesaw	State/Province: GA	Country: USA
*Phone #: 678-202-9573	
*Sampler's Signature	*Sampler's Printed Name

Client Sample ID	Sampling Date	Sampling Time	Matrix	# of Containers	Anion exchange capacity (AEC)	Cation exchange capacity (CEC)	Total sulfur	Total sulfide	Organic carbon content	X-ray diff., SEM, EDXA	Total metal conc (see notes	Other Information
					2	2	2	2	2	2	2	
DPT07_AP1_012821_32-42	1/28/21		S	2	X	X	X	X	X	X	X	Rept total conc for: Mo, Li, F, As, Fe, Al, Mg
DPT11_AP2_012721_30-40	01/27/21		S	2	X	X	X	X	X	X	X	Rept total conc for: Mo, Co, Li, Fe, Al, Mg
DPT08_AP2_012621_10-20	1/26/21		S	2	X	X	X	X	X	X	X	Rept total conc for: Mo, Co, Li, Fe, Al, Mg
DPT07_AP2_020221_10-20	2/2/21		S	2	X	X	X	X	X	X	X	Rept total conc for: Mo, Co, Li, Fe, Al, Mg
DPT01_AP3_012921_10-18	1/29/21		S	2	X	X	X	X	X	X	X	Rept total conc for: Mo, Li, Fe, Al, Mn
DPT03_AP3_020121_13-18	2/1/21		S	1	X	X	X	X	X	X	X	Rept total conc for: Mo, Li, Fe, Al, Mn
DPT02_AP3_020121_13-18	2/1/21		S	1	X	X	X	X	X	X	X	Rept total conc for: Mo, Li, Fe, Al, Mn
DPT04_AP3_020121_13-21	2/1/21		S	2	X	X	X	X	X	X	X	Rept total conc for: Mo, Li, Fe, Al, Mn
DPT09_AP2_012621_20-30	1/26/21		S	2	X	X	X	X	X	X	X	Rept total conc for: Mo, Co, Li, Fe, Al, Mg
DPT10_AP2_012721_25-35	1/27/21		S	2	X	X	X	X	X	X	X	Rept total conc for: Mo, Co, Li, Fe, Al, Mg

WL 3/18/21

Preservative Key
0. None
1. HCL
2. Other ICE
3. Other
4. Other
5. Other
6. Other

Billing Information
P.O. #:
*Bill To: Speak with PM on how to partition invoice

Turnaround Time Requested
Normal [X]
Rush [ ]

For Lab Use Only
Cooler Condition: Good.
Cooler Temperature: 14°C
Custody Seals: Yes [ ] No [ ]

For Lab Use Only
Proposal #:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature: WLaw	Signature: NBrent	Signature:	Signature:	Signature:	Signature:
Printed Name: Whitney Law	Printed Name: Natasha Brent	Printed Name:	Printed Name:	Printed Name:	Printed Name:
Firm: Geosyntec Consultants	Firm: ~~FedEx~~ SiREM	Firm:	Firm:	Firm:	Firm:
Date/Time: 3/18/21, 16:00	Date/Time: 23 Mar 21 13 55	Date/Time:	Date/Time:	Date/Time:	Date/Time:

Distribution: White - return to Originator; Yellow - Lab Copy; Pink - Retained by Client

** Mandatory Fields*

ATTACHMENT B: External Laboratory Reports

SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

Project : S-7677

16-April-2021

SiREM Laboratory
Attn : Kela Ashworth

130 Stone Rd. W
Guelph, ON
N1G 3Z2, Canada

Phone: 519-822-2265
Fax:519-822-3151

Date Rec. : 26 March 2021
LR Report: **CA14601-MAR21**

Copy: #1

CERTIFICATE OF ANALYSIS

Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: S-7677_1_DPT 07AP1	6: S-7677_2_DPT 11AP2	7: S-7677_3_DPT 08AP2	8: S-7677_4_DPT 07AP2	9: S-7677_5_DPT 01AP3
Sample Date & Time					25-Mar-21	25-Mar-21	25-Mar-21	25-Mar-21	25-Mar-21
Ag [µg/g]	15-Apr-21	19:04	16-Apr-21	10:28	< 1	< 1	< 1	< 1	< 1
Al [µg/g]	15-Apr-21	19:04	16-Apr-21	10:28	42000	57000	48000	77000	67000
As [µg/g]	15-Apr-21	19:04	16-Apr-21	10:28	7.8	4.6	8.2	9.4	6.7
Ba [µg/g]	15-Apr-21	19:04	16-Apr-21	10:28	220	260	200	280	180
Be [µg/g]	15-Apr-21	19:04	16-Apr-21	10:28	1.1	1.3	1.3	2.4	4.2
Bi [µg/g]	15-Apr-21	19:04	16-Apr-21	10:28	0.18	0.25	0.20	0.37	0.30
Ca [µg/g]	15-Apr-21	19:04	16-Apr-21	10:28	830	1300	1100	1900	1900
Cd [µg/g]	15-Apr-21	19:04	16-Apr-21	10:28	0.02	0.03	0.33	0.58	0.15
Co [µg/g]	15-Apr-21	19:04	16-Apr-21	10:28	7	7	10	14	21
Cr [µg/g]	15-Apr-21	19:04	16-Apr-21	10:28	40	56	57	150	70
Cu [µg/g]	15-Apr-21	19:04	16-Apr-21	10:28	8.2	13	13	22	32
Fe [µg/g]	15-Apr-21	19:04	16-Apr-21	10:28	20000	39000	24000	31000	37000
K [µg/g]	15-Apr-21	19:04	16-Apr-21	10:28	7900	10000	11000	20000	18000
Li [µg/g]	15-Apr-21	19:04	16-Apr-21	10:28	24	27	45	46	55
Mg [µg/g]	15-Apr-21	19:04	16-Apr-21	10:28	1600	3500	2500	5800	8500
Mn [µg/g]	15-Apr-21	19:04	16-Apr-21	10:28	100	190	230	170	780
Mo [µg/g]	15-Apr-21	19:04	16-Apr-21	10:28	1.4	1.0	1.0	2.2	0.6
Ni [µg/g]	15-Apr-21	19:04	16-Apr-21	10:28	14	19	24	55	51
Pb [µg/g]	15-Apr-21	19:04	16-Apr-21	10:28	15	18	16	19	17
Sb [µg/g]	15-Apr-21	19:04	16-Apr-21	10:28	< 0.8	< 0.8	< 0.8	1.2	< 0.8
Se [µg/g]	15-Apr-21	19:04	16-Apr-21	10:28	< 0.7	< 0.7	< 0.7	4.7	< 0.7
Sn [µg/g]	15-Apr-21	19:04	16-Apr-21	10:28	< 6	< 6	< 6	< 6	< 6
Sr [µg/g]	15-Apr-21	19:04	16-Apr-21	10:28	38	40	79	150	39
Ti [µg/g]	15-Apr-21	19:04	16-Apr-21	10:28	3500	3900	2600	3300	2900
Tl [µg/g]	15-Apr-21	19:04	16-Apr-21	10:28	0.34	0.47	0.36	0.64	0.49
U [µg/g]	15-Apr-21	19:04	16-Apr-21	10:28	2.0	2.6	1.6	3.0	3.3
V [µg/g]	15-Apr-21	19:04	16-Apr-21	10:28	53	67	71	150	84
Y [µg/g]	15-Apr-21	19:04	16-Apr-21	10:28	16	16	14	30	36
Zn [µg/g]	15-Apr-21	19:04	16-Apr-21	10:28	39	49	59	120	84
S [%]	12-Apr-21	10:54	13-Apr-21	11:02	0.022	0.034	0.033	0.811	0.023
C [%]	12-Apr-21	10:54	13-Apr-21	11:00	0.078	0.128	0.167	1.09	0.201
Sulphide [%]	13-Apr-21	07:21	13-Apr-21	11:02	< 0.04	0.04	0.05	0.85	< 0.04
TOC [%]	12-Apr-21	13:24	13-Apr-21	11:00	0.066	0.114	0.155	1.06	0.174

OnLine LIMS

00024905

Data reported represents the sample submitted to SGS. Reproduction of this analytical report in full or in part is prohibited without prior written approval. Please refer to SGS General Conditions of Services located at https://www.sgs.ca/en/terms-and-conditions (Printed copies are available upon request.)
Test method information available upon request. "Temperature Upon Receipt" is representative of the whole shipment and may not reflect the temperature of individual samples.
SGS Canada Inc. Environment-Health & Safety statement of conformity decision rule does not consider uncertainty when analytical results are compared to a specified standard or regulation.

SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

Project : S-7677

LR Report : **CA14601-MAR21**

Analysis	10: S-7677_6_DPT 03AP3	11: S-7677_7_DPT 02AP3	12: S-7677_8_DPT 04AP3	13: S-7677_9_DPT 09AP2	14: S-7677_10_DP T10AP2
Sample Date & Time	25-Mar-21	25-Mar-21	25-Mar-21	25-Mar-21	25-Mar-21
Ag [µg/g]	< 1	< 1	< 1	< 1	< 1
Al [µg/g]	47000	57000	71000	59000	69000
As [µg/g]	6.7	7.3	8.7	4.7	5.3
Ba [µg/g]	230	280	310	410	500
Be [µg/g]	2.2	2.3	3.6	1.9	1.8
Bi [µg/g]	0.13	0.27	0.30	0.25	0.25
Ca [µg/g]	12000	19000	3500	2600	3000
Cd [µg/g]	0.15	0.08	0.28	0.36	0.14
Co [µg/g]	14	12	18	13	14
Cr [µg/g]	46	48	83	60	57
Cu [µg/g]	20	25	30	14	24
Fe [µg/g]	33000	31000	42000	27000	36000
K [µg/g]	26000	33000	34000	12000	17000
Li [µg/g]	280	210	110	35	33
Mg [µg/g]	25000	25000	13000	3800	5800
Mn [µg/g]	430	640	510	380	540
Mo [µg/g]	0.6	3.6	2.0	0.8	0.9
Ni [µg/g]	35	35	67	25	24
Pb [µg/g]	11	13	15	20	20
Sb [µg/g]	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
Se [µg/g]	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7
Sn [µg/g]	< 6	< 6	< 6	< 6	< 6
Sr [µg/g]	63	130	70	55	66
Ti [µg/g]	2500	2700	2700	3800	4000
Tl [µg/g]	0.43	0.49	0.70	0.57	0.62
U [µg/g]	2.7	3.5	3.1	2.9	2.9
V [µg/g]	69	67	92	75	81
Y [µg/g]	16	29	32	31	25
Zn [µg/g]	60	67	95	85	82
S [%]	0.008	0.005	0.006	0.030	0.014
C [%]	0.526	1.05	0.208	0.496	0.179
Sulphide [%]	< 0.04	< 0.04	< 0.04	0.04	< 0.04
TOC [%]	0.293	0.601	0.188	0.479	0.151

Catharine Arnold

CHARTERED CHEMIST — CATHARINE ARNOLD — THE CHEMICAL PROFESSION OF ONTARIO

Catharine Arnold, B.Sc., C.Chem
Project Specialist,
Environment, Health & Safety

OnLine LIMS

0002464905

Data reported represents the sample submitted to SGS. Reproduction of this analytical report in full or in part is prohibited without prior written approval. Please refer to SGS General Conditions of Services located at https://www.sgs.ca/en/terms-and-conditions (Printed copies are available upon request.)
Test method information available upon request. "Temperature Upon Receipt" is representative of the whole shipment and may not reflect the temperature of individual samples.
SGS Canada Inc. Environment-Health & Safety statement of conformity decision rule does not consider uncertainty when analytical results are compared to a specified standard or regulation.

SGS	**Minerals** **Geochemistry** **Lakefield Laboratory**	Revision **2.7** Doc Type **Method Summary** Method No: **GO/GC/GT_XR** Code **F76V** Service **Testing** Issued Date **23/Sep/2014**
Minerals	**Preparation and Determination of Major Element Oxides, LOI and Rare Earth Oxides in Oxide Ores, and Process Control and Trade Products by Borate Fusion and Xray Fluorescence Spectrometry** [SiO_2, Al_2O_3, Fe_2O_3, MgO, CaO, Na_2O, K_2O, P_2O_5, MnO, TiO_2, Cr_2O_3; V_2O_5; LOI; additions BaO; Ce_2O_3; Nd_2O_3, La_2O_3; Pr_2O_3, Sm_2O_3; Nb_2O_5, ThO_2, Ta_2O_5; SnO_2; SrO; ZrO_2; HfO_2; Y_2O_3; WO_3; U_3O_8; Co; Ni ; XRF]	Approved by **K. Patel**

1. **Parameter(s) measured, unit(s):**
   Silicon Dioxide (SiO_2), Aluminum Oxide (Al_2O_3), Iron(III) Oxide (Fe_2O_3), Magnesium Oxide (MgO), Calcium Oxide (CaO), Sodium Oxide (Na_2O), Potassium Oxide (K_2O), Phosphorus Pentoxide (P_2O_5), Manganese Oxide (MnO), Titanium Dioxide (TiO_2), Chromium (III) Oxide (Cr_2O_3), Vanadium Oxide (V_2O_5), LOI, in %
   Barium Oxide (BaO), Cerium (III) Oxide(Ce_2O_3), Neodymium Oxide (Nd_2O_3), Lanthanum Oxide (La_2O_3), Praseodymium Oxide (Pr_2O_3), Samarium Oxide (Sm_2O_3), Niobium Pentoxide (Nb_2O_5), Thorium Dioxide (ThO_2), Tantalum Pentoxide (Ta_2O_5), Tin Dioxide (SnO_2) Uranium Oxide (U_3O_8), Cobalt (Co), Nickel (Ni), Strontium Oxide (SrO), Zirconium Dioxide (ZrO_2), Hafnium Oxide (HfO_2), Yttrium Oxide (Y_2O_3), Tungsten Trioxide (WO_3) in % can be added as additions

2. **Typical sample size:**
   0.2 to 0.5g, 1g additional for LOI analysis

3. **Type of sample applicable (media):**
   Rocks, oxide ores, concentrates and catalysts

4. **Sample preparation technique used:**
   Samples are crushed and pulverized according to client specified instructions or default preparation procedures. This method is used to report, in percentage, the whole rock suite (SiO_2, Al_2O_3, Fe_2O_3, MgO, CaO, Na_2O, K_2O, P_2O_5, MnO, TiO_2, Cr_2O_3 ,V_2O_5). Sample preparation entails the formation of a homogenous glass disk by the fusion of the sample and a lithium tetraborate/lithium metaborate mixture. The LOI is determined separately and gravimetrically at 1000°C.

5. **Method of analysis used:**
   The prepared disks are analyzed by wavelength dispersion X-ray fluorescence (WD-XRF). The

LOI is included in the matrix correction calculations, which are performed by the XRF software.

6. **Data reduction by:**
Computer, on line, data fed to Laboratory Information Management System with secure audit trail.

.

7. **Figures of Merit:**
This method has been fully validated for the range of samples typically analyzed. Method validation includes the use of reference materials, replicates, duplicates and blanks to calculate accuracy, precision, linearity, range, limit of detection, reporting limit, specificity and measurement uncertainty.

The reporting limits has been determined according to the following

Element	Report Limit %
SiO2	0.01
Al2O3	0.01
MgO	0.01
Na2O	0.01
K2O	0.01
CaO	0.01
P2O5	0.01
TiO2	0.01
Cr2O3	0.01
V2O5	0.01
Fe2O3	0.01
MnO	0.01
LOI	-10

*upper limit for all elements is 100%. A negative LOI indicates a gain on ignition

8. **Quality control:**
Quality control materials include method blanks, replicates and reference materials and are randomly inserted with the frequency set according to method protocols at ~12% for ore grade analysis and 18% for process control analysis. Quality control materials will also include BRM (Barren reference materials, or preparations blanks) and preparation duplicates if samples have been taken through the sample reduction process. Party quality samples are assayed in replicate, umpire quality samples are in triplicate. Calibration materials that cover the range upon method set-up; calibration check performed daily.

9. **Accreditation:**
The Standards Council of Canada has accredited this test in conformance with the requirements of ISO/IEC 17025. See www.scc.ca/en/search/palcan for scope of accreditation.

Note: Scopes of accreditation are site specific, please check with the local representative.

SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

Project : S-7677

06-April-2021

SiREM Laboratory
Attn : Kela Ashworth

130 Stone Rd. W, Guelph
Canada, N1G 3Z2
Phone: 519-822-2265, Fax:519-822-3151

Date Rec. : 26 March 2021
LR Report: **CA14602-MAR21**
Reference: P.O# 800003210A

Copy: #1

CERTIFICATE OF ANALYSIS
Final Report

Analysis	5: S-7677_1_DPT 07AP1	6: S-7677_2_DPT 11AP2	7: S-7677_3_DPT 08AP2	8: S-7677_4_DPT 07AP2	9: S-7677_5_DPT 01AP3	10: S-7677_6_DPT 03AP3	11: S-7677_7_DPT 02AP3	12: S-7677_8_DPT 04AP3	13: S-7677_9_DPT 09AP2	14: S-7677_10_DPT 10AP2
Sample Date & Time	25-Mar-21	25-Mar-21	25-Mar-21	25-Mar-21	25-Mar-21	25-Mar-21	25-Mar-21	25-Mar-21	25-Mar-21	25-Mar-21
SiO2 [%]	80.8	72.2	78.6	65.6	66.9	63.5	60.9	62.7	72.9	67.3
Al2O3 [%]	9.02	11.9	10.3	16.3	14.1	11.4	11.9	14.4	12.0	14.2
Fe2O3 [%]	3.21	6.23	3.90	4.99	5.98	5.42	5.01	6.63	4.17	5.66
MgO [%]	0.29	0.61	0.46	1.04	1.54	4.94	4.49	2.28	0.66	1.03
CaO [%]	0.12	0.19	0.14	0.24	0.30	1.94	2.96	0.52	0.38	0.43
Na2O [%]	0.10	0.12	0.14	0.39	0.07	0.09	0.27	0.25	0.26	0.56
K2O [%]	1.07	1.40	1.53	2.70	2.43	3.76	4.39	4.53	1.54	2.21
TiO2 [%]	0.90	0.97	0.60	0.74	0.64	0.50	0.57	0.54	0.96	1.02
P2O5 [%]	0.04	0.09	0.07	0.11	0.20	0.25	0.28	0.31	0.07	0.12
MnO [%]	0.01	0.02	0.04	0.02	0.10	0.05	0.09	0.06	0.06	0.07
Cr2O3 [%]	< 0.01	< 0.01	0.01	0.03	< 0.01	0.02	0.02	0.02	< 0.01	0.01
V2O5 [%]	0.02	0.02	< 0.01	0.02	0.02	0.02	< 0.01	0.01	0.01	0.01
LOI [%]	4.02	5.90	4.03	7.11	7.35	7.89	8.73	6.97	6.11	6.69
Sum [%]	99.6	99.6	99.8	99.3	99.7	99.7	99.6	99.2	99.1	99.4

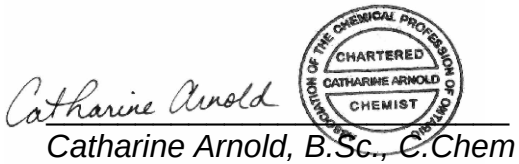
OnLine LIMS

0002451948

Data reported represents the sample submitted to SGS. Reproduction of this analytical report in full or in part is prohibited without prior written approval. Please refer to SGS General Conditions of Services located at https://www.sgs.ca/en/terms-and-conditions (Printed copies are available upon request.)
Test method information available upon request. "Temperature Upon Receipt" is representative of the whole shipment and may not reflect the temperature of individual samples.
SGS Canada Inc. Environment-Health & Safety statement of conformity decision rule does not consider uncertainty when analytical results are compared to a specified standard or regulation.

SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

Project : S-7677
LR Report : **CA14602-MAR21**



Catharine Arnold, B.Sc., C.Chem
Project Specialist,
Environment, Health & Safety

OnLine LIMS

0002451948

Data reported represents the sample submitted to SGS. Reproduction of this analytical report in full or in part is prohibited without prior written approval. Please refer to SGS General Conditions of Services located at https://www.sgs.ca/en/terms-and-conditions (Printed copies are available upon request.)
Test method information available upon request. "Temperature Upon Receipt" is representative of the whole shipment and may not reflect the temperature of individual samples.
SGS Canada Inc. Environment-Health & Safety statement of conformity decision rule does not consider uncertainty when analytical results are compared to a specified standard or regulation.

Quantitative X-Ray Diffraction by Rietveld Refinement

Report Prepared for:	*Environmental Services*
Project Number/ LIMS No.	*Custom MIN/MI5060-MAR21*
Sample Receipt:	*March 30, 2021*
Sample Analysis:	*April 12, 2021*
Reporting Date:	*May 5, 2021*

Instrument:	BRUKER AXS D8 Advance Diffractometer
Test Conditions:	Co radiation, 35 kV, 40 mA Regular Scanning: Step: 0.02°, Step time: 1s, 2θ range: 3-80°
Interpretations :	PDF2/PDF4 powder diffraction databases issued by the International Center for Diffraction Data (ICDD). DiffracPlus Eva and Topas software.
Detection Limit :	0.5-2%. Strongly dependent on crystallinity.

Contents:

1) Method Summary
2) Quantitative XRD Results
3) XRD Pattern(s)

Kim Gibbs, H.B.Sc., P.Geo.
Senior Mineralogist

Huyun Zhou, Ph.D., P.Geo.
Senior Mineralogist

ACCREDITATION: SGS Minerals Services Lakefield is accredited to the requirements of ISO/IEC 17025 for specific tests as listed on our scope of accreditation, including geochemical, mineralogical and trade mineral tests. To view a list of the accredited methods, please visit the following website and search SGS Canada - Minerals Services - Lakefield: http://palcan.scc.ca/SpecsSearch/GLSearchForm.do.

Method Summary

The Rietveld Method of Mineral Identification by XRD (ME-LR-MIN-MET-MN-D05) method used by SGS Minerals Services is accredited to the requirements of ISO/IEC 17025.

Mineral Identification and Interpretation:

Mineral identification and interpretation involves matching the diffraction pattern of an unknown material to patterns of single-phase reference materials. The reference patterns are compiled by the Joint Committee on Powder Diffraction Standards - International Center for Diffraction Data (JCPDS-ICDD) database and released on software as Powder Diffraction Files (PDF).

Interpretations do not reflect the presence of non-crystalline and/or amorphous compounds, except when internal standards have been added by request. Mineral proportions may be strongly influenced by crystallinity, crystal structure and preferred orientations. Mineral or compound identification and quantitative analysis results should be accompanied by supporting chemical assay data or other additional tests.

Quantitative Rietveld Analysis:

Quantitative Rietveld Analysis is performed by using Topas 4.2 (Bruker AXS), a graphics based profile analysis program built around a non-linear least squares fitting system, to determine the amount of different phases present in a multicomponent sample. Whole pattern analyses are predicated by the fact that the X-ray diffraction pattern is a total sum of both instrumental and specimen factors. Unlike other peak intensity-based methods, the Rietveld method uses a least squares approach to refine a theoretical line profile until it matches the obtained experimental patterns.

Rietveld refinement is completed with a set of minerals specifically identified for the sample. Zero values indicate that the mineral was included in the refinement calculations, but the calculated concentration was less than 0.05wt%. Minerals not identified by the analyst are not included in refinement calculations for specific samples and are indicated with a dash.

DISCLAIMER: This document is issued by the Company under its General Conditions of Service accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

WARNING: The sample(s) to which the findings recorded herein (the "Findings") relate was(were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativeness of any goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted.

Summary of Rietveld Quantitative Analysis X-Ray Diffraction Results

Mineral/Compound	S-7677_1_DPT07AP1 MAR5060-01 (wt %)	S-7677_2_DPT11AP2 MAR5060-02 (wt %)	S-7677_3_DPT08AP2 MAR5060-03 (wt %)	S-7677_4_DPT07AP2 MAR5060-04 (wt %)	S-7677_5_DPT01AP3 MAR5060-05 (wt %)
Quartz	68.9	59.3	65.6	43.7	46.1
Kaolinite	15.8	19.1	12.7	12.7	17.1
Muscovite	10.9	16.4	17.2	33.1	26.9
Microcline	1.9	1.5	1.7	3.0	5.1
Rutile	0.4	0.9	0.5	1.1	1.1
Albite	1.8	2.3	2.1	4.5	2.4
Anatase	0.2	0.5	0.2	0.8	1.2
Pyrite	-	-	-	1.3	-
Orthoclase	-	-	-	-	-
Calcite	-	-	-	-	-
Montmorillonite	-	-	-	-	-
Diopside	-	-	-	-	-
Biotite	-	-	-	-	-
TOTAL	100	100	100	100	100

Zero values indicate that the mineral was included in the refinement, but the calculated concentration is below a measurable value.

Dashes indicate that the mineral was not identified by the analyst and not included in the refinement calculation for the sample.

The weight percent quantities indicated have been normalized to a sum of 100%. The quantity of amorphous material has not been determined.

Mineral/Compound	Formula
Quartz	SiO_2
Kaolinite	$Al_2Si_2O_5(OH)_4$
Muscovite	$KAl_2(AlSi_3O_{10})(OH)_2$
Microcline	$KAlSi_3O_8$
Rutile	TiO_2
Albite	$NaAlSi_3O_8$
Anatase	TiO_2
Pyrite	FeS_2
Orthoclase	$KAlSi_3O_8$
Calcite	$CaCO_3$
Montmorillonite	$(Na,Ca)_{0.3}(Al,Mg)_2Si_4O_{10}(OH)_2 \cdot nH_2O$
Diopside	$CaMgSi_2O_6$
Biotite	$K(Mg,Fe)_3(AlSi_3O_{10})(OH)$

Summary of Rietveld Quantitative Analysis X-Ray Diffraction Results

Mineral/Compound	S-7677_6_DPT03AP3 MAR5060-06 (wt %)	S-7677_7_DPT02AP3 MAR5060-07 (wt %)	S-7677_8_DPT04AP3 MAR5060-08 (wt %)	S-7677_9_DPT09AP2 MAR5060-09 (wt %)	S-7677_10_DPT10AP2 MAR5060-10 (wt %)
Quartz	45.0	36.6	37.2	62.6	45.1
Kaolinite	16.2	17.7	21.8	20.4	22.0
Muscovite	9.0	8.0	8.7	7.9	23.0
Microcline	-	-	-	-	-
Rutile	0.6	0.9	0.9	0.3	0.7
Albite	2.1	3.8	3.9	4.3	7.0
Anatase	0.7	0.7	0.9	1.0	0.4
Pyrite	-	-	-	0.4	-
Orthoclase	16.5	20.4	20.4	0.6	1.9
Calcite	3.8	2.8	0.3	0.2	-
Montmorillonite	6.2	0.5	0.7	-	-
Diopside	-	3.8	3.2	2.4	-
Biotite	-	4.7	2.0	-	-
TOTAL	100	100	100	100	100

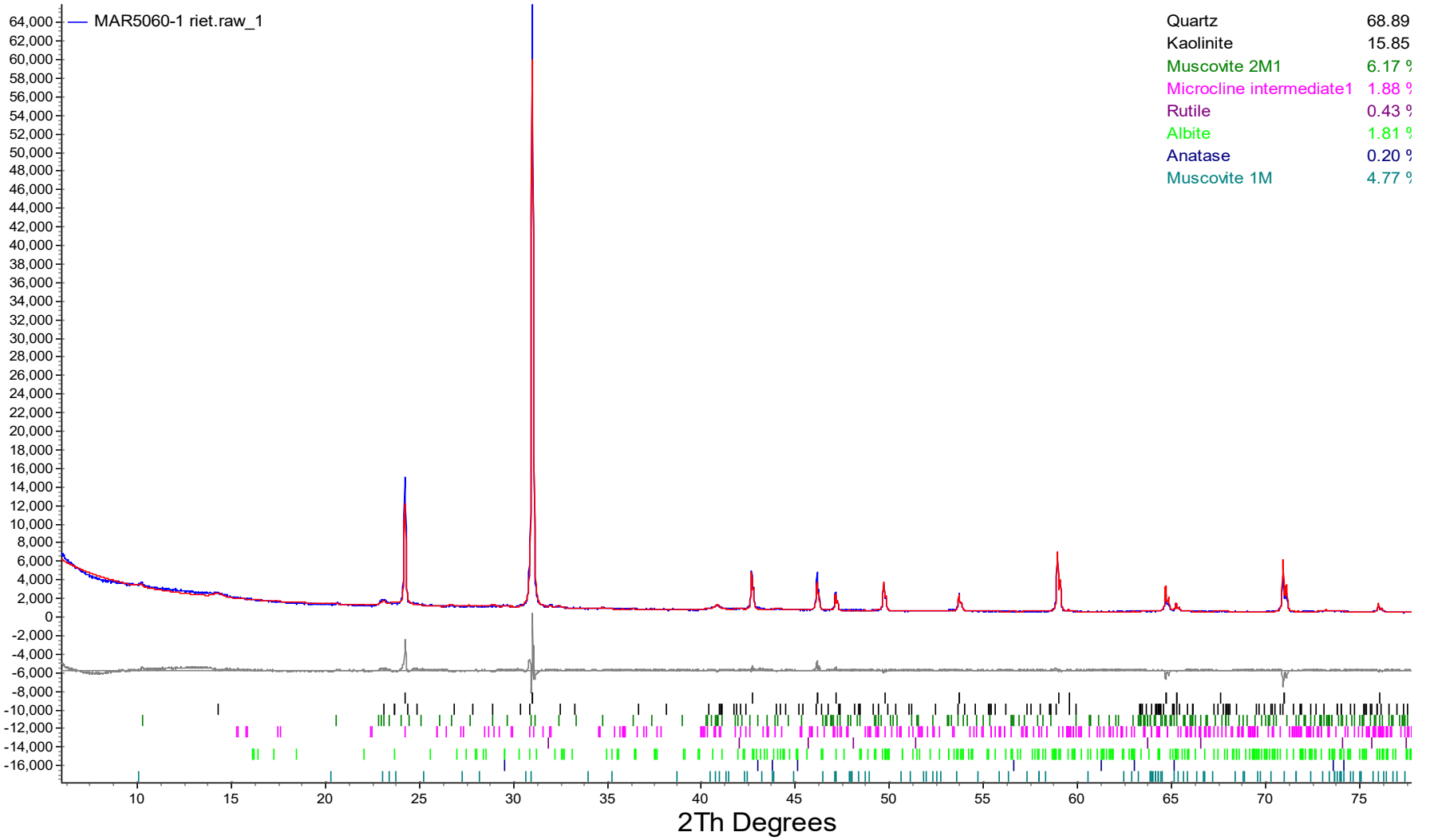
Zero values indicate that the mineral was included in the refinement, but the calculated concentration is below a measurable value.

Dashes indicate that the mineral was not identified by the analyst and not included in the refinement calculation for the sample.

The weight percent quantities indicated have been normalized to a sum of 100%. The quantity of amorphous material has not been determined.

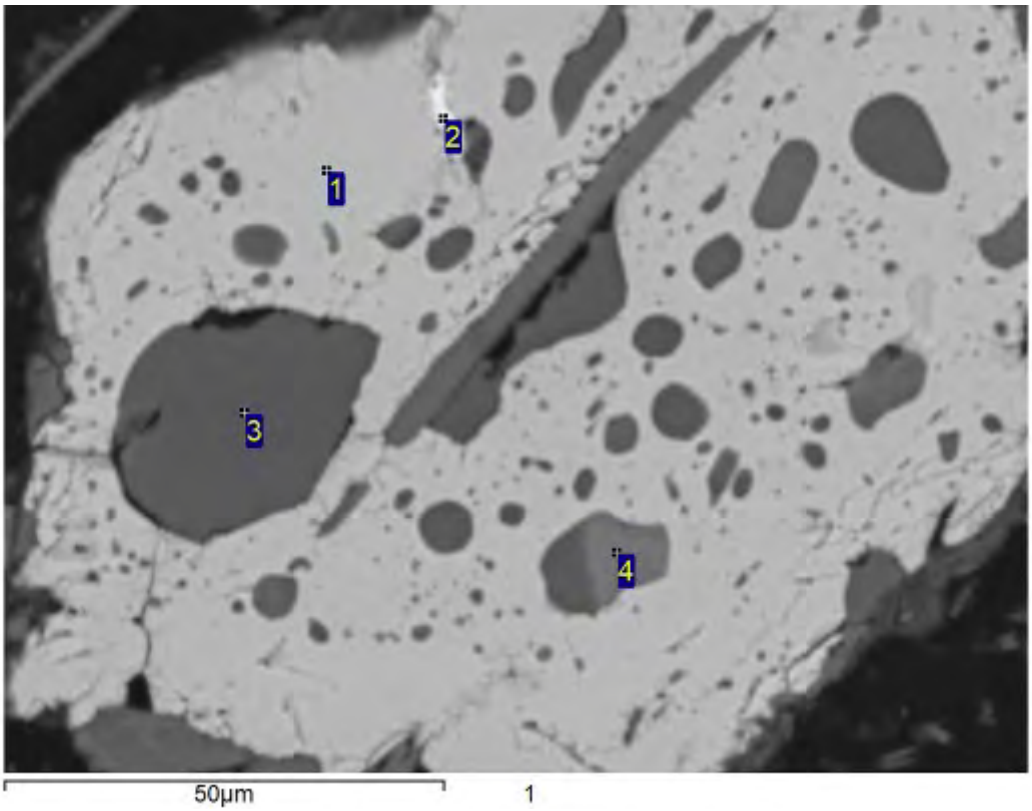
Mineral/Compound	Formula
Quartz	SiO_2
Kaolinite	$Al_2Si_2O_5(OH)_4$
Muscovite	$KAl_2(AlSi_3O_{10})(OH)_2$
Microcline	$KAlSi_3O_8$
Rutile	TiO_2
Albite	$NaAlSi_3O_8$
Anatase	TiO_2
Pyrite	FeS_2
Orthoclase	$KAlSi_3O_8$
Calcite	$CaCO_3$
Montmorillonite	$(Na,Ca)_{0.3}(Al,Mg)_2Si_4O_{10}(OH)_2 \cdot nH_2O$
Diopside	$CaMgSi_2O_6$
Biotite	$K(Mg,Fe)_3(AlSi_3O_{10})(OH)_2$

S-7677_1_DPT07AP1



Quartz	68.89
Kaolinite	15.85
Muscovite 2M1	6.17 %
Microcline intermediate1	1.88 %
Rutile	0.43 %
Albite	1.81 %
Anatase	0.20 %
Muscovite 1M	4.77 %

Sample Notes:
S-7677_1_DPT07AP1

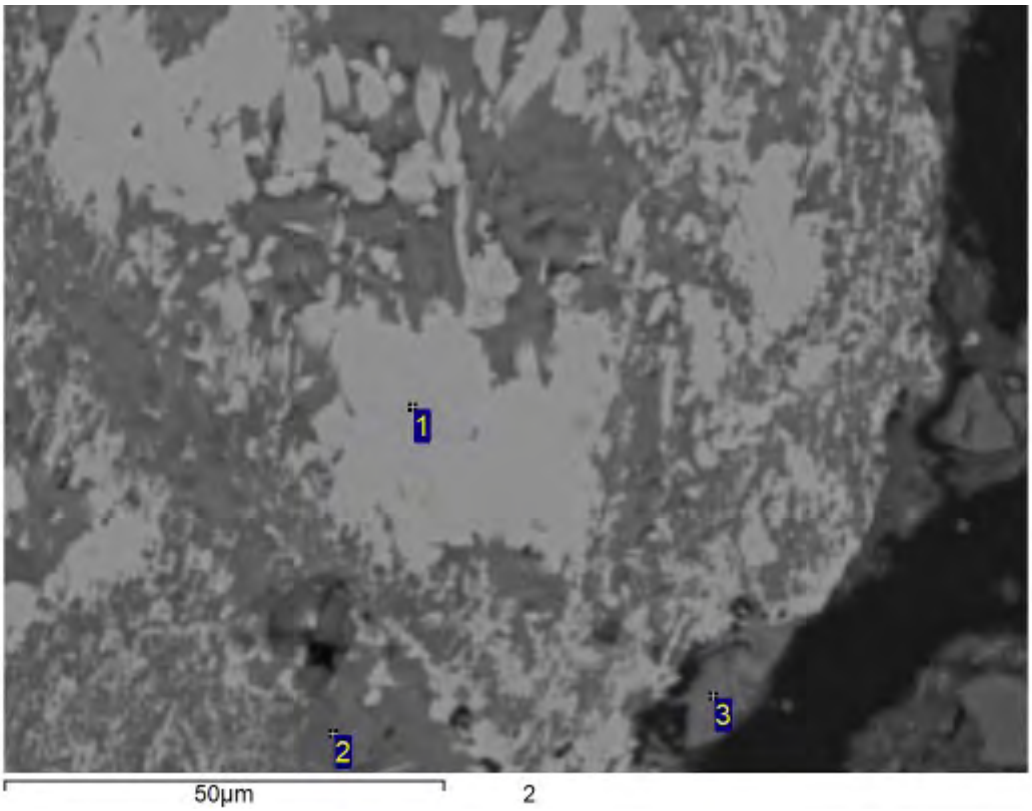


Processing option : All elements analysed (Normalised)

Spectrum	O	Mg	Al	Si	Ti	Mn	Fe	Zr	Total	Mineral ID
1	33.8				31.3	1.1	33.8		100.0	Ilmenite
2	34.9			10.8	12.4	0.4	9.4	32.0	100.0	Zircon
3	51.0			48.3	0.3		0.4		100.0	Quartz
4	41.9	7.0	12.0	13.1	0.8		25.3		100.0	Chlorite

All results in weight%

Sample Notes:
S-7677_1_DPT07AP1

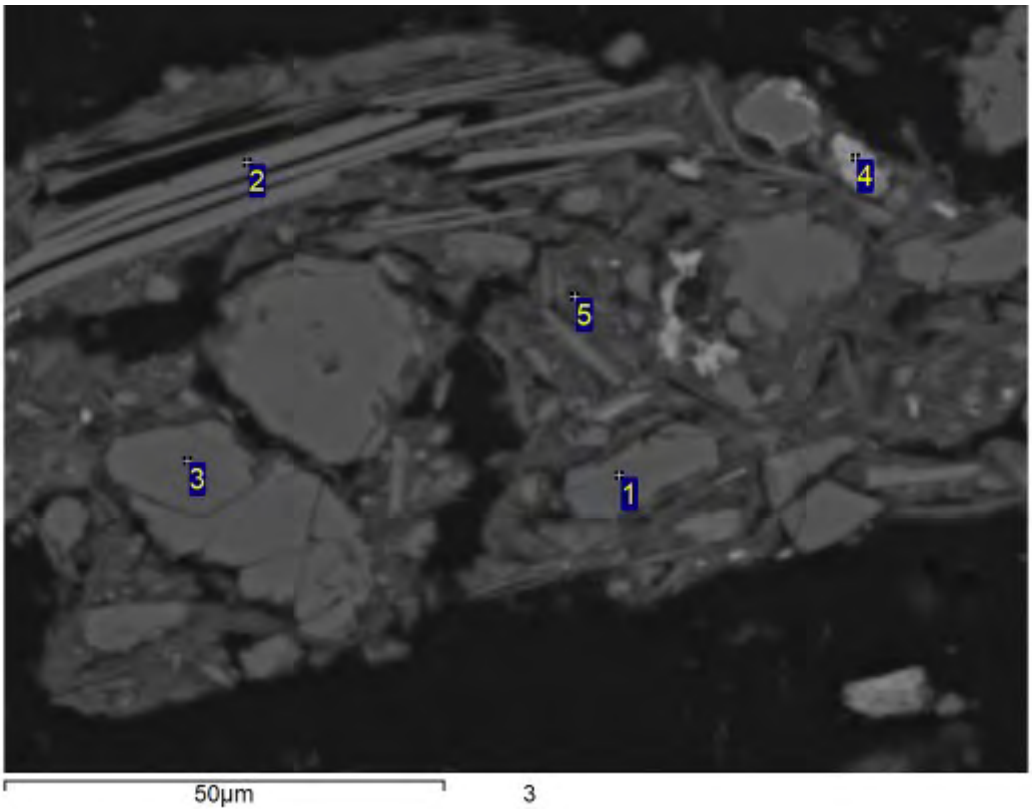


Processing option : All elements analysed (Normalised)

Spectrum	O	Mg	Al	Si	K	Ti	Fe	Total	Mineral ID
1	41.1					58.9		100.0	Rutile
2	50.3		2.6	44.4	1.5	0.8	0.4	100.0	Quartz
3	51.3	1.1	15.5	22.5	7.7	0.7	1.2	100.0	Muscovite

All results in weight%

Sample Notes:
S-7677_1_DPT07AP1

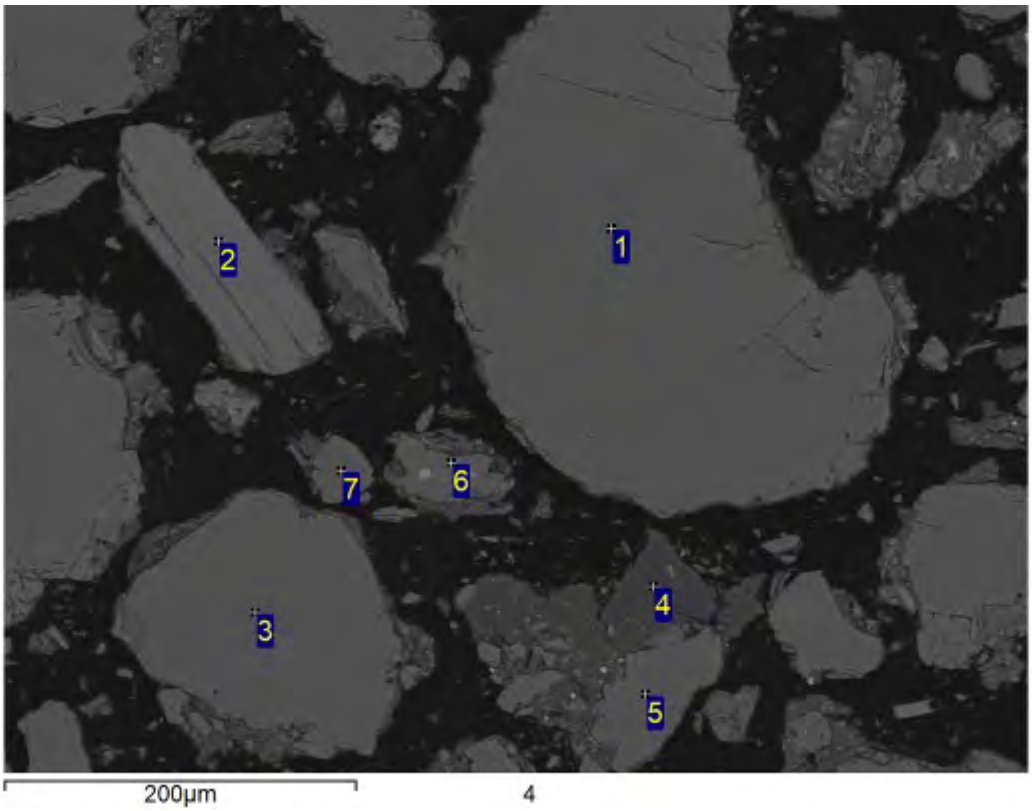


Processing option : All elements analysed (Normalised)

Spectrum	O	Mg	Al	Si	Cl	K	Ti	Fe	Total	Mineral ID
1	52.2			47.8					100.0	Quartz
2	46.5	0.9	17.1	24.9		8.4	0.6	1.5	100.0	Muscovite
3	50.8			49.2					100.0	Quartz
4	38.8		8.0	8.5		0.6		44.1	100.0	Fe-Oxide/Oxyhydroxide/Kaolinite mixture
5	42.2	0.5	18.5	27.1	0.4	3.7		7.6	100.0	Mineral mixtures Micas/Clays

All results in weight%

Sample Notes:
S-7677_1_DPT07AP1

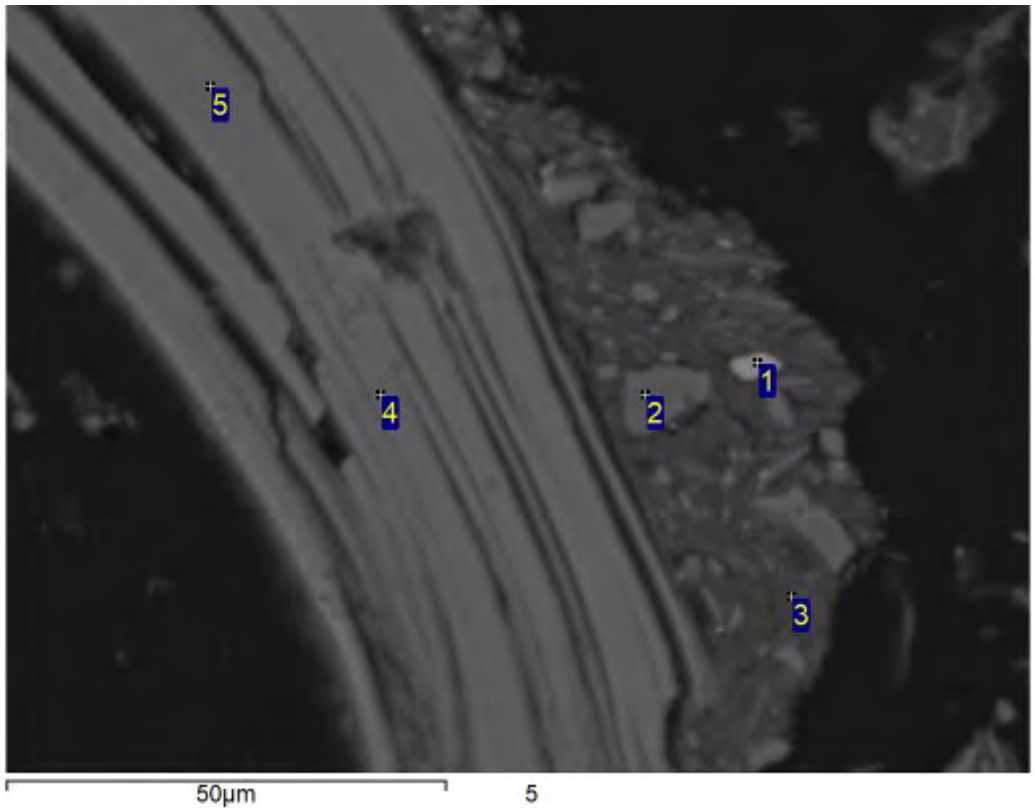


Processing option : All elements analysed (Normalised)

Spectrum	O	Na	Mg	Al	Si	S	K	Ti	Fe	Total	Mineral ID
1	50.6				49.4					100.0	Quartz
2	47.8	1.1		18.7	23.2		8.1	0.3	0.9	100.0	Muscovite
3	50.6				49.4					100.0	Quartz
4	48.9		0.7	18.5	26.7	1.4	1.8	0.3	1.6	100.0	Muscovite
5	50.9				49.1					100.0	Quartz
6	51.6				48.4					100.0	Quartz
7	51.0				49.0					100.0	Quartz

All results in weight%

Sample Notes:
S-7677_1_DPT07AP1

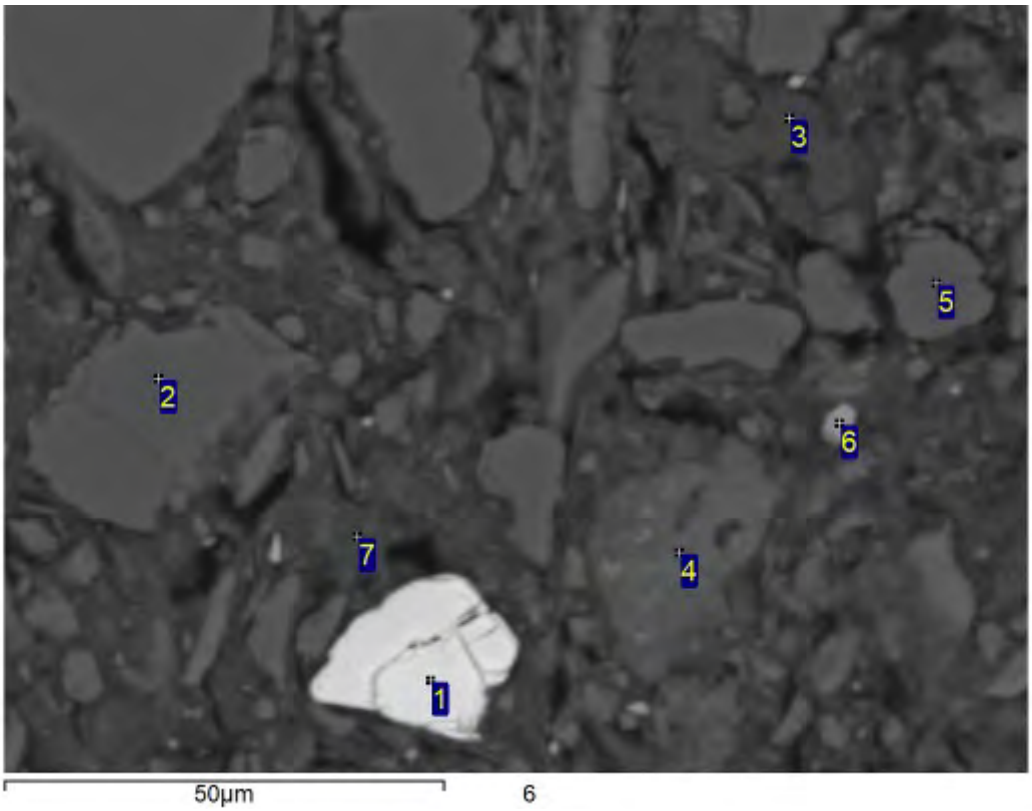


Processing option : All elements analysed (Normalised)

Spectrum	O	Na	Mg	Al	Si	P	K	Ti	Cr	Fe	Total	Mineral ID
1	49.6			5.0	3.2	0.5	0.2	36.3	0.5	4.6	100.0	Rutile
2	52.3				47.7						100.0	Quartz
3	47.0		0.7	18.6	28.7		2.0	0.9		2.1	100.0	Kaolinite/Muscovite
4	47.3	0.6	0.7	17.1	23.1		8.2	0.3		2.7	100.0	Muscovite
5	46.5	0.7	0.7	17.3	23.1		8.8			2.8	100.0	Muscovite

All results in weight%

Sample Notes:
S-7677_1_DPT07AP1

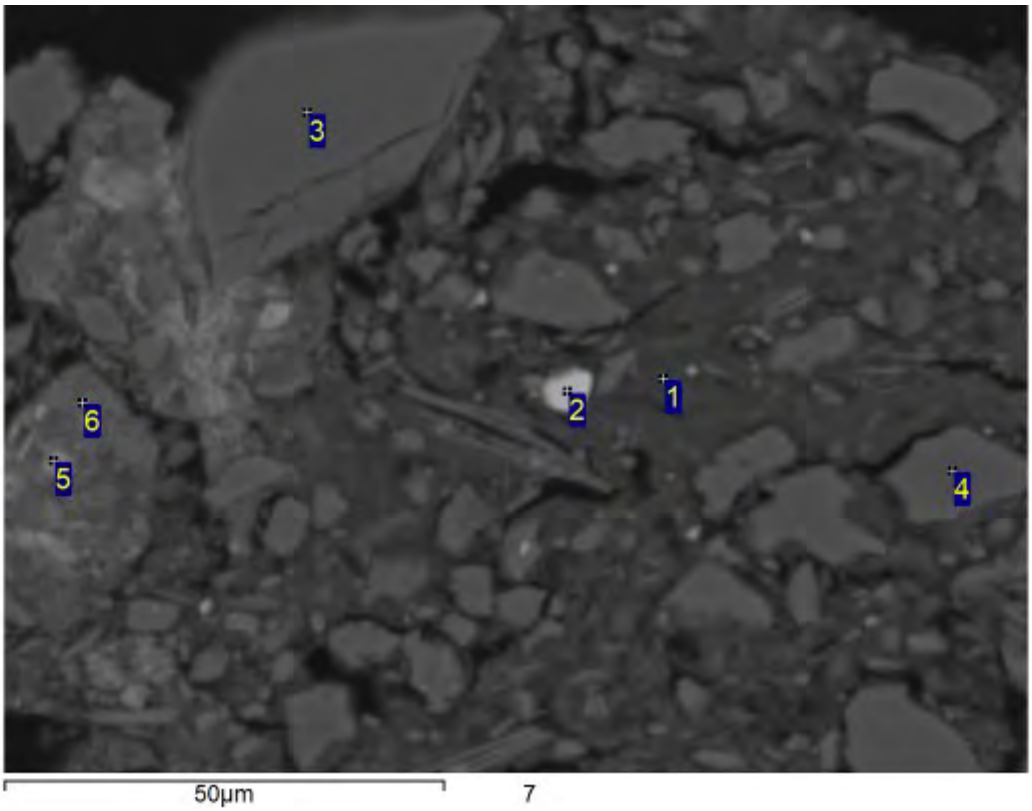


Processing option : All elements analysed (Normalised)

Spectrum	O	Mg	Al	Si	K	Ti	Fe	Zr	Total	Mineral ID
1	34.1			16.0				49.9	100.0	Zircon
2	50.7			49.3					100.0	Quartz
3	47.0		21.8	29.0			2.2		100.0	Kaolinite
4	49.1	1.0	16.0	23.8	4.8	0.4	4.9		100.0	Muscovite
5	51.2		0.3	48.5					100.0	Quartz
6	54.2		1.8	2.7		41.3			100.0	Rutile
7	44.9	0.5	20.7	29.6	2.4		1.8		100.0	Kaolinite

All results in weight%

Sample Notes:
S-7677_1_DPT07AP1



Processing option : All elements analysed (Normalised)

Spectrum	O	Mg	Al	Si	S	K	Ti	Fe	Total	Mineral ID
1	44.8	0.8	18.2	30.4	0.6	2.5	0.6	2.1	100.0	Kaolinite
2	37.0	0.9					21.2	40.9	100.0	Ilmenite
3	50.5			49.5					100.0	Quartz
4	51.0			49.0					100.0	Quartz
5	34.7		9.9	11.2		0.5		43.6	100.0	Fe-Oxide/Oxyhydroxide/Kaolinite Mixtures
6	43.4		8.3	27.8		0.9		19.6	100.0	Fe-Oxide/Oxyhydroxide/Kaolinite Mixtures

All results in weight%

Analysis Report

GS21-00731

F402001 SGS LAKEFIELD RESEARCH
PO BOX 4300
185 CONCESSION STREET
LAKEFIELD, ONTARIO ON K0L 2H0
CANADA

Received: 31-Mar-2021
Completed: 29-Apr-2021
Order Reference: Kela Ashworth - S767 CEC

Laboratory ID:	GS21-00731.001	GS21-00731.002	GS21-00731.003	GS21-00731.004	GS21-00731.005	GS21-00731.006
Client Sample #:	S-7677-1	S-7677-2	S-7677-3	S-7677-4	S-7677-5	S-7677-6
Description:	S-7677_1_DPT07AP1	S-7677_2_DPT11AP2	S-7677_3_DPT08AP2	S-7677_4_DPT07AP2	S-7677_5_DPT01AP3	S-7677_6_DPT03AP3
CEC Actual (meq/100g)	7.83	8.98	6.61	10.25	13.47	18.13

Report File Reference Number: 0000168864

NOTE:
The analysis report above refers to the time and place of testing, and strictly to the supplied sample(s) only, without reference to any other matter. This report does not evidence or refer to any consignment or shipment or/and SGS sampling and inspection.

Signed and dated in Guelph, ON
On 29-Apr-2021

For and on behalf of SGS Canada Inc., Agriculture and Food

Jack Legg, CCA-ON, 4R NMS
Branch Manager, Agronomist

This document is issued by the Company under its General Conditions of Service accessible at http://www.sgs.com/en/terms-and-conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .

Analysis Report
GS21-00731

F402001 SGS LAKEFIELD RESEARCH
PO BOX 4300
185 CONCESSION STREET
LAKEFIELD, ONTARIO ON K0L 2H0
CANADA

Received: 31-Mar-2021
Completed: 29-Apr-2021
Order Reference: Kela Ashworth - S767 CEC

Laboratory ID:	GS21-00731.007	GS21-00731.008	GS21-00731.009	GS21-00731.010
Client Sample #:	S-7677-7	S-7677-8	S-7677-9	S-7677-10
Description:	S-7677_7_DPT02AP3	S-7677_8_DPT04AP3	S-7677_9_DPT09AP2	S-7677_10_DPT10AP2
CEC Actual (meq/100g)	23.97	41.80	11.91	10.62

Report File Reference Number: 0000168864

NOTE:
The analysis report above refers to the time and place of testing, and strictly to the supplied sample(s) only, without reference to any other matter. This report does not evidence or refer to any consignment or shipment or/and SGS sampling and inspection.

Signed and dated in Guelph, ON
On 29-Apr-2021

For and on behalf of SGS Canada Inc., Agriculture and Food

Jack Legg, CCA-ON, 4R NMS
Branch Manager, Agronomist

This document is issued by the Company under its General Conditions of Service accessible at http://www.sgs.com/en/terms-and-conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .

Specialty Analytical

9011 SE Jannsen Rd
Clackamas, OR 97015
TEL: (503) 607-1331
Website: www.specialtyanalytical.com

April 06, 2021

Kela Ashworth
SiREM Lab
130 Stone Road West
Guelph, Ontario N1G3Z2
TEL: (519) 822-2265
FAX

RE: S-7677 Order No.: 2103288

Dear Kela Ashworth:

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

Marty French
Lab Director

CLIENT: SiREM Lab
Project: S-7677

Lab ID: 2103288-001 **Matrix:** SOIL
Client Sample ID S-7677_1_DPT07AP1 **Collection Date:** 3/25/2021

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANION EXCHANGE CAPACITY				**SW9081**		Analyst: **EG**
Anion Exchange Capacity	5.13	0.000200		meq/100g	1	4/1/2021 10:38:06 AM

Lab ID: 2103288-002 **Matrix:** SOIL
Client Sample ID S-7677_2_DPT11AP2 **Collection Date:** 3/25/2021

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANION EXCHANGE CAPACITY				**SW9081**		Analyst: **EG**
Anion Exchange Capacity	6.78	0.000200		meq/100g	1	4/1/2021 10:39:06 AM

Lab ID: 2103288-003 **Matrix:** SOIL
Client Sample ID S-7677_3_DPT08AP2 **Collection Date:** 3/25/2021

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANION EXCHANGE CAPACITY				**SW9081**		Analyst: **EG**
Anion Exchange Capacity	5.96	0.000200		meq/100g	1	4/1/2021 10:40:06 AM

Lab ID: 2103288-004 **Matrix:** SOIL
Client Sample ID S-7677_4_DPT07AP2 **Collection Date:** 3/25/2021

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANION EXCHANGE CAPACITY				**SW9081**		Analyst: **EG**
Anion Exchange Capacity	6.84	0.000200		meq/100g	1	4/1/2021 10:41:06 AM

Lab ID: 2103288-005 **Matrix:** SOIL
Client Sample ID S-7677_5_DPT01AP3 **Collection Date:** 3/25/2021

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANION EXCHANGE CAPACITY				**SW9081**		Analyst: **EG**
Anion Exchange Capacity	6.76	0.000200		meq/100g	1	4/1/2021 10:43:06 AM

CLIENT: SiREM Lab
Project: S-7677

Lab ID: 2103288-006 **Matrix:** SOIL
Client Sample ID S-7677_6_DPT03AP3 **Collection Date:** 3/25/2021

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANION EXCHANGE CAPACITY				**SW9081**		Analyst: **EG**
Anion Exchange Capacity	7.16	0.000200		meq/100g	1	4/1/2021 10:44:06 AM

Lab ID: 2103288-007 **Matrix:** SOIL
Client Sample ID S-7677_7_DPT02AP3 **Collection Date:** 3/25/2021

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANION EXCHANGE CAPACITY				**SW9081**		Analyst: **EG**
Anion Exchange Capacity	7.18	0.000200		meq/100g	1	4/1/2021 10:45:06 AM

Lab ID: 2103288-008 **Matrix:** SOIL
Client Sample ID S-7677_8_DPT04AP3 **Collection Date:** 3/25/2021

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANION EXCHANGE CAPACITY				**SW9081**		Analyst: **EG**
Anion Exchange Capacity	7.65	0.000200		meq/100g	1	4/1/2021 10:46:06 AM

Lab ID: 2103288-009 **Matrix:** SOIL
Client Sample ID S-7677_9_DPT09AP2 **Collection Date:** 3/25/2021

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANION EXCHANGE CAPACITY				**SW9081**		Analyst: **EG**
Anion Exchange Capacity	5.17	0.000200		meq/100g	1	4/1/2021 10:47:06 AM

Lab ID: 2103288-010 **Matrix:** SOIL
Client Sample ID S-7677_10_DPT10AP2 **Collection Date:** 3/25/2021

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ANION EXCHANGE CAPACITY				**SW9081**		Analyst: **EG**
Anion Exchange Capacity	6.19	0.000200		meq/100g	1	4/1/2021 10:48:06 AM

QC SUMMARY REPORT

Specialty Analytical

WO#: **2103288**

4/6/2021

Client: SiREM Lab

Project: S-7677 **TestCode:** **AEC_S**

Sample ID **2103288-004ADUP** SampType: **DUP** TestCode: **AEC_S** Units: **meq/100g** Prep Date: RunNo: **39875**

Client ID: **S-7677_4_DPT07AP** Batch ID: **R39875** TestNo: **SW9081** Analysis Date: **4/1/2021** SeqNo: **513304**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anion Exchange Capacity	7.21	0.000200						6.836	5.36	20	

Specialty Analytical
9011 SE Jannsen Rd
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

Sample Receipt Checklist

Client Name SIREM Work Order Numbe 2103288

RcptNo: 1 Date and Time Receive 3/29/2021 9:11:17 AM Received by Katheri ne Lynch

Completed by Reviewed by:

Completed Date: 3/29/2021 9:24:09 AM Reviewed Date: 3/29/2021 3:51:52 PM

Carrier name FedEx

Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	Not Presen ☐
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐	
Is it clear what analyses were requested?	Yes ☑	No ☐	
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Presen ☑
Samples in proper container/bottle?	Yes ☑	No ☐	
Were correct preservatives used and noted?	Yes ☐	No ☐	NA ☑
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
Were container lables complete (ID, Pres, Date)?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☐	No ☑	NA ☐
Response when temperature is outside of range:			
Preservative added to bottles:			
Sample Temp. taken and recorded upon receipt?	Yes ☑	No ☐	To 10.1 º
Water - Were bubbles absent in VOC vials?	Yes ☐	No ☐	No Vials ☑
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	NA ☑
Are Samples considered acceptable?	Yes ☑	No ☐	
Custody Seals present?	Yes ☐	No ☑	
Traffic Report or Packing Lists present?	Yes ☐	No ☑	
Airbill or Sticker?	Air Bill ☐	Sticker ☐	Not Present ☑
Airbill No:			
Sample Tags Present?	Yes ☐	No ☑	
Sample Tags Listed on COC?	Yes ☐	No ☑	
Tag Numbers:			
Sample Condition?	Intact ☑	Broken ☐	Leaking ☐

Case Number: SDG: SAS:

Adjusted? _____ Checked b

Any No and/or NA (not applicable) response must be detailed in the comments section be

Specialty Analytical
9011 SE Jannsen Rd
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

Sample Receipt Checklist

Client Contacted?	☑ Yes	☐ No	☐ NA	Person Contacted:	Comments:
Contact Mode:	☐ Phone:	☐ Fax:	☑ Email:	☐ In Person:	Samples received in cooler with ice packs. Client contacted.
Client Instructions:					
Date Contacted:	3/29/2021	Contacted By:	Katherine Lynch		
Regarding:	Temp of samples upon receipt				
CorrectiveAction:					

Specialty Analytical
9011 SE Jannsen Rd
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Chain of Custody Record

Date: | Page: 1 of: 1 | Laboratory Project No (internal): 2103288

Project Name: | Temperature on Receipt: 10.1 °C

Client: SiREM Lab | Project No: S-7677 PO No: | Cooling: Yes Cooler + Ice Shipped Via: FedEx

Address: 130 Stone Road West | Collected by: Kela Ashworth | Custody Seal: Y / (N) Intact / Broken Cooler / Bottle

City, State, Zip: Guelph, Ontario, N1G 3Z2 | State Collected: OR [ ] WA [ ] OTHER | MDL [ ] TIER IV [ ] EDD [ ]

Telephone: 519-822-2265 | Report To (PM): Kela Ashworth | Sample Disposal: [ ] Return to client [X] Disposal by lab (after 60 days)

AP Email: accountspayablecan@siremlab.com | PM Email: kashworth@siremlab.com

Sample Name	Sample Date	Sample Time	Sample Matrix*	# of Containers	Requested Tests: Anion Exchange Capacity										Anion Exchange Capacity		Comments
1 S-7677_1_DPT07AP1	25-Mar-21		S	1	✓												
2 S-7677_2_DPT11AP2	25-Mar-21		S	1	✓												
3 S-7677_3_DPT08AP2	25-Mar-21		S	1	✓												
4 S-7677_4_DPT07AP2	25-Mar-21		S	1	✓												
5 S-7677_5_DPT01AP3	25-Mar-21		S	1	✓												
6 S-7677_6_DPT03AP3	25-Mar-21		S	1	✓												
7 S-7677_7_DPT02AP3	25-Mar-21		S	1	✓												
8 S-7677_8_DPT04AP3	25-Mar-21		S	1	✓												
9 S-7677_9_DPT09AP2	25-Mar-21		S	1	✓												
10 S-7677_10_DPT10AP2	25-Mar-21		S	1	✓												

*Matrix: A = Air, AQ = Aqueous, L = Liquid, O = Oil, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water, M = Miscellaneous

Turn-around Time: Standard (5-7 Business): ✓ 3 Day: [ ] 2 Day: [ ] Next Day: [ ] Same Day: [ ]

Expedited turn-around requests should be coordinated in advance

Relinquished	Date/Time	Received	Date/Time
x Kela Ashworth	25 March 21 / 16:30	x	3-29-2021 9:10
x		x	
x		x	

Specialty Analytical
9011 SE Jannsen Rd
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

Definition Only

WO#: **2103288**
Date: **4/6/2021**

Definitions:

KEY TO FLAGS

A: This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was qualified against gasoline calibration standards.

A1: This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was qualified against diesel calibration standards.

A2: This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was qualified against lube oil calibration standards.

A3: The results was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.

A4: The product appears to be aged or degraded.

B: The blank exhibited a positive result greater than the reporting limit for this compound.

CN: See Case Narrative.

E: Result exceeds the calibration range for this compound. The result should be considered an estimate.

F: The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.

FS: Follow-up testing is suggested.

G: Result may be biased high due to biogenic interferences. Clean up is recommended.

H: Sample was analyzed outside recommended holding time.

HT: At client's request, samples was analyzed outside of recommended holding time.

HP: Sample was analyzed outside recommended holding time due to VOA having pH >2.

J: The results for this analyte is between the MDL and the PQL and should be considered an

Specialty Analytical
9011 SE Jannsen Rd
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

Definition Only

WO#: **2103288**
Date: **4/6/2021**

Definitions:

estimated concentration.

K: Diesel result is biased high due to amount of Oil contained in the sample.

L: Diesel result is biased high due to amount of Gasoline contained in the sample.

M: Oil result is biased high due to amount of Diesel contained in the sample.

N: Gasoline result is biased high due to amount of Diesel contained in the sample.

MC: Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.

MI: Result is outside control limits due to matrix interference.

NH: Sample matrix is non-homogeneous

MSA: Value determined by Method of Standard Addition.

O: Laboratory Control Standard (LCS) exceeded laboratory control limits but meets CCV criteria. Data meets EPA requirements.

Q: Detection levels elevated due to sample matrix.

R: RPD control limits were exceeded

RF: Duplicate failed due to result being at or near the method-reporting limit.

RP: Matrix spike values exceed established QC limits; post digestion spike is in control.

S: Recovery is outside control limits.

SC: CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.

SL: LCS exceeded recovery control limits, but associated MS/MSD passing. Data meets EPA requirements.

APPENDIX C

Laboratory Analytical and Field Sampling Reports

LABORATORY ANALYTICAL RESULTS

December 2020

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

December 31, 2020

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

RE: Project: HAMMOND AP-1 BKG 03
Pace Project No.: 92512572

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on December 17, 2020. 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,

Kevin Herring
kevin.herring@pacelabs.com
1(704)875-9092
HORIZON Database Administrator

Enclosures

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

CERTIFICATIONS

Project: HAMMOND AP-1 BKG 03
Pace Project No.: 92512572

Pace Analytical Services Charlotte
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

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

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SAMPLE SUMMARY

Project: HAMMOND AP-1 BKG 03
Pace Project No.: 92512572

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92512572001	**HGWA-43D**	Water	12/15/20 12:25	12/17/20 08:48
92512572002	**HGWA-44D**	Water	12/15/20 16:18	12/17/20 08:48
92512572003	**EB-01**	Water	12/15/20 18:02	12/17/20 08:48

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SAMPLE ANALYTE COUNT

Project: HAMMOND AP-1 BKG 03
Pace Project No.: 92512572

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92512572001	**HGWA-43D**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92512572002	**HGWA-44D**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92512572003	**EB-01**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 BKG 03
Pace Project No.: 92512572

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92512572001	**HGWA-43D**					
	Performed by	CUSTOMER			12/15/20 12:25	
	Collected By	Thomas Kessler			12/15/20 12:25	
	Collected Date	12/15/20			12/15/20 12:25	
	Collected Time	12:25			12/15/20 12:25	
	pH	7.39	Std. Units		12/15/20 12:25	
EPA 6010D	Calcium	62.6	mg/L	1.0	12/24/20 23:57	
EPA 6020B	Antimony	0.00031J	mg/L	0.0030	12/28/20 17:38	
EPA 6020B	Barium	0.29	mg/L	0.010	12/28/20 17:38	
EPA 6020B	Boron	0.052J	mg/L	0.10	12/28/20 17:38	
EPA 6020B	Lead	0.000082J	mg/L	0.0050	12/28/20 17:38	
EPA 6020B	Lithium	0.0019J	mg/L	0.030	12/28/20 17:38	
EPA 6020B	Molybdenum	0.0044J	mg/L	0.010	12/28/20 17:38	
SM 2450C-2011	Total Dissolved Solids	289	mg/L	10.0	12/19/20 12:19	
EPA 300.0 Rev 2.1 1993	Chloride	4.7	mg/L	1.0	12/23/20 19:30	
EPA 300.0 Rev 2.1 1993	Fluoride	0.21	mg/L	0.10	12/23/20 19:30	
EPA 300.0 Rev 2.1 1993	Sulfate	38.8	mg/L	1.0	12/23/20 19:30	
92512572002	**HGWA-44D**					
	Performed by	CUSTOMER			12/15/20 16:18	
	Collected By	Thomas Kessler			12/15/20 16:18	
	Collected Date	12/15/20			12/15/20 16:18	
	Collected Time	16:18			12/15/20 16:18	
	pH	7.87	Std. Units		12/15/20 16:18	
EPA 6010D	Calcium	28.7	mg/L	1.0	12/25/20 00:03	M1
EPA 6020B	Antimony	0.00047J	mg/L	0.0030	12/28/20 17:43	
EPA 6020B	Barium	0.39	mg/L	0.010	12/28/20 17:43	
EPA 6020B	Boron	0.31	mg/L	0.10	12/28/20 17:43	
EPA 6020B	Chromium	0.00072J	mg/L	0.010	12/28/20 17:43	
EPA 6020B	Lead	0.00011J	mg/L	0.0050	12/28/20 17:43	
EPA 6020B	Lithium	0.028J	mg/L	0.030	12/28/20 17:43	
EPA 6020B	Molybdenum	0.0019J	mg/L	0.010	12/28/20 17:43	
SM 2450C-2011	Total Dissolved Solids	295	mg/L	10.0	12/19/20 12:19	
EPA 300.0 Rev 2.1 1993	Chloride	9.4	mg/L	1.0	12/23/20 19:45	
EPA 300.0 Rev 2.1 1993	Fluoride	0.67	mg/L	0.10	12/23/20 19:45	
EPA 300.0 Rev 2.1 1993	Sulfate	6.7	mg/L	1.0	12/23/20 19:45	
92512572003	**EB-01**					
EPA 6010D	Calcium	0.12J	mg/L	1.0	12/25/20 00:28	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 BKG 03
Pace Project No.: 92512572

Sample: HGWA-43D **Lab ID: 92512572001** Collected: 12/15/20 12:25 Received: 12/17/20 08:48 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		12/15/20 12:25		
Collected By	**Thomas Kessler**				1		12/15/20 12:25		
Collected Date	**12/15/20**				1		12/15/20 12:25		
Collected Time	**12:25**				1		12/15/20 12:25		
pH	**7.39**	Std. Units			1		12/15/20 12:25		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**62.6**	mg/L	1.0	0.070	1	12/24/20 13:26	12/24/20 23:57	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00031J**	mg/L	0.0030	0.00028	1	12/24/20 10:19	12/28/20 17:38	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	12/24/20 10:19	12/28/20 17:38	7440-38-2	
Barium	**0.29**	mg/L	0.010	0.00071	1	12/24/20 10:19	12/28/20 17:38	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	12/24/20 10:19	12/28/20 17:38	7440-41-7	
Boron	**0.052J**	mg/L	0.10	0.0052	1	12/24/20 10:19	12/28/20 17:38	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	12/24/20 10:19	12/28/20 17:38	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	12/24/20 10:19	12/28/20 17:38	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	12/24/20 10:19	12/28/20 17:38	7440-48-4	
Lead	**0.000082J**	mg/L	0.0050	0.000036	1	12/24/20 10:19	12/28/20 17:38	7439-92-1	
Lithium	**0.0019J**	mg/L	0.030	0.00081	1	12/24/20 10:19	12/28/20 17:38	7439-93-2	
Molybdenum	**0.0044J**	mg/L	0.010	0.00069	1	12/24/20 10:19	12/28/20 17:38	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	12/24/20 10:19	12/28/20 17:38	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	12/24/20 10:19	12/28/20 17:38	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	12/18/20 08:35	12/18/20 14:17	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**289**	mg/L	10.0	10.0	1		12/19/20 12:19		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.7**	mg/L	1.0	0.60	1		12/23/20 19:30	16887-00-6	
Fluoride	**0.21**	mg/L	0.10	0.050	1		12/23/20 19:30	16984-48-8	
Sulfate	**38.8**	mg/L	1.0	0.50	1		12/23/20 19:30	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 BKG 03
Pace Project No.: 92512572

Sample: HGWA-44D **Lab ID: 92512572002** Collected: 12/15/20 16:18 Received: 12/17/20 08:48 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		12/15/20 16:18		
Collected By	**Thomas Kessler**				1		12/15/20 16:18		
Collected Date	**12/15/20**				1		12/15/20 16:18		
Collected Time	**16:18**				1		12/15/20 16:18		
pH	**7.87**	Std. Units			1		12/15/20 16:18		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**28.7**	mg/L	1.0	0.070	1	12/24/20 13:26	12/25/20 00:03	7440-70-2	M1
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00047J**	mg/L	0.0030	0.00028	1	12/24/20 10:19	12/28/20 17:43	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	12/24/20 10:19	12/28/20 17:43	7440-38-2	
Barium	**0.39**	mg/L	0.010	0.00071	1	12/24/20 10:19	12/28/20 17:43	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	12/24/20 10:19	12/28/20 17:43	7440-41-7	
Boron	**0.31**	mg/L	0.10	0.0052	1	12/24/20 10:19	12/28/20 17:43	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	12/24/20 10:19	12/28/20 17:43	7440-43-9	
Chromium	**0.00072J**	mg/L	0.010	0.00055	1	12/24/20 10:19	12/28/20 17:43	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	12/24/20 10:19	12/28/20 17:43	7440-48-4	
Lead	**0.00011J**	mg/L	0.0050	0.000036	1	12/24/20 10:19	12/28/20 17:43	7439-92-1	
Lithium	**0.028J**	mg/L	0.030	0.00081	1	12/24/20 10:19	12/28/20 17:43	7439-93-2	
Molybdenum	**0.0019J**	mg/L	0.010	0.00069	1	12/24/20 10:19	12/28/20 17:43	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	12/24/20 10:19	12/28/20 17:43	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	12/24/20 10:19	12/28/20 17:43	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	12/18/20 08:35	12/18/20 14:19	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**295**	mg/L	10.0	10.0	1		12/19/20 12:19		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**9.4**	mg/L	1.0	0.60	1		12/23/20 19:45	16887-00-6	
Fluoride	**0.67**	mg/L	0.10	0.050	1		12/23/20 19:45	16984-48-8	
Sulfate	**6.7**	mg/L	1.0	0.50	1		12/23/20 19:45	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 BKG 03
Pace Project No.: 92512572

Sample: EB-01 **Lab ID: 92512572003** Collected: 12/15/20 18:02 Received: 12/17/20 08:48 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	**0.12J**	mg/L	1.0	0.070	1	12/24/20 13:26	12/25/20 00:28	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	0.00028	1	12/24/20 10:19	12/29/20 10:21	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	12/24/20 10:19	12/29/20 10:21	7440-38-2	
Barium	ND	mg/L	0.010	0.00071	1	12/24/20 10:19	12/29/20 10:21	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	12/24/20 10:19	12/29/20 10:21	7440-41-7	
Boron	ND	mg/L	0.10	0.0052	1	12/24/20 10:19	12/29/20 10:21	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	12/24/20 10:19	12/29/20 10:21	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	12/24/20 10:19	12/29/20 10:21	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	12/24/20 10:19	12/29/20 10:21	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	12/24/20 10:19	12/29/20 10:21	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	12/24/20 10:19	12/29/20 10:21	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	12/24/20 10:19	12/29/20 10:21	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	12/24/20 10:19	12/29/20 10:21	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	12/24/20 10:19	12/29/20 10:21	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	12/18/20 08:35	12/18/20 14:22	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		12/19/20 12:19		
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		12/23/20 20:00	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		12/23/20 20:00	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		12/23/20 20:00	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 BKG 03
Pace Project No.: 92512572

QC Batch: 589396
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92512572001, 92512572002, 92512572003

METHOD BLANK: 3113409 Matrix: Water
Associated Lab Samples: 92512572001, 92512572002, 92512572003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.070	12/24/20 23:39	

LABORATORY CONTROL SAMPLE: 3113410

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3113411 3113412

Parameter	Units	92512572002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	28.7	1	1	30.4	29.3	173	61	75-125	4	20	M1

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 BKG 03
Pace Project No.: 92512572

QC Batch: 589337
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92512572001, 92512572002, 92512572003

METHOD BLANK: 3113101 Matrix: Water
Associated Lab Samples: 92512572001, 92512572002, 92512572003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	12/28/20 16:52	
Arsenic	mg/L	ND	0.0050	0.00078	12/28/20 16:52	
Barium	mg/L	ND	0.010	0.00071	12/28/20 16:52	
Beryllium	mg/L	ND	0.0030	0.000046	12/28/20 16:52	
Boron	mg/L	ND	0.10	0.0052	12/28/20 16:52	
Cadmium	mg/L	ND	0.0025	0.00012	12/28/20 16:52	
Chromium	mg/L	ND	0.010	0.00055	12/28/20 16:52	
Cobalt	mg/L	ND	0.0050	0.00038	12/28/20 16:52	
Lead	mg/L	ND	0.0050	0.000036	12/28/20 16:52	
Lithium	mg/L	ND	0.030	0.00081	12/28/20 16:52	
Molybdenum	mg/L	ND	0.010	0.00069	12/28/20 16:52	
Selenium	mg/L	ND	0.010	0.0016	12/28/20 16:52	
Thallium	mg/L	ND	0.0010	0.00014	12/28/20 16:52	

LABORATORY CONTROL SAMPLE: 3113102

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	0.094	94	80-120	
Barium	mg/L	0.1	0.095	95	80-120	
Beryllium	mg/L	0.1	0.095	95	80-120	
Boron	mg/L	1	0.91	91	80-120	
Cadmium	mg/L	0.1	0.098	98	80-120	
Chromium	mg/L	0.1	0.097	97	80-120	
Cobalt	mg/L	0.1	0.095	95	80-120	
Lead	mg/L	0.1	0.097	97	80-120	
Lithium	mg/L	0.1	0.096	96	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.094	94	80-120	
Thallium	mg/L	0.1	0.097	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3113103 3113104

Parameter	Units	92512103004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.099	0.099	99	99	75-125	0	20	
Arsenic	mg/L	ND	0.1	0.1	0.092	0.092	92	92	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 BKG 03
Pace Project No.: 92512572

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3113103 3113104

Parameter	Units	92512103004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	ND	0.1	0.1	0.094	0.094	94	94	75-125	0	20	
Beryllium	mg/L	ND	0.1	0.1	0.095	0.096	95	96	75-125	1	20	
Boron	mg/L	ND	1	1	0.92	0.95	91	95	75-125	3	20	
Cadmium	mg/L	ND	0.1	0.1	0.095	0.096	95	96	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.093	0.096	93	96	75-125	3	20	
Cobalt	mg/L	ND	0.1	0.1	0.094	0.093	94	93	75-125	1	20	
Lead	mg/L	ND	0.1	0.1	0.092	0.095	92	95	75-125	3	20	
Lithium	mg/L	ND	0.1	0.1	0.094	0.099	94	99	75-125	4	20	
Molybdenum	mg/L	ND	0.1	0.1	0.097	0.096	97	96	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.089	0.091	89	91	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.091	0.094	91	94	75-125	3	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 BKG 03
Pace Project No.: 92512572

QC Batch: 587972
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92512572001, 92512572002, 92512572003

METHOD BLANK: 3107202 Matrix: Water
Associated Lab Samples: 92512572001, 92512572002, 92512572003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000078	12/18/20 13:15	

LABORATORY CONTROL SAMPLE: 3107203

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0022	87	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3107204 3107205

Parameter	Units	92511758011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0026	0.0026	103	102	75-125	1	20	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 BKG 03
Pace Project No.: 92512572

QC Batch: 588373
QC Batch Method: SM 2450C-2011
Analysis Method: SM 2450C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92512572001, 92512572002, 92512572003

METHOD BLANK: 3109057 Matrix: Water
Associated Lab Samples: 92512572001, 92512572002, 92512572003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	12/19/20 12:17	

LABORATORY CONTROL SAMPLE: 3109058

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	408	102	84-108	

SAMPLE DUPLICATE: 3109059

Parameter	Units	92512397001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	65.0	70.0	7	10	

SAMPLE DUPLICATE: 3109063

Parameter	Units	92512574004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	193	183	5	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 BKG 03
Pace Project No.: 92512572

QC Batch: 589104
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: 92512572001, 92512572002, 92512572003

METHOD BLANK: 3112052 Matrix: Water
Associated Lab Samples: 92512572001, 92512572002, 92512572003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	12/23/20 16:31	
Fluoride	mg/L	ND	0.10	0.050	12/23/20 16:31	
Sulfate	mg/L	ND	1.0	0.50	12/23/20 16:31	

LABORATORY CONTROL SAMPLE: 3112053

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.6	103	90-110	
Fluoride	mg/L	2.5	2.5	102	90-110	
Sulfate	mg/L	50	52.0	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3112054 3112055

Parameter	Units	92513456002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	409	50	50	471	456	125	94	90-110	3	10	M6
Fluoride	mg/L	0.14	2.5	2.5	2.1	2.1	77	79	90-110	2	10	M1
Sulfate	mg/L	403	50	50	466	450	126	93	90-110	4	10	M6

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3112056 3112057

Parameter	Units	92512580004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.4	50	50	57.4	57.5	108	108	90-110	0	10	
Fluoride	mg/L	0.18	2.5	2.5	2.7	2.7	102	102	90-110	0	10	
Sulfate	mg/L	11.3	50	50	65.5	65.6	108	109	90-110	0	10	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALIFIERS

Project: HAMMOND AP-1 BKG 03
Pace Project No.: 92512572

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.

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.
M6	Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HAMMOND AP-1 BKG 03
Pace Project No.: 92512572

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92512572001	**HGWA-43D**				
92512572002	**HGWA-44D**				
92512572001	**HGWA-43D**	EPA 3010A	589396	EPA 6010D	589429
92512572002	**HGWA-44D**	EPA 3010A	589396	EPA 6010D	589429
92512572003	**EB-01**	EPA 3010A	589396	EPA 6010D	589429
92512572001	**HGWA-43D**	EPA 3005A	589337	EPA 6020B	589405
92512572002	**HGWA-44D**	EPA 3005A	589337	EPA 6020B	589405
92512572003	**EB-01**	EPA 3005A	589337	EPA 6020B	589405
92512572001	**HGWA-43D**	EPA 7470A	587972	EPA 7470A	588144
92512572002	**HGWA-44D**	EPA 7470A	587972	EPA 7470A	588144
92512572003	**EB-01**	EPA 7470A	587972	EPA 7470A	588144
92512572001	**HGWA-43D**	SM 2450C-2011	588373		
92512572002	**HGWA-44D**	SM 2450C-2011	588373		
92512572003	**EB-01**	SM 2450C-2011	588373		
92512572001	**HGWA-43D**	EPA 300.0 Rev 2.1 1993	589104		
92512572002	**HGWA-44D**	EPA 300.0 Rev 2.1 1993	589104		
92512572003	**EB-01**	EPA 300.0 Rev 2.1 1993	589104		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

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

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO# : 92512572

92512572

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

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

Date/Initials Person Examining Contents: 2/12/20

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

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

Thermometer: ☑ IR Gun ID: 214 ☐ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 4.2 Correction Factor: Add/Subtract (°C) 0.1

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

Cooler Temp Corrected (°C): 4.3

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

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____

***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**

Project # **WO# : 92512572**

PM: KLH1 Due Date: 01/04/21

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)	BP4C-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)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (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	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			1																							
2		1	1			1																							
3		1	1			1																							
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

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

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR 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 AP-1 BKG 03
Project Number:	GW6581B

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	10839-4

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ~~CGR~~

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 DATE	COLLECTED TIME	COMPOSITE DATE	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 (N)	TDS (N)	Full App. III&IV Metals 6010/6020* (N)	RAD 226/228 (N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. G2512572
1	HGWA-43D	WT	G	12/15	1225	–	–	17	5	2		3							X	X	X	X	N	pH = 7.39
2	HGWA-44D	WT	G	12/15	1618	–	–	16	5	2		3							X	X	X	X	N	pH = 7.87
3	EB-01	WT	G	12/15	1802	–	–	6*	5	2		3							X	X	X	X	N	
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	Thomas Kessler / Geosyntec	12/17	0846	[signature] / Pace	12/17/20	8:48	
*Full App. III & IV Metals=Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Hg, Mo, Se, Tl	Ryan [signature] / Pace	12/17/20	1102	[signature] / Pace	12/17/20	1102	
One sample set submitted for HGWA-43D and HGWA-44D but they will be reported for AP-1/2/3 SDGs							
One sample set submitted for EB-01 but it will be reported for AP-1/2/3/4 SDGs							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Kessler

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 12/15/2020

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

January 11, 2021

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

RE: Project: HAMMOND AP-1 BKG 03 RADS
Pace Project No.: 92512535

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on December 17, 2020. 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,

Kevin Herring
kevin.herring@pacelabs.com
1(704)875-9092
HORIZON Database Administrator

Enclosures

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

CERTIFICATIONS

Project: HAMMOND AP-1 BKG 03 RADS
Pace Project No.: 92512535

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SAMPLE SUMMARY

Project: HAMMOND AP-1 BKG 03 RADS
Pace Project No.: 92512535

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92512535001	**HGWA-43D**	Water	12/15/20 12:25	12/17/20 08:48
92512535002	**HGWA-44D**	Water	12/15/20 16:18	12/17/20 08:48
92512535003	**EB-01**	Water	12/15/20 18:02	12/17/20 08:48

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SAMPLE ANALYTE COUNT

Project: HAMMOND AP-1 BKG 03 RADS
Pace Project No.: 92512535

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92512535001	**HGWA-43D**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92512535002	**HGWA-44D**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92512535003	**EB-01**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 BKG 03 RADS
Pace Project No.: 92512535

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92512535001	**HGWA-43D**					
EPA 9315	Radium-226	0.162 ± 0.236 (0.511) C:88% T:NA	pCi/L		01/06/21 07:00	
EPA 9320	Radium-228	0.879 ± 0.484 (0.887) C:69% T:83%	pCi/L		01/05/21 13:26	
Total Radium Calculation	Total Radium	1.04 ± 0.720 (1.40)	pCi/L		01/06/21 14:34	
92512535002	**HGWA-44D**					
EPA 9315	Radium-226	0.359 ± 0.268 (0.453) C:92% T:NA	pCi/L		01/06/21 07:27	
EPA 9320	Radium-228	0.341 ± 0.410 (0.868) C:68% T:86%	pCi/L		01/05/21 13:26	
Total Radium Calculation	Total Radium	0.700 ± 0.678 (1.32)	pCi/L		01/06/21 14:34	
92512535003	**EB-01**					
EPA 9315	Radium-226	0.0278 ± 0.302 (0.765) C:89% T:NA	pCi/L		01/06/21 07:00	
EPA 9320	Radium-228	0.226 ± 0.391 (0.853) C:72% T:88%	pCi/L		01/05/21 13:26	
Total Radium Calculation	Total Radium	0.254 ± 0.693 (1.62)	pCi/L		01/06/21 14:34	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 BKG 03 RADS
Pace Project No.: 92512535

Sample: HGWA-43D **Lab ID: 92512535001** Collected: 12/15/20 12:25 Received: 12/17/20 08:48 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	**0.162 ± 0.236 (0.511) C:88% T:NA**	pCi/L	01/06/21 07:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.879 ± 0.484 (0.887) C:69% T:83%**	pCi/L	01/05/21 13:26	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.04 ± 0.720 (1.40)**	pCi/L	01/06/21 14:34	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 BKG 03 RADS
Pace Project No.: 92512535

Sample: HGWA-44D **Lab ID: 92512535002** Collected: 12/15/20 16:18 Received: 12/17/20 08:48 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	**0.359 ± 0.268 (0.453) C:92% T:NA**	pCi/L	01/06/21 07:27	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.341 ± 0.410 (0.868) C:68% T:86%**	pCi/L	01/05/21 13:26	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.700 ± 0.678 (1.32)**	pCi/L	01/06/21 14:34	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 BKG 03 RADS
Pace Project No.: 92512535

Sample: EB-01 **Lab ID: 92512535003** Collected: 12/15/20 18:02 Received: 12/17/20 08:48 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	**0.0278 ± 0.302 (0.765) C:89% T:NA**	pCi/L	01/06/21 07:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.226 ± 0.391 (0.853) C:72% T:88%**	pCi/L	01/05/21 13:26	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.254 ± 0.693 (1.62)**	pCi/L	01/06/21 14:34	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: HAMMOND AP-1 BKG 03 RADS
Pace Project No.: 92512535

QC Batch: 428750
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92512535001, 92512535002, 92512535003

METHOD BLANK: 2071922
Matrix: Water
Associated Lab Samples: 92512535001, 92512535002, 92512535003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.694 ± 0.380 (0.676) C:79% T:80%	pCi/L	01/05/21 13:26	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: HAMMOND AP-1 BKG 03 RADS
Pace Project No.: 92512535

QC Batch: 429175
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92512535001, 92512535002, 92512535003

METHOD BLANK: 2073293 Matrix: Water
Associated Lab Samples: 92512535001, 92512535002, 92512535003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.176 ± 0.138 (0.246) C:97% T:NA	pCi/L	01/05/21 17:40	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALIFIERS

Project: HAMMOND AP-1 BKG 03 RADS
Pace Project No.: 92512535

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.

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HAMMOND AP-1 BKG 03 RADS
Pace Project No.: 92512535

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92512535001	**HGWA-43D**	EPA 9315	429175		
92512535002	**HGWA-44D**	EPA 9315	429175		
92512535003	**EB-01**	EPA 9315	429175		
92512535001	**HGWA-43D**	EPA 9320	428750		
92512535002	**HGWA-44D**	EPA 9320	428750		
92512535003	**EB-01**	EPA 9320	428750		
92512535001	**HGWA-43D**	Total Radium Calculation	429861		
92512535002	**HGWA-44D**	Total Radium Calculation	429861		
92512535003	**EB-01**	Total Radium Calculation	429861		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

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

Sample Condition Upon Receipt

Client Name: GA Power

Project WO#: 92512535

92512535

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

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

Date/Initials Person Examining Contents: 12/17/15

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

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

Thermometer: ☑ IR Gun ID: 214

☐ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 4.2 Correction Factor: Add/Subtract (°C) 0.1

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

Cooler Temp Corrected (°C): 4.3

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

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____

***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**

Project # **WO# : 92512535**

PM: KLH1 Due Date: 01/11/21

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)	BP4C-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)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (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)	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			1																		BPN				
2		1	1			1																						
3		1	1			1																						
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

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

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

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Geosyntec Contacts	Company Name:	
				Address:	
Email To:	SCS Contacts	Purchase Order No.:		Pace Quote Reference:	
Phone:	Fax:	Project Name:	Plant Hammond AP-1 BKG 03	Pace Project Manager:	Kevin Herring
Requested Due Date/TAT:	10 Day	Project Number:	GW6581B	Pace Profile #:	10839-4

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ~~COR~~

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 DATE	COLLECTED TIME	COMPOSITE DATE	COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate N	TDS N	Full App. III&IV Metals 6010/6020* N	RAD 226/228 N	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. G2512535
1	HGWA-43D	WT	G	12/15	1225	–	–	17	5	2		3							X	X	X	X	N	pH = 7.39
2	HGWA-44D	WT	G	12/15	1618	–	–	16	5	2		3							X	X	X	X	N	pH = 7.87
3	EB-01	WT	G	12/15	1800	–	–	6*	5	2		3							X	X	X	X	N	
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	Thomas Kessler / Geosyntec	12/17	0846	[signature] / Pace	12/17/20	8:48am	
*Full App. III & IV Metals=Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Hg, Mo, Se, Tl	Ryan [signature] / Pace	12/17/20	1102	[signature] / Pace	12/17/20	1102	
One sample set submitted for HGWA-43D and HGWA-44D but they will be reported for AP-1/2/3 SDGs							
One sample set submitted for EB-01 but it will be reported for AP-1/2/3/4 SDGs							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Kessler

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 12/15/2020

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

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-226
Analyst:	LAL
Date:	1/5/2021
Worklist:	58138
Matrix:	DW

Method Blank Assessment	
MB Sample ID	2073293
MB concentration:	0.176
M/B Counting Uncertainty:	0.135
MB MDC:	0.246
MB Numerical Performance Indicator:	2.55
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS58138	LCSD58138
Count Date:	1/6/2021	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.041	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.515	
Target Conc. (pCi/L, g, F):	4.669	
Uncertainty (Calculated):	0.056	
Result (pCi/L, g, F):	4.726	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.782	
Numerical Performance Indicator:	0.14	
Percent Recovery:	101.21%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

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

Duplicate Sample Assessment		
Sample I.D.:	92512557001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	92512557001DUP	
Sample Result (pCi/L, g, F):	0.259	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.248	
Sample Duplicate Result (pCi/L, g, F):	0.181	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.219	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	0.458	92512557001
Duplicate RPD:	35.10%	92512557001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	
% RPD Limit:	25%	

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

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

Comments:

~~***Batch must be re-prepped due to unacceptable precision.~~ N/A LAM 1/6/21

KLB 1-6-2021

LAM 1/6/21

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	1/5/2021
Worklist:	58138
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2073293
MB concentration:	0.176
M/B Counting Uncertainty:	0.135
MB MDC:	0.246
MB Numerical Performance Indicator:	2.55
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS58138	LCSD58138
Count Date:	1/6/2021	1/6/2021
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.041	24.041
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.515	0.507
Target Conc. (pCi/L, g, F):	4.669	4.743
Uncertainty (Calculated):	0.056	0.057
Result (pCi/L, g, F):	4.726	4.173
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.782	0.736
Numerical Performance Indicator:	0.14	-1.51
Percent Recovery:	101.21%	87.98%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS58138	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD58138	
Sample Result (pCi/L, g, F):	4.726	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.782	
Sample Duplicate Result (pCi/L, g, F):	4.173	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.736	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	1.009	92512557001
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	13.99%	92512557001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

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

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

Comments:

KB 1-6-2021

LAM 1/6/21

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	12/31/2020
Worklist:	58095
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2071922
MB concentration:	0.694
MB 2 Sigma CSU:	0.380
MB MDC:	0.676
MB Numerical Performance Indicator:	3.58
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS58095	LCSD58095
Count Date:	1/5/2021	1/5/2021
Spike I.D.:	20-030	20-030
Decay Corrected Spike Concentration (pCi/mL):	37.002	37.002
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.803	0.801
Target Conc. (pCi/L, g, F):	4.610	4.617
Uncertainty (Calculated):	0.226	0.226
Result (pCi/L, g, F):	5.581	5.412
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.255	1.220
Numerical Performance Indicator:	1.49	1.25
Percent Recovery:	121.08%	117.21%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS58095	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD58095	
Sample Result (pCi/L, g, F):	5.581	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.255	
Sample Duplicate Result (pCi/L, g, F):	5.412	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.220	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.190	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	3.25%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

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

Comments:
*The method blank result is below the reporting limit for this analysis and is acceptable.

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-226
Analyst:	LAL
Date:	1/5/2021
Worklist:	58138
Matrix:	DW

Method Blank Assessment	
MB Sample ID	2073293
MB concentration:	0.176
M/B Counting Uncertainty:	0.135
MB MDC:	0.246
MB Numerical Performance Indicator:	2.55
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS58138	LCSD58138
Count Date:	1/6/2021	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.041	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.515	
Target Conc. (pCi/L, g, F):	4.669	
Uncertainty (Calculated):	0.056	
Result (pCi/L, g, F):	4.726	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.782	
Numerical Performance Indicator:	0.14	
Percent Recovery:	101.21%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

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

Duplicate Sample Assessment		
Sample I.D.:	92512557001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	92512557001DUP	
Sample Result (pCi/L, g, F):	0.259	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.248	
Sample Duplicate Result (pCi/L, g, F):	0.181	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.219	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	0.458	92512557001
Duplicate RPD:	35.10%	92512557001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	
% RPD Limit:	25%	

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

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

Comments:

~~***Batch must be re-prepped due to unacceptable precision.~~ N/A LAM 1/6/21

KLB 1-6-2021

LAM 1/6/21

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	1/5/2021
Worklist:	58138
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2073293
MB concentration:	0.176
M/B Counting Uncertainty:	0.135
MB MDC:	0.246
MB Numerical Performance Indicator:	2.55
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS58138	LCSD58138
Count Date:	1/6/2021	1/6/2021
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.041	24.041
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.515	0.507
Target Conc. (pCi/L, g, F):	4.669	4.743
Uncertainty (Calculated):	0.056	0.057
Result (pCi/L, g, F):	4.726	4.173
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.782	0.736
Numerical Performance Indicator:	0.14	-1.51
Percent Recovery:	101.21%	87.98%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS58138	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD58138	
Sample Result (pCi/L, g, F):	4.726	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.782	
Sample Duplicate Result (pCi/L, g, F):	4.173	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.736	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	1.009	92512557001
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	13.99%	92512557001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

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

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

Comments:

KB 1-6-2021

LAM 1/6/21

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	12/31/2020
Worklist:	58095
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2071922
MB concentration:	0.694
M/B 2 Sigma CSU:	0.380
MB MDC:	0.676
MB Numerical Performance Indicator:	3.58
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS58095	LCSD58095
Count Date:	1/5/2021	1/5/2021
Spike I.D.:	20-030	20-030
Decay Corrected Spike Concentration (pCi/mL):	37.002	37.002
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.803	0.801
Target Conc. (pCi/L, g, F):	4.610	4.617
Uncertainty (Calculated):	0.226	0.226
Result (pCi/L, g, F):	5.581	5.412
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.255	1.220
Numerical Performance Indicator:	1.49	1.25
Percent Recovery:	121.08%	117.21%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS58095	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD58095	
Sample Result (pCi/L, g, F):	5.581	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.255	
Sample Duplicate Result (pCi/L, g, F):	5.412	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.220	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.190	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	3.25%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

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

Comments:
*The method blank result is below the reporting limit for this analysis and is acceptable.

January 2021

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

February 03, 2021

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

RE: Project: HAMMOND AP-1 BKG 04
Pace Project No.: 92517888

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on January 21, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

Kevin Herring
kevin.herring@pacelabs.com
1(704)875-9092
HORIZON Database Administrator

Enclosures

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

CERTIFICATIONS

Project: HAMMOND AP-1 BKG 04
Pace Project No.: 92517888

Pace Analytical Services Charlotte
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

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

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SAMPLE SUMMARY

Project: HAMMOND AP-1 BKG 04
Pace Project No.: 92517888

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92517888001	**HGWA-43D**	Water	01/19/21 16:45	01/21/21 11:30
92517888002	**HGWA-44D**	Water	01/19/21 17:42	01/21/21 11:30
92517888003	**EB-01**	Water	01/20/21 14:00	01/21/21 11:30

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SAMPLE ANALYTE COUNT

Project: HAMMOND AP-1 BKG 04
Pace Project No.: 92517888

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92517888001	**HGWA-43D**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92517888002	**HGWA-44D**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92517888003	**EB-01**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2450C-2011	AW1	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 BKG 04
Pace Project No.: 92517888

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92517888001	**HGWA-43D**					
	Performed by	CUSTOMER			01/21/21 15:22	
	pH	7.39	Std. Units		01/21/21 15:22	
EPA 6010D	Calcium	60.1	mg/L	1.0	02/02/21 09:19	
EPA 6020B	Antimony	0.00029J	mg/L	0.0030	02/02/21 19:23	B
EPA 6020B	Arsenic	0.0011J	mg/L	0.0050	02/02/21 19:23	
EPA 6020B	Barium	0.32	mg/L	0.010	02/02/21 19:23	
EPA 6020B	Boron	0.049J	mg/L	0.10	02/02/21 19:23	
EPA 6020B	Lead	0.000044J	mg/L	0.0050	02/02/21 19:23	
EPA 6020B	Lithium	0.0025J	mg/L	0.030	02/02/21 19:23	
EPA 6020B	Molybdenum	0.0038J	mg/L	0.010	02/02/21 19:23	
SM 2450C-2011	Total Dissolved Solids	270	mg/L	10.0	01/22/21 09:38	
EPA 300.0 Rev 2.1 1993	Chloride	4.1	mg/L	1.0	01/24/21 23:50	
EPA 300.0 Rev 2.1 1993	Fluoride	0.16	mg/L	0.10	01/24/21 23:50	
EPA 300.0 Rev 2.1 1993	Sulfate	37.3	mg/L	1.0	01/24/21 23:50	
92517888002	**HGWA-44D**					
	Performed by	CUSTOMER			01/21/21 15:22	
	pH	7.86	Std. Units		01/21/21 15:22	
EPA 6010D	Calcium	33.0	mg/L	1.0	02/02/21 14:34	
EPA 6020B	Antimony	0.00067J	mg/L	0.0030	02/02/21 19:29	B
EPA 6020B	Barium	0.41	mg/L	0.010	02/02/21 19:29	
EPA 6020B	Boron	0.40	mg/L	0.10	02/02/21 19:29	
EPA 6020B	Chromium	0.0011J	mg/L	0.010	02/02/21 19:29	
EPA 6020B	Lead	0.00019J	mg/L	0.0050	02/02/21 19:29	
EPA 6020B	Lithium	0.034	mg/L	0.030	02/02/21 19:29	
EPA 6020B	Molybdenum	0.0035J	mg/L	0.010	02/02/21 19:29	
SM 2450C-2011	Total Dissolved Solids	278	mg/L	10.0	01/22/21 09:39	
EPA 300.0 Rev 2.1 1993	Chloride	9.5	mg/L	1.0	01/25/21 00:04	
EPA 300.0 Rev 2.1 1993	Fluoride	0.74	mg/L	0.10	01/25/21 00:04	
EPA 300.0 Rev 2.1 1993	Sulfate	7.4	mg/L	1.0	01/25/21 00:04	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 BKG 04
Pace Project No.: 92517888

Sample: HGWA-43D **Lab ID: 92517888001** Collected: 01/19/21 16:45 Received: 01/21/21 11:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		01/21/21 15:22		
pH	**7.39**	Std. Units			1		01/21/21 15:22		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**60.1**	mg/L	1.0	0.070	1	02/01/21 11:28	02/02/21 09:19	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00029J**	mg/L	0.0030	0.00028	1	02/02/21 09:23	02/02/21 19:23	7440-36-0	B
Arsenic	**0.0011J**	mg/L	0.0050	0.00078	1	02/02/21 09:23	02/02/21 19:23	7440-38-2	
Barium	**0.32**	mg/L	0.010	0.00071	1	02/02/21 09:23	02/02/21 19:23	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/02/21 09:23	02/02/21 19:23	7440-41-7	
Boron	**0.049J**	mg/L	0.10	0.0052	1	02/02/21 09:23	02/02/21 19:23	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/02/21 09:23	02/02/21 19:23	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/02/21 09:23	02/02/21 19:23	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/02/21 09:23	02/02/21 19:23	7440-48-4	
Lead	**0.000044J**	mg/L	0.0050	0.000036	1	02/02/21 09:23	02/02/21 19:23	7439-92-1	
Lithium	**0.0025J**	mg/L	0.030	0.00081	1	02/02/21 09:23	02/02/21 19:23	7439-93-2	
Molybdenum	**0.0038J**	mg/L	0.010	0.00069	1	02/02/21 09:23	02/02/21 19:23	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/02/21 09:23	02/02/21 19:23	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/02/21 09:23	02/02/21 19:23	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	01/26/21 07:45	01/26/21 10:33	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**270**	mg/L	10.0	10.0	1		01/22/21 09:38		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.1**	mg/L	1.0	0.60	1		01/24/21 23:50	16887-00-6	
Fluoride	**0.16**	mg/L	0.10	0.050	1		01/24/21 23:50	16984-48-8	
Sulfate	**37.3**	mg/L	1.0	0.50	1		01/24/21 23:50	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 BKG 04
Pace Project No.: 92517888

Sample: HGWA-44D **Lab ID: 92517888002** Collected: 01/19/21 17:42 Received: 01/21/21 11:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		01/21/21 15:22		
pH	**7.86**	Std. Units			1		01/21/21 15:22		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**33.0**	mg/L	1.0	0.070	1	02/01/21 11:28	02/02/21 14:34	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00067J**	mg/L	0.0030	0.00028	1	02/02/21 09:23	02/02/21 19:29	7440-36-0	B
Arsenic	ND	mg/L	0.0050	0.00078	1	02/02/21 09:23	02/02/21 19:29	7440-38-2	
Barium	**0.41**	mg/L	0.010	0.00071	1	02/02/21 09:23	02/02/21 19:29	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/02/21 09:23	02/02/21 19:29	7440-41-7	
Boron	**0.40**	mg/L	0.10	0.0052	1	02/02/21 09:23	02/02/21 19:29	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/02/21 09:23	02/02/21 19:29	7440-43-9	
Chromium	**0.0011J**	mg/L	0.010	0.00055	1	02/02/21 09:23	02/02/21 19:29	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/02/21 09:23	02/02/21 19:29	7440-48-4	
Lead	**0.00019J**	mg/L	0.0050	0.000036	1	02/02/21 09:23	02/02/21 19:29	7439-92-1	
Lithium	**0.034**	mg/L	0.030	0.00081	1	02/02/21 09:23	02/02/21 19:29	7439-93-2	
Molybdenum	**0.0035J**	mg/L	0.010	0.00069	1	02/02/21 09:23	02/02/21 19:29	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/02/21 09:23	02/02/21 19:29	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/02/21 09:23	02/02/21 19:29	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	01/26/21 07:45	01/26/21 10:35	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**278**	mg/L	10.0	10.0	1		01/22/21 09:39		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**9.5**	mg/L	1.0	0.60	1		01/25/21 00:04	16887-00-6	
Fluoride	**0.74**	mg/L	0.10	0.050	1		01/25/21 00:04	16984-48-8	
Sulfate	**7.4**	mg/L	1.0	0.50	1		01/25/21 00:04	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 BKG 04
Pace Project No.: 92517888

Sample: EB-01 **Lab ID: 92517888003** Collected: 01/20/21 14:00 Received: 01/21/21 11:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.070	1	02/01/21 11:28	02/02/21 14:39	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	0.00028	1	02/02/21 09:23	02/02/21 19:34	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/02/21 09:23	02/02/21 19:34	7440-38-2	
Barium	ND	mg/L	0.010	0.00071	1	02/02/21 09:23	02/02/21 19:34	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/02/21 09:23	02/02/21 19:34	7440-41-7	
Boron	ND	mg/L	0.10	0.0052	1	02/02/21 09:23	02/02/21 19:34	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/02/21 09:23	02/02/21 19:34	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/02/21 09:23	02/02/21 19:34	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/02/21 09:23	02/02/21 19:34	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/02/21 09:23	02/02/21 19:34	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	02/02/21 09:23	02/02/21 19:34	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/02/21 09:23	02/02/21 19:34	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/02/21 09:23	02/02/21 19:34	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/02/21 09:23	02/02/21 19:34	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	01/26/21 07:45	01/26/21 10:38	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		01/22/21 16:44		
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		01/25/21 00:19	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		01/25/21 00:19	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		01/25/21 00:19	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 BKG 04
Pace Project No.: 92517888

QC Batch: 596653
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92517888001, 92517888002, 92517888003

METHOD BLANK: 3146677 Matrix: Water
Associated Lab Samples: 92517888001, 92517888002, 92517888003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.070	02/01/21 20:01	

LABORATORY CONTROL SAMPLE: 3146678

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3146679 3146681

Parameter	Units	92517740001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	157	1	1	159	152	244	-497	75-125	5	20	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3146682 3146683

Parameter	Units	92517909002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	177	1	1	182	183	421	522	75-125	1	20	M1

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 BKG 04
Pace Project No.: 92517888

QC Batch: 596887
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92517888001, 92517888002, 92517888003

METHOD BLANK: 3147679 Matrix: Water
Associated Lab Samples: 92517888001, 92517888002, 92517888003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00049J	0.0030	0.00028	02/02/21 18:08	
Arsenic	mg/L	ND	0.0050	0.00078	02/02/21 18:08	
Barium	mg/L	ND	0.010	0.00071	02/02/21 18:08	
Beryllium	mg/L	ND	0.0030	0.000046	02/02/21 18:08	
Boron	mg/L	ND	0.10	0.0052	02/02/21 18:08	
Cadmium	mg/L	ND	0.0025	0.00012	02/02/21 18:08	
Chromium	mg/L	ND	0.010	0.00055	02/02/21 18:08	
Cobalt	mg/L	ND	0.0050	0.00038	02/02/21 18:08	
Lead	mg/L	ND	0.0050	0.000036	02/02/21 18:08	
Lithium	mg/L	ND	0.030	0.00081	02/02/21 18:08	
Molybdenum	mg/L	ND	0.010	0.00069	02/02/21 18:08	
Selenium	mg/L	ND	0.010	0.0016	02/02/21 18:08	
Thallium	mg/L	ND	0.0010	0.00014	02/02/21 18:08	

LABORATORY CONTROL SAMPLE: 3147680

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	100	80-120	
Barium	mg/L	0.1	0.10	100	80-120	
Beryllium	mg/L	0.1	0.11	106	80-120	
Boron	mg/L	1	1.1	108	80-120	
Cadmium	mg/L	0.1	0.099	99	80-120	
Chromium	mg/L	0.1	0.10	103	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Lead	mg/L	0.1	0.10	102	80-120	
Lithium	mg/L	0.1	0.11	108	80-120	
Molybdenum	mg/L	0.1	0.10	103	80-120	
Selenium	mg/L	0.1	0.095	95	80-120	
Thallium	mg/L	0.1	0.10	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3147681 3147682

Parameter	Units	92517740002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00068J	0.1	0.1	0.11	0.11	107	111	75-125	3	20	
Arsenic	mg/L	ND	0.1	0.1	0.098	0.10	98	101	75-125	4	20	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 BKG 04
Pace Project No.: 92517888

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3147681 3147682

Parameter	Units	92517740002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.058	0.1	0.1	0.15	0.16	96	102	75-125	4	20	
Beryllium	mg/L	ND	0.1	0.1	0.099	0.10	99	102	75-125	3	20	
Boron	mg/L	0.022J	1	1	1.0	1.0	99	100	75-125	1	20	
Cadmium	mg/L	ND	0.1	0.1	0.094	0.096	94	96	75-125	2	20	
Chromium	mg/L	0.00061J	0.1	0.1	0.10	0.10	102	103	75-125	2	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20	
Lead	mg/L	0.000072J	0.1	0.1	0.094	0.097	94	97	75-125	3	20	
Lithium	mg/L	ND	0.1	0.1	0.098	0.10	98	101	75-125	4	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	0	20	
Selenium	mg/L	ND	0.1	0.1	0.093	0.094	92	93	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.095	0.097	95	97	75-125	2	20	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 BKG 04
Pace Project No.: 92517888

QC Batch: 594784
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92517888001, 92517888002, 92517888003

METHOD BLANK: 3138045 Matrix: Water
Associated Lab Samples: 92517888001, 92517888002, 92517888003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000078	01/26/21 10:28	

LABORATORY CONTROL SAMPLE: 3138046

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3138047 3138048

Parameter	Units	92517891001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0024	0.0027	94	106	75-125	12	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 BKG 04
Pace Project No.: 92517888

QC Batch: 594633
QC Batch Method: SM 2450C-2011
Analysis Method: SM 2450C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92517888001, 92517888002

METHOD BLANK: 3137200 Matrix: Water
Associated Lab Samples: 92517888001, 92517888002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	01/22/21 09:32	

LABORATORY CONTROL SAMPLE: 3137201

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	398	100	84-108	

SAMPLE DUPLICATE: 3137203

Parameter	Units	92517894003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	131	126	4	10	

SAMPLE DUPLICATE: 3137350

Parameter	Units	92517894002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	64.0	67.0	5	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 BKG 04
Pace Project No.: 92517888

QC Batch: 594779
QC Batch Method: SM 2450C-2011
Analysis Method: SM 2450C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92517888003

METHOD BLANK: 3137995 Matrix: Water
Associated Lab Samples: 92517888003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	01/22/21 16:40	

LABORATORY CONTROL SAMPLE: 3137996

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	394	98	84-108	

SAMPLE DUPLICATE: 3137997

Parameter	Units	92517969001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		10	

SAMPLE DUPLICATE: 3138171

Parameter	Units	92517909004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	289	270	7	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 BKG 04
Pace Project No.: 92517888

QC Batch: 594878
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: 92517888001, 92517888002, 92517888003

METHOD BLANK: 3138480 Matrix: Water
Associated Lab Samples: 92517888001, 92517888002, 92517888003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	01/24/21 21:50	
Fluoride	mg/L	ND	0.10	0.050	01/24/21 21:50	
Sulfate	mg/L	ND	1.0	0.50	01/24/21 21:50	

LABORATORY CONTROL SAMPLE: 3138481

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	52.9	106	90-110	
Fluoride	mg/L	2.5	2.4	95	90-110	
Sulfate	mg/L	50	54.7	109	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3138482 3138483

Parameter	Units	92517740005 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	53.9	53.4	108	107	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.5	103	98	90-110	5	10	
Sulfate	mg/L	ND	50	50	55.4	54.9	111	110	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3138484 3138485

Parameter	Units	92517704001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	377	50	50	439	424	124	93	90-110	3	10	M6
Fluoride	mg/L	0.23	2.5	2.5	ND	ND	-9	-9	90-110		10	M1
Sulfate	mg/L	597	50	50	676	646	158	99	90-110	4	10	M6

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALIFIERS

Project: HAMMOND AP-1 BKG 04
Pace Project No.: 92517888

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.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
M6	Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HAMMOND AP-1 BKG 04
Pace Project No.: 92517888

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92517888001	**HGWA-43D**				
92517888002	**HGWA-44D**				
92517888001	**HGWA-43D**	EPA 3010A	596653	EPA 6010D	596772
92517888002	**HGWA-44D**	EPA 3010A	596653	EPA 6010D	596772
92517888003	**EB-01**	EPA 3010A	596653	EPA 6010D	596772
92517888001	**HGWA-43D**	EPA 3005A	596887	EPA 6020B	597015
92517888002	**HGWA-44D**	EPA 3005A	596887	EPA 6020B	597015
92517888003	**EB-01**	EPA 3005A	596887	EPA 6020B	597015
92517888001	**HGWA-43D**	EPA 7470A	594784	EPA 7470A	595259
92517888002	**HGWA-44D**	EPA 7470A	594784	EPA 7470A	595259
92517888003	**EB-01**	EPA 7470A	594784	EPA 7470A	595259
92517888001	**HGWA-43D**	SM 2450C-2011	594633		
92517888002	**HGWA-44D**	SM 2450C-2011	594633		
92517888003	**EB-01**	SM 2450C-2011	594779		
92517888001	**HGWA-43D**	EPA 300.0 Rev 2.1 1993	594878		
92517888002	**HGWA-44D**	EPA 300.0 Rev 2.1 1993	594878		
92517888003	**EB-01**	EPA 300.0 Rev 2.1 1993	594878		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

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

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO# : 92517888

92517888

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

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

Date/Initials Person Examining Contents: 1/21/21 CJH

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

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

Thermometer: ☑ IR Gun ID: 233 ☑ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 4.1 Correction Factor: Add/Subtract (°C) -0.2

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

Cooler Temp Corrected (°C): 3.9

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

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

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

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

Project # **WO# : 92517888**

PM: KLH1 **Due Date: 02/04/21**

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)	BP4C-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)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (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)	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	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 DEHNR 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 3

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 AP-1 BKG 04	Pace Project Manager: Kevin Herring
Requested Due Date/TAT: 10 Day	Project Number: GW6581B	Pace Profile #: 10839-4

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
WASTEWATER	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 DATE	COLLECTED TIME	COMPOSITE DATE	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	TDS	Full App. III&IV Metals 6010/6020*	RAD 226/228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Requested Analysis Filtered (Y/N)	N	N	N	N		92577688
1	HGWA-43D	WT	G	1/19/21	1645	–	–	17/C5	5	2		3							X	X	X	X	N	pH = 7.68
2	~~HGWA-44D~~	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
3	~~EB-01~~	WT	G			–	–		5	2		3							X	X	X	X	N	
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

EC 1/20/21

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	GEC	1/21/21	1130	Pace	1/21/21	1130	
*Full App. III & IV Metals=Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Hg, Mo, Se, Tl	Pace	1/21/21	1320		1/21/21	1820	
One sample set submitted for HGWA-43D and HGWA-44D but they will be reported for AP-1/2/3 SDGs							
One sample set submitted for EB-01 but it will be reported for AP-1/2/3/4 SDGs							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Connor Cain

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 1/20/21

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
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: 2 of 3

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 AP-1 BKG 04
Project Number:	GW65818

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	10839-4

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 DATE	COLLECTED TIME	COMPOSITE DATE	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	TDS	Full App. III&IV Metals 6010/6020*	RAD 226/228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Requested Analysis Filtered (Y/N)	N	N	N	N		92517888
1	HGWA-43D	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
2	HGWA-44D	WT	G	1/19	1742	–	–	14	5	2		3							X	X	X	X	N	pH = 7.86
3	EB-01	WT	G			–	–		5	2		3							X	X	X	X	N	
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

1/19/2021

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	/TCO	1/20/21	1600	/GEO	1/20/21	1600	
*Full App. III & IV Metals=Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Hg, Mo, Se, Tl	/GEC	1/21/21	1130	/Pace	1/21/21	1130	
One sample set submitted for HGWA-43D and HGWA-44D but they will be reported for AP-1/2/3 SDGs	/Pace	1/21/21	1326		1/21/21	1326	
One sample set submitted for EB-01 but it will be reported for AP-1/2/3/4 SDGs							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Chad Rosso

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 1/19/2021

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
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: 3 of 3

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 AP-1 BKG 04
Project Number:	GW6581B

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	10839-4

REGULATORY AGENCY

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

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 DATE	COLLECTED TIME	COMPOSITE DATE	COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	Chloride, Fluoride, Sulfate (N)	TDS (N)	Full App. III&IV Metals 6010/6020* (N)	RAD 226/228 (N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 925(7688
1	~~HGWA-43D~~	WT	G			–	–		5	2		3							X	X	X	X	N	~~pH=~~
2	~~HGWA-44D~~	WT	G						5	2		3							X	X	X	X	N	~~pH=~~
3	EB-01	WT	G	1/20	1400	–	–	–	5	2		3							X	X	X	X	N	
4																								
5																								
6																								
7																								
8									1/20/21															
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	[signature] / GEO	1/20/21	1600	[signature] / GEO	1/20/21	1600
*Full App. III & IV Metals=Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Hg, Mo, Se, Tl	[signature] / GEO	1/21/21	1130	[signature] / Pace	1/21/21	1130
One sample set submitted for HGWA-43D and HGWA-44D but they will be reported for AP-1/2/3 SDGs.	[signature] / Pace	1/21/21	1320	[signature]	1/21/21	1326
One sample set submitted for EB-01 but it will be reported for AP-1/2/3/4 SDGs						

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Chad Russo

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 1/20/21

*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

February 11, 2021

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

RE: Project: HAMMOND AP-1 BKG 04 RADS
Pace Project No.: 92517856

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on January 21, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Greensburg

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

Sincerely,

Kevin Herring
kevin.herring@pacelabs.com
1(704)875-9092
HORIZON Database Administrator

Enclosures

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

CERTIFICATIONS

Project: HAMMOND AP-1 BKG 04 RADS
Pace Project No.: 92517856

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SAMPLE SUMMARY

Project: HAMMOND AP-1 BKG 04 RADS
Pace Project No.: 92517856

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92517856001	**HGWA-43D**	Water	01/19/21 16:45	01/21/21 11:30
92517856002	**HGWA-44D**	Water	01/19/21 17:42	01/21/21 11:30
92517856003	**EB-01**	Water	01/20/21 14:00	01/21/21 11:30

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SAMPLE ANALYTE COUNT

Project: HAMMOND AP-1 BKG 04 RADS
Pace Project No.: 92517856

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92517856001	**HGWA-43D**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92517856002	**HGWA-44D**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92517856003	**EB-01**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 BKG 04 RADS
Pace Project No.: 92517856

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92517856001	**HGWA-43D**					
EPA 9315	Radium-226	0.203 ± 0.224 (0.445) C:90% T:NA	pCi/L		02/09/21 07:43	
EPA 9320	Radium-228	0.482 ± 0.373 (0.741) C:82% T:84%	pCi/L		02/04/21 11:54	
Total Radium Calculation	Total Radium	0.685 ± 0.597 (1.19)	pCi/L		02/10/21 08:43	
92517856002	**HGWA-44D**					
EPA 9315	Radium-226	0.259 ± 0.225 (0.402) C:101% T:NA	pCi/L		02/09/21 07:43	
EPA 9320	Radium-228	0.531 ± 0.589 (1.24) C:73% T:80%	pCi/L		02/04/21 14:43	
Total Radium Calculation	Total Radium	0.790 ± 0.814 (1.64)	pCi/L		02/10/21 08:43	
92517856003	**EB-01**					
EPA 9315	Radium-226	0.0391 ± 0.180 (0.466) C:86% T:NA	pCi/L		02/09/21 07:43	
EPA 9320	Radium-228	0.365 ± 0.434 (0.916) C:78% T:72%	pCi/L		02/04/21 14:59	
Total Radium Calculation	Total Radium	0.404 ± 0.614 (1.38)	pCi/L		02/10/21 08:43	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 BKG 04 RADS
Pace Project No.: 92517856

Sample: HGWA-43D **Lab ID: 92517856001** Collected: 01/19/21 16:45 Received: 01/21/21 11:30 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	**0.203 ± 0.224 (0.445) C:90% T:NA**	pCi/L	02/09/21 07:43	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.482 ± 0.373 (0.741) C:82% T:84%**	pCi/L	02/04/21 11:54	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.685 ± 0.597 (1.19)**	pCi/L	02/10/21 08:43	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 BKG 04 RADS
Pace Project No.: 92517856

Sample: HGWA-44D **Lab ID: 92517856002** Collected: 01/19/21 17:42 Received: 01/21/21 11:30 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	**0.259 ± 0.225 (0.402) C:101% T:NA**	pCi/L	02/09/21 07:43	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.531 ± 0.589 (1.24) C:73% T:80%**	pCi/L	02/04/21 14:43	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.790 ± 0.814 (1.64)**	pCi/L	02/10/21 08:43	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 BKG 04 RADS
Pace Project No.: 92517856

Sample: EB-01 **Lab ID: 92517856003** Collected: 01/20/21 14:00 Received: 01/21/21 11:30 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	**0.0391 ± 0.180 (0.466) C:86% T:NA**	pCi/L	02/09/21 07:43	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.365 ± 0.434 (0.916) C:78% T:72%**	pCi/L	02/04/21 14:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.404 ± 0.614 (1.38)**	pCi/L	02/10/21 08:43	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: HAMMOND AP-1 BKG 04 RADS
Pace Project No.: 92517856

QC Batch: 432561
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92517856001, 92517856002, 92517856003

METHOD BLANK: 2088957
Matrix: Water
Associated Lab Samples: 92517856001, 92517856002, 92517856003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.423 ± 0.354 (0.709) C:81% T:84%	pCi/L	02/04/21 14:59	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: HAMMOND AP-1 BKG 04 RADS
Pace Project No.: 92517856

QC Batch: 433326
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92517856001, 92517856002, 92517856003

METHOD BLANK: 2092294
Matrix: Water
Associated Lab Samples: 92517856001, 92517856002, 92517856003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.150 ± 0.194 (0.397) C:92% T:NA	pCi/L	02/09/21 07:43	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALIFIERS

Project: HAMMOND AP-1 BKG 04 RADS
Pace Project No.: 92517856

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.

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HAMMOND AP-1 BKG 04 RADS
Pace Project No.: 92517856

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92517856001	**HGWA-43D**	EPA 9315	433326		
92517856002	**HGWA-44D**	EPA 9315	433326		
92517856003	**EB-01**	EPA 9315	433326		
92517856001	**HGWA-43D**	EPA 9320	432561		
92517856002	**HGWA-44D**	EPA 9320	432561		
92517856003	**EB-01**	EPA 9320	432561		
92517856001	**HGWA-43D**	Total Radium Calculation	434325		
92517856002	**HGWA-44D**	Total Radium Calculation	434325		
92517856003	**EB-01**	Total Radium Calculation	434325		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

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

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO# : 92517856

92517856

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

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

Date/Initials Person Examining Contents: 1/21/21 CJH

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

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

Thermometer: ☑ IR Gun ID: 233 ☐ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 4.1 Correction Factor: Add/Subtract (°C) -0.2

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

Cooler Temp Corrected (°C): 3.9

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

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

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

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

Project # **WO#: 92517856**

PM: KLH1 **Due Date: 02/11/21**

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)	BP4C-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)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (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)		BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	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 DEHNR 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 3

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 AP-1 BKG 04
Project Number:	GW6581B

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	10839-4

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 DATE	COLLECTED TIME	COMPOSITE DATE	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	TDS	Full App. III&IV Metals 6010/6020*	RAD 226/228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																			N	N	N	N		92517856
1	HGWA-43D	WT	G	1/19/21	1645	–	– 17/65		5	2		3							X	X	X	X	N	pH = 7.68
2	~~HGWA-44D~~	WT	G			–	–		5	2		3							X	X	X	X	N	~~pH =~~
3	~~EB-01~~	WT	G			–	–		5	2		3							X	X	X	X	N	
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

CC 1/20/21

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	GEC	1/21/21	1130	PACE	1/21/21	1130	
*Full App. III & IV Metals=Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Hg, Mo, Se, Tl	PACE	1/21/21	1320				
One sample set submitted for HGWA-43D and HGWA-44D but they will be reported for AP-1/2/3 SDGs							
One sample set submitted for EB-01 but it will be reported for AP-1/2/3/4 SDGs							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Connor Cain

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 1/20/21

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
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: 2 of 3

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 AP-1 BKG 04	Pace Project Manager:	Kevin Herring
Requested Due Date/TAT:	10 Day	Project Number:	GW6581B	Pace Profile #:	10839-4

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

Site Location STATE: GA

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

ITEM #	Section D Required Client Information: SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	COMPOSITE DATE	COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analysis Filtered (Y/N): Y/N	Analysis Test: Chloride, Fluoride, Sulfate	TDS	Full App III&IV Metals 6010/6020*	RAD 226/228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	~~HGWA-43D~~	~~WT~~	~~G~~	~~-~~	~~-~~	~~-~~	~~-~~		5	2		3						N	N	N	N	N		62517656
2	HGWA-44D	WT	G	1/19	1742	-	-	17	5	2		3						X	X	X	X	N	~~pH =~~	
3	EB-01	WT	G			-	-		5	2		3						X	X	X	X	N	pH = 7.86	
4																		X	X	X	X	N		
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

1/19/2021

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	/JEO	1/20/21	1600	/GEO	1/20/21	1600	
*Full App. III & IV Metals=Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Hg, Mo, Se, Tl	/GEO	1/21/21	1130	/Pace	1/21/21	1130	
One sample set submitted for HGWA-43D and HGWA-44D but they will be reported for AP-1/2/3 SDGs	/Pace	1/21/21	1326				
One sample set submitted for EB-01 but it will be reported for AP-1/2/3/4 SDGs							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: ~~Chad Russo~~

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 1/19/2021

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
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: 3 of 3

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 AP-1 BKG 04	Pace Project Manager:	Kevin Herring
Requested Due Date/TAT:	10 Day	Project Number:	GW6581B	Pace Profile #:	10839-4

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☒ OTHER ~~CGR~~

Site Location STATE: GA

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

ITEM #	Section D Required Client Information: SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	COMPOSITE DATE	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	TDS	Full App. III&IV Metals 6010/6020*	RAD 226/228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Requested Analysis Filtered (Y/N)	N	N	N	N		
1	~~HGWA-43D~~	WT	G			-	-		5	2		3							X	X	X	X	N	~~pH=~~
2	~~HGWA-44D~~	WT	G						5	2		3							X	X	X	X	N	~~pH=~~
3	EB-01	WT	G	1/20	1400	-	-		5	2		3							X	X	X	X	N	42517856
4																								
5									10															
6																								
7																								
8									1/20/21															
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	CR / SCS	1/20/21	16:00	/ GEO	1/20/21	1600	
*Full App. III & IV Metals=Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Hg, Mo, Se, Tl	/ GEO	1/21/21	1130	/ Pace	1/21/21	1130	
One sample set submitted for HGWA-43D and HGWA-44D but they will be reported for AP-1/2/3 SDGs	/ Pace	1/21/21	1320	Chad Russo	1/21/21	1326	
One sample set submitted for EB-01 but it will be reported for AP-1/2/3/4 SDGs							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Chad Russo

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 1/20/21

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

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

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	JJY
Date:	2/8/2021
Worklist:	58638
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2092294
MB concentration:	0.150
M/B Counting Uncertainty:	0.192
MB MDC:	0.397
MB Numerical Performance Indicator:	1.53
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS58638	LCSD58638
Count Date:	2/9/2021	2/9/2021
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.040	24.040
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.505	0.507
Target Conc. (pCi/L, g, F):	4.765	4.742
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	4.773	5.375
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.808	0.863
Numerical Performance Indicator:	0.02	1.44
Percent Recovery:	100.16%	113.37%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS58638	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD58638	
Sample Result (pCi/L, g, F):	4.773	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.808	
Sample Duplicate Result (pCi/L, g, F):	5.375	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.863	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.999	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	12.37%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

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

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

Comments:

2/9/21

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	JJY
Date:	2/8/2021
Worklist:	58638
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2092294
MB concentration:	0.150
M/B Counting Uncertainty:	0.192
MB MDC:	0.397
MB Numerical Performance Indicator:	1.53
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS58638	LCSD58638
Count Date:	2/9/2021	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.040	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.505	
Target Conc. (pCi/L, g, F):	4.765	
Uncertainty (Calculated):	0.057	
Result (pCi/L, g, F):	4.773	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.808	
Numerical Performance Indicator:	0.02	
Percent Recovery:	100.16%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

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

Duplicate Sample Assessment		
Sample I.D.:	92517856001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	92517856001DUP	
Sample Result (pCi/L, g, F):	0.203	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.222	
Sample Duplicate Result (pCi/L, g, F):	0.681	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.370	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	-2.171	92517856001
Duplicate RPD:	108.17%	92517856001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	
% RPD Limit:	25%	

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

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

Comments:

NI < 3 acceptable

***Batch must be re-prepped due to unacceptable precision.

JJY 2/9/21

Quality Control Sample Performance Assessment

Test: Ra-228
Analyst: VAL
Date: 2/2/2021
Worklist: 58538
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2088957
MB concentration:	0.423
M/B 2 Sigma CSU:	0.354
MB MDC:	0.709
MB Numerical Performance Indicator:	2.34
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS58538	LCSD58538
Count Date:	2/4/2021	2/4/2021
Spike I.D.:	20-030	20-030
Decay Corrected Spike Concantration (pCi/mL):	36.635	36.635
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.803	0.806
Target Conc. (pCi/L, g, F):	4.563	4.543
Uncertainty (Calculated):	0.224	0.223
Result (pCi/L, g, F):	2.734	3.105
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.942	0.887
Numerical Performance Indicator:	-3.70	-3.08
Percent Recovery:	59.92%	68.36%
Status vs Numerical Indicator:	Fail**	N/A
Status vs Recovery:	Fail Low**	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS58538	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD58538	
Sample Result (pCi/L, g, F):	2.734	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.942	
Sample Duplicate Result (pCi/L, g, F):	3.105	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.887	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.563	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	13.15%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

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

Comments:

**Batch must be re-prepped due to LCS failure.

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	2/5/2021
Worklist:	58538
Matrix:	

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	
MB concentration:	
MB MDC:	
MB Numerical Performance Indicator:	
MB Status vs Numerical Indicator:	
MB Status vs. MDC:	

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS58538	LCSD58538
Count Date:	2/8/2021	2/8/2021
Spike I.D.:	20-030	20-030
Decay Corrected Spike Concentration (pCi/mL):	36.590	36.590
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.803	0.806
Target Conc. (pCi/L, g, F):	4.557	4.538
Uncertainty (Calculated):	0.223	0.222
Result (pCi/L, g, F):	4.275	4.409
	1.024	1.024
Numerical Performance Indicator:	-0.53	-0.24
Percent Recovery:	93.80%	97.18%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS58538	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD58538	
Sample Result (pCi/L, g, F):	4.275	
	1.024	
Sample Duplicate Result (pCi/L, g, F):	4.409	
	1.024	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.182	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	3.53%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Sample Matrix Spike Duplicate Result:		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

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

Comments:

2/9/21

February 2021

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

March 09, 2021

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

RE: Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between February 09, 2021 and February 23, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

Kevin Herring
kevin.herring@pacelabs.com
1(704)875-9092
HORIZON Database Administrator

Enclosures

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

CERTIFICATIONS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Pace Analytical Services Charlotte
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

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

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SAMPLE SUMMARY

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92521151001	**HGWA-1**	Water	02/08/21 16:13	02/09/21 12:33
92521151002	**HGWA-2**	Water	02/09/21 10:38	02/10/21 09:56
92521151003	**HGWA-3**	Water	02/09/21 11:56	02/10/21 09:56
92521151004	**HGWA-43D**	Water	02/09/21 17:58	02/10/21 09:56
92521151005	**HGWA-44D**	Water	02/09/21 13:09	02/10/21 09:56
92521151006	**HGWC-7**	Water	02/10/21 12:11	02/11/21 09:19
92521151007	**MW-28D**	Water	02/10/21 17:31	02/11/21 09:19
92521151008	**MW-28D FILTERED**	Water	02/10/21 17:31	02/11/21 09:19
92521151009	**MW-20**	Water	02/11/21 11:59	02/12/21 09:36
92521151010	**HGWC-11**	Water	02/12/21 12:45	02/15/21 09:45
92521151011	**HGWC-12**	Water	02/12/21 14:51	02/15/21 09:45
92521151012	**MW-19**	Water	02/12/21 13:40	02/15/21 09:45
92521151013	**DUP-1**	Water	02/12/21 00:00	02/15/21 09:45
92521151014	**MW-25D**	Water	02/12/21 10:31	02/15/21 09:45
92521151015	**FB-1**	Water	02/12/21 15:30	02/15/21 09:45
92521151016	**EB-1**	Water	02/12/21 15:35	02/15/21 09:45
92521151017	**HGWC-10**	Water	02/15/21 13:31	02/17/21 11:54
92521151018	**MW-7**	Water	02/15/21 17:17	02/17/21 11:54
92521151019	**MW-29**	Water	02/15/21 14:45	02/17/21 11:54
92521151020	**HGWC-8**	Water	02/16/21 15:05	02/17/21 11:54
92521151021	**HGWC-9**	Water	02/16/21 18:39	02/17/21 11:54
92521151022	**MW-5**	Water	02/16/21 16:27	02/17/21 11:54
92521151023	**MW-6**	Water	02/16/21 15:12	02/17/21 11:54
92521151024	**MW-24D**	Water	02/16/21 12:44	02/17/21 11:54
92521151025	**MW-26D**	Water	02/16/21 18:03	02/17/21 11:54
92521151026	**MW-27D**	Water	02/16/21 11:11	02/17/21 11:54
92521151027	**MW-27D FILTERED**	Water	02/16/21 11:11	02/17/21 11:54
92521151028	**HGWC-13**	Water	02/22/21 13:54	02/23/21 09:10

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SAMPLE ANALYTE COUNT

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92521151001	**HGWA-1**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	JLH	1
92521151002	**HGWA-2**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521151003	**HGWA-3**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521151004	**HGWA-43D**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521151005	**HGWA-44D**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521151006	**HGWC-7**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	JLH	1
92521151007	**MW-28D**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	JLH	1
92521151008	**MW-28D FILTERED**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	JLH	1
92521151009	**MW-20**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	JLH	1
92521151010	**HGWC-11**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	JLH	1
92521151011	**HGWC-12**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521151012	**MW-19**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521151013	**DUP-1**	EPA 6020B	CW1	12

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SAMPLE ANALYTE COUNT

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521151014	**MW-25D**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521151015	**FB-1**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521151016	**EB-1**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	JLH	1
92521151017	**HGWC-10**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521151018	**MW-7**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521151019	**MW-29**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521151020	**HGWC-8**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521151021	**HGWC-9**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521151022	**MW-5**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521151023	**MW-6**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521151024	**MW-24D**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521151025	**MW-26D**	EPA 6020B	CW1	12
		EPA 7470A	VB	1

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SAMPLE ANALYTE COUNT

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 300.0 Rev 2.1 1993	CDC	1
92521151026	**MW-27D**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521151027	**MW-27D FILTERED**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521151028	**HGWC-13**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	JLH	1

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521151001	**HGWA-1**					
	Performed by	CUSTOMER			02/24/21 07:44	
	pH	7.11	Std. Units		02/24/21 07:44	
EPA 6020B	Barium	0.032	mg/L	0.010	02/23/21 18:06	
EPA 6020B	Lead	0.000058J	mg/L	0.0050	02/23/21 18:06	
EPA 6020B	Lithium	0.00086J	mg/L	0.030	02/23/21 18:06	
EPA 300.0 Rev 2.1 1993	Fluoride	0.078J	mg/L	0.10	02/10/21 17:59	
92521151002	**HGWA-2**					
	Performed by	CUSTOMER			02/24/21 07:44	
	pH	5.42	Std. Units		02/24/21 07:44	
EPA 6020B	Antimony	0.00062J	mg/L	0.0030	02/23/21 18:41	B
EPA 6020B	Barium	0.12	mg/L	0.010	02/23/21 18:41	
EPA 6020B	Beryllium	0.00014J	mg/L	0.0030	02/23/21 18:41	
EPA 6020B	Cadmium	0.00016J	mg/L	0.0025	02/23/21 18:41	
EPA 6020B	Cobalt	0.020	mg/L	0.0050	02/23/21 18:41	
EPA 6020B	Lead	0.000094J	mg/L	0.0050	02/23/21 18:41	
EPA 6020B	Lithium	0.0012J	mg/L	0.030	02/23/21 18:41	
92521151003	**HGWA-3**					
	Performed by	CUSTOMER			02/24/21 07:44	
	pH	7.23	Std. Units		02/24/21 07:44	
EPA 6020B	Antimony	0.00031J	mg/L	0.0030	02/23/21 18:46	B
EPA 6020B	Barium	0.13	mg/L	0.010	02/23/21 18:46	
EPA 6020B	Lithium	0.0032J	mg/L	0.030	02/23/21 18:46	
EPA 300.0 Rev 2.1 1993	Fluoride	0.074J	mg/L	0.10	02/11/21 18:16	
92521151004	**HGWA-43D**					
	Performed by	CUSTOMER			02/24/21 07:44	
	pH	7.44	Std. Units		02/24/21 07:44	
EPA 6020B	Antimony	0.00037J	mg/L	0.0030	02/23/21 19:15	B
EPA 6020B	Arsenic	0.0017J	mg/L	0.0050	02/23/21 19:15	B
EPA 6020B	Barium	0.34	mg/L	0.010	02/23/21 19:15	
EPA 6020B	Chromium	0.00095J	mg/L	0.010	02/23/21 19:15	
EPA 6020B	Lead	0.00029J	mg/L	0.0050	02/23/21 19:15	
EPA 6020B	Lithium	0.0026J	mg/L	0.030	02/23/21 19:15	
EPA 6020B	Molybdenum	0.0045J	mg/L	0.010	02/23/21 19:15	
EPA 300.0 Rev 2.1 1993	Fluoride	0.19	mg/L	0.10	02/11/21 19:36	
92521151005	**HGWA-44D**					
	Performed by	CUSTOMER			02/24/21 07:44	
	pH	7.84	Std. Units		02/24/21 07:44	
EPA 6020B	Antimony	0.00042J	mg/L	0.0030	02/23/21 19:21	B
EPA 6020B	Arsenic	0.00083J	mg/L	0.0050	02/23/21 19:21	B
EPA 6020B	Barium	0.46	mg/L	0.010	02/23/21 19:21	
EPA 6020B	Chromium	0.00066J	mg/L	0.010	02/23/21 19:21	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521151005	**HGWA-44D**					
EPA 6020B	Lead	0.00010J	mg/L	0.0050	02/23/21 19:21	
EPA 6020B	Lithium	0.026J	mg/L	0.030	02/23/21 19:21	
EPA 6020B	Molybdenum	0.0038J	mg/L	0.010	02/23/21 19:21	
EPA 300.0 Rev 2.1 1993	Fluoride	0.44	mg/L	0.10	02/11/21 19:52	
92521151006	**HGWC-7**					
	Performed by	CUSTOMER			02/24/21 07:44	
	pH	7.29	Std. Units		02/24/21 07:44	
EPA 6020B	Barium	0.069	mg/L	0.010	02/24/21 14:42	
EPA 6020B	Beryllium	0.000081J	mg/L	0.0030	02/24/21 14:42	
EPA 6020B	Chromium	0.0014J	mg/L	0.010	02/24/21 14:42	
EPA 6020B	Cobalt	0.00081J	mg/L	0.0050	02/24/21 14:42	
EPA 6020B	Lead	0.00056J	mg/L	0.0050	02/24/21 14:42	
EPA 6020B	Lithium	0.0032J	mg/L	0.030	02/24/21 14:42	
EPA 6020B	Molybdenum	0.051	mg/L	0.010	02/24/21 14:42	
EPA 300.0 Rev 2.1 1993	Fluoride	0.085J	mg/L	0.10	02/16/21 01:43	
92521151007	**MW-28D**					
	Performed by	CUSTOMER			02/24/21 07:44	
	pH	7.54	Std. Units		02/24/21 07:44	
EPA 6020B	Antimony	0.0019J	mg/L	0.0030	02/24/21 15:05	
EPA 6020B	Arsenic	0.0011J	mg/L	0.0050	02/24/21 15:05	
EPA 6020B	Barium	0.26	mg/L	0.010	02/24/21 15:05	
EPA 6020B	Beryllium	0.000054J	mg/L	0.0030	02/24/21 15:05	
EPA 6020B	Chromium	0.0014J	mg/L	0.010	02/24/21 15:05	
EPA 6020B	Lead	0.00044J	mg/L	0.0050	02/24/21 15:05	
EPA 6020B	Lithium	0.0092J	mg/L	0.030	02/24/21 15:05	
EPA 6020B	Molybdenum	0.020	mg/L	0.010	02/24/21 15:05	
EPA 300.0 Rev 2.1 1993	Fluoride	0.16	mg/L	0.10	02/16/21 01:58	
92521151008	**MW-28D FILTERED**					
	Performed by	CUSTOMER			02/24/21 07:44	
	pH	7.54	Std. Units		02/24/21 07:44	
EPA 6020B	Antimony	0.00054J	mg/L	0.0030	02/24/21 15:11	
EPA 6020B	Arsenic	0.0014J	mg/L	0.0050	02/24/21 15:11	
EPA 6020B	Barium	0.25	mg/L	0.010	02/24/21 15:11	
EPA 6020B	Cadmium	0.00021J	mg/L	0.0025	02/24/21 15:11	
EPA 6020B	Lithium	0.0083J	mg/L	0.030	02/24/21 15:11	
EPA 6020B	Molybdenum	0.018	mg/L	0.010	02/24/21 15:11	
EPA 300.0 Rev 2.1 1993	Fluoride	0.15	mg/L	0.10	02/16/21 02:12	
92521151009	**MW-20**					
	Performed by	CUSTOMER			02/24/21 07:44	
	pH	6.93	Std. Units		02/24/21 07:44	
EPA 6020B	Arsenic	0.00094J	mg/L	0.0050	02/24/21 15:39	
EPA 6020B	Barium	0.093	mg/L	0.010	02/24/21 15:39	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521151009	**MW-20**					
EPA 6020B	Lead	0.000039J	mg/L	0.0050	02/24/21 15:39	
EPA 6020B	Lithium	0.0010J	mg/L	0.030	02/24/21 15:39	
92521151010	**HGWC-11**					
	Performed by	CUSTOMER			02/24/21 07:44	
	pH	7.27	Std. Units		02/24/21 07:44	
EPA 6020B	Arsenic	0.0020J	mg/L	0.0050	02/24/21 16:08	
EPA 6020B	Barium	0.039	mg/L	0.010	02/24/21 16:08	
EPA 6020B	Molybdenum	0.023	mg/L	0.010	02/24/21 16:08	
EPA 6020B	Selenium	0.0079J	mg/L	0.010	02/24/21 16:08	
EPA 300.0 Rev 2.1 1993	Fluoride	0.17	mg/L	0.10	02/16/21 22:15	
92521151011	**HGWC-12**					
	Performed by	CUSTOMER			02/24/21 07:44	
	pH	6.23	Std. Units		02/24/21 07:44	
EPA 6020B	Arsenic	0.0045J	mg/L	0.0050	02/24/21 16:14	
EPA 6020B	Barium	0.090	mg/L	0.010	02/24/21 16:14	
EPA 6020B	Cobalt	0.0012J	mg/L	0.0050	02/24/21 16:14	
EPA 6020B	Lead	0.000067J	mg/L	0.0050	02/24/21 16:14	
EPA 6020B	Lithium	0.0094J	mg/L	0.030	02/24/21 16:14	
EPA 6020B	Molybdenum	0.048	mg/L	0.010	02/24/21 16:14	
EPA 300.0 Rev 2.1 1993	Fluoride	0.19	mg/L	0.10	02/20/21 15:05	
92521151012	**MW-19**					
	Performed by	CUSTOMER			02/24/21 07:44	
	pH	6.36	Std. Units		02/24/21 07:44	
EPA 6020B	Barium	0.051	mg/L	0.010	02/24/21 16:19	
EPA 6020B	Cadmium	0.00020J	mg/L	0.0025	02/24/21 16:19	
EPA 6020B	Chromium	0.00059J	mg/L	0.010	02/24/21 16:19	
EPA 6020B	Cobalt	0.037	mg/L	0.0050	02/24/21 16:19	
EPA 6020B	Lead	0.000071J	mg/L	0.0050	02/24/21 16:19	
EPA 6020B	Lithium	0.012J	mg/L	0.030	02/24/21 16:19	
EPA 6020B	Molybdenum	0.046	mg/L	0.010	02/24/21 16:19	
EPA 6020B	Selenium	0.0021J	mg/L	0.010	02/24/21 16:19	
EPA 6020B	Thallium	0.00019J	mg/L	0.0010	02/24/21 16:19	
EPA 300.0 Rev 2.1 1993	Fluoride	0.16	mg/L	0.10	02/20/21 15:21	
92521151013	**DUP-1**					
EPA 6020B	Barium	0.049	mg/L	0.010	02/24/21 16:25	
EPA 6020B	Cadmium	0.00015J	mg/L	0.0025	02/24/21 16:25	
EPA 6020B	Cobalt	0.036	mg/L	0.0050	02/24/21 16:25	
EPA 6020B	Lead	0.000071J	mg/L	0.0050	02/24/21 16:25	
EPA 6020B	Lithium	0.011J	mg/L	0.030	02/24/21 16:25	
EPA 6020B	Molybdenum	0.046	mg/L	0.010	02/24/21 16:25	
EPA 6020B	Selenium	0.0028J	mg/L	0.010	02/24/21 16:25	
EPA 6020B	Thallium	0.00019J	mg/L	0.0010	02/24/21 16:25	
EPA 300.0 Rev 2.1 1993	Fluoride	0.16	mg/L	0.10	02/20/21 15:37	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521151014	**MW-25D**					
	Performed by	CUSTOMER			02/24/21 07:44	
	pH	7.77	Std. Units		02/24/21 07:44	
EPA 6020B	Barium	0.46	mg/L	0.010	02/24/21 16:31	
EPA 6020B	Lithium	0.045	mg/L	0.030	02/24/21 16:31	
EPA 300.0 Rev 2.1 1993	Fluoride	1.6	mg/L	0.10	02/20/21 15:53	
92521151017	**HGWC-10**					
	Performed by	CUSTOMER			02/24/21 07:44	
	pH	6.83	Std. Units		02/24/21 07:44	
EPA 6020B	Antimony	0.00065J	mg/L	0.0030	03/04/21 17:27	
EPA 6020B	Barium	0.060	mg/L	0.0050	03/04/21 17:27	
EPA 6020B	Selenium	0.0028J	mg/L	0.0050	03/04/21 17:27	
EPA 300.0 Rev 2.1 1993	Fluoride	0.080J	mg/L	0.10	02/20/21 18:14	
92521151018	**MW-7**					
	Performed by	CUSTOMER			02/24/21 07:44	
	pH	6.77	Std. Units		02/24/21 07:44	
EPA 6020B	Antimony	0.0021J	mg/L	0.0030	03/04/21 17:50	
EPA 6020B	Barium	0.048	mg/L	0.0050	03/04/21 17:50	
EPA 6020B	Chromium	0.0015J	mg/L	0.0050	03/04/21 17:50	
EPA 6020B	Molybdenum	0.0015J	mg/L	0.010	03/04/21 17:50	
92521151019	**MW-29**					
	Performed by	CUSTOMER			02/24/21 07:44	
	pH	7.09	Std. Units		02/24/21 07:44	
EPA 6020B	Antimony	0.00094J	mg/L	0.0030	03/04/21 17:56	
EPA 6020B	Barium	0.081	mg/L	0.0050	03/04/21 17:56	
EPA 6020B	Cobalt	0.00097J	mg/L	0.0050	03/04/21 17:56	
EPA 6020B	Lead	0.000052J	mg/L	0.0010	03/04/21 17:56	
EPA 6020B	Lithium	0.0024J	mg/L	0.030	03/04/21 17:56	
EPA 6020B	Molybdenum	0.0029J	mg/L	0.010	03/04/21 17:56	
92521151020	**HGWC-8**					
	Performed by	CUSTOMER			02/24/21 07:44	
	pH	7.16	Std. Units		02/24/21 07:44	
EPA 6020B	Antimony	0.00064J	mg/L	0.0030	03/04/21 18:01	
EPA 6020B	Barium	0.069	mg/L	0.0050	03/04/21 18:01	
EPA 6020B	Beryllium	0.000071J	mg/L	0.00050	03/04/21 18:01	
EPA 6020B	Cadmium	0.00037J	mg/L	0.00050	03/04/21 18:01	
EPA 6020B	Cobalt	0.0020J	mg/L	0.0050	03/04/21 18:01	
EPA 6020B	Lead	0.000086J	mg/L	0.0010	03/04/21 18:01	
EPA 6020B	Lithium	0.0027J	mg/L	0.030	03/04/21 18:01	
EPA 6020B	Molybdenum	0.46	mg/L	0.010	03/04/21 18:01	
EPA 300.0 Rev 2.1 1993	Fluoride	0.47	mg/L	0.10	02/20/21 18:59	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521151021	**HGWC-9**					
	Performed by	CUSTOMER			02/24/21 07:44	
	pH	7.26	Std. Units		02/24/21 07:44	
EPA 6020B	Antimony	0.00043J	mg/L	0.0030	03/04/21 18:07	
EPA 6020B	Barium	0.11	mg/L	0.0050	03/04/21 18:07	
EPA 6020B	Chromium	0.00067J	mg/L	0.0050	03/04/21 18:07	
EPA 6020B	Cobalt	0.00061J	mg/L	0.0050	03/04/21 18:07	
EPA 6020B	Lead	0.00020J	mg/L	0.0010	03/04/21 18:07	
EPA 6020B	Lithium	0.0045J	mg/L	0.030	03/04/21 18:07	
EPA 6020B	Molybdenum	0.035	mg/L	0.010	03/04/21 18:07	
EPA 300.0 Rev 2.1 1993	Fluoride	0.096J	mg/L	0.10	02/20/21 19:44	
92521151022	**MW-5**					
	Performed by	CUSTOMER			02/24/21 07:44	
	pH	5.95	Std. Units		02/24/21 07:44	
EPA 6020B	Barium	0.050	mg/L	0.0050	03/04/21 18:24	
EPA 6020B	Chromium	0.0032J	mg/L	0.0050	03/04/21 18:24	
EPA 6020B	Selenium	0.0035J	mg/L	0.0050	03/04/21 18:24	
EPA 300.0 Rev 2.1 1993	Fluoride	0.051J	mg/L	0.10	02/20/21 19:59	
92521151023	**MW-6**					
	Performed by	CUSTOMER			02/24/21 07:44	
	pH	7.00	Std. Units		02/24/21 07:44	
EPA 6020B	Barium	0.085	mg/L	0.0050	03/04/21 18:30	
EPA 6020B	Cobalt	0.00045J	mg/L	0.0050	03/04/21 18:30	
EPA 6020B	Lead	0.000084J	mg/L	0.0010	03/04/21 18:30	
EPA 6020B	Molybdenum	0.0025J	mg/L	0.010	03/04/21 18:30	
EPA 300.0 Rev 2.1 1993	Fluoride	0.059J	mg/L	0.10	02/20/21 20:14	
92521151024	**MW-24D**					
	Performed by	CUSTOMER			02/24/21 07:44	
	pH	7.69	Std. Units		02/24/21 07:44	
EPA 6020B	Barium	0.062	mg/L	0.0050	03/04/21 18:36	
EPA 6020B	Lead	0.00012J	mg/L	0.0010	03/04/21 18:36	
EPA 6020B	Lithium	0.0028J	mg/L	0.030	03/04/21 18:36	
EPA 6020B	Molybdenum	0.00096J	mg/L	0.010	03/04/21 18:36	
92521151025	**MW-26D**					
	Performed by	CUSTOMER			02/24/21 07:44	
	pH	7.27	Std. Units		02/24/21 07:44	
EPA 6020B	Arsenic	0.00080J	mg/L	0.0050	03/04/21 18:42	
EPA 6020B	Barium	0.093	mg/L	0.0050	03/04/21 18:42	
EPA 6020B	Chromium	0.0010J	mg/L	0.0050	03/04/21 18:42	
EPA 6020B	Cobalt	0.00045J	mg/L	0.0050	03/04/21 18:42	
EPA 6020B	Lead	0.000080J	mg/L	0.0010	03/04/21 18:42	
EPA 6020B	Lithium	0.0038J	mg/L	0.030	03/04/21 18:42	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521151025	**MW-26D**					
EPA 6020B	Molybdenum	0.022	mg/L	0.010	03/04/21 18:42	
EPA 300.0 Rev 2.1 1993	Fluoride	0.071J	mg/L	0.10	02/20/21 20:43	
92521151026	**MW-27D**					
	Performed by	CUSTOMER			02/24/21 07:44	
	pH	7.96	Std. Units		02/24/21 07:44	
EPA 6020B	Antimony	0.00038J	mg/L	0.0030	03/04/21 18:47	
EPA 6020B	Arsenic	0.0010J	mg/L	0.0050	03/04/21 18:47	
EPA 6020B	Barium	1.0	mg/L	0.025	03/05/21 14:35	
EPA 6020B	Chromium	0.00082J	mg/L	0.0050	03/04/21 18:47	
EPA 6020B	Cobalt	0.00040J	mg/L	0.0050	03/04/21 18:47	
EPA 6020B	Lead	0.00043J	mg/L	0.0010	03/04/21 18:47	
EPA 6020B	Lithium	0.0078J	mg/L	0.030	03/04/21 18:47	
EPA 6020B	Molybdenum	0.0019J	mg/L	0.010	03/04/21 18:47	
EPA 300.0 Rev 2.1 1993	Fluoride	0.25	mg/L	0.10	02/20/21 21:28	
92521151027	**MW-27D FILTERED**					
	Performed by	CUSTOMER			02/24/21 07:44	
	pH	7.96	Std. Units		02/24/21 07:44	
EPA 6020B	Antimony	0.00038J	mg/L	0.0030	03/04/21 18:53	
EPA 6020B	Barium	1.1	mg/L	0.025	03/05/21 14:41	
EPA 6020B	Lithium	0.0084J	mg/L	0.030	03/04/21 18:53	
EPA 6020B	Molybdenum	0.0015J	mg/L	0.010	03/04/21 18:53	
EPA 300.0 Rev 2.1 1993	Fluoride	0.25	mg/L	0.10	02/20/21 21:43	
92521151028	**HGWC-13**					
	Performed by	CUSTOMER			02/24/21 07:44	
	pH	7.27	Std. Units		02/24/21 07:44	
EPA 6020B	Antimony	0.00047J	mg/L	0.0030	03/04/21 18:59	
EPA 6020B	Arsenic	0.45	mg/L	0.0050	03/04/21 18:59	
EPA 6020B	Barium	0.061	mg/L	0.0050	03/04/21 18:59	
EPA 6020B	Beryllium	0.000097J	mg/L	0.00050	03/04/21 18:59	
EPA 6020B	Cobalt	0.0030J	mg/L	0.0050	03/04/21 18:59	
EPA 6020B	Lead	0.00018J	mg/L	0.0010	03/04/21 18:59	
EPA 6020B	Lithium	0.032	mg/L	0.030	03/04/21 18:59	
EPA 6020B	Molybdenum	0.036	mg/L	0.010	03/04/21 18:59	
EPA 6020B	Thallium	0.00030J	mg/L	0.0010	03/04/21 18:59	
EPA 300.0 Rev 2.1 1993	Fluoride	0.55	mg/L	0.10	03/08/21 11:46	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Sample: HGWA-1 **Lab ID: 92521151001** Collected: 02/08/21 16:13 Received: 02/09/21 12:33 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		02/24/21 07:44		
pH	**7.11**	Std. Units			1		02/24/21 07:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/23/21 11:55	02/23/21 18:06	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/23/21 11:55	02/23/21 18:06	7440-38-2	
Barium	**0.032**	mg/L	0.010	0.00071	1	02/23/21 11:55	02/23/21 18:06	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/23/21 11:55	02/23/21 18:06	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/23/21 11:55	02/23/21 18:06	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/23/21 11:55	02/23/21 18:06	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/23/21 11:55	02/23/21 18:06	7440-48-4	
Lead	**0.000058J**	mg/L	0.0050	0.000036	1	02/23/21 11:55	02/23/21 18:06	7439-92-1	
Lithium	**0.00086J**	mg/L	0.030	0.00081	1	02/23/21 11:55	02/23/21 18:06	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/23/21 11:55	02/23/21 18:06	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 11:55	02/23/21 18:06	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 11:55	02/23/21 18:06	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 12:38	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.078J**	mg/L	0.10	0.050	1		02/10/21 17:59	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Sample: HGWA-2 **Lab ID: 92521151002** Collected: 02/09/21 10:38 Received: 02/10/21 09:56 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		02/24/21 07:44		
pH	**5.42**	Std. Units			1		02/24/21 07:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00062J**	mg/L	0.0030	0.00028	1	02/23/21 11:55	02/23/21 18:41	7440-36-0	B
Arsenic	ND	mg/L	0.0050	0.00078	1	02/23/21 11:55	02/23/21 18:41	7440-38-2	
Barium	**0.12**	mg/L	0.010	0.00071	1	02/23/21 11:55	02/23/21 18:41	7440-39-3	
Beryllium	**0.00014J**	mg/L	0.0030	0.000046	1	02/23/21 11:55	02/23/21 18:41	7440-41-7	
Cadmium	**0.00016J**	mg/L	0.0025	0.00012	1	02/23/21 11:55	02/23/21 18:41	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/23/21 11:55	02/23/21 18:41	7440-47-3	
Cobalt	**0.020**	mg/L	0.0050	0.00038	1	02/23/21 11:55	02/23/21 18:41	7440-48-4	
Lead	**0.000094J**	mg/L	0.0050	0.000036	1	02/23/21 11:55	02/23/21 18:41	7439-92-1	
Lithium	**0.0012J**	mg/L	0.030	0.00081	1	02/23/21 11:55	02/23/21 18:41	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/23/21 11:55	02/23/21 18:41	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 11:55	02/23/21 18:41	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 11:55	02/23/21 18:41	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 12:57	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/11/21 17:28	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Sample: HGWA-3 **Lab ID: 92521151003** Collected: 02/09/21 11:56 Received: 02/10/21 09:56 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		02/24/21 07:44		
pH	**7.23**	Std. Units			1		02/24/21 07:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00031J**	mg/L	0.0030	0.00028	1	02/23/21 11:55	02/23/21 18:46	7440-36-0	B
Arsenic	ND	mg/L	0.0050	0.00078	1	02/23/21 11:55	02/23/21 18:46	7440-38-2	
Barium	**0.13**	mg/L	0.010	0.00071	1	02/23/21 11:55	02/23/21 18:46	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/23/21 11:55	02/23/21 18:46	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/23/21 11:55	02/23/21 18:46	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/23/21 11:55	02/23/21 18:46	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/23/21 11:55	02/23/21 18:46	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/23/21 11:55	02/23/21 18:46	7439-92-1	
Lithium	**0.0032J**	mg/L	0.030	0.00081	1	02/23/21 11:55	02/23/21 18:46	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/23/21 11:55	02/23/21 18:46	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 11:55	02/23/21 18:46	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 11:55	02/23/21 18:46	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 12:59	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.074J**	mg/L	0.10	0.050	1		02/11/21 18:16	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Sample: HGWA-43D **Lab ID: 92521151004** Collected: 02/09/21 17:58 Received: 02/10/21 09:56 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		02/24/21 07:44		
pH	**7.44**	Std. Units			1		02/24/21 07:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00037J**	mg/L	0.0030	0.00028	1	02/23/21 11:55	02/23/21 19:15	7440-36-0	B
Arsenic	**0.0017J**	mg/L	0.0050	0.00078	1	02/23/21 11:55	02/23/21 19:15	7440-38-2	B
Barium	**0.34**	mg/L	0.010	0.00071	1	02/23/21 11:55	02/23/21 19:15	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/23/21 11:55	02/23/21 19:15	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/23/21 11:55	02/23/21 19:15	7440-43-9	
Chromium	**0.00095J**	mg/L	0.010	0.00055	1	02/23/21 11:55	02/23/21 19:15	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/23/21 11:55	02/23/21 19:15	7440-48-4	
Lead	**0.00029J**	mg/L	0.0050	0.000036	1	02/23/21 11:55	02/23/21 19:15	7439-92-1	
Lithium	**0.0026J**	mg/L	0.030	0.00081	1	02/23/21 11:55	02/23/21 19:15	7439-93-2	
Molybdenum	**0.0045J**	mg/L	0.010	0.00069	1	02/23/21 11:55	02/23/21 19:15	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 11:55	02/23/21 19:15	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 11:55	02/23/21 19:15	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 13:06	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.19**	mg/L	0.10	0.050	1		02/11/21 19:36	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Sample: HGWA-44D **Lab ID: 92521151005** Collected: 02/09/21 13:09 Received: 02/10/21 09:56 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		02/24/21 07:44		
pH	**7.84**	Std. Units			1		02/24/21 07:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00042J**	mg/L	0.0030	0.00028	1	02/23/21 11:55	02/23/21 19:21	7440-36-0	B
Arsenic	**0.00083J**	mg/L	0.0050	0.00078	1	02/23/21 11:55	02/23/21 19:21	7440-38-2	B
Barium	**0.46**	mg/L	0.010	0.00071	1	02/23/21 11:55	02/23/21 19:21	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/23/21 11:55	02/23/21 19:21	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/23/21 11:55	02/23/21 19:21	7440-43-9	
Chromium	**0.00066J**	mg/L	0.010	0.00055	1	02/23/21 11:55	02/23/21 19:21	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/23/21 11:55	02/23/21 19:21	7440-48-4	
Lead	**0.00010J**	mg/L	0.0050	0.000036	1	02/23/21 11:55	02/23/21 19:21	7439-92-1	
Lithium	**0.026J**	mg/L	0.030	0.00081	1	02/23/21 11:55	02/23/21 19:21	7439-93-2	
Molybdenum	**0.0038J**	mg/L	0.010	0.00069	1	02/23/21 11:55	02/23/21 19:21	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 11:55	02/23/21 19:21	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 11:55	02/23/21 19:21	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 13:09	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.44**	mg/L	0.10	0.050	1		02/11/21 19:52	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Sample: HGWC-7 **Lab ID: 92521151006** Collected: 02/10/21 12:11 Received: 02/11/21 09:19 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		02/24/21 07:44		
pH	**7.29**	Std. Units			1		02/24/21 07:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/23/21 13:13	02/24/21 14:42	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/23/21 13:13	02/24/21 14:42	7440-38-2	
Barium	**0.069**	mg/L	0.010	0.00071	1	02/23/21 13:13	02/24/21 14:42	7440-39-3	
Beryllium	**0.000081J**	mg/L	0.0030	0.000046	1	02/23/21 13:13	02/24/21 14:42	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/23/21 13:13	02/24/21 14:42	7440-43-9	
Chromium	**0.0014J**	mg/L	0.010	0.00055	1	02/23/21 13:13	02/24/21 14:42	7440-47-3	
Cobalt	**0.00081J**	mg/L	0.0050	0.00038	1	02/23/21 13:13	02/24/21 14:42	7440-48-4	
Lead	**0.00056J**	mg/L	0.0050	0.000036	1	02/23/21 13:13	02/24/21 14:42	7439-92-1	
Lithium	**0.0032J**	mg/L	0.030	0.00081	1	02/23/21 13:13	02/24/21 14:42	7439-93-2	
Molybdenum	**0.051**	mg/L	0.010	0.00069	1	02/23/21 13:13	02/24/21 14:42	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 13:13	02/24/21 14:42	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 13:13	02/24/21 14:42	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/22/21 02:15	02/23/21 13:19	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.085J**	mg/L	0.10	0.050	1		02/16/21 01:43	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Sample: MW-28D **Lab ID: 92521151007** Collected: 02/10/21 17:31 Received: 02/11/21 09:19 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		02/24/21 07:44		
pH	**7.54**	Std. Units			1		02/24/21 07:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.0019J**	mg/L	0.0030	0.00028	1	02/23/21 13:13	02/24/21 15:05	7440-36-0	
Arsenic	**0.0011J**	mg/L	0.0050	0.00078	1	02/23/21 13:13	02/24/21 15:05	7440-38-2	
Barium	**0.26**	mg/L	0.010	0.00071	1	02/23/21 13:13	02/24/21 15:05	7440-39-3	
Beryllium	**0.000054J**	mg/L	0.0030	0.000046	1	02/23/21 13:13	02/24/21 15:05	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/23/21 13:13	02/24/21 15:05	7440-43-9	
Chromium	**0.0014J**	mg/L	0.010	0.00055	1	02/23/21 13:13	02/24/21 15:05	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/23/21 13:13	02/24/21 15:05	7440-48-4	
Lead	**0.00044J**	mg/L	0.0050	0.000036	1	02/23/21 13:13	02/24/21 15:05	7439-92-1	
Lithium	**0.0092J**	mg/L	0.030	0.00081	1	02/23/21 13:13	02/24/21 15:05	7439-93-2	
Molybdenum	**0.020**	mg/L	0.010	0.00069	1	02/23/21 13:13	02/24/21 15:05	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 13:13	02/24/21 15:05	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 13:13	02/24/21 15:05	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/22/21 02:15	02/23/21 13:21	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.16**	mg/L	0.10	0.050	1		02/16/21 01:58	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Sample: MW-28D FILTERED **Lab ID: 92521151008** Collected: 02/10/21 17:31 Received: 02/11/21 09:19 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		02/24/21 07:44		
pH	**7.54**	Std. Units			1		02/24/21 07:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00054J**	mg/L	0.0030	0.00028	1	02/23/21 13:13	02/24/21 15:11	7440-36-0	
Arsenic	**0.0014J**	mg/L	0.0050	0.00078	1	02/23/21 13:13	02/24/21 15:11	7440-38-2	
Barium	**0.25**	mg/L	0.010	0.00071	1	02/23/21 13:13	02/24/21 15:11	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/23/21 13:13	02/24/21 15:11	7440-41-7	
Cadmium	**0.00021J**	mg/L	0.0025	0.00012	1	02/23/21 13:13	02/24/21 15:11	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/23/21 13:13	02/24/21 15:11	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/23/21 13:13	02/24/21 15:11	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/23/21 13:13	02/24/21 15:11	7439-92-1	
Lithium	**0.0083J**	mg/L	0.030	0.00081	1	02/23/21 13:13	02/24/21 15:11	7439-93-2	
Molybdenum	**0.018**	mg/L	0.010	0.00069	1	02/23/21 13:13	02/24/21 15:11	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 13:13	02/24/21 15:11	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 13:13	02/24/21 15:11	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/22/21 02:15	02/23/21 13:24	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.15**	mg/L	0.10	0.050	1		02/16/21 02:12	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Sample: MW-20 **Lab ID: 92521151009** Collected: 02/11/21 11:59 Received: 02/12/21 09:36 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		02/24/21 07:44		
pH	**6.93**	Std. Units			1		02/24/21 07:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/23/21 13:13	02/24/21 15:39	7440-36-0	
Arsenic	**0.00094J**	mg/L	0.0050	0.00078	1	02/23/21 13:13	02/24/21 15:39	7440-38-2	
Barium	**0.093**	mg/L	0.010	0.00071	1	02/23/21 13:13	02/24/21 15:39	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/23/21 13:13	02/24/21 15:39	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/23/21 13:13	02/24/21 15:39	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/23/21 13:13	02/24/21 15:39	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/23/21 13:13	02/24/21 15:39	7440-48-4	
Lead	**0.000039J**	mg/L	0.0050	0.000036	1	02/23/21 13:13	02/24/21 15:39	7439-92-1	
Lithium	**0.0010J**	mg/L	0.030	0.00081	1	02/23/21 13:13	02/24/21 15:39	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/23/21 13:13	02/24/21 15:39	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 13:13	02/24/21 15:39	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 13:13	02/24/21 15:39	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/22/21 02:15	02/23/21 13:26	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/16/21 18:01	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Sample: HGWC-11 **Lab ID: 92521151010** Collected: 02/12/21 12:45 Received: 02/15/21 09:45 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		02/24/21 07:44		
pH	**7.27**	Std. Units			1		02/24/21 07:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/23/21 13:13	02/24/21 16:08	7440-36-0	
Arsenic	**0.0020J**	mg/L	0.0050	0.00078	1	02/23/21 13:13	02/24/21 16:08	7440-38-2	
Barium	**0.039**	mg/L	0.010	0.00071	1	02/23/21 13:13	02/24/21 16:08	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/23/21 13:13	02/24/21 16:08	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/23/21 13:13	02/24/21 16:08	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/23/21 13:13	02/24/21 16:08	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/23/21 13:13	02/24/21 16:08	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/23/21 13:13	02/24/21 16:08	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	02/23/21 13:13	02/24/21 16:08	7439-93-2	
Molybdenum	**0.023**	mg/L	0.010	0.00069	1	02/23/21 13:13	02/24/21 16:08	7439-98-7	
Selenium	**0.0079J**	mg/L	0.010	0.0016	1	02/23/21 13:13	02/24/21 16:08	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 13:13	02/24/21 16:08	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/22/21 02:15	02/23/21 13:29	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.17**	mg/L	0.10	0.050	1		02/16/21 22:15	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Sample: HGWC-12 **Lab ID: 92521151011** Collected: 02/12/21 14:51 Received: 02/15/21 09:45 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		02/24/21 07:44		
pH	**6.23**	Std. Units			1		02/24/21 07:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/23/21 13:13	02/24/21 16:14	7440-36-0	
Arsenic	**0.0045J**	mg/L	0.0050	0.00078	1	02/23/21 13:13	02/24/21 16:14	7440-38-2	
Barium	**0.090**	mg/L	0.010	0.00071	1	02/23/21 13:13	02/24/21 16:14	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/23/21 13:13	02/24/21 16:14	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/23/21 13:13	02/24/21 16:14	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/23/21 13:13	02/24/21 16:14	7440-47-3	
Cobalt	**0.0012J**	mg/L	0.0050	0.00038	1	02/23/21 13:13	02/24/21 16:14	7440-48-4	
Lead	**0.000067J**	mg/L	0.0050	0.000036	1	02/23/21 13:13	02/24/21 16:14	7439-92-1	
Lithium	**0.0094J**	mg/L	0.030	0.00081	1	02/23/21 13:13	02/24/21 16:14	7439-93-2	
Molybdenum	**0.048**	mg/L	0.010	0.00069	1	02/23/21 13:13	02/24/21 16:14	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 13:13	02/24/21 16:14	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 13:13	02/24/21 16:14	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/22/21 02:15	02/23/21 13:31	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.19**	mg/L	0.10	0.050	1		02/20/21 15:05	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Sample: MW-19 **Lab ID: 92521151012** Collected: 02/12/21 13:40 Received: 02/15/21 09:45 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		02/24/21 07:44		
pH	**6.36**	Std. Units			1		02/24/21 07:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/23/21 13:13	02/24/21 16:19	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/23/21 13:13	02/24/21 16:19	7440-38-2	
Barium	**0.051**	mg/L	0.010	0.00071	1	02/23/21 13:13	02/24/21 16:19	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/23/21 13:13	02/24/21 16:19	7440-41-7	
Cadmium	**0.00020J**	mg/L	0.0025	0.00012	1	02/23/21 13:13	02/24/21 16:19	7440-43-9	
Chromium	**0.00059J**	mg/L	0.010	0.00055	1	02/23/21 13:13	02/24/21 16:19	7440-47-3	
Cobalt	**0.037**	mg/L	0.0050	0.00038	1	02/23/21 13:13	02/24/21 16:19	7440-48-4	
Lead	**0.000071J**	mg/L	0.0050	0.000036	1	02/23/21 13:13	02/24/21 16:19	7439-92-1	
Lithium	**0.012J**	mg/L	0.030	0.00081	1	02/23/21 13:13	02/24/21 16:19	7439-93-2	
Molybdenum	**0.046**	mg/L	0.010	0.00069	1	02/23/21 13:13	02/24/21 16:19	7439-98-7	
Selenium	**0.0021J**	mg/L	0.010	0.0016	1	02/23/21 13:13	02/24/21 16:19	7782-49-2	
Thallium	**0.00019J**	mg/L	0.0010	0.00014	1	02/23/21 13:13	02/24/21 16:19	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/22/21 02:15	02/23/21 13:33	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.16**	mg/L	0.10	0.050	1		02/20/21 15:21	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Sample: DUP-1 **Lab ID: 92521151013** Collected: 02/12/21 00:00 Received: 02/15/21 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/23/21 13:13	02/24/21 16:25	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/23/21 13:13	02/24/21 16:25	7440-38-2	
Barium	**0.049**	mg/L	0.010	0.00071	1	02/23/21 13:13	02/24/21 16:25	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/23/21 13:13	02/24/21 16:25	7440-41-7	
Cadmium	**0.00015J**	mg/L	0.0025	0.00012	1	02/23/21 13:13	02/24/21 16:25	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/23/21 13:13	02/24/21 16:25	7440-47-3	
Cobalt	**0.036**	mg/L	0.0050	0.00038	1	02/23/21 13:13	02/24/21 16:25	7440-48-4	
Lead	**0.000071J**	mg/L	0.0050	0.000036	1	02/23/21 13:13	02/24/21 16:25	7439-92-1	
Lithium	**0.011J**	mg/L	0.030	0.00081	1	02/23/21 13:13	02/24/21 16:25	7439-93-2	
Molybdenum	**0.046**	mg/L	0.010	0.00069	1	02/23/21 13:13	02/24/21 16:25	7439-98-7	
Selenium	**0.0028J**	mg/L	0.010	0.0016	1	02/23/21 13:13	02/24/21 16:25	7782-49-2	
Thallium	**0.00019J**	mg/L	0.0010	0.00014	1	02/23/21 13:13	02/24/21 16:25	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/22/21 02:15	02/23/21 13:36	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.16**	mg/L	0.10	0.050	1		02/20/21 15:37	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Sample: MW-25D **Lab ID: 92521151014** Collected: 02/12/21 10:31 Received: 02/15/21 09:45 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		02/24/21 07:44		
pH	**7.77**	Std. Units			1		02/24/21 07:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/23/21 13:13	02/24/21 16:31	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/23/21 13:13	02/24/21 16:31	7440-38-2	
Barium	**0.46**	mg/L	0.010	0.00071	1	02/23/21 13:13	02/24/21 16:31	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/23/21 13:13	02/24/21 16:31	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/23/21 13:13	02/24/21 16:31	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/23/21 13:13	02/24/21 16:31	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/23/21 13:13	02/24/21 16:31	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/23/21 13:13	02/24/21 16:31	7439-92-1	
Lithium	**0.045**	mg/L	0.030	0.00081	1	02/23/21 13:13	02/24/21 16:31	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/23/21 13:13	02/24/21 16:31	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 13:13	02/24/21 16:31	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 13:13	02/24/21 16:31	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/22/21 02:15	02/23/21 13:43	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**1.6**	mg/L	0.10	0.050	1		02/20/21 15:53	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Sample: FB-1 **Lab ID: 92521151015** Collected: 02/12/21 15:30 Received: 02/15/21 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/23/21 13:13	02/24/21 17:20	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/23/21 13:13	02/24/21 17:20	7440-38-2	
Barium	ND	mg/L	0.010	0.00071	1	02/23/21 13:13	02/24/21 17:20	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/23/21 13:13	02/24/21 17:20	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/23/21 13:13	02/24/21 17:20	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/23/21 13:13	02/24/21 17:20	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/23/21 13:13	02/24/21 17:20	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/23/21 13:13	02/24/21 17:20	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	02/23/21 13:13	02/24/21 17:20	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/23/21 13:13	02/24/21 17:20	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 13:13	02/24/21 17:20	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 13:13	02/24/21 17:20	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/22/21 02:15	02/23/21 13:45	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/20/21 16:09	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Sample: EB-1 **Lab ID: 92521151016** Collected: 02/12/21 15:35 Received: 02/15/21 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/23/21 13:13	02/24/21 16:02	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/23/21 13:13	02/24/21 16:02	7440-38-2	
Barium	ND	mg/L	0.010	0.00071	1	02/23/21 13:13	02/24/21 16:02	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/23/21 13:13	02/24/21 16:02	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/23/21 13:13	02/24/21 16:02	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/23/21 13:13	02/24/21 16:02	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/23/21 13:13	02/24/21 16:02	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/23/21 13:13	02/24/21 16:02	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	02/23/21 13:13	02/24/21 16:02	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/23/21 13:13	02/24/21 16:02	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 13:13	02/24/21 16:02	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 13:13	02/24/21 16:02	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/22/21 09:50	02/22/21 13:46	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/16/21 21:15	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Sample: HGWC-10 **Lab ID: 92521151017** Collected: 02/15/21 13:31 Received: 02/17/21 11:54 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		02/24/21 07:44		
pH	**6.83**	Std. Units			1		02/24/21 07:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00065J**	mg/L	0.0030	0.00028	1	03/03/21 10:21	03/04/21 17:27	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/03/21 10:21	03/04/21 17:27	7440-38-2	
Barium	**0.060**	mg/L	0.0050	0.00071	1	03/03/21 10:21	03/04/21 17:27	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/03/21 10:21	03/04/21 17:27	7440-41-7	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/03/21 10:21	03/04/21 17:27	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/03/21 10:21	03/04/21 17:27	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/03/21 10:21	03/04/21 17:27	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/03/21 10:21	03/04/21 17:27	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/03/21 10:21	03/04/21 17:27	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/03/21 10:21	03/04/21 17:27	7439-98-7	
Selenium	**0.0028J**	mg/L	0.0050	0.0016	1	03/03/21 10:21	03/04/21 17:27	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/03/21 10:21	03/04/21 17:27	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/22/21 09:50	02/22/21 14:10	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.080J**	mg/L	0.10	0.050	1		02/20/21 18:14	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Sample: MW-7 **Lab ID: 92521151018** Collected: 02/15/21 17:17 Received: 02/17/21 11:54 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		02/24/21 07:44		
pH	**6.77**	Std. Units			1		02/24/21 07:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.0021J**	mg/L	0.0030	0.00028	1	03/03/21 10:21	03/04/21 17:50	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/03/21 10:21	03/04/21 17:50	7440-38-2	
Barium	**0.048**	mg/L	0.0050	0.00071	1	03/03/21 10:21	03/04/21 17:50	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/03/21 10:21	03/04/21 17:50	7440-41-7	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/03/21 10:21	03/04/21 17:50	7440-43-9	
Chromium	**0.0015J**	mg/L	0.0050	0.00055	1	03/03/21 10:21	03/04/21 17:50	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/03/21 10:21	03/04/21 17:50	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/03/21 10:21	03/04/21 17:50	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/03/21 10:21	03/04/21 17:50	7439-93-2	
Molybdenum	**0.0015J**	mg/L	0.010	0.00069	1	03/03/21 10:21	03/04/21 17:50	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/03/21 10:21	03/04/21 17:50	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/03/21 10:21	03/04/21 17:50	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/22/21 09:50	02/22/21 14:13	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/20/21 18:29	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Sample: MW-29 **Lab ID: 92521151019** Collected: 02/15/21 14:45 Received: 02/17/21 11:54 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		02/24/21 07:44		
pH	**7.09**	Std. Units			1		02/24/21 07:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00094J**	mg/L	0.0030	0.00028	1	03/03/21 10:21	03/04/21 17:56	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/03/21 10:21	03/04/21 17:56	7440-38-2	
Barium	**0.081**	mg/L	0.0050	0.00071	1	03/03/21 10:21	03/04/21 17:56	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/03/21 10:21	03/04/21 17:56	7440-41-7	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/03/21 10:21	03/04/21 17:56	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/03/21 10:21	03/04/21 17:56	7440-47-3	
Cobalt	**0.00097J**	mg/L	0.0050	0.00038	1	03/03/21 10:21	03/04/21 17:56	7440-48-4	
Lead	**0.000052J**	mg/L	0.0010	0.000036	1	03/03/21 10:21	03/04/21 17:56	7439-92-1	
Lithium	**0.0024J**	mg/L	0.030	0.00081	1	03/03/21 10:21	03/04/21 17:56	7439-93-2	
Molybdenum	**0.0029J**	mg/L	0.010	0.00069	1	03/03/21 10:21	03/04/21 17:56	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/03/21 10:21	03/04/21 17:56	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/03/21 10:21	03/04/21 17:56	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/22/21 09:50	02/22/21 14:15	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/20/21 18:44	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Sample: HGWC-8 **Lab ID: 92521151020** Collected: 02/16/21 15:05 Received: 02/17/21 11:54 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		02/24/21 07:44		
pH	**7.16**	Std. Units			1		02/24/21 07:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00064J**	mg/L	0.0030	0.00028	1	03/03/21 10:21	03/04/21 18:01	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/03/21 10:21	03/04/21 18:01	7440-38-2	
Barium	**0.069**	mg/L	0.0050	0.00071	1	03/03/21 10:21	03/04/21 18:01	7440-39-3	
Beryllium	**0.000071J**	mg/L	0.00050	0.000046	1	03/03/21 10:21	03/04/21 18:01	7440-41-7	
Cadmium	**0.00037J**	mg/L	0.00050	0.00012	1	03/03/21 10:21	03/04/21 18:01	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/03/21 10:21	03/04/21 18:01	7440-47-3	
Cobalt	**0.0020J**	mg/L	0.0050	0.00038	1	03/03/21 10:21	03/04/21 18:01	7440-48-4	
Lead	**0.000086J**	mg/L	0.0010	0.000036	1	03/03/21 10:21	03/04/21 18:01	7439-92-1	
Lithium	**0.0027J**	mg/L	0.030	0.00081	1	03/03/21 10:21	03/04/21 18:01	7439-93-2	
Molybdenum	**0.46**	mg/L	0.010	0.00069	1	03/03/21 10:21	03/04/21 18:01	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/03/21 10:21	03/04/21 18:01	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/03/21 10:21	03/04/21 18:01	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/22/21 09:50	02/22/21 14:17	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.47**	mg/L	0.10	0.050	1		02/20/21 18:59	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Sample: HGWC-9 **Lab ID: 92521151021** Collected: 02/16/21 18:39 Received: 02/17/21 11:54 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		02/24/21 07:44		
pH	**7.26**	Std. Units			1		02/24/21 07:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00043J**	mg/L	0.0030	0.00028	1	03/03/21 10:21	03/04/21 18:07	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/03/21 10:21	03/04/21 18:07	7440-38-2	
Barium	**0.11**	mg/L	0.0050	0.00071	1	03/03/21 10:21	03/04/21 18:07	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/03/21 10:21	03/04/21 18:07	7440-41-7	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/03/21 10:21	03/04/21 18:07	7440-43-9	
Chromium	**0.00067J**	mg/L	0.0050	0.00055	1	03/03/21 10:21	03/04/21 18:07	7440-47-3	
Cobalt	**0.00061J**	mg/L	0.0050	0.00038	1	03/03/21 10:21	03/04/21 18:07	7440-48-4	
Lead	**0.00020J**	mg/L	0.0010	0.000036	1	03/03/21 10:21	03/04/21 18:07	7439-92-1	
Lithium	**0.0045J**	mg/L	0.030	0.00081	1	03/03/21 10:21	03/04/21 18:07	7439-93-2	
Molybdenum	**0.035**	mg/L	0.010	0.00069	1	03/03/21 10:21	03/04/21 18:07	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/03/21 10:21	03/04/21 18:07	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/03/21 10:21	03/04/21 18:07	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/24/21 08:00	02/24/21 12:32	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.096J**	mg/L	0.10	0.050	1		02/20/21 19:44	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Sample: MW-5 **Lab ID: 92521151022** Collected: 02/16/21 16:27 Received: 02/17/21 11:54 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		02/24/21 07:44		
pH	**5.95**	Std. Units			1		02/24/21 07:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/03/21 10:21	03/04/21 18:24	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/03/21 10:21	03/04/21 18:24	7440-38-2	
Barium	**0.050**	mg/L	0.0050	0.00071	1	03/03/21 10:21	03/04/21 18:24	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/03/21 10:21	03/04/21 18:24	7440-41-7	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/03/21 10:21	03/04/21 18:24	7440-43-9	
Chromium	**0.0032J**	mg/L	0.0050	0.00055	1	03/03/21 10:21	03/04/21 18:24	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/03/21 10:21	03/04/21 18:24	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/03/21 10:21	03/04/21 18:24	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/03/21 10:21	03/04/21 18:24	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/03/21 10:21	03/04/21 18:24	7439-98-7	
Selenium	**0.0035J**	mg/L	0.0050	0.0016	1	03/03/21 10:21	03/04/21 18:24	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/03/21 10:21	03/04/21 18:24	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/24/21 08:00	02/24/21 12:42	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.051J**	mg/L	0.10	0.050	1		02/20/21 19:59	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Sample: MW-6 **Lab ID: 92521151023** Collected: 02/16/21 15:12 Received: 02/17/21 11:54 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		02/24/21 07:44		
pH	**7.00**	Std. Units			1		02/24/21 07:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/03/21 10:21	03/04/21 18:30	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/03/21 10:21	03/04/21 18:30	7440-38-2	
Barium	**0.085**	mg/L	0.0050	0.00071	1	03/03/21 10:21	03/04/21 18:30	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/03/21 10:21	03/04/21 18:30	7440-41-7	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/03/21 10:21	03/04/21 18:30	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/03/21 10:21	03/04/21 18:30	7440-47-3	
Cobalt	**0.00045J**	mg/L	0.0050	0.00038	1	03/03/21 10:21	03/04/21 18:30	7440-48-4	
Lead	**0.000084J**	mg/L	0.0010	0.000036	1	03/03/21 10:21	03/04/21 18:30	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/03/21 10:21	03/04/21 18:30	7439-93-2	
Molybdenum	**0.0025J**	mg/L	0.010	0.00069	1	03/03/21 10:21	03/04/21 18:30	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/03/21 10:21	03/04/21 18:30	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/03/21 10:21	03/04/21 18:30	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/24/21 08:00	02/24/21 12:44	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.059J**	mg/L	0.10	0.050	1		02/20/21 20:14	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Sample: MW-24D **Lab ID: 92521151024** Collected: 02/16/21 12:44 Received: 02/17/21 11:54 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		02/24/21 07:44		
pH	**7.69**	Std. Units			1		02/24/21 07:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/03/21 10:21	03/04/21 18:36	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/03/21 10:21	03/04/21 18:36	7440-38-2	
Barium	**0.062**	mg/L	0.0050	0.00071	1	03/03/21 10:21	03/04/21 18:36	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/03/21 10:21	03/04/21 18:36	7440-41-7	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/03/21 10:21	03/04/21 18:36	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/03/21 10:21	03/04/21 18:36	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/03/21 10:21	03/04/21 18:36	7440-48-4	
Lead	**0.00012J**	mg/L	0.0010	0.000036	1	03/03/21 10:21	03/04/21 18:36	7439-92-1	
Lithium	**0.0028J**	mg/L	0.030	0.00081	1	03/03/21 10:21	03/04/21 18:36	7439-93-2	
Molybdenum	**0.00096J**	mg/L	0.010	0.00069	1	03/03/21 10:21	03/04/21 18:36	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/03/21 10:21	03/04/21 18:36	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/03/21 10:21	03/04/21 18:36	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/24/21 08:00	02/24/21 12:46	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/20/21 20:28	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Sample: MW-26D **Lab ID: 92521151025** Collected: 02/16/21 18:03 Received: 02/17/21 11:54 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		02/24/21 07:44		
pH	**7.27**	Std. Units			1		02/24/21 07:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/03/21 10:21	03/04/21 18:42	7440-36-0	
Arsenic	**0.00080J**	mg/L	0.0050	0.00078	1	03/03/21 10:21	03/04/21 18:42	7440-38-2	
Barium	**0.093**	mg/L	0.0050	0.00071	1	03/03/21 10:21	03/04/21 18:42	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/03/21 10:21	03/04/21 18:42	7440-41-7	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/03/21 10:21	03/04/21 18:42	7440-43-9	
Chromium	**0.0010J**	mg/L	0.0050	0.00055	1	03/03/21 10:21	03/04/21 18:42	7440-47-3	
Cobalt	**0.00045J**	mg/L	0.0050	0.00038	1	03/03/21 10:21	03/04/21 18:42	7440-48-4	
Lead	**0.000080J**	mg/L	0.0010	0.000036	1	03/03/21 10:21	03/04/21 18:42	7439-92-1	
Lithium	**0.0038J**	mg/L	0.030	0.00081	1	03/03/21 10:21	03/04/21 18:42	7439-93-2	
Molybdenum	**0.022**	mg/L	0.010	0.00069	1	03/03/21 10:21	03/04/21 18:42	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/03/21 10:21	03/04/21 18:42	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/03/21 10:21	03/04/21 18:42	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/24/21 08:00	02/24/21 12:49	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.071J**	mg/L	0.10	0.050	1		02/20/21 20:43	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Sample: MW-27D **Lab ID: 92521151026** Collected: 02/16/21 11:11 Received: 02/17/21 11:54 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		02/24/21 07:44		
pH	**7.96**	Std. Units			1		02/24/21 07:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00038J**	mg/L	0.0030	0.00028	1	03/03/21 10:21	03/04/21 18:47	7440-36-0	
Arsenic	**0.0010J**	mg/L	0.0050	0.00078	1	03/03/21 10:21	03/04/21 18:47	7440-38-2	
Barium	**1.0**	mg/L	0.025	0.0036	5	03/03/21 10:21	03/05/21 14:35	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/03/21 10:21	03/04/21 18:47	7440-41-7	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/03/21 10:21	03/04/21 18:47	7440-43-9	
Chromium	**0.00082J**	mg/L	0.0050	0.00055	1	03/03/21 10:21	03/04/21 18:47	7440-47-3	
Cobalt	**0.00040J**	mg/L	0.0050	0.00038	1	03/03/21 10:21	03/04/21 18:47	7440-48-4	
Lead	**0.00043J**	mg/L	0.0010	0.000036	1	03/03/21 10:21	03/04/21 18:47	7439-92-1	
Lithium	**0.0078J**	mg/L	0.030	0.00081	1	03/03/21 10:21	03/04/21 18:47	7439-93-2	
Molybdenum	**0.0019J**	mg/L	0.010	0.00069	1	03/03/21 10:21	03/04/21 18:47	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/03/21 10:21	03/04/21 18:47	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/03/21 10:21	03/04/21 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	0.00050	0.000078	1	02/24/21 08:00	02/24/21 12:56	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.25**	mg/L	0.10	0.050	1		02/20/21 21:28	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Sample: MW-27D FILTERED **Lab ID: 92521151027** Collected: 02/16/21 11:11 Received: 02/17/21 11:54 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		02/24/21 07:44		
pH	**7.96**	Std. Units			1		02/24/21 07:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00038J**	mg/L	0.0030	0.00028	1	03/03/21 10:21	03/04/21 18:53	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/03/21 10:21	03/04/21 18:53	7440-38-2	
Barium	**1.1**	mg/L	0.025	0.0036	5	03/03/21 10:21	03/05/21 14:41	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/03/21 10:21	03/04/21 18:53	7440-41-7	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/03/21 10:21	03/04/21 18:53	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/03/21 10:21	03/04/21 18:53	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/03/21 10:21	03/04/21 18:53	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/03/21 10:21	03/04/21 18:53	7439-92-1	
Lithium	**0.0084J**	mg/L	0.030	0.00081	1	03/03/21 10:21	03/04/21 18:53	7439-93-2	
Molybdenum	**0.0015J**	mg/L	0.010	0.00069	1	03/03/21 10:21	03/04/21 18:53	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/03/21 10:21	03/04/21 18:53	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/03/21 10:21	03/04/21 18:53	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/24/21 08:00	02/24/21 12:58	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.25**	mg/L	0.10	0.050	1		02/20/21 21:43	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Sample: HGWC-13 **Lab ID: 92521151028** Collected: 02/22/21 13:54 Received: 02/23/21 09:10 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		02/24/21 07:44		
pH	**7.27**	Std. Units			1		02/24/21 07:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00047J**	mg/L	0.0030	0.00028	1	03/03/21 10:21	03/04/21 18:59	7440-36-0	
Arsenic	**0.45**	mg/L	0.0050	0.00078	1	03/03/21 10:21	03/04/21 18:59	7440-38-2	
Barium	**0.061**	mg/L	0.0050	0.00071	1	03/03/21 10:21	03/04/21 18:59	7440-39-3	
Beryllium	**0.000097J**	mg/L	0.00050	0.000046	1	03/03/21 10:21	03/04/21 18:59	7440-41-7	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/03/21 10:21	03/04/21 18:59	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/03/21 10:21	03/04/21 18:59	7440-47-3	
Cobalt	**0.0030J**	mg/L	0.0050	0.00038	1	03/03/21 10:21	03/04/21 18:59	7440-48-4	
Lead	**0.00018J**	mg/L	0.0010	0.000036	1	03/03/21 10:21	03/04/21 18:59	7439-92-1	
Lithium	**0.032**	mg/L	0.030	0.00081	1	03/03/21 10:21	03/04/21 18:59	7439-93-2	
Molybdenum	**0.036**	mg/L	0.010	0.00069	1	03/03/21 10:21	03/04/21 18:59	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/03/21 10:21	03/04/21 18:59	7782-49-2	
Thallium	**0.00030J**	mg/L	0.0010	0.00014	1	03/03/21 10:21	03/04/21 18:59	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/24/21 15:10	02/25/21 11:18	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.55**	mg/L	0.10	0.050	1		03/08/21 11:46	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

QC Batch: 601892
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92521151001, 92521151002, 92521151003, 92521151004, 92521151005

METHOD BLANK: 3171327 Matrix: Water
Associated Lab Samples: 92521151001, 92521151002, 92521151003, 92521151004, 92521151005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00030J	0.0030	0.00028	02/23/21 17:55	
Arsenic	mg/L	0.00094J	0.0050	0.00078	02/23/21 17:55	
Barium	mg/L	ND	0.010	0.00071	02/23/21 17:55	
Beryllium	mg/L	ND	0.0030	0.000046	02/23/21 17:55	
Cadmium	mg/L	ND	0.0025	0.00012	02/23/21 17:55	
Chromium	mg/L	ND	0.010	0.00055	02/23/21 17:55	
Cobalt	mg/L	ND	0.0050	0.00038	02/23/21 17:55	
Lead	mg/L	ND	0.0050	0.000036	02/23/21 17:55	
Lithium	mg/L	ND	0.030	0.00081	02/23/21 17:55	
Molybdenum	mg/L	ND	0.010	0.00069	02/23/21 17:55	
Selenium	mg/L	ND	0.010	0.0016	02/23/21 17:55	
Thallium	mg/L	ND	0.0010	0.00014	02/23/21 17:55	

LABORATORY CONTROL SAMPLE: 3171328

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	108	80-120	
Arsenic	mg/L	0.1	0.096	96	80-120	
Barium	mg/L	0.1	0.10	100	80-120	
Beryllium	mg/L	0.1	0.098	98	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Lithium	mg/L	0.1	0.097	97	80-120	
Molybdenum	mg/L	0.1	0.10	102	80-120	
Selenium	mg/L	0.1	0.094	94	80-120	
Thallium	mg/L	0.1	0.098	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3171329 3171330

Parameter	Units	92521143002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.10	108	104	75-125	3	20	
Arsenic	mg/L	ND	0.1	0.1	0.097	0.093	97	93	75-125	5	20	
Barium	mg/L	0.040	0.1	0.1	0.14	0.14	99	96	75-125	2	20	
Beryllium	mg/L	0.00023J	0.1	0.1	0.095	0.090	95	90	75-125	6	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3171329 3171330

Parameter	Units	92521143002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cadmium	mg/L	ND	0.1	0.1	0.10	0.098	101	98	75-125	3	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.098	101	98	75-125	3	20	
Cobalt	mg/L	0.00074J	0.1	0.1	0.10	0.098	100	97	75-125	3	20	
Lead	mg/L	0.00024J	0.1	0.1	0.10	0.098	101	98	75-125	3	20	
Lithium	mg/L	0.0013J	0.1	0.1	0.094	0.091	93	89	75-125	4	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.099	103	99	75-125	4	20	
Selenium	mg/L	ND	0.1	0.1	0.093	0.091	93	91	75-125	3	20	
Thallium	mg/L	ND	0.1	0.1	0.098	0.095	98	95	75-125	3	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

QC Batch: 601924
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92521151006, 92521151007, 92521151008, 92521151009, 92521151010, 92521151011, 92521151012, 92521151013, 92521151014, 92521151015, 92521151016

METHOD BLANK: 3171451 Matrix: Water
Associated Lab Samples: 92521151006, 92521151007, 92521151008, 92521151009, 92521151010, 92521151011, 92521151012, 92521151013, 92521151014, 92521151015, 92521151016

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	02/24/21 14:31	
Arsenic	mg/L	ND	0.0050	0.00078	02/24/21 14:31	
Barium	mg/L	ND	0.010	0.00071	02/24/21 14:31	
Beryllium	mg/L	ND	0.0030	0.000046	02/24/21 14:31	
Cadmium	mg/L	ND	0.0025	0.00012	02/24/21 14:31	
Chromium	mg/L	ND	0.010	0.00055	02/24/21 14:31	
Cobalt	mg/L	ND	0.0050	0.00038	02/24/21 14:31	
Lead	mg/L	ND	0.0050	0.000036	02/24/21 14:31	
Lithium	mg/L	ND	0.030	0.00081	02/24/21 14:31	
Molybdenum	mg/L	ND	0.010	0.00069	02/24/21 14:31	
Selenium	mg/L	ND	0.010	0.0016	02/24/21 14:31	
Thallium	mg/L	ND	0.0010	0.00014	02/24/21 14:31	

LABORATORY CONTROL SAMPLE: 3171452

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	0.094	94	80-120	
Barium	mg/L	0.1	0.10	100	80-120	
Beryllium	mg/L	0.1	0.099	99	80-120	
Cadmium	mg/L	0.1	0.098	98	80-120	
Chromium	mg/L	0.1	0.097	97	80-120	
Cobalt	mg/L	0.1	0.098	98	80-120	
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	0.10	102	80-120	
Selenium	mg/L	0.1	0.093	93	80-120	
Thallium	mg/L	0.1	0.097	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3171453 3171454

Parameter	Units	92521151006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	102	104	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.098	0.10	98	101	75-125	3	20	
Barium	mg/L	0.069	0.1	0.1	0.16	0.17	95	96	75-125	1	20	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3171453 3171454

Parameter	Units	92521151006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Beryllium	mg/L	0.000081J	0.1	0.1	0.093	0.096	93	96	75-125	4	20	
Cadmium	mg/L	ND	0.1	0.1	0.097	0.10	97	101	75-125	4	20	
Chromium	mg/L	0.0014J	0.1	0.1	0.099	0.10	98	99	75-125	1	20	
Cobalt	mg/L	0.00081J	0.1	0.1	0.096	0.099	95	98	75-125	2	20	
Lead	mg/L	0.00056J	0.1	0.1	0.095	0.096	95	95	75-125	1	20	
Lithium	mg/L	0.0032J	0.1	0.1	0.098	0.10	95	98	75-125	3	20	
Molybdenum	mg/L	0.051	0.1	0.1	0.15	0.15	101	99	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.093	0.098	92	98	75-125	6	20	
Thallium	mg/L	ND	0.1	0.1	0.093	0.094	93	94	75-125	2	20	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

QC Batch: 603830
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92521151017, 92521151018, 92521151019, 92521151020, 92521151021, 92521151022, 92521151023, 92521151024, 92521151025, 92521151026, 92521151027, 92521151028

METHOD BLANK: 3180953 Matrix: Water
Associated Lab Samples: 92521151017, 92521151018, 92521151019, 92521151020, 92521151021, 92521151022, 92521151023, 92521151024, 92521151025, 92521151026, 92521151027, 92521151028

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	03/04/21 17:16	
Arsenic	mg/L	ND	0.0050	0.00078	03/04/21 17:16	
Barium	mg/L	ND	0.0050	0.00071	03/04/21 17:16	
Beryllium	mg/L	ND	0.00050	0.000046	03/04/21 17:16	
Cadmium	mg/L	ND	0.00050	0.00012	03/04/21 17:16	
Chromium	mg/L	ND	0.0050	0.00055	03/04/21 17:16	
Cobalt	mg/L	ND	0.0050	0.00038	03/04/21 17:16	
Lead	mg/L	ND	0.0010	0.000036	03/04/21 17:16	
Lithium	mg/L	ND	0.030	0.00081	03/04/21 17:16	
Molybdenum	mg/L	ND	0.010	0.00069	03/04/21 17:16	
Selenium	mg/L	ND	0.0050	0.0016	03/04/21 17:16	
Thallium	mg/L	ND	0.0010	0.00014	03/04/21 17:16	

LABORATORY CONTROL SAMPLE: 3180954

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	103	80-120	
Arsenic	mg/L	0.1	0.10	101	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.10	103	80-120	
Cadmium	mg/L	0.1	0.10	103	80-120	
Chromium	mg/L	0.1	0.097	97	80-120	
Cobalt	mg/L	0.1	0.096	96	80-120	
Lead	mg/L	0.1	0.098	98	80-120	
Lithium	mg/L	0.1	0.097	97	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.11	107	80-120	
Thallium	mg/L	0.1	0.095	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3180955 3180956

Parameter	Units	92521151017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00065J	0.1	0.1	0.11	0.11	111	110	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	104	104	75-125	0	20	
Barium	mg/L	0.060	0.1	0.1	0.17	0.16	107	103	75-125	2	20	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3180955 3180956

Parameter	Units	92521151017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Beryllium	mg/L	ND	0.1	0.1	0.097	0.099	97	99	75-125	2	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.094	0.094	94	94	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.094	0.093	94	93	75-125	1	20	
Lead	mg/L	ND	0.1	0.1	0.094	0.094	94	94	75-125	0	20	
Lithium	mg/L	ND	0.1	0.1	0.096	0.095	95	95	75-125	1	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	1	20	
Selenium	mg/L	0.0028J	0.1	0.1	0.11	0.11	107	104	75-125	3	20	
Thallium	mg/L	ND	0.1	0.1	0.094	0.094	94	94	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

QC Batch: 600377 | Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A | Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92521151001, 92521151002, 92521151003, 92521151004, 92521151005

METHOD BLANK: 3164783 Matrix: Water
Associated Lab Samples: 92521151001, 92521151002, 92521151003, 92521151004, 92521151005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000078	02/18/21 12:33	

LABORATORY CONTROL SAMPLE: 3164784

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3164785 3164786

Parameter	Units	92521143001 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	0.0026	99	104	75-125	5	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

QC Batch: 601295
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92521151006, 92521151007, 92521151008, 92521151009, 92521151010, 92521151011, 92521151012, 92521151013, 92521151014, 92521151015

METHOD BLANK: 3168813 Matrix: Water
Associated Lab Samples: 92521151006, 92521151007, 92521151008, 92521151009, 92521151010, 92521151011, 92521151012, 92521151013, 92521151014, 92521151015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000078	02/23/21 13:14	

LABORATORY CONTROL SAMPLE: 3168814

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: 3168815 3168816

Parameter	Units	92521578011 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	89	75-125	1	20	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

QC Batch: 601590
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92521151016, 92521151017, 92521151018, 92521151019, 92521151020

METHOD BLANK: 3170068 Matrix: Water
Associated Lab Samples: 92521151016, 92521151017, 92521151018, 92521151019, 92521151020

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000078	02/22/21 13:27	

LABORATORY CONTROL SAMPLE: 3170069

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0023	91	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3170070 3170071

Parameter	Units	92521143021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0022	0.0023	85	90	75-125	6	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

QC Batch: 601883 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92521151021, 92521151022, 92521151023, 92521151024, 92521151025, 92521151026, 92521151027

METHOD BLANK: 3171311 Matrix: Water
Associated Lab Samples: 92521151021, 92521151022, 92521151023, 92521151024, 92521151025, 92521151026, 92521151027

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000078	02/24/21 12:27	

LABORATORY CONTROL SAMPLE: 3171312

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0026	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3171313 3171314

Parameter	Units	92521151021 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	100	100	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

QC Batch: 602268
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92521151028

METHOD BLANK: 3173354 Matrix: Water
Associated Lab Samples: 92521151028

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000078	02/25/21 10:11	

LABORATORY CONTROL SAMPLE: 3173355

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3173356 3173357

Parameter	Units	92523277011 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	0.0024	97	94	75-125	2	20	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

QC Batch: 598903
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: 92521151001

METHOD BLANK: 3157390 Matrix: Water
Associated Lab Samples: 92521151001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	ND	0.10	0.050	02/10/21 16:04	

LABORATORY CONTROL SAMPLE: 3157391

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	2.5	2.6	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3157392 3157393

Parameter	Units	92520887002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	0.42	2.5	2.5	2.9	2.9	100	98	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3157394 3157395

Parameter	Units	92521223018 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	ND	2.5	2.5	2.2	2.2	85	88	90-110	2	10	M1

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

QC Batch: 599257
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: 92521151002, 92521151003, 92521151004, 92521151005

METHOD BLANK: 3159217 Matrix: Water
Associated Lab Samples: 92521151002, 92521151003, 92521151004, 92521151005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	ND	0.10	0.050	02/11/21 13:11	

LABORATORY CONTROL SAMPLE: 3159218

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	2.5	2.6	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3159221 3159222

Parameter	Units	92521143004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	ND	2.5	2.5	2.3	2.4	93	96	90-110	4	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3159223 3159224

Parameter	Units	92521359001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	2.1	2.5	2.5	4.4	4.4	92	91	90-110	0	10	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

QC Batch: 599863
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: 92521151006, 92521151007, 92521151008

METHOD BLANK: 3162426 Matrix: Water
Associated Lab Samples: 92521151006, 92521151007, 92521151008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	ND	0.10	0.050	02/15/21 22:21	

LABORATORY CONTROL SAMPLE: 3162427

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	2.5	2.6	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3162428 3162429

Parameter	Units	92521957001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	0.41	2.5	2.5	2.7	2.8	93	95	90-110	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3162430 3162431

Parameter	Units	92521151008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	0.15	2.5	2.5	2.7	2.6	102	97	90-110	5	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

QC Batch: 600235
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: 92521151009, 92521151010, 92521151016

METHOD BLANK: 3164171 Matrix: Water
Associated Lab Samples: 92521151009, 92521151010, 92521151016

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	ND	0.10	0.050	02/16/21 14:16	

LABORATORY CONTROL SAMPLE: 3164172

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	2.5	2.4	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3164173 3164174

Parameter	Units	92522138001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	ND	2.5	2.5	2.4	2.5	95	97	90-110	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3164175 3164176

Parameter	Units	92521578011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	0.068J	2.5	2.5	2.6	2.6	100	100	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

QC Batch: 600783
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: 92521151011, 92521151012, 92521151013, 92521151014, 92521151015

METHOD BLANK: 3166590 Matrix: Water
Associated Lab Samples: 92521151011, 92521151012, 92521151013, 92521151014, 92521151015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	ND	0.10	0.050	02/20/21 11:54	

LABORATORY CONTROL SAMPLE: 3166591

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	2.5	2.6	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3166592 3166593

Parameter	Units	92522456002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	0.34	2.5	2.5	3.1	3.0	108	105	90-110	3	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3166594 3166595

Parameter	Units	92521151015 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	ND	2.5	2.5	2.7	2.5	106	101	90-110	5	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

QC Batch: 601397
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: 92521151017, 92521151018, 92521151019, 92521151020, 92521151021, 92521151022, 92521151023, 92521151024, 92521151025, 92521151026, 92521151027

METHOD BLANK: 3169354 Matrix: Water
Associated Lab Samples: 92521151017, 92521151018, 92521151019, 92521151020, 92521151021, 92521151022, 92521151023, 92521151024, 92521151025, 92521151026, 92521151027

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	ND	0.10	0.050	02/20/21 16:44	

LABORATORY CONTROL SAMPLE: 3169355

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3169356 3169357

Parameter	Units	92521143022 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	ND	2.5	2.5	2.6	2.7	104	105	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3169358 3169359

Parameter	Units	92521151025 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	0.071J	2.5	2.5	2.4	2.4	95	95	90-110	0	10	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

QC Batch: 604773
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: 92521151028

METHOD BLANK: 3186355 Matrix: Water
Associated Lab Samples: 92521151028

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	ND	0.10	0.050	03/08/21 05:16	

LABORATORY CONTROL SAMPLE: 3186356

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	2.5	2.5	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3186357 3186358

Parameter	Units	92526098004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	ND	2.5	2.5	ND	ND	0	0	90-110		10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3186359 3186360

Parameter	Units	92526099009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	ND	2.5	2.5	3.2	2.8	129	113	90-110	13	10	M1,R1

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALIFIERS

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

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.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92521151001	**HGWA-1**				
92521151002	**HGWA-2**				
92521151003	**HGWA-3**				
92521151004	**HGWA-43D**				
92521151005	**HGWA-44D**				
92521151006	**HGWC-7**				
92521151007	**MW-28D**				
92521151008	**MW-28D FILTERED**				
92521151009	**MW-20**				
92521151010	**HGWC-11**				
92521151011	**HGWC-12**				
92521151012	**MW-19**				
92521151014	**MW-25D**				
92521151017	**HGWC-10**				
92521151018	**MW-7**				
92521151019	**MW-29**				
92521151020	**HGWC-8**				
92521151021	**HGWC-9**				
92521151022	**MW-5**				
92521151023	**MW-6**				
92521151024	**MW-24D**				
92521151025	**MW-26D**				
92521151026	**MW-27D**				
92521151027	**MW-27D FILTERED**				
92521151028	**HGWC-13**				
92521151001	**HGWA-1**	EPA 3005A	601892	EPA 6020B	601999
92521151002	**HGWA-2**	EPA 3005A	601892	EPA 6020B	601999
92521151003	**HGWA-3**	EPA 3005A	601892	EPA 6020B	601999
92521151004	**HGWA-43D**	EPA 3005A	601892	EPA 6020B	601999
92521151005	**HGWA-44D**	EPA 3005A	601892	EPA 6020B	601999
92521151006	**HGWC-7**	EPA 3005A	601924	EPA 6020B	602022
92521151007	**MW-28D**	EPA 3005A	601924	EPA 6020B	602022
92521151008	**MW-28D FILTERED**	EPA 3005A	601924	EPA 6020B	602022
92521151009	**MW-20**	EPA 3005A	601924	EPA 6020B	602022
92521151010	**HGWC-11**	EPA 3005A	601924	EPA 6020B	602022
92521151011	**HGWC-12**	EPA 3005A	601924	EPA 6020B	602022
92521151012	**MW-19**	EPA 3005A	601924	EPA 6020B	602022
92521151013	**DUP-1**	EPA 3005A	601924	EPA 6020B	602022
92521151014	**MW-25D**	EPA 3005A	601924	EPA 6020B	602022
92521151015	**FB-1**	EPA 3005A	601924	EPA 6020B	602022
92521151016	**EB-1**	EPA 3005A	601924	EPA 6020B	602022
92521151017	**HGWC-10**	EPA 3005A	603830	EPA 6020B	603941
92521151018	**MW-7**	EPA 3005A	603830	EPA 6020B	603941
92521151019	**MW-29**	EPA 3005A	603830	EPA 6020B	603941
92521151020	**HGWC-8**	EPA 3005A	603830	EPA 6020B	603941
92521151021	**HGWC-9**	EPA 3005A	603830	EPA 6020B	603941
92521151022	**MW-5**	EPA 3005A	603830	EPA 6020B	603941

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92521151023	**MW-6**	EPA 3005A	603830	EPA 6020B	603941
92521151024	**MW-24D**	EPA 3005A	603830	EPA 6020B	603941
92521151025	**MW-26D**	EPA 3005A	603830	EPA 6020B	603941
92521151026	**MW-27D**	EPA 3005A	603830	EPA 6020B	603941
92521151027	**MW-27D FILTERED**	EPA 3005A	603830	EPA 6020B	603941
92521151028	**HGWC-13**	EPA 3005A	603830	EPA 6020B	603941
92521151001	**HGWA-1**	EPA 7470A	600377	EPA 7470A	600865
92521151002	**HGWA-2**	EPA 7470A	600377	EPA 7470A	600865
92521151003	**HGWA-3**	EPA 7470A	600377	EPA 7470A	600865
92521151004	**HGWA-43D**	EPA 7470A	600377	EPA 7470A	600865
92521151005	**HGWA-44D**	EPA 7470A	600377	EPA 7470A	600865
92521151006	**HGWC-7**	EPA 7470A	601295	EPA 7470A	601814
92521151007	**MW-28D**	EPA 7470A	601295	EPA 7470A	601814
92521151008	**MW-28D FILTERED**	EPA 7470A	601295	EPA 7470A	601814
92521151009	**MW-20**	EPA 7470A	601295	EPA 7470A	601814
92521151010	**HGWC-11**	EPA 7470A	601295	EPA 7470A	601814
92521151011	**HGWC-12**	EPA 7470A	601295	EPA 7470A	601814
92521151012	**MW-19**	EPA 7470A	601295	EPA 7470A	601814
92521151013	**DUP-1**	EPA 7470A	601295	EPA 7470A	601814
92521151014	**MW-25D**	EPA 7470A	601295	EPA 7470A	601814
92521151015	**FB-1**	EPA 7470A	601295	EPA 7470A	601814
92521151016	**EB-1**	EPA 7470A	601590	EPA 7470A	601621
92521151017	**HGWC-10**	EPA 7470A	601590	EPA 7470A	601621
92521151018	**MW-7**	EPA 7470A	601590	EPA 7470A	601621
92521151019	**MW-29**	EPA 7470A	601590	EPA 7470A	601621
92521151020	**HGWC-8**	EPA 7470A	601590	EPA 7470A	601621
92521151021	**HGWC-9**	EPA 7470A	601883	EPA 7470A	602188
92521151022	**MW-5**	EPA 7470A	601883	EPA 7470A	602188
92521151023	**MW-6**	EPA 7470A	601883	EPA 7470A	602188
92521151024	**MW-24D**	EPA 7470A	601883	EPA 7470A	602188
92521151025	**MW-26D**	EPA 7470A	601883	EPA 7470A	602188
92521151026	**MW-27D**	EPA 7470A	601883	EPA 7470A	602188
92521151027	**MW-27D FILTERED**	EPA 7470A	601883	EPA 7470A	602188
92521151028	**HGWC-13**	EPA 7470A	602268	EPA 7470A	602517
92521151001	**HGWA-1**	EPA 300.0 Rev 2.1 1993	598903		
92521151002	**HGWA-2**	EPA 300.0 Rev 2.1 1993	599257		
92521151003	**HGWA-3**	EPA 300.0 Rev 2.1 1993	599257		
92521151004	**HGWA-43D**	EPA 300.0 Rev 2.1 1993	599257		
92521151005	**HGWA-44D**	EPA 300.0 Rev 2.1 1993	599257		
92521151006	**HGWC-7**	EPA 300.0 Rev 2.1 1993	599863		
92521151007	**MW-28D**	EPA 300.0 Rev 2.1 1993	599863		
92521151008	**MW-28D FILTERED**	EPA 300.0 Rev 2.1 1993	599863		
92521151009	**MW-20**	EPA 300.0 Rev 2.1 1993	600235		
92521151010	**HGWC-11**	EPA 300.0 Rev 2.1 1993	600235		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HAMMOND AP-1 APP IV
Pace Project No.: 92521151

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92521151011	**HGWC-12**	EPA 300.0 Rev 2.1 1993	600783		
92521151012	**MW-19**	EPA 300.0 Rev 2.1 1993	600783		
92521151013	**DUP-1**	EPA 300.0 Rev 2.1 1993	600783		
92521151014	**MW-25D**	EPA 300.0 Rev 2.1 1993	600783		
92521151015	**FB-1**	EPA 300.0 Rev 2.1 1993	600783		
92521151016	**EB-1**	EPA 300.0 Rev 2.1 1993	600235		
92521151017	**HGWC-10**	EPA 300.0 Rev 2.1 1993	601397		
92521151018	**MW-7**	EPA 300.0 Rev 2.1 1993	601397		
92521151019	**MW-29**	EPA 300.0 Rev 2.1 1993	601397		
92521151020	**HGWC-8**	EPA 300.0 Rev 2.1 1993	601397		
92521151021	**HGWC-9**	EPA 300.0 Rev 2.1 1993	601397		
92521151022	**MW-5**	EPA 300.0 Rev 2.1 1993	601397		
92521151023	**MW-6**	EPA 300.0 Rev 2.1 1993	601397		
92521151024	**MW-24D**	EPA 300.0 Rev 2.1 1993	601397		
92521151025	**MW-26D**	EPA 300.0 Rev 2.1 1993	601397		
92521151026	**MW-27D**	EPA 300.0 Rev 2.1 1993	601397		
92521151027	**MW-27D FILTERED**	EPA 300.0 Rev 2.1 1993	601397		
92521151028	**HGWC-13**	EPA 300.0 Rev 2.1 1993	604773		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical®	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO# : 92521151

92521151

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

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

Date/Initials Person Examining Contents: MR 2/9/21

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☑ Other

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

Thermometer: ☐ IR Gun ID: 233 **Type of Ice:** ☑ Wet ☐ Blue ☐ None

Cooler Temp: 3.6 **Correction Factor: Add/Subtract (°C)** +0.4

Cooler Temp Corrected (°C): 4.0

Temp should be above freezing to 6°C

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

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

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

Pace Analytical

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 AP-1 App. IV Scan
Project Number:	GW6581B

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	

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 DATE	COLLECTED TIME	COMPOSITE DATE	COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Fluoride N	Full App IV Metals 6020/7470* N	RAD 226/228 N	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 9252451
1	HGWA-1	WT	G	2/8/2021	1613	–	–	17	4	1		3							X	X	X	N	pH = 7.11
2	HGWA-2	WT	G			–	–		4	1		3							X	X	X	N	pH =
3	HGWA-3	WT	G			–	–		4	1		3							X	X	X	N	pH =
4	HGWA-43D	WT	G			–	–		4	1		3							X	X	X	N	pH =
5	HGWA-44D	WT	G			–	–		4	1		3							X	X	X	N	pH =
6	HGWC-7	WT	G			–	–		4	1		3							X	X	X	N	pH =
7	HGWC-8	WT	G			–	–		4	1		3							X	X	X	N	pH =
8	HGWC-9	WT	G			–	–		4	1		3							X	X	X	N	pH =
9	HGWC-10	WT	G			–	–		4	1		3							X	X	X	N	pH =
10	HGWC-11	WT	G			–	–		4	1		3							X	X	X	N	pH =
11	HGWC-12	WT	G			–	–		4	1		3							X	X	X	N	pH =
12	HGWC-13	WT	G			–	–		4	1		3							X	X	X	N	pH =

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	[signature]	2/9/21	1233	[signature] / Pace	2/9/21	1233				
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl	[signature] / Pace	2/9/21	1545	[signature] / Pace	2/9/21	1545	3.6	Y	N	Y
One sample set submitted for HGWA-1/2/3/43D/44D and EB-1 but they will be reported for AP-1/2 SDGs										
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Chad Russo

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 2/8/2021

*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
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 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:	Plant Hammond AP-1 App. IV Scan
Project Number:	GW6581B

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	

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 DATE	COLLECTED TIME	COMPOSITE DATE	COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Fluoride N	Full App.IV Metals 6020/7470* N	RAD 226/228 N	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 92521151
1	HGWA-1	WT	G						4	1		3							X	X	X	N	pH =
2	HGWA-2	WT	G	2/9/21	1038	–	–	16	4	1		3							X	X	X	N	pH = 5.42
3	HGWA-3	WT	G	2/9/21	1156	–	–	18	4	1		3							X	X	X	N	pH = 7.23
~~4~~	~~HGWA-43D~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
~~5~~	~~HGWA-44D~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
~~6~~	~~HGWC-7~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
~~7~~	~~HGWC-8~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
~~8~~	~~HGWC-9~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
~~9~~	~~HGWC-10~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
~~10~~	~~HGWC-11~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
~~11~~	~~HGWC-12~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
~~12~~	~~HGWC-13~~	WT	G			–	–		4	1		3							X	X	X	N	pH =

ADDITIONAL COMMENTS

Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl
One sample set submitted for HGWA-1/2/3/43D/44D and EB-1 but they will be reported for AP-1/2 SDGs

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Thomas Hessler / Pace	2/9/21	1759	[signature]	2/9/21	1459
[signature]	2/10/21	0933	[signature] / Pace	2/10/21	0936
			[signature]	2/10/21	1270

SAMPLE CONDITIONS

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Hessler

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 02/09/21

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

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

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 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	Plant Hammond AP-1 App. IV Scan
Project Number	GW6581B

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	

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 DATE	COLLECTED TIME	COMPOSITE DATE	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	Fluoride	Full App. IV Metals 6020/7470*	RAD 226/228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Y/N	N	N	N		92521151
1	HGWA-1	WT	G			-			4	1		3							X	X	X	N	pH =
2	HGWA-2	WT	G			-			4	1		3							X	X	X	N	pH =
3	HGWA-3	WT	G			-			4	1		3							X	X	X	N	pH =
4	HGWA-43D	WT	G	2/9/21	1058	-		16	4	1		3							X	X	X	N	pH =
5	HGWA-44D	WT	G	2/9/21	1309	-		17	4	1		3							X	X	X	N	pH = 7.44
6	HGWC-7	WT	G			-			4	1		3							X	X	X	N	pH = 7.89
7	HGWC-8	WT	G			-			4	1		3							X	X	X	N	pH =
8	HGWC-9	WT	G			-			4	1		3							X	X	X	N	pH =
9	HGWC-10	WT	G			-			4	1		3							X	X	X	N	pH =
10	HGWC-11	WT	G			-			4	1		3							X	X	X	N	pH =
11	HGWC-12	WT	G			2/9/21	-		4	1		3							X	X	X	N	pH =
12	HGWC-13	WT	G			-	-		4	1		3							X	X	X	N	pH =

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.		2/10/21	0933	Pace	2/11/21	0930	
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl	Pace	2/10/21	1220		2/11/21	1220	
One sample set submitted for HGWA-1/2/3/43D/44D and EB-1 but they will be reported for AP-1/2 SDGs							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Chad Russo

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 2/9/2021

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
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 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:	Plant Hammond AP-1 App. IV Scan
Project Number:	GW6581B

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	

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

ITEM #	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	COMPOSITE DATE	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	Fluoride	Full App.IV Metals 6020/7470	RAD 226/228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																	Requested Analysis Filtered (Y/N)	N	N	N		92321151
1	HGWA-1	WT	G					4	1		3							X	X	X	N	pH =
2	HGWA-2	WT	G					4	1		3							X	X	X	N	pH =
3	HGWA-3	WT	G					4	1		3							X	X	X	N	pH =
4	HGWA-43D	WT	G					4	1		3							X	X	X	N	pH =
5	HGWA-44D	WT	G					4	1		3							X	X	X	N	pH =
6	HGWC-7	WT	G	2/10/21	1211			4	1		3							X	X	X	N	pH = 7.29
7	HGWC-8	WT	G					4	1		3							X	X	X	N	pH =
8	HGWC-9	WT	G					4	1		3							X	X	X	N	pH =
9	HGWC-10	WT	G					4	1		3							X	X	X	N	pH =
10	HGWC-11	WT	G					4	1		3							X	X	X	N	pH =
11	HGWC-12	WT	G					4	1		3							X	X	X	N	pH =
12	HGWC-13	WT	G					4	1		3							X	X	X	N	pH =

ADDITIONAL COMMENTS

Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl
One sample set submitted for HGWA-1/2/3/43D/44D and EB-1 but they will be reported for AP-1/2 SDGs

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[signature] /Geo	2/11/21	0930	[signature] /Geo	2/11/21	0836
[signature] /Geo	2/11/21	0915	[signature] /Pace	2/4/21	0919
[signature] /Pace	2/11/21	1326			

SAMPLE CONDITIONS

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Myriam Hassler
SIGNATURE of SAMPLER: [signature]
DATE Signed (MM/DD/YY): 2/11/21

*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
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: 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:	Plant Hammond AP-1 App. IV Scan
Project Number:	GW6581B

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ~~CBR~~

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 DATE	COLLECTED TIME	COMPOSITE DATE	COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	Fluoride (N)	Full App.IV Metals 6020/7470* (N)	RAD 226/228 (N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	~~MW-5~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
2	~~MW-6~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
3	~~MW-7~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
4	~~MW-19~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
5	~~MW-20~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
6	~~MW-24D~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
7	~~MW-25D~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
8	~~MW-26D~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
9	~~MW-27D~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
10	MW-28D	WT	G	2/10/21	1731	–	–	18	4	1		3							X	X	X	N	pH = 7.54 006
11	~~MW-28D-Filtered MW-29~~	WT	G	2/10/21	1731	–	–	18	4	1		3							X	X	X	N	pH = 7.54 007
12	~~Dup-1~~	WT	G			–	–		4	1		3							X	X	X	N	

92521151

ADDITIONAL COMMENTS

Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl
One sample set submitted for HGWA-1/2/3/43D/44D and EB-1 but they will be reported for AP-1/2 SDGs

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Thomas Kessler / Geo	2/11/21	0830	[signature] / Geo	2/11/21	0830
[signature] / Geo	2/11/21	0915	[signature] / Pace	2/11/21	0919
[signature] / Pace	2/11/21	1320			

SAMPLE CONDITIONS

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Kessler

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 02/10/21

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

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

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

Section A Required Client Information:		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 AP-1 App. IV Scan	Pace Project Manager:	Kevin Herring
Requested Due Date/TAT:	10 Day	Project Number:	GW6581B	Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ~~con~~

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 DATE	COLLECTED TIME	COMPOSITE DATE	COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	Fluoride (N)	Full App IV Metals 6020/7470* (N)	RAD 226/228 (N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 92521151
1	~~MW-5~~	~~WT~~	~~G~~			–	–		4	1		3							X	X	X	N	~~pH =~~
2	~~MW-6~~	~~WT~~	~~G~~			–	–		4	1		3							X	X	X	N	~~pH =~~
3	~~MW-7~~	~~WT~~	~~G~~			–	–		4	1		3							X	X	X	N	~~pH =~~
4	~~MW-19~~	~~WT~~	~~G~~			–	–		4	1		3							X	X	X	N	~~pH =~~
5	MW-20	WT	G	2/11/21	1159	–	–	☒	4	1		3							X	X	X	N	pH = 6.93 009
6	~~MW-24D~~	~~WT~~	~~G~~			–	–		4	1		3							X	X	X	N	~~pH =~~
7	~~MW-25D~~	~~WT~~	~~G~~			–	–		4	1		3							X	X	X	N	~~pH =~~
8	~~MW-26D~~	~~WT~~	~~G~~			–	–		4	1		3							X	X	X	N	~~pH =~~
9	~~MW-27D~~	~~WT~~	~~G~~			–	–		4	1		3							X	X	X	N	~~pH =~~
10	~~MW-28D~~	~~WT~~	~~G~~			–	–		4	1		3							X	X	X	N	~~pH =~~
11	~~MW-29~~	~~WT~~	~~G~~			–	–		4	1		3							X	X	X	N	~~pH =~~
12	~~Dup-1~~	~~WT~~	~~G~~			–	–		4	1		3							X	X	X	N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	Thomas Kessler / Geo	2/12/21	0845	[signature] / geo	2/12/21	0815
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl	[signature] / geo	2/12/21	0936	[signature] / Pace	2/12/21	0936
One sample set submitted for HGWA-1/2/3/43D/44D and EB-1 but they will be reported for AP-1/2 SDGs	[signature] / Pace	2/12/21	1352	Charles Hess	2/12/21	1352

SAMPLE CONDITIONS

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Kessler

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 02/11/21

... for any invoices not paid within 30 days.

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

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 9

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 AP-1 App. IV Scan
Project Number: GW6581B

Section C — Invoice Information:
Attention: Southern Co.
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Kevin Herring
Pace Profile #:

REGULATORY AGENCY
☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ~~OGR~~

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	COMPOSITE DATE	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): Fluoride	Full App.IV Metals 6020/7470*	RAD 226/228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Y/N	N	N	N		92521171
1	~~HGWA-1~~	WT	G						4	1		3							X	X	X	N	pH =
2	~~HGWA-2~~	WT	G						4	1		3							X	X	X	N	pH =
3	~~HGWA-3~~	WT	G						4	1		3							X	X	X	N	pH =
4	~~HGWA-43D~~	WT	G						4	1		3							X	X	X	N	pH =
5	~~HGWA-44D~~	WT	G						4	1		3							X	X	X	N	pH =
6	~~HGWC-7~~	WT	G						4	1		3							X	X	X	N	pH =
7	~~HGWC-8~~	WT	G						4	1		3							X	X	X	N	pH =
8	~~HGWC-9~~	WT	G						4	1		3							X	X	X	N	pH =
9	~~HGWC-10~~	WT	G						4	1		3							X	X	X	N	pH =
10	HGWC-11	WT	G	2/12/21	1245			17	4	1		3							X	X	X	N	pH = 7.27 010
11	HGWC-12	WT	G	2/12/21	1431			16	4	1		3							X	X	X	N	pH = 6.23 011
12	~~HGWC-13~~	WT	G						4	1		3							X	X	X	N	pH =

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	Thomas Wheeler	2/12/21	1660		2/12/21	1600	
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl		2/15/21	0945		2/15/21	0945	
One sample set submitted for HGWA-1/2/3/43D/44D and EB-1 but they will be reported for AP-1/2 SDGs							

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Thomas Wheeler
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY): 02/12/21

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
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: 2 of 4

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 AP-1 App. IV Scan
Project Number:	GW6581B

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ~~DSR~~

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 in left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	COMPOSITE DATE	COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	Fluoride (N)	Full App.IV Metals 6020/7470* (N)	RAD 226/228 (N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 9252151
1	MW-5	WT	G			–	–		4	1		3							X	X	X	N	pH =
2	MW-6	WT	G			–	–		4	1		3							X	X	X	N	pH =
3	MW-7	WT	G			–	–		4	1		3							X	X	X	N	pH =
4	MW-19	WT	G	2-12-21	1340	–	–		4	1		3							X	X	X	N	pH = 6.36 OK
5	MW-20	WT	G			–	–		4	1		3							X	X	X	N	pH =
6	MW-24D	WT	G			–	–		4	1		3							X	X	X	N	pH =
7	MW-25D	WT	G			–	–		4	1		3							X	X	X	N	pH =
8	MW-26D	WT	G			–	–		4	1		3							X	X	X	N	pH =
9	MW-27D	WT	G			–	–		4	1		3							X	X	X	N	pH =
10	MW-28D	WT	G			–	–		4	1		3							X	X	X	N	pH =
11	MW-29	WT	G			–	–		4	1		3							X	X	X	N	pH =
12	Dup-1	WT	G	2-12-21		–	–		4	1		3							X	X	X	N	

A Reeder 2-12-2021

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please note dry wells, strike through any wells not sampled, and note when the last sample for the event has been taken.	[signature] / Sampler	2-12-21	1600	[signature] / GCO	2/12/21	1600	
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl	[signature] / GCO	2/15/21	0945	[signature] / Pace	2/15/21	0945	
One sample set submitted for HGWA-1/2/3/43D/44D and EB-1 but they will be reported for AP-1/2 SDGs							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Aaron Reeder

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 02/12/2021

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

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

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

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 3 of 4

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 AP-1 App. IV Scan
Project Number:	GW65818

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	

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 DATE	COLLECTED TIME	COMPOSITE DATE	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	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 4252451
																			Fluoride	Full App.IV Metals 6020/7470*	RAD 226/228		
1	~~MW-5~~	WT	G						4	1		3							X	X	X	N	pH =
2	~~MW-6~~	WT	G						4	1		3							X	X	X	N	pH =
3	MW-7	WT	G						4	1		3							X	X	X	N	pH =
4	~~MW-19~~	WT	G						4	1		3							X	X	X	N	pH =
5	~~MW-20~~	WT	G						4	1		3							X	X	X	N	pH =
6	~~MW-24D~~	WT	G						4	1		3							X	X	X	N	pH =
7	MW-25D	WT	G	2/12/21	1031				4	1		3							X	X	X	N	pH =
8	~~MW-26D~~	WT	G						4	1		3							X	X	X	N	pH = 7.77 014
9	~~MW-27D~~	WT	G						4	1		3							X	X	X	N	pH =
10	~~MW-28D~~	WT	G						4	1		3							X	X	X	N	pH =
11	~~MW-29~~	WT	G						4	1		3							X	X	X	N	pH =
12	Dup-1	WT	G						4	1		3							X	X	X	N	pH =

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	[signature] / GSC	2/12/21	1600	[signature] / GSC	2/12/21	1600	
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl	[signature] / GSC	2/15/21	0945	[signature] / Pace	2/15/21	0945	
One sample set submitted for HGWA-1/2/3/43D/44D and EB-1 but they will be reported for AP-1/2 SDGs							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Wessler

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 02/12/21

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
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: 4 of 4

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 AP-1 App. IV Scan
Project Number:	GW6581B

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	

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 DATE	COLLECTED TIME	COMPOSITE DATE	COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Fluoride	Full App.IV Metals 6020/7470*	RAD 226/228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	~~EB-1~~	~~WT~~	~~G~~																				
2	FB-1	WT	G	2-12-21	1530	--	--		4	1		3							X	X	X	N	9252451
3	EB-1	WT	G	2-12-21	1535	--	--		4	1		3							X	X	X	N	015
4									4	1		3							X	X	X	N	016
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	[signature] / Sampler	2-12-21	1600	[signature] / SCO	2/12/21	1600	
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl	[signature] / SCO	2/15/21	0945	[signature] / Pace	2/15/21	0945	
One sample set submitted for HGWA-1/2/3/43D/44D and EB-1 but they will be reported for AP-1/2 SDGs							

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER:	Aaron Reeder
SIGNATURE of SAMPLER:	[signature]
DATE Signed (MM/DD/YY):	02/12/2021

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

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

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

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

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 AP-1 App. IV Scan
Project Number:	GW6581B

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	

Page: 1 of 2

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ~~OGR~~

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 DATE	COLLECTED TIME	COMPOSITE DATE	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): Fluoride	Full App.IV Metals 6020/7470*	RAD 226/228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 92521151
1	HGWA-1	WT	G						4	1		3							X	X	X		N	pH =
2	HGWA-2	WT	G						4	1		3							X	X	X		N	pH =
3	HGWA-3	WT	G						4	1		3							X	X	X		N	pH =
4	HGWA-43D	WT	G						4	1		3							X	X	X		N	pH =
5	HGWA-44D	WT	G						4	1		3							X	X	X		N	pH =
6	HGWC-7	WT	G					2/15/21	4	1		3							X	X	X		N	pH =
7	HGWC-8	WT	G						4	1		3							X	X	X		N	pH =
8	HGWC-9	WT	G						4	1		3							X	X	X		N	pH =
9	HGWC-10	WT	G	2/15/21	1331			19	4	1		3							X	X	X		N	pH = 6.83
10	HGWC-11	WT	G						4	1		3							X	X	X		N	pH =
11	HGWC-12	WT	G						4	1		3							X	X	X		N	pH =
12	HGWC-13	WT	G						4	1		3							X	X	X		N	pH =

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Please note dry wells, strike through any wells not sampled, and note when the last sample for the event has been taken.										
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl	[illegible]	2/17/21	1154	[illegible] Pace	2/17/21	1154				
One sample set submitted for HGWA-1/2/3/43D/44D and EB-1 but they will be reported for AP-1/2 SDGs	[illegible] Pace	2/17/21	1608	[illegible] Pace	2/17/21	1608	4.9	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Chad Ruiso

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 2/15/2021

*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
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: 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: Plant Hammond AP-1 App. IV Scan
Project Number: GW6581B

Section C Invoice Information:

Attention: Southern Co.
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Kevin Herring
Pace Profile #:

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 DATE	COLLECTED TIME	COMPOSITE DATE	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): Fluoride	Full App.IV Metals 6020/7470*	RAD 226/228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																			N	N	N		92521151
1	MW-5	WT	G						4	1		3							X	X	X	N	pH =
2	MW-6	WT	G						4	1		3							X	X	X	N	pH =
3	MW-7	WT	G	2/15/21	1717			N	4	1		3							X	X	X	N	pH =
4	MW-19	WT	G						4	1		3							X	X	X	N	pH = 6.77 @18
5	MW-20	WT	G						4	1		3							X	X	X	N	pH =
6	MW-24D	WT	G						4	1		3							X	X	X	N	pH =
7	MW-25D	WT	G						4	1		3							X	X	X	N	pH =
8	MW-26D	WT	G						4	1		3							X	X	X	N	pH =
9	MW-27D	WT	G						4	1		3							X	X	X	N	pH =
10	MW-28D	WT	G						4	1		3							X	X	X	N	pH =
11	MW-29	WT	G	2/13/21	1406				4	1		3							X	X	X	N	pH =
12	Dup-1	WT	G					R	4	1		3							X	X	X	N	pH = 7.09 @18
									4	1		3							X	X	X	N	

ADDITIONAL COMMENTS

Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl
One sample set submitted for HGWA-1/2/3/43D/44D and EB-1 but they will be reported for AP-1/2 SDGs

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Thomas Kressler/Geo	2/17/21	1154	/Pace	2/17/21	1154
/Pace	2/17/21	1608		2/17/21	1608

SAMPLE CONDITIONS

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Kressler
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY): 2/15/21

*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
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 3

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 AP-1 App. IV Scan
Project Number:	GW6581B

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	

REGULATORY AGENCY

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

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 DATE	COLLECTED TIME	COMPOSITE DATE	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	Fluoride	Full App.IV Metals 6020/7470*	RAD 226/228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Requested Analysis Filtered (Y/N)	N	N	N		42521151
1	~~HGWA-1~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
2	~~HGWA-2~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
3	~~HGWA-3~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
4	~~HGWA-43D~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
5	~~HGWA-44D~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
6	~~HGWG-7~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
7	HGWC-8	WT	G	2/16/21	1505	–	–	14	4	1		3							X	X	X	N	pH =
8	HGWC-9	WT	G	2/16/21	1839	–	–	15	4	1		3							X	X	X	N	pH = 7.16 020
9	~~HGWC-10~~	WT	G			–	–		4	1		3							X	X	X	N	pH = 7.26 021
10	~~HGWC-11~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
11	~~HGWC-12~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
12	~~HGWG-13~~	WT	G			–	–		4	1		3							X	X	X	N	pH =

ADDITIONAL COMMENTS

Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl
One sample set submitted for HGWA-1/2/3/43D/44D and EB-1 but they will be reported for AP-1/2 SDGs

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
						Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
[signature] /Pace	2/17/21	1154	[signature] /Pace	2/17/21	1154				
[signature] /Pace	2/17/21	1608	[signature] /Pace	2/17/21	1608	4.9	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Hessler
SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 02/16/21

*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
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: 2 of 3

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 AP-1 App. IV Scan
Project Number:	GW6581B

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	

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: 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	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	COMPOSITE DATE	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): Fluoride	Full App.IV Metals 6020/7470*	RAD 228/228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																			N	N	N		92521151
1	MW-5	WT	G	2/16/21	1627	–	–	17	4	1		3							X	X	X	N	pH = 5.95 002
2	MW-6	WT	G	2/16/21	1512	–	–	17	4	1		3							X	X	X	N	pH = 7.00 023
3	~~MW-7~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
4	~~MW-19~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
5	~~MW-20~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
6	MW-24D	WT	G	2/16/21	1244	–	–	17	4	1		3							X	X	X	N	pH = 7.69 024
7	~~MW-25D~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
8	MW-26D	WT	G	2/16/21	1803	–	–	15	4	1		3							X	X	X	N	pH = 7.27 025
9	~~MW-27D~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
10	MW-28D	WT	G			–	–		4	1		3							X	X	X	N	pH =
11	MW-29	WT	G			–	–		4	1		3							X	X	X	N	pH =
12	Dup-1	WT	G			–	–		4	1		3							X	X	X	N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	[signature] /GSC	2/17/2021	1055	[signature] /Pace	2/17/21	1154
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo Se, Tl	[signature] /Pace	2/17/21	1608	[signature] /Pace	2/17/21	1608
One sample set submitted for HGWA-1/2/3/4/3D/4D and EB-1 but they will be reported for AP-1/2 SDGs						

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Chad Russo

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 2/16/2021

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

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

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 3 of 3

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 AP-1 App. IV Scan
Project Number:	GW6581B

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	

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 DATE	COLLECTED TIME	COMPOSITE DATE	COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Fluoride	Full App.IV Metals 6020/7470*	RAD 226/228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																	Requested Analysis Filtered (Y/N)	N	N	N		9252157
1	~~MW-5~~	WT	G						4	1	3							X	X	X	N	pH =
2	~~MW-6~~	WT	G						4	1	3							X	X	X	N	pH =
3	~~MW-7~~	WT	G						4	1	3							X	X	X	N	pH =
4	~~MW-19~~	WT	G						4	1	3							X	X	X	N	pH =
5	~~MW-28~~	WT	G						4	1	3							X	X	X	N	pH =
6	~~MW-24D~~	WT	G						4	1	3							X	X	X	N	pH =
7	~~MW-25D~~	WT	G						4	1	3							X	X	X	N	pH =
8	~~MW-26D~~	WT	G						4	1	3							X	X	X	N	pH =
9	MW-27D	WT	G	2/16/21	1131	–	–	10	4	1	3							X	X	X	N	pH =
10	MW-27D ~~MW-28D~~ Filtered	WT	G	2/16/21	1111	–	–	10	4	1	3							X	X	X	N	pH = 7.96 026
11	~~MW-29~~	WT	G			–	–		4	1	3							X	X	X	N	pH = 7.96 027
12	Dup-1	WT	G			–	–		4	1	3							X	X	X	N	pH =

ADDITIONAL COMMENTS

Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl
One sample set submitted for HGWA-1/2/3/43D/44D and EB-1 but they will be reported for AP-1/2 SDGs

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Thermofisher / Geo	2/17/21	1154	[signature] / Pace	2/17/21	1154
[signature] / Pace	2/17/21	1608	[signature] / Pace	2/17/21	1608

SAMPLE CONDITIONS

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Hegler
SIGNATURE of SAMPLER: [signature]
DATE Signed (MM/DD/YY): 02/16/21

*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
www.pacelabs.com

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
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 AP-1 App. IV Scan
Project Number: GW6581B

Section C
Invoice Information:
Attention: Southern Co.
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Kevin Herring
Pace Profile #:

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

SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	COMPOSITE DATE	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): Fluoride	Cl, SO4, App IV Metals 6020/7470*	RAD 226/228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																	Y/N	N	N	N		
HGWA-1	WT	G						4	1		3							X	X	X	N	92521151
HGWA-2	WT	G						4	1		3							X	X	X	N	pH =
HGWA-3	WT	G						4	1		3							X	X	X	N	pH =
HGWA-43D	WT	G						4	1		3							X	X	X	N	pH =
HGWA-44D	WT	G						4	1		3							X	X	X	N	pH =
HGWC-7	WT	G						4	1		3							X	X	X	N	pH =
HGWC-8	WT	G						4	1		3							X	X	X	N	pH =
HGWC-9	WT	G						4	1		3							X	X	X	N	pH =
HGWC-10	WT	G						4	1		3							X	X	X	N	pH =
HGWC-11	WT	G						4	1		3							X	X	X	N	pH =
HGWC-12	WT	G						4	1		3							X	X	X	N	pH =
HGWC-13	WT	G	2/22/21	359			20	4	1		3							X	X	X	N	pH = 7.27 028

ADDITIONAL COMMENTS
e note dry wells, strike thorugh any wells not sampled, and
when the last sample for the event has been taken.
App IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo.
ample set submitted for HGWA-1/2/3/43D/44D and EB-1
ey will be reported for AP-1/2 SDGs

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[signature] / GEO	2/23/21	0910	Ryan Williams / Pace	2/23/21	0905
Ryan Williams / Pace	2/24/21	1131	[signature]	2/23/21	1135

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Chad Russo
SIGNATURE of SAMPLER: [signature]
DATE Signed (MM/DD/YY): 2/22/21

SAMPLE CONDITIONS

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

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

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

March 16, 2021

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

RE: Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between February 09, 2021 and February 23, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Greensburg

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

Sincerely,

Kevin Herring
kevin.herring@pacelabs.com
1(704)875-9092
HORIZON Database Administrator

Enclosures

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

CERTIFICATIONS

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SAMPLE SUMMARY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92521131001	**HGWA-1**	Water	02/08/21 16:13	02/09/21 12:33
92521131002	**HGWA-2**	Water	02/09/21 10:38	02/10/21 09:56
92521131003	**HGWA-3**	Water	02/09/21 11:56	02/10/21 09:56
92521131004	**HGWA-43D**	Water	02/09/21 17:58	02/10/21 09:56
92521131005	**HGWA-44D**	Water	02/09/21 13:09	02/10/21 09:56
92521131006	**HGWC-7**	Water	02/10/21 12:11	02/11/21 09:19
92521131007	**MW-28D**	Water	02/10/21 17:31	02/11/21 09:19
92521131008	**MW-28D FILTERED**	Water	02/10/21 17:31	02/11/21 09:19
92521131009	**MW-20**	Water	02/11/21 11:59	02/12/21 09:36
92521131010	**HGWC-11**	Water	02/12/21 12:45	02/15/21 09:45
92521131011	**HGWC-12**	Water	02/12/21 14:51	02/15/21 09:45
92521131012	**MW-19**	Water	02/12/21 13:40	02/15/21 09:45
92521131013	**DUP-1**	Water	02/12/21 00:00	02/15/21 09:45
92521131014	**MW-25D**	Water	02/12/21 10:31	02/15/21 09:45
92521131015	**FB-1**	Water	02/12/21 15:30	02/15/21 09:45
92521131016	**EB-1**	Water	02/12/21 15:35	02/15/21 09:45
92521131017	**HGWC-10**	Water	02/15/21 13:31	02/17/21 11:54
92521131018	**MW-7**	Water	02/15/21 17:17	02/17/21 11:54
92521131019	**MW-29**	Water	02/15/21 14:45	02/17/21 11:54
92521131020	**HGWC-8**	Water	02/16/21 15:05	02/17/21 11:54
92521131021	**HGWC-9**	Water	02/16/21 18:39	02/17/21 11:54
92521131022	**MW-5**	Water	02/16/21 16:27	02/17/21 11:54
92521131023	**MW-6**	Water	02/16/21 15:12	02/17/21 11:54
92521131024	**MW-24D**	Water	02/16/21 12:44	02/17/21 11:54
92521131025	**MW-26D**	Water	02/16/21 18:03	02/17/21 11:54
92521131026	**MW-27D**	Water	02/16/21 11:11	02/17/21 11:54
92521131027	**MW-27D FILTERED**	Water	02/16/21 11:11	02/17/21 11:54
92521131028	**HGWC-13**	Water	02/22/21 13:54	02/23/21 09:10

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SAMPLE ANALYTE COUNT

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92521131001	**HGWA-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521131002	**HGWA-2**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521131003	**HGWA-3**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521131004	**HGWA-43D**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521131005	**HGWA-44D**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521131006	**HGWC-7**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521131007	**MW-28D**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521131008	**MW-28D FILTERED**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521131009	**MW-20**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521131010	**HGWC-11**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521131011	**HGWC-12**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521131012	**MW-19**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521131013	**DUP-1**	EPA 9315	LAL	1	PASI-PA

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SAMPLE ANALYTE COUNT

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521131014	**MW-25D**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521131015	**FB-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521131016	**EB-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521131017	**HGWC-10**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521131018	**MW-7**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521131019	**MW-29**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521131020	**HGWC-8**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521131021	**HGWC-9**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521131022	**MW-5**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521131023	**MW-6**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521131024	**MW-24D**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521131025	**MW-26D**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SAMPLE ANALYTE COUNT

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		Total Radium Calculation	CMC	1	PASI-PA
92521131026	**MW-27D**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521131027	**MW-27D FILTERED**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521131028	**HGWC-13**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521131001	**HGWA-1**					
EPA 9315	Radium-226	0.0455 ± 0.0937 (0.218) C:84% T:NA	pCi/L		03/02/21 07:38	
EPA 9320	Radium-228	0.177 ± 0.371 (0.820) C:77% T:86%	pCi/L		02/24/21 15:30	
Total Radium Calculation	Total Radium	0.223 ± 0.465 (1.04)	pCi/L		03/05/21 14:01	
92521131002	**HGWA-2**					
EPA 9315	Radium-226	0.465 ± 0.189 (0.205) C:80% T:NA	pCi/L		03/08/21 08:33	
EPA 9320	Radium-228	0.256 ± 0.375 (0.807) C:77% T:89%	pCi/L		03/02/21 15:44	
Total Radium Calculation	Total Radium	0.721 ± 0.564 (1.01)	pCi/L		03/10/21 10:49	
92521131003	**HGWA-3**					
EPA 9315	Radium-226	0.161 ± 0.133 (0.248) C:80% T:NA	pCi/L		03/08/21 08:34	
EPA 9320	Radium-228	0.286 ± 0.395 (0.847) C:75% T:86%	pCi/L		03/02/21 15:44	
Total Radium Calculation	Total Radium	0.447 ± 0.528 (1.10)	pCi/L		03/10/21 10:49	
92521131004	**HGWA-43D**					
EPA 9315	Radium-226	0.138 ± 0.105 (0.176) C:87% T:NA	pCi/L		03/08/21 08:14	
EPA 9320	Radium-228	-0.0292 ± 0.272 (0.643) C:77% T:86%	pCi/L		03/02/21 11:24	
Total Radium Calculation	Total Radium	0.138 ± 0.377 (0.819)	pCi/L		03/10/21 10:49	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521131005	**HGWA-44D**					
EPA 9315	Radium-226	0.171 ± 0.126 (0.217) C:84% T:NA	pCi/L		03/08/21 08:28	
EPA 9320	Radium-228	0.315 ± 0.398 (0.849) C:77% T:81%	pCi/L		03/02/21 11:24	
Total Radium Calculation	Total Radium	0.486 ± 0.524 (1.07)	pCi/L		03/10/21 10:49	
92521131006	**HGWC-7**					
EPA 9315	Radium-226	0.255 ± 0.156 (0.254) C:84% T:NA	pCi/L		03/08/21 08:08	
EPA 9320	Radium-228	0.0263 ± 0.311 (0.718) C:73% T:84%	pCi/L		03/02/21 11:25	
Total Radium Calculation	Total Radium	0.281 ± 0.467 (0.972)	pCi/L		03/10/21 10:49	
92521131007	**MW-28D**					
EPA 9315	Radium-226	0.0715 ± 0.101 (0.219) C:87% T:NA	pCi/L		03/08/21 08:12	
EPA 9320	Radium-228	0.129 ± 0.353 (0.790) C:73% T:80%	pCi/L		03/02/21 11:25	
Total Radium Calculation	Total Radium	0.201 ± 0.454 (1.01)	pCi/L		03/10/21 10:49	
92521131008	**MW-28D FILTERED**					
EPA 9315	Radium-226	0.112 ± 0.0987 (0.179) C:88% T:NA	pCi/L		03/08/21 08:14	
EPA 9320	Radium-228	0.422 ± 0.335 (0.657) C:75% T:82%	pCi/L		03/02/21 11:25	
Total Radium Calculation	Total Radium	0.534 ± 0.434 (0.836)	pCi/L		03/10/21 10:49	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521131009	**MW-20**					
EPA 9315	Radium-226	0.228 ± 0.142 (0.230) C:82% T:NA	pCi/L		03/08/21 08:15	
EPA 9320	Radium-228	0.106 ± 0.303 (0.682) C:74% T:83%	pCi/L		03/02/21 11:25	
Total Radium Calculation	Total Radium	0.334 ± 0.445 (0.912)	pCi/L		03/10/21 10:49	
92521131010	**HGWC-11**					
EPA 9315	Radium-226	0.273 ± 0.138 (0.181) C:92% T:NA	pCi/L		03/08/21 08:15	
EPA 9320	Radium-228	0.829 ± 0.401 (0.685) C:77% T:82%	pCi/L		03/02/21 11:24	
Total Radium Calculation	Total Radium	1.10 ± 0.539 (0.866)	pCi/L		03/10/21 10:49	
92521131011	**HGWC-12**					
EPA 9315	Radium-226	0.199 ± 0.139 (0.240) C:82% T:NA	pCi/L		03/08/21 08:15	
EPA 9320	Radium-228	0.0372 ± 0.240 (0.556) C:77% T:90%	pCi/L		03/02/21 11:24	
Total Radium Calculation	Total Radium	0.236 ± 0.379 (0.796)	pCi/L		03/10/21 10:49	
92521131012	**MW-19**					
EPA 9315	Radium-226	0.0614 ± 0.107 (0.242) C:88% T:NA	pCi/L		03/11/21 08:12	
EPA 9320	Radium-228	0.703 ± 0.479 (0.919) C:80% T:84%	pCi/L		03/03/21 18:16	
Total Radium Calculation	Total Radium	0.764 ± 0.586 (1.16)	pCi/L		03/11/21 12:05	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521131013	**DUP-1**					
EPA 9315	Radium-226	0.142 ± 0.107 (0.176) C:89% T:NA	pCi/L		03/11/21 08:13	
EPA 9320	Radium-228	0.618 ± 0.335 (0.584) C:83% T:80%	pCi/L		03/03/21 16:04	
Total Radium Calculation	Total Radium	0.760 ± 0.442 (0.760)	pCi/L		03/11/21 12:05	
92521131014	**MW-25D**					
EPA 9315	Radium-226	0.601 ± 0.198 (0.164) C:95% T:NA	pCi/L		03/11/21 08:13	
EPA 9320	Radium-228	0.570 ± 0.351 (0.643) C:79% T:81%	pCi/L		03/03/21 16:04	
Total Radium Calculation	Total Radium	1.17 ± 0.549 (0.807)	pCi/L		03/11/21 12:05	
92521131015	**FB-1**					
EPA 9315	Radium-226	0.209 ± 0.122 (0.178) C:93% T:NA	pCi/L		03/11/21 08:13	
EPA 9320	Radium-228	0.661 ± 0.382 (0.694) C:81% T:82%	pCi/L		03/03/21 16:04	
Total Radium Calculation	Total Radium	0.870 ± 0.504 (0.872)	pCi/L		03/11/21 12:05	
92521131016	**EB-1**					
EPA 9315	Radium-226	0.0746 ± 0.100 (0.213) C:80% T:NA	pCi/L		03/11/21 08:15	
EPA 9320	Radium-228	2.12 ± 0.734 (1.06) C:81% T:90%	pCi/L		03/03/21 19:10	
Total Radium Calculation	Total Radium	2.19 ± 0.834 (1.27)	pCi/L		03/11/21 12:05	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521131017	**HGWC-10**					
EPA 9315	Radium-226	0.0638 ± 0.0809 (0.162) C:76% T:NA	pCi/L		03/11/21 08:15	
EPA 9320	Radium-228	1.85 ± 0.759 (1.24) C:81% T:80%	pCi/L		03/03/21 19:10	
Total Radium Calculation	Total Radium	1.91 ± 0.840 (1.40)	pCi/L		03/11/21 12:05	
92521131018	**MW-7**					
EPA 9315	Radium-226	0.237 ± 0.143 (0.224) C:80% T:NA	pCi/L		03/11/21 08:16	
EPA 9320	Radium-228	0.655 ± 0.526 (1.05) C:79% T:83%	pCi/L		03/03/21 19:10	
Total Radium Calculation	Total Radium	0.892 ± 0.669 (1.27)	pCi/L		03/11/21 12:05	
92521131019	**MW-29**					
EPA 9315	Radium-226	0.280 ± 0.158 (0.252) C:82% T:NA	pCi/L		03/11/21 08:16	
EPA 9320	Radium-228	0.886 ± 0.609 (1.17) C:77% T:75%	pCi/L		03/03/21 19:10	
Total Radium Calculation	Total Radium	1.17 ± 0.767 (1.42)	pCi/L		03/11/21 13:04	
92521131020	**HGWC-8**					
EPA 9315	Radium-226	0.270 ± 0.150 (0.229) C:79% T:NA	pCi/L		03/11/21 08:18	
EPA 9320	Radium-228	0.494 ± 0.367 (0.723) C:79% T:89%	pCi/L		03/04/21 11:53	
Total Radium Calculation	Total Radium	0.764 ± 0.517 (0.952)	pCi/L		03/11/21 13:04	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521131021	**HGWC-9**					
EPA 9315	Radium-226	0.169 ± 0.115 (0.181) C:88% T:NA	pCi/L		03/11/21 08:20	
EPA 9320	Radium-228	1.00 ± 0.571 (1.08) C:80% T:81%	pCi/L		03/04/21 15:07	
Total Radium Calculation	Total Radium	1.17 ± 0.686 (1.26)	pCi/L		03/11/21 13:04	
92521131022	**MW-5**					
EPA 9315	Radium-226	0.0673 ± 0.0891 (0.187) C:83% T:NA	pCi/L		03/11/21 08:20	
EPA 9320	Radium-228	0.399 ± 0.491 (1.04) C:78% T:76%	pCi/L		03/04/21 15:07	
Total Radium Calculation	Total Radium	0.466 ± 0.580 (1.23)	pCi/L		03/11/21 13:04	
92521131023	**MW-6**					
EPA 9315	Radium-226	0.198 ± 0.148 (0.277) C:86% T:NA	pCi/L		03/11/21 08:20	
EPA 9320	Radium-228	-0.0243 ± 0.474 (1.09) C:79% T:78%	pCi/L		03/04/21 15:07	
Total Radium Calculation	Total Radium	0.198 ± 0.622 (1.37)	pCi/L		03/11/21 13:04	
92521131024	**MW-24D**					
EPA 9315	Radium-226	0.0409 ± 0.100 (0.238) C:87% T:NA	pCi/L		03/11/21 08:20	
EPA 9320	Radium-228	0.115 ± 0.504 (1.13) C:77% T:85%	pCi/L		03/04/21 15:07	
Total Radium Calculation	Total Radium	0.156 ± 0.604 (1.37)	pCi/L		03/11/21 13:04	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521131025	**MW-26D**					
EPA 9315	Radium-226	0.166 ± 0.122 (0.210) C:84% T:NA	pCi/L		03/11/21 08:20	
EPA 9320	Radium-228	0.339 ± 0.317 (0.646) C:80% T:92%	pCi/L		03/04/21 15:09	
Total Radium Calculation	Total Radium	0.505 ± 0.439 (0.856)	pCi/L		03/11/21 13:04	
92521131026	**MW-27D**					
EPA 9315	Radium-226	0.552 ± 0.189 (0.182) C:93% T:NA	pCi/L		03/11/21 08:21	
EPA 9320	Radium-228	0.654 ± 0.420 (0.801) C:77% T:90%	pCi/L		03/04/21 15:09	
Total Radium Calculation	Total Radium	1.21 ± 0.609 (0.983)	pCi/L		03/11/21 13:04	
92521131027	**MW-27D FILTERED**					
EPA 9315	Radium-226	0.512 ± 0.187 (0.212) C:95% T:NA	pCi/L		03/11/21 08:21	
EPA 9320	Radium-228	0.877 ± 0.471 (0.844) C:76% T:80%	pCi/L		03/04/21 15:09	
Total Radium Calculation	Total Radium	1.39 ± 0.658 (1.06)	pCi/L		03/11/21 13:04	
92521131028	**HGWC-13**					
EPA 9315	Radium-226	0.166 ± 0.127 (0.209) C:92% T:NA	pCi/L		03/15/21 09:18	
EPA 9320	Radium-228	0.857 ± 0.447 (0.804) C:79% T:90%	pCi/L		03/15/21 16:07	
Total Radium Calculation	Total Radium	1.02 ± 0.574 (1.01)	pCi/L		03/16/21 09:30	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Sample: HGWA-1 **Lab ID: 92521131001** Collected: 02/08/21 16:13 Received: 02/09/21 12:33 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	**0.0455 ± 0.0937 (0.218) C:84% T:NA**	pCi/L	03/02/21 07:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.177 ± 0.371 (0.820) C:77% T:86%**	pCi/L	02/24/21 15:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.223 ± 0.465 (1.04)**	pCi/L	03/05/21 14:01	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Sample: HGWA-2 **Lab ID: 92521131002** Collected: 02/09/21 10:38 Received: 02/10/21 09:56 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	**0.465 ± 0.189 (0.205) C:80% T:NA**	pCi/L	03/08/21 08:33	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.256 ± 0.375 (0.807) C:77% T:89%**	pCi/L	03/02/21 15:44	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.721 ± 0.564 (1.01)**	pCi/L	03/10/21 10:49	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Sample: HGWA-3 **Lab ID: 92521131003** Collected: 02/09/21 11:56 Received: 02/10/21 09:56 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	**0.161 ± 0.133 (0.248) C:80% T:NA**	pCi/L	03/08/21 08:34	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.286 ± 0.395 (0.847) C:75% T:86%**	pCi/L	03/02/21 15:44	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.447 ± 0.528 (1.10)**	pCi/L	03/10/21 10:49	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Sample: HGWA-43D **Lab ID: 92521131004** Collected: 02/09/21 17:58 Received: 02/10/21 09:56 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	**0.138 ± 0.105 (0.176) C:87% T:NA**	pCi/L	03/08/21 08:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0292 ± 0.272 (0.643) C:77% T:86%**	pCi/L	03/02/21 11:24	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.138 ± 0.377 (0.819)**	pCi/L	03/10/21 10:49	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Sample: HGWA-44D **Lab ID: 92521131005** Collected: 02/09/21 13:09 Received: 02/10/21 09:56 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	**0.171 ± 0.126 (0.217) C:84% T:NA**	pCi/L	03/08/21 08:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.315 ± 0.398 (0.849) C:77% T:81%**	pCi/L	03/02/21 11:24	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.486 ± 0.524 (1.07)**	pCi/L	03/10/21 10:49	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Sample: HGWC-7 **Lab ID: 92521131006** Collected: 02/10/21 12:11 Received: 02/11/21 09:19 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	**0.255 ± 0.156 (0.254) C:84% T:NA**	pCi/L	03/08/21 08:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0263 ± 0.311 (0.718) C:73% T:84%**	pCi/L	03/02/21 11:25	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.281 ± 0.467 (0.972)**	pCi/L	03/10/21 10:49	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Sample: MW-28D **Lab ID: 92521131007** Collected: 02/10/21 17:31 Received: 02/11/21 09:19 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	**0.0715 ± 0.101 (0.219) C:87% T:NA**	pCi/L	03/08/21 08:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.129 ± 0.353 (0.790) C:73% T:80%**	pCi/L	03/02/21 11:25	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.201 ± 0.454 (1.01)**	pCi/L	03/10/21 10:49	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Sample: MW-28D FILTERED **Lab ID: 92521131008** Collected: 02/10/21 17:31 Received: 02/11/21 09:19 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 ± 0.0987 (0.179) C:88% T:NA**	pCi/L	03/08/21 08:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.422 ± 0.335 (0.657) C:75% T:82%**	pCi/L	03/02/21 11:25	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.534 ± 0.434 (0.836)**	pCi/L	03/10/21 10:49	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Sample: MW-20 **Lab ID: 92521131009** Collected: 02/11/21 11:59 Received: 02/12/21 09:36 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	**0.228 ± 0.142 (0.230) C:82% T:NA**	pCi/L	03/08/21 08:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.106 ± 0.303 (0.682) C:74% T:83%**	pCi/L	03/02/21 11:25	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.334 ± 0.445 (0.912)**	pCi/L	03/10/21 10:49	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Sample: HGWC-11 **Lab ID: 92521131010** Collected: 02/12/21 12:45 Received: 02/15/21 09:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.273 ± 0.138 (0.181) C:92% T:NA**	pCi/L	03/08/21 08:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.829 ± 0.401 (0.685) C:77% T:82%**	pCi/L	03/02/21 11:24	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.10 ± 0.539 (0.866)**	pCi/L	03/10/21 10:49	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Sample: HGWC-12 **Lab ID: 92521131011** Collected: 02/12/21 14:51 Received: 02/15/21 09:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.199 ± 0.139 (0.240) C:82% T:NA**	pCi/L	03/08/21 08:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0372 ± 0.240 (0.556) C:77% T:90%**	pCi/L	03/02/21 11:24	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.236 ± 0.379 (0.796)**	pCi/L	03/10/21 10:49	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Sample: MW-19 **Lab ID: 92521131012** Collected: 02/12/21 13:40 Received: 02/15/21 09:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0614 ± 0.107 (0.242) C:88% T:NA**	pCi/L	03/11/21 08:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.703 ± 0.479 (0.919) C:80% T:84%**	pCi/L	03/03/21 18:16	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.764 ± 0.586 (1.16)**	pCi/L	03/11/21 12:05	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Sample: DUP-1 **Lab ID: 92521131013** Collected: 02/12/21 00:00 Received: 02/15/21 09:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.142 ± 0.107 (0.176) C:89% T:NA**	pCi/L	03/11/21 08:13	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.618 ± 0.335 (0.584) C:83% T:80%**	pCi/L	03/03/21 16:04	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.760 ± 0.442 (0.760)**	pCi/L	03/11/21 12:05	7440-14-4	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Sample: MW-25D **Lab ID: 92521131014** Collected: 02/12/21 10:31 Received: 02/15/21 09:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.601 ± 0.198 (0.164) C:95% T:NA**	pCi/L	03/11/21 08:13	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.570 ± 0.351 (0.643) C:79% T:81%**	pCi/L	03/03/21 16:04	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.17 ± 0.549 (0.807)**	pCi/L	03/11/21 12:05	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Sample: FB-1 **Lab ID: 92521131015** Collected: 02/12/21 15:30 Received: 02/15/21 09:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.209 ± 0.122 (0.178) C:93% T:NA**	pCi/L	03/11/21 08:13	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.661 ± 0.382 (0.694) C:81% T:82%**	pCi/L	03/03/21 16:04	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.870 ± 0.504 (0.872)**	pCi/L	03/11/21 12:05	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Sample: EB-1 **Lab ID: 92521131016** Collected: 02/12/21 15:35 Received: 02/15/21 09:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0746 ± 0.100 (0.213) C:80% T:NA**	pCi/L	03/11/21 08:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**2.12 ± 0.734 (1.06) C:81% T:90%**	pCi/L	03/03/21 19:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.19 ± 0.834 (1.27)**	pCi/L	03/11/21 12:05	7440-14-4	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Sample: HGWC-10 **Lab ID: 92521131017** Collected: 02/15/21 13:31 Received: 02/17/21 11:54 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	**0.0638 ± 0.0809 (0.162) C:76% T:NA**	pCi/L	03/11/21 08:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.85 ± 0.759 (1.24) C:81% T:80%**	pCi/L	03/03/21 19:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.91 ± 0.840 (1.40)**	pCi/L	03/11/21 12:05	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Sample: MW-7 **Lab ID: 92521131018** Collected: 02/15/21 17:17 Received: 02/17/21 11:54 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	**0.237 ± 0.143 (0.224) C:80% T:NA**	pCi/L	03/11/21 08:16	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.655 ± 0.526 (1.05) C:79% T:83%**	pCi/L	03/03/21 19:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.892 ± 0.669 (1.27)**	pCi/L	03/11/21 12:05	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Sample: MW-29 **Lab ID: 92521131019** Collected: 02/15/21 14:45 Received: 02/17/21 11:54 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 ± 0.158 (0.252) C:82% T:NA**	pCi/L	03/11/21 08:16	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.886 ± 0.609 (1.17) C:77% T:75%**	pCi/L	03/03/21 19:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.17 ± 0.767 (1.42)**	pCi/L	03/11/21 13:04	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Sample: HGWC-8 **Lab ID: 92521131020** Collected: 02/16/21 15:05 Received: 02/17/21 11:54 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	**0.270 ± 0.150 (0.229) C:79% T:NA**	pCi/L	03/11/21 08:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.494 ± 0.367 (0.723) C:79% T:89%**	pCi/L	03/04/21 11:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.764 ± 0.517 (0.952)**	pCi/L	03/11/21 13:04	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Sample: HGWC-9 **Lab ID: 92521131021** Collected: 02/16/21 18:39 Received: 02/17/21 11:54 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	**0.169 ± 0.115 (0.181) C:88% T:NA**	pCi/L	03/11/21 08:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.00 ± 0.571 (1.08) C:80% T:81%**	pCi/L	03/04/21 15:07	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.17 ± 0.686 (1.26)**	pCi/L	03/11/21 13:04	7440-14-4	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Sample: MW-5 **Lab ID: 92521131022** Collected: 02/16/21 16:27 Received: 02/17/21 11:54 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	**0.0673 ± 0.0891 (0.187) C:83% T:NA**	pCi/L	03/11/21 08:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.399 ± 0.491 (1.04) C:78% T:76%**	pCi/L	03/04/21 15:07	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.466 ± 0.580 (1.23)**	pCi/L	03/11/21 13:04	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Sample: MW-6 **Lab ID: 92521131023** Collected: 02/16/21 15:12 Received: 02/17/21 11:54 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	**0.198 ± 0.148 (0.277) C:86% T:NA**	pCi/L	03/11/21 08:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0243 ± 0.474 (1.09) C:79% T:78%**	pCi/L	03/04/21 15:07	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.198 ± 0.622 (1.37)**	pCi/L	03/11/21 13:04	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Sample: MW-24D **Lab ID: 92521131024** Collected: 02/16/21 12:44 Received: 02/17/21 11:54 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	**0.0409 ± 0.100 (0.238) C:87% T:NA**	pCi/L	03/11/21 08:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.115 ± 0.504 (1.13) C:77% T:85%**	pCi/L	03/04/21 15:07	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.156 ± 0.604 (1.37)**	pCi/L	03/11/21 13:04	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Sample: MW-26D **Lab ID: 92521131025** Collected: 02/16/21 18:03 Received: 02/17/21 11:54 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	**0.166 ± 0.122 (0.210) C:84% T:NA**	pCi/L	03/11/21 08:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.339 ± 0.317 (0.646) C:80% T:92%**	pCi/L	03/04/21 15:09	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.505 ± 0.439 (0.856)**	pCi/L	03/11/21 13:04	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Sample: MW-27D **Lab ID: 92521131026** Collected: 02/16/21 11:11 Received: 02/17/21 11:54 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	**0.552 ± 0.189 (0.182) C:93% T:NA**	pCi/L	03/11/21 08:21	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.654 ± 0.420 (0.801) C:77% T:90%**	pCi/L	03/04/21 15:09	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.21 ± 0.609 (0.983)**	pCi/L	03/11/21 13:04	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Sample: MW-27D FILTERED **Lab ID: 92521131027** Collected: 02/16/21 11:11 Received: 02/17/21 11:54 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	**0.512 ± 0.187 (0.212) C:95% T:NA**	pCi/L	03/11/21 08:21	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.877 ± 0.471 (0.844) C:76% T:80%**	pCi/L	03/04/21 15:09	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.39 ± 0.658 (1.06)**	pCi/L	03/11/21 13:04	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Sample: HGWC-13 **Lab ID: 92521131028** Collected: 02/22/21 13:54 Received: 02/23/21 09:10 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.166 ± 0.127 (0.209) C:92% T:NA**	pCi/L	03/15/21 09:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.857 ± 0.447 (0.804) C:79% T:90%**	pCi/L	03/15/21 16:07	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.02 ± 0.574 (1.01)**	pCi/L	03/16/21 09:30	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

QC Batch: 435459
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92521131001

METHOD BLANK: 2102227
Matrix: Water
Associated Lab Samples: 92521131001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.276 ± 0.140 (0.180) C:89% T:NA	pCi/L	03/02/21 07:53	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

QC Batch: 435786
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92521131002, 92521131003, 92521131004, 92521131005, 92521131006, 92521131007, 92521131008, 92521131009, 92521131010, 92521131011

METHOD BLANK: 2103744 Matrix: Water
Associated Lab Samples: 92521131002, 92521131003, 92521131004, 92521131005, 92521131006, 92521131007, 92521131008, 92521131009, 92521131010, 92521131011

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0425 ± 0.0687 (0.225) C:93% T:NA	pCi/L	03/08/21 08:35	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

QC Batch: 435116
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92521131001

METHOD BLANK: 2100680 Matrix: Water
Associated Lab Samples: 92521131001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.356 ± 0.369 (0.763) C:72% T:87%	pCi/L	02/24/21 15:29	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

QC Batch: 437599
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92521131028

METHOD BLANK: 2112389 Matrix: Water
Associated Lab Samples: 92521131028

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.00470 ± 0.0712 (0.214) C:85% T:NA	pCi/L	03/15/21 09:18	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

QC Batch: 435836
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92521131012, 92521131013, 92521131014, 92521131015, 92521131016, 92521131017, 92521131018, 92521131019

METHOD BLANK: 2103905 Matrix: Water
Associated Lab Samples: 92521131012, 92521131013, 92521131014, 92521131015, 92521131016, 92521131017, 92521131018, 92521131019

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.253 ± 0.323 (0.687) C:83% T:83%	pCi/L	03/03/21 16:05	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

QC Batch: 435838
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92521131020, 92521131021, 92521131022, 92521131023, 92521131024, 92521131025, 92521131026, 92521131027

METHOD BLANK: 2103907 Matrix: Water
Associated Lab Samples: 92521131020, 92521131021, 92521131022, 92521131023, 92521131024, 92521131025, 92521131026, 92521131027

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.298 ± 0.350 (0.738) C:76% T:86%	pCi/L	03/04/21 11:53	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

QC Batch: 435837
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92521131020, 92521131021, 92521131022, 92521131023, 92521131024, 92521131025, 92521131026, 92521131027

METHOD BLANK: 2103906 Matrix: Water
Associated Lab Samples: 92521131020, 92521131021, 92521131022, 92521131023, 92521131024, 92521131025, 92521131026, 92521131027

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.144 ± 0.106 (0.177) C:91% T:NA	pCi/L	03/11/21 08:18	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

QC Batch: 437641
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92521131028

METHOD BLANK: 2112538 Matrix: Water
Associated Lab Samples: 92521131028

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.312 ± 0.330 (0.686) C:82% T:90%	pCi/L	03/15/21 16:07	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

QC Batch: 435835
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92521131012, 92521131013, 92521131014, 92521131015, 92521131016, 92521131017, 92521131018, 92521131019

METHOD BLANK: 2103903 Matrix: Water
Associated Lab Samples: 92521131012, 92521131013, 92521131014, 92521131015, 92521131016, 92521131017, 92521131018, 92521131019

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0385 ± 0.0817 (0.191) C:95% T:NA	pCi/L	03/11/21 08:12	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

QC Batch: 435787
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92521131002, 92521131003, 92521131004, 92521131005, 92521131006, 92521131007, 92521131008, 92521131009, 92521131010, 92521131011

METHOD BLANK: 2103745 Matrix: Water
Associated Lab Samples: 92521131002, 92521131003, 92521131004, 92521131005, 92521131006, 92521131007, 92521131008, 92521131009, 92521131010, 92521131011

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.345 ± 0.339 (0.700) C:84% T:79%	pCi/L	03/02/21 12:33	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALIFIERS

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

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.

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92521131001	**HGWA-1**	EPA 9315	435459		
92521131002	**HGWA-2**	EPA 9315	435786		
92521131003	**HGWA-3**	EPA 9315	435786		
92521131004	**HGWA-43D**	EPA 9315	435786		
92521131005	**HGWA-44D**	EPA 9315	435786		
92521131006	**HGWC-7**	EPA 9315	435786		
92521131007	**MW-28D**	EPA 9315	435786		
92521131008	**MW-28D FILTERED**	EPA 9315	435786		
92521131009	**MW-20**	EPA 9315	435786		
92521131010	**HGWC-11**	EPA 9315	435786		
92521131011	**HGWC-12**	EPA 9315	435786		
92521131012	**MW-19**	EPA 9315	435835		
92521131013	**DUP-1**	EPA 9315	435835		
92521131014	**MW-25D**	EPA 9315	435835		
92521131015	**FB-1**	EPA 9315	435835		
92521131016	**EB-1**	EPA 9315	435835		
92521131017	**HGWC-10**	EPA 9315	435835		
92521131018	**MW-7**	EPA 9315	435835		
92521131019	**MW-29**	EPA 9315	435835		
92521131020	**HGWC-8**	EPA 9315	435837		
92521131021	**HGWC-9**	EPA 9315	435837		
92521131022	**MW-5**	EPA 9315	435837		
92521131023	**MW-6**	EPA 9315	435837		
92521131024	**MW-24D**	EPA 9315	435837		
92521131025	**MW-26D**	EPA 9315	435837		
92521131026	**MW-27D**	EPA 9315	435837		
92521131027	**MW-27D FILTERED**	EPA 9315	435837		
92521131028	**HGWC-13**	EPA 9315	437599		
92521131001	**HGWA-1**	EPA 9320	435116		
92521131002	**HGWA-2**	EPA 9320	435787		
92521131003	**HGWA-3**	EPA 9320	435787		
92521131004	**HGWA-43D**	EPA 9320	435787		
92521131005	**HGWA-44D**	EPA 9320	435787		
92521131006	**HGWC-7**	EPA 9320	435787		
92521131007	**MW-28D**	EPA 9320	435787		
92521131008	**MW-28D FILTERED**	EPA 9320	435787		
92521131009	**MW-20**	EPA 9320	435787		
92521131010	**HGWC-11**	EPA 9320	435787		
92521131011	**HGWC-12**	EPA 9320	435787		
92521131012	**MW-19**	EPA 9320	435836		
92521131013	**DUP-1**	EPA 9320	435836		
92521131014	**MW-25D**	EPA 9320	435836		
92521131015	**FB-1**	EPA 9320	435836		
92521131016	**EB-1**	EPA 9320	435836		
92521131017	**HGWC-10**	EPA 9320	435836		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HAMMOND AP-1 APP IV RADS
Pace Project No.: 92521131

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92521131018	**MW-7**	EPA 9320	435836		
92521131019	**MW-29**	EPA 9320	435836		
92521131020	**HGWC-8**	EPA 9320	435838		
92521131021	**HGWC-9**	EPA 9320	435838		
92521131022	**MW-5**	EPA 9320	435838		
92521131023	**MW-6**	EPA 9320	435838		
92521131024	**MW-24D**	EPA 9320	435838		
92521131025	**MW-26D**	EPA 9320	435838		
92521131026	**MW-27D**	EPA 9320	435838		
92521131027	**MW-27D FILTERED**	EPA 9320	435838		
92521131028	**HGWC-13**	EPA 9320	437641		
92521131001	**HGWA-1**	Total Radium Calculation	437457		
92521131002	**HGWA-2**	Total Radium Calculation	438014		
92521131003	**HGWA-3**	Total Radium Calculation	438014		
92521131004	**HGWA-43D**	Total Radium Calculation	438014		
92521131005	**HGWA-44D**	Total Radium Calculation	438014		
92521131006	**HGWC-7**	Total Radium Calculation	438014		
92521131007	**MW-28D**	Total Radium Calculation	438014		
92521131008	**MW-28D FILTERED**	Total Radium Calculation	438014		
92521131009	**MW-20**	Total Radium Calculation	438014		
92521131010	**HGWC-11**	Total Radium Calculation	438014		
92521131011	**HGWC-12**	Total Radium Calculation	438014		
92521131012	**MW-19**	Total Radium Calculation	438252		
92521131013	**DUP-1**	Total Radium Calculation	438252		
92521131014	**MW-25D**	Total Radium Calculation	438252		
92521131015	**FB-1**	Total Radium Calculation	438252		
92521131016	**EB-1**	Total Radium Calculation	438252		
92521131017	**HGWC-10**	Total Radium Calculation	438252		
92521131018	**MW-7**	Total Radium Calculation	438252		
92521131019	**MW-29**	Total Radium Calculation	438275		
92521131020	**HGWC-8**	Total Radium Calculation	438275		
92521131021	**HGWC-9**	Total Radium Calculation	438275		
92521131022	**MW-5**	Total Radium Calculation	438275		
92521131023	**MW-6**	Total Radium Calculation	438275		
92521131024	**MW-24D**	Total Radium Calculation	438275		
92521131025	**MW-26D**	Total Radium Calculation	438275		
92521131026	**MW-27D**	Total Radium Calculation	438275		
92521131027	**MW-27D FILTERED**	Total Radium Calculation	438275		
92521131028	**HGWC-13**	Total Radium Calculation	438839		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: GA Power

Project # WO#: 92521131

92521131

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

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

Date/Initials Person Examining Contents: MP 2/9/21

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☑ Other

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

Thermometer: ☐ IR Gun ID: 233 **Type of Ice:** ☑ Wet ☐ Blue ☐ None

Cooler Temp: 3.6 **Correction Factor:** Add/Subtract (°C) ± 0.4

Cooler Temp Corrected (°C): 4.0

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: WT				
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
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 AP-1 App. IV Scan
Project Number:	GW6561B

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	

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 DATE	COLLECTED TIME	COMPOSITE DATE	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	Fluoride	Full App IV Metals 6020/7470	RAD 226/228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		N	N	N	N		9252131
1	HGWA-1	WT	G	2/8/21	1613	–	–	17	4	1		3							X	X	X	N	pH = 7.11
2	HGWA-2	WT	G			–	–		4	1		3							X	X	X	N	pH =
3	HGWA-3	WT	G			–	–		4	1		3							X	X	X	N	pH =
4	HGWA-43D	WT	G			–	–		4	1		3							X	X	X	N	pH =
5	HGWA-44D	WT	G			–	–		4	1		3							X	X	X	N	pH =
6	HGWC-7	WT	G			–	–		4	1		3							X	X	X	N	pH =
7	HGWC-8	WT	G			–	–		4	1		3							X	X	X	N	pH =
8	HGWC-9	WT	G			–	–		4	1		3							X	X	X	N	pH =
9	HGWC-10	WT	G			–	–		4	1		3							X	X	X	N	pH =
10	HGWC-11	WT	G			–	–		4	1		3							X	X	X	N	pH =
11	HGWC-12	WT	G			–	–		4	1		3							X	X	X	N	pH =
12	HGWC-13	WT	G			–	–		4	1		3							X	X	X	N	pH =

OK
2/8/21

ADDITIONAL COMMENTS

Please note dry wells, strike through any wells not sampled, and note when the last sample for the event has been taken.
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl
One sample set submitted for HGWA-1/2/3/43D/44D and EB-1 but they will be reported for AP-1/2 SDGs

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	2/9/21	1229	/ Pace	2/9/21	1233
/ Pace	2/9/21	1545	/ Pace	2/9/21	1545

SAMPLE CONDITIONS

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Chad Russo
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY): 2/8/2021

*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
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 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: Plant Hammond AP-1 App. IV Scan
Project Number: GW65818

Section C — Invoice Information:
Attention: Southern Co.
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Kevin Herring
Pace Profile #:

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 DATE	COLLECTED TIME	COMPOSITE DATE	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	Fluoride	Full App.IV Metals 6020/7470*	RAD 228/226	Residual Chlorine (Y/N)	
1	~~HGWA-1~~	WT	G																			N	pH =
2	HGWA-2	WT	G	2/4/21	1036	–	–	16	4	1		3							X	X	X	N	pH = 5.42
3	HGWA-3	WT	G	2/4/21	1156	–	–	18	4	1		3							X	X	X	N	pH = 7.23
~~4~~	~~HGWA-43D~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
~~5~~	~~HGWA-44D~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
~~6~~	~~HGWC-7~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
~~7~~	~~HGWC-8~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
~~8~~	~~HGWC-9~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
~~9~~	~~HGWC-10~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
~~10~~	~~HGWC-11~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
~~11~~	~~HGWC-12~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
~~12~~	~~HGWC-13~~	WT	G			–	–		4	1		3							X	X	X	N	pH =

92521131
Pace Project No./ Lab I.D.

ADDITIONAL COMMENTS
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl
One sample set submitted for HGWA-1/2/3/43D/44D and EB-1 but they will be reported for AP-1/2 SDGs

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[signature]	2/9/21	1354	[signature]	2/9/21	1454
[signature]	2/10/21	0933	[signature] / Pace	2/10/21	0934
			[signature]	2/10/21	270

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: [signature]
SIGNATURE of SAMPLER: [signature]
DATE Signed (MM/DD/YY): 02/09/21

SAMPLE CONDITIONS

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
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: 2 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: Plant Hammond AP-1 App. IV Scan	Pace Project Manager: Kevin Herring
Requested Due Date/TAT: 10 Day	Project Number: GW6581B	Pace Profile #:

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 DATE	COLLECTED TIME	COMPOSITE DATE	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): Fluoride N	Full App.IV Metals 6020/7470* N	R&D 228/229 N	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 92521316
1	HGWA-1	WT	G			–	–		4	1		3							X	X	X	N	pH =
2	HGWA-2	WT	G			–	–		4	1		3							X	X	X	N	pH =
3	HGWA-3	WT	G			–	–		4	1		3							X	X	X	N	pH =
4	HGWA-43D	WT	G	2/9/21	1108	–	–	16	4	1		3							X	X	X	N	pH = 7.44
5	HGWA-44D	WT	G	2/9/21	1309	–	–	17	4	1		3							X	X	X	N	pH = 7.89
6	HGWC-7	WT	G			–	–		4	1		3							X	X	X	N	pH =
7	HGWC-8	WT	G			–	–		4	1		3							X	X	X	N	pH =
8	HGWC-9	WT	G			–	–		4	1		3							X	X	X	N	pH =
9	HGWC-10	WT	G			CR	–		4	1		3							X	X	X	N	pH =
10	HGWC-11	WT	G						4	1		3							X	X	X	N	pH =
11	HGWC-12	WT	G		2/9/21	–	–		4	1		3							X	X	X	N	pH =
12	HGWC-13	WT	G			–	–		4	1		3							X	X	X	N	pH =

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.		2/10/21	0933	Pace	2/11/21	0936	
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl	Pace	2/10/21	1220		2/11/21	1220	
One sample set submitted for HGWA-1/2/3/43D/44D and EB-1 but they will be reported for AP-1/2 SDGs							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Chad Russo

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 2/9/2021

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
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 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:	Plant Hammond AP-1 App. IV Scan
Project Number:	GW6581B

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	

REGULATORY AGENCY

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

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 (use valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	COMPOSITE DATE	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): Fluoride N	Full App.IV Metals 6020/7470 N	RAD 228/228 N	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	HGWA-1	WT	G						4	1		3							X	X	X	N	pH =
2	HGWA-2	WT	G						4	1		3							X	X	X	N	pH =
3	HGWA-3	WT	G						4	1		3							X	X	X	N	pH =
4	HGWA-43D	WT	G						4	1		3							X	X	X	N	pH =
5	HGWA-44D	WT	G						4	1		3							X	X	X	N	pH =
6	HGWC-7	WT	G	2/10/21	1411			18	4	1		3							X	X	X	N	pH = 7.29
7	HGWC-8	WT	G						4	1		3							X	X	X	N	pH =
8	HGWC-9	WT	G						4	1		3							X	X	X	N	pH =
9	HGWC-10	WT	G						4	1		3							X	X	X	N	pH =
10	HGWC-11	WT	G						4	1		3							X	X	X	N	pH =
11	HGWC-12	WT	G						4	1		3							X	X	X	N	pH =
12	HGWC-13	WT	G						4	1		3							X	X	X	N	pH =

92521131

Pace Project No./ Lab I.D.

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please note dry wells, strike through any wells not sampled, and note when the last sample for the event has been taken.	[signature] /GW	2/11/21	0930	[signature] /Geo	2/11/21	0830	
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl	[signature] /GEO	2/11/21	0915	[signature] /Pace	2/4/21	0919	
One sample set submitted for HGWA-1/2/3/43D/44D and EB-1 but they will be reported for AP-1/2 SDGs	[signature] /Pace	2/11/21	1326				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: [signature]

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 2/10/21

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
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: 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:	Plant Hammond AP-1 App. IV Scan
Project Number:	GW6581B

Section C — Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	

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 DATE	COLLECTED TIME	COMPOSITE DATE	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	Fluoride	Full App.IV Metals 6020/7470*	RAD 226/228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Y/N	N	N	N		92521631
1	MW-5	WT	G						4	1		3							X	X	X	N	pH =
2	MW-6	WT	G						4	1		3							X	X	X	N	pH =
3	MW-7	WT	G						4	1		3							X	X	X	N	pH =
4	MW-19	WT	G						4	1		3							X	X	X	N	pH =
5	MW-20	WT	G						4	1		3							X	X	X	N	pH =
6	MW-24D	WT	G						4	1		3							X	X	X	N	pH =
7	MW-25D	WT	G						4	1		3							X	X	X	N	pH =
8	MW-26D	WT	G						4	1		3							X	X	X	N	pH =
9	MW-27D	WT	G						4	1		3							X	X	X	N	pH =
10	MW-28D	WT	G	2/4/21	1731			15	4	1		3							X	X	X	N	pH = 7.54 007
11	MW-28D-Filtered - MW-28 Matrix	WT	G	2/4/21	1731			15	4	1		3							X	X	X	N	pH = 7.54 008
12	Dup-1	WT	G						4	1		3							X	X	X	N	

ADDITIONAL COMMENTS

Please note dry wells, strike through any wells not sampled, and note when the last sample for the event has been taken.
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl
One sample set submitted for HGWA-1/2/3/4/3D/4D and EB-1 but they will be reported for AP-1/2 SDGs

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Thomas Hessler/Geo	2/11/21	0830	/geo	2/11/21	0830
/Geo	2/11/21	0915	Pace	2/11/21	0919
/Pace	2/4/21	1320			

SAMPLE CONDITIONS

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Hessler
SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 02/10/21

*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
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

Section A Required Client Information		Section B Required Project Information		Section C Invoice Information	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Geosyntec Contacts	Company Name:	
				Address:	
Email To:	SCS Contacts	Purchase Order No.:		Pace Quote Reference:	
Phone:	Fax:	Project Name:	Plant Hammond AP-1 App. IV Scan	Pace Project Manager:	Kevin Herring
Requested Due Date/TAT:	10 Day	Project Number:	GW6581B	Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ~~OCR~~

Site Location STATE: GA

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOILSOLID	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 DATE	COLLECTED TIME	COMPOSITE DATE	COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	Fluoride (N)	Full App. IV Metals 6020/7470* (N)	RAD 226/228 (N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 92521131
1	MW-5	WT	G			–	–		4	1		3							X	X	X	N	pH =
2	MW-6	WT	G			–	–		4	1		3							X	X	X	N	pH =
3	MW-7	WT	G			–	–		4	1		3							X	X	X	N	pH =
4	MW-19	WT	G			–	–		4	1		3							X	X	X	N	pH =
5	MW-20	WT	G	2/11/21	1159	–	–		4	1		3							X	X	X	N	pH = 6.93 006
6	MW-24D	WT	G			–	–		4	1		3							X	X	X	N	pH =
7	MW-25D	WT	G			–	–		4	1		3							X	X	X	N	pH =
8	MW-26D	WT	G			–	–		4	1		3							X	X	X	N	pH =
9	MW-27D	WT	G			–	–		4	1		3							X	X	X	N	pH =
10	MW-28D	WT	G			–	–		4	1		3							X	X	X	N	pH =
11	MW-29	WT	G			–	–		4	1		3							X	X	X	N	pH =
12	Dup-1	WT	G			–	–		4	1		3							X	X	X	N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	Thomas Kessler / Geo	2/12/21	0845	[signature] / geo	2/12/21	0875	
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl	[signature] / geo	2/12/21	0936	[signature] / Pace	2/12/21	0936	
One sample set submitted for HGWA-1/2/3/43D/44D and EB-1 but they will be reported for AP-1/2 SDGs	[signature] / Pace	2/12/21	1352	Charles Hess	2/12/21	1352	

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Kessler

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 02/11/21

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

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 4

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 AP-1 App. IV Scan
Project Number: GW6581B

Section C Invoice Information:
Attention: Southern Co.
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Kevin Herring
Pace Profile #:

REGULATORY AGENCY
☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ~~DDR~~
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 in left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	COMPOSITE DATE	COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	Fluoride (N)	Full App.IV Metals 6020/7470* (N)	RAD 226/228 (N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 92521131
1	HGWA-1	WT	G			–	–		4	1		3							X	X	X	N	pH =
2	HGWA-2	WT	G			–	–		4	1		3							X	X	X	N	pH =
3	HGWA-3	WT	G			–	–		4	1		3							X	X	X	N	pH =
4	HGWA-43D	WT	G			–	–		4	1		3							X	X	X	N	pH =
5	HGWA-44D	WT	G			–	–		4	1		3							X	X	X	N	pH =
6	HGWC-7	WT	G			–	–		4	1		3							X	X	X	N	pH =
7	HGWC-8	WT	G			–	–		4	1		3							X	X	X	N	pH =
8	HGWC-9	WT	G			–	–		4	1		3							X	X	X	N	pH =
9	HGWC-10	WT	G			–	–		4	1		3							X	X	X	N	pH =
10	HGWC-11	WT	G	2/12/21	1245	–	–	17	4	1		3							X	X	X	N	pH = 7.27 010
11	HGWC-12	WT	G	2/12/21	1451	–	–	16	4	1		3							X	X	X	N	pH = 6.23 011
12	HGWC-13	WT	G			–	–		4	1		3							X	X	X	N	pH =

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	Thomas Kiessh [signature]	2/12/21	1660	[signature] / Pace	2/12/21	1600	
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl	[signature] / GCO	2/15/21	0945	[signature] / Pace	2/15/21	0945	
One sample set submitted for HGWA-1/2/3/43D/44D and EB-1 but they will be reported for AP-1/2 SDGs							

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Thomas Kiessh
SIGNATURE of SAMPLER: [signature]
DATE Signed (MM/DD/YY): 02/12/21

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

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

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

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 2 of 4

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 AP-1 App. IV Scan
Project Number:	GW6581B

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ~~con~~

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 DATE	COLLECTED TIME	COMPOSITE DATE	COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	Fluoride (N)	Full App.IV Metals 6020/7470* (N)	RAD 226/228 (N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. G2521131
1	MW-5	WT	G			–	–		4	1		3							X	X	X	N	pH =
2	MW-6	WT	G			–	–		4	1		3							X	X	X	N	pH =
3	MW-7	WT	G			–	–		4	1		3							X	X	X	N	pH =
4	MW-19	WT	G	2-12-21	1340	–	–		4	1		3							X	X	X	N	pH = 6.36 012
5	MW-20	WT	G			–	–		4	1		3							X	X	X	N	pH =
6	MW-24D	WT	G			–	–		4	1		3							X	X	X	N	pH =
7	MW-25D	WT	G			–	–		4	1		3							X	X	X	N	pH =
8	MW-26D	WT	G			–	–		4	1		3							X	X	X	N	pH =
9	MW-27D	WT	G			–	–		4	1		3							X	X	X	N	pH =
10	MW-28D	WT	G			–	–		4	1		3							X	X	X	N	pH =
11	MW-29	WT	G			–	–		4	1		3							X	X	X	N	pH =
12	Dup-1	WT	G	2-12-21		–	–		4	1		3							X	X	X	N	

A Reeder 2-12-2021

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Please note dry wells, strike through any wells not sampled, and note when the last sample for the event has been taken.	[signature] / Sampler	2-12-21	1600	[signature] / GCD	2/12/21	1600
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl	[signature] / GCD	2/15/21	0945	[signature] / Pace	2/15/21	0945
One sample set submitted for HGWA-1/2/3/43D/44D and EB-1 but they will be reported for AP-1/2 SDGs						

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Aaron Reeder

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 02/12/2021

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

*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
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: 3 of 4

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 AP-1 App. IV Scan
Project Number: GW6581B

Section C Invoice Information:
Attention: Southern Co.
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Kevin Herring
Pace Profile #:

REGULATORY AGENCY
☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER CSR

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 DATE	COLLECTED TIME	COMPOSITE DATE	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	Fluoride	Full App.IV Metals E020/7470*	RAD 226/228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Requested Analysis Filtered (Y/N)	N	N	N		92582131
1	~~MW-5~~	WT	G						4	1		3							X	X	X	N	pH =
2	~~MW-6~~	WT	G						4	1		3							X	X	X	N	pH =
3	~~MW-7~~	WT	G						4	1		3							X	X	X	N	pH =
4	~~MW-19~~	WT	G						4	1		3							X	X	X	N	pH =
5	~~MW-20~~	WT	G						4	1		3							X	X	X	N	pH =
6	~~MW-24D~~	WT	G						4	1		3							X	X	X	N	pH =
7	MW-25D	WT	G	2/12/21	1031			15	4	1		3							X	X	X	N	pH = 7.77 ok
8	~~MW-26D~~	WT	G						4	1		3							X	X	X	N	pH =
9	~~MW-27D~~	WT	G						4	1		3							X	X	X	N	pH =
10	~~MW-28D~~	WT	G						4	1		3							X	X	X	N	pH =
11	~~MW-29~~	WT	G						4	1		3							X	X	X	N	pH =
12	Dup-1	WT	G						4	1		3							X	X	X	N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Please note dry wells, strike through any wells not sampled, and note when the last sample for the event has been taken.	[signature] / Geo	2/12/21	1600	[signature] / SCS	2/12/21	1600
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl	[signature] / SCS	2/15/21	0945	[signature] / Pace	3/15/21	0945
One sample set submitted for HGWA-1/2/3/43D/44D and EB-1 but they will be reported for AP-1/2 SDGs						

SAMPLE CONDITIONS

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

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Thomas Hessler
SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 02/12/21

*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
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: 4 of 4

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 AP-1 App. IV Scan
Project Number: GW6581B

Section C — Invoice Information:
Attention: Southern Co.
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Kevin Herring
Pace Profile #:

REGULATORY AGENCY
☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ~~GGR~~
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 DATE	COLLECTED TIME	COMPOSITE DATE	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): Fluoride	Full App.IV Metals 6020/7470*	RAD 226/228	Residual Chlorine (Y/N)
1	~~EB-1~~	~~WT~~	~~G~~															N	N	N	N	
2	FB-1	WT	G	2-12-21	1530	–	–		4	1		3							X	X	X		015
3	EB-1	WT	G	2-12-21	1535	–	–		4	1		3							X	X	X	N	016
4																						
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						

9252101(

Pace Project No./ Lab I.D.

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	Sampler	2-12-21	1600	JCD / JCD	2/12/21	1600	
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl	JCD	2/15/21	0945	Pace	2/15/21	0945	
One sample set submitted for HGWA-1/2/3/43D/44D and EB-1 but they will be reported for AP-1/2 SDGs							

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Aaron Reeder
SIGNATURE of SAMPLER: [signature]
DATE Signed (MM/DD/YY): 02/12/2021

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
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 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: Plant Hammond AP-1 App. IV Scan	Pace Project Manager: Kevin Herring
Requested Due Date/TAT: 10 Day	Project Number: GW6581B	Pace Profile #:

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

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 (use valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	COMPOSITE DATE	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	Fluoride	Full App.IV Metals 6020/7470	RAD 226/228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																				N	N	N			92521131
1	HGWA-1		WT	G						4	1		3							X	X	X		N	pH =
2	HGWA-2		WT	G						4	1		3							X	X	X		N	pH =
3	HGWA-3		WT	G						4	1		3							X	X	X		N	pH =
4	HGWA-43D		WT	G						4	1		3							X	X	X		N	pH =
5	HGWA-44D		WT	G						4	1		3							X	X	X		N	pH =
6	HGWC-7		WT	G						4	1		3							X	X	X		N	pH =
7	HGWC-8		WT	G						4	1		3							X	X	X		N	pH =
8	HGWC-9		WT	G						4	1		3							X	X	X		N	pH =
9	HGWC-10		WT	G	2/15/21	1331				4	1		3							X	X	X		N	pH = 6.83
10	HGWC-11		WT	G						4	1		3							X	X	X		N	pH =
11	HGWC-12		WT	G						4	1		3							X	X	X		N	pH =
12	HGWC-13		WT	G						4	1		3							X	X	X		N	pH =

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Please note dry wells; strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	[illegible] TGCO	2/17/21	1154	[illegible] /Pace	2/17/21	1154				
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl	[illegible] /Pace	2/17/21	1608	[illegible] /Pace	2/17/21	1608	4.9	Y	N	Y
One sample set submitted for HGWA-1/2/3/43D/44D and EB-1 but they will be reported for AP-1/2 SDGs										

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Chad Rutto

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 2/15/2021

*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
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: 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:	Plant Hammond AP-1 App. IV Scan
Project Number:	GW6581B

Section C Invoice Information

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	

REGULATORY AGENCY

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

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 DATE	COLLECTED TIME	COMPOSITE DATE	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	Fluoride	Full App.IV Metals 6020/7470	RAD 226/228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Requested Analysis Filtered (Y/N)	N	N	N		9272131
1	MW-5	WT	G						4	1		3							X	X	X	N	pH =
2	MW-6	WT	G						4	1		3							X	X	X	N	pH =
3	MW-7	WT	G	2/1/21	1717			N	4	1		3							X	X	X	N	pH = 6.77 016
4	MW-19	WT	G						4	1		3							X	X	X	N	pH =
5	MW-20	WT	G						4	1		3							X	X	X	N	pH =
6	MW-24D	WT	G						4	1		3							X	X	X	N	pH =
7	MW-25D	WT	G						4	1		3							X	X	X	N	pH =
8	MW-26D	WT	G						4	1		3							X	X	X	N	pH =
9	MW-27D	WT	G						4	1		3							X	X	X	N	pH =
10	MW-28D	WT	G						4	1		3							X	X	X	N	pH =
11	MW-29	WT	G	2/1/21	1445			R	4	1		3							X	X	X	N	pH =
12	Dup-1	WT	G						4	1		3							X	X	X	N	pH = 7.09 016

ADDITIONAL COMMENTS

Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl
One sample set submitted for HGWA-1/2/3/430/44D and EB-1 but they will be reported for AP-1/2 SDGs

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Thomas Kressler/Pace	2/1/21	1154	/Pace	2/1/21	1154
/Pace	2/1/21	1608		2/1/21	1608

SAMPLE CONDITIONS

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Kressler

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 2/1/21

*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
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 3

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 AP-1 App. IV Scan
Project Number:	GW6581B

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	

REGULATORY AGENCY

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

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 (use valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	COMPOSITE DATE	COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Requested Analysis Filtered (Y/N): Chloride	Full App.IV Metals 6020/7470*	RAD 226/228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	~~HGWA-1~~	WT	G			–	–		4	1		3							X	X	X		N	92521131
2	~~HGWA-2~~	WT	G			–	–		4	1		3							X	X	X		N	pH =
3	~~HGWA-3~~	WT	G			–	–		4	1		3							X	X	X		N	pH =
4	~~HGWA-43D~~	WT	G			–	–		4	1		3							X	X	X		N	pH =
5	~~HGWA-44D~~	WT	G			–	–		4	1		3							X	X	X		N	pH =
6	~~HGWG-7~~	WT	G			–	–		4	1		3							X	X	X		N	pH =
7	HGWC-8	WT	G	2/16/21	1505	–	–	14	4	1		3							X	X	X		N	pH = 7.16 020
8	HGWC-9	WT	G	2/16/21	1839	–	–	15	4	1		3							X	X	X		N	pH = 7.26 021
9	~~HGWC-10~~	WT	G			–	–		4	1		3							X	X	X		N	pH =
10	~~HGWC-11~~	WT	G			–	–		4	1		3							X	X	X		N	pH =
11	~~HGWC-12~~	WT	G			–	–		4	1		3							X	X	X		N	pH =
12	~~HGWC-13~~	WT	G			–	–		4	1		3							X	X	X		N	pH =

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	[signature] /Pace	2/17/21	1154	[signature] /Pace	2/17/21	1154				
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl	[signature] /Pace	2/17/21	1608	[signature] /Pace	2/17/21	1608	4.9	Y	N	Y
One sample set submitted for HGWA-1/2/3/43D/44D and EB-1 but they will be reported for AP-1/2 SDGs										

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Hudson

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 02/16/21

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
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: 2 of 3

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 AP-1 App. IV Scan	Pace Project Manager: Kevin Herring
Requested Due Date/TAT: 10 Day	Project Number: GW6581B	Pace Profile #:

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: 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 DATE	COLLECTED TIME	COMPOSITE DATE	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	Fluoride	Full App.IV Metals 6020/7470*	RAD 226/228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 40252171
																		N	N	N	N		
1	MW-5	WT	G	2/16/24	1627	–	–	17	4	1		3							X	X	X	N	pH = 5.95 022
2	MW-6	WT	G	2/16/24	1512	–	–	17	4	1		3							X	X	X	N	pH = 7.00 023
3	~~MW-7~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
4	~~MW-19~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
5	~~MW-20~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
6	MW-24D	WT	G	2/16/24	1244	–	–	17	4	1		3							X	X	X	N	pH = 7.69 024
7	~~MW-25D~~	WT	G			–	–		4	1		3							X	X	X	N	pH =
8	MW-26D	WT	G	2/16/24	1603	–	–	15	4	1		3							X	X	X	N	pH = 7.27 025
9	MW-27D	WT	G			–	–		4	1		3							X	X	X	N	pH =
10	MW-28D	WT	G			–	–		4	1		3							X	X	X	N	pH =
11	MW-29	WT	G			–	–	2/16/24	4	1		3							X	X	X	N	pH =
12	Dup-1	WT	G			–	–		4	1		3							X	X	X	N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	[signature] /GSC	2/17/24	1055	[signature] /Pace	2/17/24	1154
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl	[signature] /Pace	2/17/24	1409	[signature] /Pace	2/17/24	1608
One sample set submitted for HGWA-1/2/3/43D/44D and EB-1 but they will be reported for AP-1/2 SDGs						

SAMPLE CONDITIONS

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Chad Russo

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 2/16/2024

*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
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: 3 of 3

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 AP-1 App. IV Scan
Project Number	GW6581B

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	

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 DATE	COLLECTED TIME	COMPOSITE DATE	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): Fluoride	Full App.IV Metals 6020/7470*	RAD 226/228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 9252431
1	~~MW-5~~	WT	G						4	1		3							N	X	X	X	N	pH =
2	~~MW-6~~	WT	G						4	1		3							N	X	X	X	N	pH =
3	~~MW-7~~	WT	G						4	1		3							N	X	X	X	N	pH =
4	~~MW-19~~	WT	G						4	1		3							N	X	X	X	N	pH =
5	~~MW-28~~	WT	G						4	1		3							N	X	X	X	N	pH =
6	~~MW-24D~~	WT	G						4	1		3							N	X	X	X	N	pH =
7	~~MW-25D~~	WT	G						4	1		3							N	X	X	X	N	pH =
8	~~MW-26D~~	WT	G						4	1		3							N	X	X	X	N	pH =
9	MW-27D	WT	G	2/16/21	1111	–	–	to	4	1		3							N	X	X	X	N	pH = 7.96 026
10	MW-27D> ~~MW-28D~~ Filtered	WT	G	2/16/21	1111	–	–	to	4	1		3							N	X	X	X	N	pH = 7.96 027
11	~~MW-29~~	WT	G			–	–		4	1		3							N	X	X	X	N	pH =
12	Dup-1	WT	G			–	–		4	1		3							N	X	X	X	N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	Thomas Hessler / Geo	2/17/21	1154	/ Pace	2/17/21	1154
*Full App. IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl	/ Pace	2/17/21	1608	/ Pace	2/17/21	1608
One sample set submitted for HGWA-1/2/3/430/44D and EB-1 but they will be reported for AP-1/2 SDGs						

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Hessler

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 02/16/21

*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™ www.pacelabs.com

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:	REGULATORY AGENCY
		Address:	☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
Email To: SCS Contacts	Purchase Order No.:	Pace Quote Reference:	☐ UST ☐ RCRA ☑ OTHER CCR
Phone: Fax:	Project Name: Plant Hammond AP-1 App. IV Scan	Pace Project Manager: Kevin Herring	Site Location STATE: GA
Requested Due Date/TAT: 10 Day	Project Number: GW6581B	Pace Profile #:	

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

Item #	SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (use valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED 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	Fluoride	Full App IV Metals 6020/7470*	RAD 226/228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 92521131
																		Y/N	N	N	N		
1	HGWA-1	WT	G						4	1		3							X	X	X	N	pH =
2	HGWA-2	WT	G						4	1		3							X	X	X	N	pH =
3	HGWA-3	WT	G						4			3							X	X	X	N	pH =
4	HGWA-43D	WT	G						4			3							X	X	X	N	pH =
5	HGWA-44D	WT	G						4			3							X	X	X	N	pH =
6	HGWC-7	WT	G						4	1		3							X	X	X	N	pH =
7	HGWC-8	WT	G						4	1		3							X	X	X	N	pH =
8	HGWC-9	WT	G						4	1		3							X	X	X	N	pH =
9	HGWC-10	WT	G						4	1		3							X	X	X	N	pH =
10	HGWC-11	WT	G						4	1		3							X	X	X	N	pH =
11	HGWC-12	WT	G						4	1		3							X	X	X	N	pH =
12	HGWC-13	WT	G	2/22/21	1359			20	4	1		3							X	X	X	N	pH = 7.27 028

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
ase note dry wells, strike through any wells not sampled, and e when the last sample for the event has been taken	/ GEO	2/23/21	0910	Ryan Williams / Pace	2/23/21	0905
ll App IV Metals=Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Tl	Ryan Williams / Pace	2/23/21	1131		2/23/21	1131
e sample set submitted for HGWA-1/2/3/43D/44D and EB-1 , they will be reported for AP-1/2 SDGs						

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Chad Russ

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 2/22/21

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

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	3/9/2021
Worklist:	59152
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2112389
MB concentration:	-0.005
M/B Counting Uncertainty:	0.071
MB MDC:	0.214
MB Numerical Performance Indicator:	-0.13
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS59152	LCSD59152
Count Date:	3/15/2021	3/15/2021
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.039	24.039
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.504	0.504
Target Conc. (pCi/L, g, F):	4.772	4.767
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	5.339	5.520
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.625	0.640
Numerical Performance Indicator:	1.77	2.29
Percent Recovery:	111.88%	115.78%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS59152	Enter Duplicate
Duplicate Sample I.D.	LCSD59152	sample IDs if
Sample Result (pCi/L, g, F):	5.339	other than
Sample Result Counting Uncertainty (pCi/L, g, F):	0.625	LCS/LCSD in
Sample Duplicate Result (pCi/L, g, F):	5.520	the space below.
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.640	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.396	92524756004
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	3.43%	92524756004DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

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

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

Comments:

LAM 3/15/21

AMT 3/15/21

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	3/9/2021
Worklist:	59152
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2112389
MB concentration:	-0.005
M/B Counting Uncertainty:	0.071
MB MDC:	0.214
MB Numerical Performance Indicator:	-0.13
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS59152	LCSD59152
Count Date:	3/15/2021	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.039	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.504	
Target Conc. (pCi/L, g, F):	4.772	
Uncertainty (Calculated):	0.057	
Result (pCi/L, g, F):	5.339	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.625	
Numerical Performance Indicator:	1.77	
Percent Recovery:	111.88%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

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

Duplicate Sample Assessment		
Sample I.D.:	92524756004	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	92524756004DUP	
Sample Result (pCi/L, g, F):	0.330	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.165	
Sample Duplicate Result (pCi/L, g, F):	0.280	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.189	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	0.394	92524756004
Duplicate RPD:	16.51%	92524756004DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

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

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

Comments:

LAM 3/15/21

CMT 3/15/21

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	JJY
Date:	2/19/2021
Worklist:	58877
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2102227
MB concentration:	0.276
M/B Counting Uncertainty:	0.134
MB MDC:	0.180
MB Numerical Performance Indicator:	4.05
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS58877	LCSD58877
Count Date:	3/2/2021	3/2/2021
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.040	24.040
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.502	0.501
Target Conc. (pCi/L, g, F):	4.789	4.798
Uncertainty (Calculated):	0.057	0.058
Result (pCi/L, g, F):	5.300	4.626
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.555	0.517
Numerical Performance Indicator:	1.80	-0.65
Percent Recovery:	110.67%	96.42%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS58877	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD58877	
Sample Result (pCi/L, g, F):	5.300	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.555	
Sample Duplicate Result (pCi/L, g, F):	4.626	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.517	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	1.742	92520873006
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	13.77%	92520873006DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

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

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

Comments:
*The method blank result is below the reporting limit for this analysis and is acceptable.

CMW 3/2/2021

LAM 3/2/21

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	JJY
Date:	2/19/2021
Worklist:	58877
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2102227
MB concentration:	0.276
M/B Counting Uncertainty:	0.134
MB MDC:	0.180
MB Numerical Performance Indicator:	4.05
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS58877	LCSD58877
Count Date:	3/2/2021	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.040	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.502	
Target Conc. (pCi/L, g, F):	4.789	
Uncertainty (Calculated):	0.057	
Result (pCi/L, g, F):	5.300	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.555	
Numerical Performance Indicator:	1.80	
Percent Recovery:	110.67%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

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

Duplicate Sample Assessment		
Sample I.D.:	92520873006	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	92520873006DUP	
Sample Result (pCi/L, g, F):	0.162	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.140	
Sample Duplicate Result (pCi/L, g, F):	0.006	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.075	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	1.924	92520873006
Duplicate RPD:	185.80%	92520873006DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	
% RPD Limit:	25%	

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

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

Comments:

*The method blank result is below the reporting limit for this analysis and is acceptable.

~~***Batch must be re-prepped due to unacceptable precision.~~ N/A VAM 3/2/21

VAM 3/2/21

VAM 3/2/21

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	2/26/2021
Worklist:	58914
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2103744
MB concentration:	-0.043
MB Counting Uncertainty:	0.068
MB MDC:	0.225
MB Numerical Performance Indicator:	-1.22
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS58914	LCSD58914
Count Date:	3/8/2021	3/8/2021
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.039	24.039
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.504	0.509
Target Conc. (pCi/L, g, F):	4.770	4.724
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	4.906	5.140
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.508	0.510
Numerical Performance Indicator:	0.52	1.59
Percent Recovery:	102.86%	108.80%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS58914	Enter Duplicate
Duplicate Sample I.D.	LCSD58914	sample IDs if
Sample Result (pCi/L, g, F):	4.906	other than
Sample Result Counting Uncertainty (pCi/L, g, F):	0.508	LCS/LCSD in
Sample Duplicate Result (pCi/L, g, F):	5.140	the space below.
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.510	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.637	92521125006
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	5.61%	92521125006DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

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

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

Comments:

LAM 3/8/21

CLW 3/8/21

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	2/26/2021
Worklist:	58914
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2103744
MB concentration:	-0.043
M/B Counting Uncertainty:	0.068
MB MDC:	0.225
MB Numerical Performance Indicator:	-1.22
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS58914	LCSD58914
Count Date:	3/8/2021	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.039	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.504	
Target Conc. (pCi/L, g, F):	4.770	
Uncertainty (Calculated):	0.057	
Result (pCi/L, g, F):	4.906	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.508	
Numerical Performance Indicator:	0.52	
Percent Recovery:	102.86%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

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

Duplicate Sample Assessment		
Sample I.D.:	92521125006	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	92521125006DUP	
Sample Result (pCi/L, g, F):	0.181	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.137	
Sample Duplicate Result (pCi/L, g, F):	0.027	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.145	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	1.507	92521125006
Duplicate RPD:	147.89%	92521125006DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	
% RPD Limit:	25%	

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

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

Comments:

~~***Batch must be re-prepped due to unacceptable precision.~~ N/A LAM 3/8/21

3/8/21

LAM 3/8/21

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test: Ra-226
Analyst: LAL
Date: 2/25/2021
Worklist: 58923
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2103903
MB concentration:	0.039
M/B Counting Uncertainty:	0.081
MB MDC:	0.191
MB Numerical Performance Indicator:	0.93
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS58923	LCSD58923
Count Date:	3/11/2021	3/11/2021
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.039	24.039
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.504	0.507
Target Conc. (pCi/L, g, F):	4.770	4.744
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	5.115	4.710
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.500	0.467
Numerical Performance Indicator:	1.34	-0.14
Percent Recovery:	107.22%	99.28%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS58923	Enter Duplicate
Duplicate Sample I.D.	LCSD58923	sample IDs if
Sample Result (pCi/L, g, F):	5.115	other than
Sample Result Counting Uncertainty (pCi/L, g, F):	0.500	LCS/LCSD in
Sample Duplicate Result (pCi/L, g, F):	4.710	the space below.
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.467	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	1.161	92521131012
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	7.70%	92521131012DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

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

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

Comments:

LAM 3/11/21

3/11/21

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	2/25/2021
Worklist:	58923
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2103903
MB concentration:	0.039
M/B Counting Uncertainty:	0.081
MB MDC:	0.191
MB Numericel Performance Indicator:	0.93
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS58923	LCSD58923
Count Date:	3/11/2021	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.039	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.504	
Target Conc. (pCi/L, g, F):	4.770	
Uncertainty (Calculated):	0.057	
Result (pCi/L, g, F):	5.115	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.500	
Numerical Performance Indicator:	1.34	
Percent Recovery:	107.22%	
Status vs Numericel Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

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

Duplicate Sample Assessment		
Sample I.D.:	92521131012	Enter Duplicate
Duplicate Sample I.D.	92521131012DUP	sample IDs if
Sample Result (pCi/L, g, F):	0.061	other than
Sample Result Counting Uncertainty (pCi/L, g, F):	0.107	LCS/LCSD in
Sample Duplicate Result (pCi/L, g, F):	0.227	the space below.
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.128	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	-1.954	92521131012
Duplicate RPD:	114.91%	92521131012DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	
% RPD Limit:	25%	

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

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

Comments:

~~***Batch must be re-prepped due to unacceptable precision.~~ N/A LAM 3/11/21

LAM 3/11/21

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-226
Analyst:	LAL
Date:	2/25/2021
Worklist:	58925
Matrix:	DW

Method Blank Assessment	
MB Sample ID	2103906
MB concentration:	0.144
M/B Counting Uncertainty:	0.104
MB MDC:	0.177
MB Numerical Performance Indicator:	2.72
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS58925	LCSD58925
Count Date:	3/11/2021	3/11/2021
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.039	24.039
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.508	0.501
Target Conc. (pCi/L, g, F):	4.733	4.795
Uncertainty (Calculated):	0.057	0.058
Result (pCi/L, g, F):	4.684	4.741
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.477	0.493
Numerical Performance Indicator:	-0.20	-0.21
Percent Recovery:	98.98%	98.68%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS58925	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD58925	
Sample Result (pCi/L, g, F):	4.684	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.477	
Sample Duplicate Result (pCi/L, g, F):	4.741	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.493	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.163	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	0.10%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

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

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

Comments:

3/11/21

LAM 3/11/21

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-228
Analyst:	VAL
Date:	3/11/2021
Worklist:	59157
Matrix:	WT

Method Blank Assessment	
MB Sample ID	2112538
MB concentration:	0.312
M/B 2 Sigma CSU:	0.330
MB MDC:	0.686
MB Numerical Performance Indicetor:	1.85
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS59157	LCSD59157
Count Date:	3/15/2021	3/15/2021
Spike I.D.:	21-003	21-003
Decay Corrected Spike Concantration (pCi/mL):	38.455	38.455
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.810	0.807
Target Conc. (pCi/L, g, F):	4.747	4.768
Uncertainty (Calculated):	0.233	0.234
Result (pCi/L, g, F):	3.492	2.971
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.863	0.784
Numerical Performance Indicator:	-2.75	-4.30
Percent Recovery:	73.55%	62.31%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment		
Sample I.D.:	LCS59157	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD59157	
Sample Result (pCi/L, g, F):	3.492	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.863	
Sample Duplicate Result (pCi/L, g, F):	2.971	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.784	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.875	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	16.54%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

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

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

Comments:

3/11/2021

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	2/22/2021
Worklist:	58851
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2100680
MB concentration:	0.356
M/B 2 Sigma CSU:	0.369
MB MDC:	0.763
MB Numerical Performance Indicator:	1.89
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS58851	LCSD58851
Count Date:	2/24/2021	2/24/2021
Spike I.D.:	21-003	21-003
Decay Corrected Spike Concentration (pCi/mL):	38.698	38.698
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.813	0.821
Target Conc. (pCi/L, g, F):	4.759	4.711
Uncertainty (Calculated):	0.233	0.231
Result (pCi/L, g, F):	4.358	5.382
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.031	1.179
Numerical Performance Indicator:	-0.74	1.09
Percent Recovery:	91.58%	114.23%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS58851	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD58851	
Sample Result (pCi/L, g, F):	4.358	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.031	
Sample Duplicate Result (pCi/L, g, F):	5.382	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.179	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-1.281	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	22.01%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

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

Comments:

2/25/21

2/25/21

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	2/24/2021
Worklist:	58915
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2103745
MB concentration:	0.345
M/B 2 Sigma CSU:	0.339
MB MDC:	0.700
MB Numerical Performance Indicator:	1.99
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS58915	LCSD58915
Count Date:	3/2/2021	3/2/2021
Spike I.D.:	21-003	21-003
Decay Corrected Spike Concentration (pCi/mL):	38.623	38.623
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.808	0.819
Target Conc. (pCi/L, g, F):	4.781	4.718
Uncertainty (Calculated):	0.234	0.231
Result (pCi/L, g, F):	4.284	3.747
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.952	0.834
Numerical Performance Indicator:	-0.99	-2.20
Percent Recovery:	89.60%	79.42%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS58915	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD58915	
Sample Result (pCi/L, g, F):	4.284	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.952	
Sample Duplicate Result (pCi/L, g, F):	3.747	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.834	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.832	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	12.05%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

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

Comments:

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	3/1/2021
Worklist:	58924
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2103905
MB concentration:	0.253
M/B 2 Sigma CSU:	0.323
MB MDC:	0.687
MB Numerical Performance Indicator:	1.54
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS58924	LCSD58924
Count Date:	3/3/2021	3/3/2021
Spike I.D.:	21-003	21-003
Decay Corrected Spike Concentration (pCi/mL):	38.608	38.608
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.807	0.809
Target Conc. (pCi/L, g, F):	4.782	4.770
Uncertainty (Calculated):	0.234	0.234
Result (pCi/L, g, F):	4.298	4.434
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.960	1.026
Numericel Performance Indicator:	-0.96	-0.63
Percent Recovery:	89.88%	92.96%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS58924	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD58924	
Sample Result (pCi/L, g, F):	4.298	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.960	
Sample Duplicate Result (pCi/L, g, F):	4.434	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.026	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.190	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	3.37%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

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

Comments:

3/5/21

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	3/2/2021
Worklist:	58926
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2103907
MB concentration:	0.298
MB 2 Sigma CSU:	0.350
MB MDC:	0.738
MB Numerical Performance Indicator:	1.67
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS58926	LCSD58926
Count Date:	3/4/2021	3/4/2021
Spike I.D.:	21-003	21-003
Decay Corrected Spike Concentration (pCi/mL):	38.598	38.598
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.802	0.809
Target Conc. (pCi/L, g, F):	4.812	4.772
Uncertainty (Calculated):	0.236	0.234
Result (pCi/L, g, F):	4.092	5.302
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.944	1.159
Numerical Performance Indicator:	-1.45	0.88
Percent Recovery:	85.03%	111.09%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS58926	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD58926	
Sample Result (pCi/L, g, F):	4.092	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.944	
Sample Duplicate Result (pCi/L, g, F):	5.302	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.159	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-1.586	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	26.57%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

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

Comments:

3/5/21

March 2021

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

April 27, 2021

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

RE: Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between March 11, 2021 and March 18, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

Kevin Herring
kevin.herring@pacelabs.com
1(704)875-9092
HORIZON Database Administrator

Enclosures

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

CERTIFICATIONS

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Pace Analytical Services Charlotte
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

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

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SAMPLE SUMMARY

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92527268001	**HGWA-1**	Water	03/10/21 16:10	03/11/21 15:55
92527268002	**HGWA-44D**	Water	03/10/21 14:30	03/11/21 15:55
92527268003	**HGWA-2**	Water	03/11/21 09:59	03/12/21 13:43
92527268004	**HGWA-3**	Water	03/11/21 11:25	03/12/21 13:43
92527268005	**HGWA-43D**	Water	03/11/21 09:57	03/12/21 13:43
92527268006	**HGWC-10**	Water	03/12/21 10:11	03/15/21 12:00
92527268007	**MW-27D**	Water	03/12/21 09:47	03/15/21 12:00
92527268008	**HGWC-7 FILTERED**	Water	03/15/21 16:25	03/16/21 13:42
92527268009	**HGWC-7**	Water	03/15/21 16:10	03/16/21 13:42
92527268010	**HGWC-8**	Water	03/15/21 11:00	03/16/21 13:42
92527268011	**MW-7**	Water	03/15/21 12:00	03/16/21 13:42
92527268012	**MW-20**	Water	03/15/21 14:22	03/16/21 13:42
92527268013	**MW-28D**	Water	03/15/21 18:25	03/16/21 13:42
92527268014	**MW-29**	Water	03/15/21 12:52	03/16/21 13:42
92527268015	**HGWC-9**	Water	03/16/21 14:48	03/17/21 13:10
92527268016	**HGWC-11**	Water	03/16/21 09:45	03/17/21 13:10
92527268017	**HGWC-12**	Water	03/16/21 11:12	03/17/21 13:10
92527268018	**MW-5**	Water	03/16/21 16:08	03/17/21 13:10
92527268019	**MW-6**	Water	03/16/21 15:43	03/17/21 13:10
92527268020	**MW-25D**	Water	03/16/21 12:32	03/17/21 13:10
92527268021	**DUP-1**	Water	03/16/21 00:00	03/17/21 13:10
92527268022	**EB-1**	Water	03/16/21 16:40	03/17/21 13:10
92527268023	**FB-1**	Water	03/16/21 16:25	03/17/21 13:10
92527268024	**HGWC-13**	Water	03/17/21 14:58	03/18/21 13:17
92527268025	**MW-19**	Water	03/17/21 10:20	03/18/21 13:17
92527268026	**MW-24D**	Water	03/17/21 16:00	03/18/21 13:17
92527268027	**MW-26D**	Water	03/17/21 08:50	03/18/21 13:17

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SAMPLE ANALYTE COUNT

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92527268001	**HGWA-1**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92527268002	**HGWA-44D**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92527268003	**HGWA-2**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92527268004	**HGWA-3**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92527268005	**HGWA-43D**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92527268006	**HGWC-10**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92527268007	**MW-27D**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92527268008	**HGWC-7 FILTERED**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92527268009	**HGWC-7**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92527268010	**HGWC-8**	EPA 6010D	DRB	1

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SAMPLE ANALYTE COUNT

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 6020B	CW1	13
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92527268011	**MW-7**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92527268012	**MW-20**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92527268013	**MW-28D**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92527268014	**MW-29**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92527268015	**HGWC-9**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92527268016	**HGWC-11**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92527268017	**HGWC-12**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92527268018	**MW-5**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92527268019	**MW-6**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SAMPLE ANALYTE COUNT

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92527268020	**MW-25D**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92527268021	**DUP-1**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92527268022	**EB-1**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92527268023	**FB-1**	EPA 6010D	DRB	1
		EPA 6020B	KH	13
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92527268024	**HGWC-13**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92527268025	**MW-19**	EPA 6010D	DRB	1
		EPA 6020B	KH	13
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92527268026	**MW-24D**	EPA 6010D	DRB	1
		EPA 6020B	KH	13
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92527268027	**MW-26D**	EPA 6010D	DRB	1
		EPA 6020B	KH	13
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92527268001	**HGWA-1**					
	Performed by	CUSTOMER			03/22/21 11:58	
	pH	6.95	Std. Units		03/22/21 11:58	
EPA 6010D	Calcium	111	mg/L	1.0	03/19/21 04:13	
EPA 6020B	Barium	0.030	mg/L	0.0050	03/16/21 15:56	
EPA 6020B	Boron	0.015J	mg/L	0.040	03/16/21 15:56	
EPA 6020B	Lithium	0.00090J	mg/L	0.030	03/16/21 15:56	
EPA 6020B	Selenium	0.0047J	mg/L	0.0050	03/16/21 15:56	
SM 2540C-2011	Total Dissolved Solids	348	mg/L	10.0	03/15/21 13:15	
EPA 300.0 Rev 2.1 1993	Chloride	7.4	mg/L	1.0	03/17/21 20:51	
EPA 300.0 Rev 2.1 1993	Fluoride	0.079J	mg/L	0.10	03/17/21 20:51	
EPA 300.0 Rev 2.1 1993	Sulfate	49.6	mg/L	1.0	03/17/21 20:51	
92527268002	**HGWA-44D**					
	Performed by	CUSTOMER			03/22/21 11:58	
	pH	7.92	Std. Units		03/22/21 11:58	
EPA 6010D	Calcium	5.9	mg/L	1.0	03/19/21 04:18	
EPA 6020B	Antimony	0.00037J	mg/L	0.0030	03/16/21 16:13	B
EPA 6020B	Barium	0.26	mg/L	0.0050	03/16/21 16:13	
EPA 6020B	Boron	0.39	mg/L	0.040	03/16/21 16:13	
EPA 6020B	Lithium	0.030	mg/L	0.030	03/16/21 16:13	
EPA 6020B	Molybdenum	0.0019J	mg/L	0.010	03/16/21 16:13	
SM 2540C-2011	Total Dissolved Solids	289	mg/L	10.0	03/15/21 13:15	
EPA 300.0 Rev 2.1 1993	Chloride	12.3	mg/L	1.0	03/17/21 22:28	
EPA 300.0 Rev 2.1 1993	Fluoride	0.65	mg/L	0.10	03/17/21 22:28	
92527268003	**HGWA-2**					
	Performed by	CUSTOMER			03/22/21 11:58	
	pH	5.80	Std. Units		03/22/21 11:58	
EPA 6010D	Calcium	43.8	mg/L	1.0	03/22/21 20:09	
EPA 6020B	Barium	0.070	mg/L	0.0050	03/19/21 20:54	
EPA 6020B	Beryllium	0.000086J	mg/L	0.00050	03/19/21 20:54	
EPA 6020B	Boron	0.056	mg/L	0.040	03/19/21 20:54	
EPA 6020B	Cobalt	0.013	mg/L	0.0050	03/19/21 20:54	
EPA 6020B	Lead	0.000076J	mg/L	0.0010	03/19/21 20:54	
EPA 6020B	Lithium	0.0011J	mg/L	0.030	03/19/21 20:54	
SM 2540C-2011	Total Dissolved Solids	169	mg/L	10.0	03/16/21 15:08	
EPA 300.0 Rev 2.1 1993	Chloride	5.1	mg/L	1.0	03/19/21 00:00	
EPA 300.0 Rev 2.1 1993	Fluoride	0.10	mg/L	0.10	03/19/21 00:00	
EPA 300.0 Rev 2.1 1993	Sulfate	52.9	mg/L	1.0	03/19/21 00:00	
92527268004	**HGWA-3**					
	Performed by	CUSTOMER			03/22/21 11:58	
	pH	7.33	Std. Units		03/22/21 11:58	
EPA 6010D	Calcium	83.8	mg/L	1.0	03/22/21 20:29	
EPA 6020B	Barium	0.13	mg/L	0.0050	03/19/21 21:00	
EPA 6020B	Boron	0.015J	mg/L	0.040	03/19/21 21:00	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92527268004	**HGWA-3**					
EPA 6020B	Lithium	0.0035J	mg/L	0.030	03/19/21 21:00	
SM 2540C-2011	Total Dissolved Solids	267	mg/L	10.0	03/16/21 15:08	
EPA 300.0 Rev 2.1 1993	Chloride	5.9	mg/L	1.0	03/19/21 00:00	
EPA 300.0 Rev 2.1 1993	Sulfate	50.4	mg/L	1.0	03/19/21 00:00	
92527268005	**HGWA-43D**					
	Performed by	CUSTOMER			03/22/21 11:58	
	pH	7.46	Std. Units		03/22/21 11:58	
EPA 6010D	Calcium	59.6	mg/L	1.0	03/22/21 20:33	
EPA 6020B	Antimony	0.00057J	mg/L	0.0030	03/19/21 21:06	
EPA 6020B	Arsenic	0.0013J	mg/L	0.0050	03/19/21 21:06	
EPA 6020B	Barium	0.32	mg/L	0.0050	03/19/21 21:06	
EPA 6020B	Boron	0.060	mg/L	0.040	03/19/21 21:06	
EPA 6020B	Lead	0.000094J	mg/L	0.0010	03/19/21 21:06	
EPA 6020B	Lithium	0.0022J	mg/L	0.030	03/19/21 21:06	
EPA 6020B	Molybdenum	0.0064J	mg/L	0.010	03/19/21 21:06	
SM 2540C-2011	Total Dissolved Solids	279	mg/L	10.0	03/17/21 17:40	
EPA 300.0 Rev 2.1 1993	Chloride	4.5	mg/L	1.0	03/19/21 00:00	
EPA 300.0 Rev 2.1 1993	Fluoride	0.20	mg/L	0.10	03/19/21 00:00	
EPA 300.0 Rev 2.1 1993	Sulfate	38.6	mg/L	1.0	03/19/21 00:00	
92527268006	**HGWC-10**					
	Performed by	CUSTOMER			03/22/21 11:58	
	pH	6.76	Std. Units		03/22/21 11:58	
EPA 6010D	Calcium	146	mg/L	1.0	03/26/21 19:19	M1
EPA 6020B	Barium	0.058	mg/L	0.0050	03/29/21 18:43	
EPA 6020B	Boron	0.64	mg/L	0.040	03/29/21 18:43	
EPA 6020B	Molybdenum	0.00070J	mg/L	0.010	03/29/21 18:43	
SM 2540C-2011	Total Dissolved Solids	490	mg/L	10.0	03/23/21 07:39	H1
EPA 300.0 Rev 2.1 1993	Chloride	35.0	mg/L	1.0	03/21/21 01:09	
EPA 300.0 Rev 2.1 1993	Fluoride	0.054J	mg/L	0.10	03/21/21 01:09	
EPA 300.0 Rev 2.1 1993	Sulfate	120	mg/L	3.0	03/23/21 19:12	
92527268007	**MW-27D**					
	Performed by	CUSTOMER			03/22/21 11:58	
	pH	7.88	Std. Units		03/22/21 11:58	
EPA 6010D	Calcium	28.0	mg/L	1.0	03/26/21 19:48	
EPA 6020B	Barium	1.1	mg/L	0.025	03/30/21 12:03	
EPA 6020B	Boron	0.13	mg/L	0.040	03/29/21 18:48	
EPA 6020B	Lithium	0.0090J	mg/L	0.030	03/29/21 18:48	
EPA 6020B	Molybdenum	0.00080J	mg/L	0.010	03/29/21 18:48	
SM 2540C-2011	Total Dissolved Solids	215	mg/L	10.0	03/23/21 07:39	H1
EPA 300.0 Rev 2.1 1993	Chloride	31.3	mg/L	1.0	03/21/21 01:24	
EPA 300.0 Rev 2.1 1993	Fluoride	0.24	mg/L	0.10	03/21/21 01:24	
EPA 300.0 Rev 2.1 1993	Sulfate	7.4	mg/L	1.0	03/21/21 01:24	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92527268008	**HGWC-7 FILTERED**					
	Performed by	CUSTOMER			03/22/21 11:58	
	pH	7.19	Std. Units		03/22/21 11:58	
EPA 6010D	Calcium	109	mg/L	1.0	03/26/21 19:53	
EPA 6020B	Barium	0.068	mg/L	0.0050	03/29/21 18:54	
EPA 6020B	Boron	1.1	mg/L	0.040	03/29/21 18:54	
EPA 6020B	Cadmium	0.00021J	mg/L	0.00050	03/29/21 18:54	
EPA 6020B	Cobalt	0.00053J	mg/L	0.0050	03/29/21 18:54	
EPA 6020B	Lithium	0.0020J	mg/L	0.030	03/29/21 18:54	
EPA 6020B	Molybdenum	0.050	mg/L	0.010	03/29/21 18:54	
SM 2540C-2011	Total Dissolved Solids	366	mg/L	10.0	03/22/21 15:10	
EPA 300.0 Rev 2.1 1993	Chloride	44.4	mg/L	1.0	03/20/21 16:46	
EPA 300.0 Rev 2.1 1993	Fluoride	0.088J	mg/L	0.10	03/20/21 16:46	
EPA 300.0 Rev 2.1 1993	Sulfate	80.6	mg/L	2.0	03/21/21 07:17	
92527268009	**HGWC-7**					
	Performed by	CUSTOMER			03/22/21 11:58	
	pH	7.19	Std. Units		03/22/21 11:58	
EPA 6010D	Calcium	113	mg/L	1.0	03/26/21 17:13	M1
EPA 6020B	Barium	0.074	mg/L	0.0050	03/29/21 19:00	
EPA 6020B	Beryllium	0.00019J	mg/L	0.00050	03/29/21 19:00	
EPA 6020B	Boron	1.1	mg/L	0.040	03/29/21 19:00	
EPA 6020B	Chromium	0.0021J	mg/L	0.0050	03/29/21 19:00	
EPA 6020B	Cobalt	0.0014J	mg/L	0.0050	03/29/21 19:00	
EPA 6020B	Lead	0.0013	mg/L	0.0010	03/29/21 19:00	
EPA 6020B	Lithium	0.0038J	mg/L	0.030	03/29/21 19:00	
EPA 6020B	Molybdenum	0.047	mg/L	0.010	03/29/21 19:00	
SM 2540C-2011	Total Dissolved Solids	370	mg/L	10.0	03/22/21 15:10	
EPA 300.0 Rev 2.1 1993	Chloride	44.5	mg/L	1.0	03/20/21 17:00	
EPA 300.0 Rev 2.1 1993	Fluoride	0.086J	mg/L	0.10	03/20/21 17:00	
EPA 300.0 Rev 2.1 1993	Sulfate	107	mg/L	2.0	03/21/21 07:33	
92527268010	**HGWC-8**					
	Performed by	CUSTOMER			03/22/21 11:58	
	pH	7.09	Std. Units		03/22/21 11:58	
EPA 6010D	Calcium	156	mg/L	1.0	03/26/21 19:58	
EPA 6020B	Barium	0.063	mg/L	0.0050	03/29/21 19:06	
EPA 6020B	Beryllium	0.000078J	mg/L	0.00050	03/29/21 19:06	
EPA 6020B	Boron	1.7	mg/L	0.040	03/29/21 19:06	
EPA 6020B	Cadmium	0.00017J	mg/L	0.00050	03/29/21 19:06	
EPA 6020B	Chromium	0.00082J	mg/L	0.0050	03/29/21 19:06	
EPA 6020B	Cobalt	0.0019J	mg/L	0.0050	03/29/21 19:06	
EPA 6020B	Lead	0.00011J	mg/L	0.0010	03/29/21 19:06	
EPA 6020B	Lithium	0.0029J	mg/L	0.030	03/29/21 19:06	
EPA 6020B	Molybdenum	0.41	mg/L	0.010	03/29/21 19:06	
SM 2540C-2011	Total Dissolved Solids	614	mg/L	20.0	03/22/21 15:10	
EPA 300.0 Rev 2.1 1993	Chloride	72.4	mg/L	1.0	03/20/21 17:14	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92527268010	**HGWC-8**					
EPA 300.0 Rev 2.1 1993	Fluoride	0.51	mg/L	0.10	03/20/21 17:14	
EPA 300.0 Rev 2.1 1993	Sulfate	272	mg/L	6.0	03/21/21 07:47	
92527268011	**MW-7**					
	Performed by	CUSTOMER			03/22/21 11:58	
	pH	6.66	Std. Units		03/22/21 11:58	
EPA 6010D	Calcium	76.9	mg/L	1.0	03/26/21 20:03	
EPA 6020B	Barium	0.053	mg/L	0.0050	03/29/21 19:11	
EPA 6020B	Boron	0.16	mg/L	0.040	03/29/21 19:11	
EPA 6020B	Chromium	0.0018J	mg/L	0.0050	03/29/21 19:11	
EPA 6020B	Molybdenum	0.0015J	mg/L	0.010	03/29/21 19:11	
EPA 6020B	Selenium	0.0021J	mg/L	0.0050	03/29/21 19:11	B
SM 2540C-2011	Total Dissolved Solids	293	mg/L	10.0	03/22/21 15:10	
EPA 300.0 Rev 2.1 1993	Chloride	6.8	mg/L	1.0	03/20/21 17:27	
EPA 300.0 Rev 2.1 1993	Sulfate	92.1	mg/L	2.0	03/21/21 08:03	
92527268012	**MW-20**					
	Performed by	CUSTOMER			03/22/21 11:58	
	pH	6.97	Std. Units		03/22/21 11:58	
EPA 6010D	Calcium	121	mg/L	1.0	03/26/21 20:07	
EPA 6020B	Barium	0.096	mg/L	0.0050	03/29/21 19:17	
EPA 6020B	Boron	0.12	mg/L	0.040	03/29/21 19:17	
EPA 6020B	Chromium	0.00068J	mg/L	0.0050	03/29/21 19:17	
EPA 6020B	Lead	0.00010J	mg/L	0.0010	03/29/21 19:17	
EPA 6020B	Lithium	0.0011J	mg/L	0.030	03/29/21 19:17	
SM 2540C-2011	Total Dissolved Solids	406	mg/L	10.0	03/22/21 15:10	
EPA 300.0 Rev 2.1 1993	Chloride	31.1	mg/L	1.0	03/20/21 17:41	
EPA 300.0 Rev 2.1 1993	Sulfate	109	mg/L	2.0	03/21/21 08:19	
92527268013	**MW-28D**					
	Performed by	CUSTOMER			03/22/21 11:58	
	pH	7.61	Std. Units		03/22/21 11:58	
EPA 6010D	Calcium	66.1	mg/L	1.0	03/26/21 20:12	
EPA 6020B	Barium	0.45	mg/L	0.0050	03/29/21 19:23	
EPA 6020B	Beryllium	0.000048J	mg/L	0.00050	03/29/21 19:23	
EPA 6020B	Boron	0.36	mg/L	0.040	03/29/21 19:23	
EPA 6020B	Chromium	0.00078J	mg/L	0.0050	03/29/21 19:23	
EPA 6020B	Lead	0.00034J	mg/L	0.0010	03/29/21 19:23	
EPA 6020B	Lithium	0.013J	mg/L	0.030	03/29/21 19:23	
EPA 6020B	Molybdenum	0.013	mg/L	0.010	03/29/21 19:23	
SM 2540C-2011	Total Dissolved Solids	293	mg/L	10.0	03/22/21 15:10	
EPA 300.0 Rev 2.1 1993	Chloride	35.8	mg/L	1.0	03/20/21 18:21	
EPA 300.0 Rev 2.1 1993	Fluoride	0.24	mg/L	0.10	03/20/21 18:21	
EPA 300.0 Rev 2.1 1993	Sulfate	50.1	mg/L	1.0	03/20/21 18:21	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92527268014	**MW-29**					
	Performed by	CUSTOMER			03/22/21 11:58	
	pH	7.05	Std. Units		03/22/21 11:58	
EPA 6010D	Calcium	145	mg/L	1.0	03/26/21 20:17	
EPA 6020B	Barium	0.078	mg/L	0.0050	03/29/21 19:40	
EPA 6020B	Boron	1.2	mg/L	0.040	03/29/21 19:40	
EPA 6020B	Cobalt	0.0011J	mg/L	0.0050	03/29/21 19:40	
EPA 6020B	Lithium	0.0022J	mg/L	0.030	03/29/21 19:40	
EPA 6020B	Molybdenum	0.0031J	mg/L	0.010	03/29/21 19:40	
SM 2540C-2011	Total Dissolved Solids	555	mg/L	10.0	03/22/21 15:10	
EPA 300.0 Rev 2.1 1993	Chloride	73.6	mg/L	1.0	03/20/21 18:35	
EPA 300.0 Rev 2.1 1993	Sulfate	148	mg/L	3.0	03/21/21 08:34	
92527268015	**HGWC-9**					
	Performed by	CUSTOMER			03/22/21 11:58	
	pH	7.10	Std. Units		03/22/21 11:58	
EPA 6010D	Calcium	182	mg/L	1.0	03/26/21 17:42	
EPA 6020B	Barium	0.11	mg/L	0.0050	03/29/21 19:46	
EPA 6020B	Boron	2.2	mg/L	0.040	03/29/21 19:46	
EPA 6020B	Cobalt	0.00069J	mg/L	0.0050	03/29/21 19:46	
EPA 6020B	Lead	0.00027J	mg/L	0.0010	03/29/21 19:46	
EPA 6020B	Lithium	0.0046J	mg/L	0.030	03/29/21 19:46	
EPA 6020B	Molybdenum	0.035	mg/L	0.010	03/29/21 19:46	
SM 2540C-2011	Total Dissolved Solids	672	mg/L	20.0	03/23/21 07:59	
EPA 300.0 Rev 2.1 1993	Chloride	94.7	mg/L	5.0	03/22/21 09:56	
EPA 300.0 Rev 2.1 1993	Fluoride	0.098J	mg/L	0.10	03/22/21 00:11	
EPA 300.0 Rev 2.1 1993	Sulfate	211	mg/L	5.0	03/22/21 09:56	
92527268016	**HGWC-11**					
	Performed by	CUSTOMER			03/22/21 11:58	
	pH	5.95	Std. Units		03/22/21 11:58	
EPA 6010D	Calcium	132	mg/L	1.0	03/26/21 17:47	
EPA 6020B	Arsenic	0.0017J	mg/L	0.0050	03/30/21 18:35	
EPA 6020B	Barium	0.035	mg/L	0.0050	03/30/21 18:35	
EPA 6020B	Beryllium	0.000081J	mg/L	0.00050	03/30/21 18:35	
EPA 6020B	Boron	0.53	mg/L	0.040	03/30/21 18:35	
EPA 6020B	Lead	0.000099J	mg/L	0.0010	03/30/21 18:35	
EPA 6020B	Molybdenum	0.015	mg/L	0.010	03/30/21 18:35	
EPA 6020B	Selenium	0.015	mg/L	0.0050	03/30/21 18:35	
SM 2540C-2011	Total Dissolved Solids	558	mg/L	10.0	03/23/21 07:59	
EPA 300.0 Rev 2.1 1993	Chloride	11.5	mg/L	1.0	03/22/21 00:51	
EPA 300.0 Rev 2.1 1993	Fluoride	0.21	mg/L	0.10	03/22/21 00:51	
EPA 300.0 Rev 2.1 1993	Sulfate	291	mg/L	6.0	03/22/21 10:11	
92527268017	**HGWC-12**					
	Performed by	CUSTOMER			03/22/21 11:58	
	pH	7.15	Std. Units		03/22/21 11:58	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92527268017	**HGWC-12**					
EPA 6010D	Calcium	166	mg/L	1.0	03/26/21 17:52	
EPA 6020B	Arsenic	0.0038J	mg/L	0.0050	03/30/21 18:41	
EPA 6020B	Barium	0.084	mg/L	0.0050	03/30/21 18:41	
EPA 6020B	Boron	1.9	mg/L	0.040	03/30/21 18:41	
EPA 6020B	Cobalt	0.0012J	mg/L	0.0050	03/30/21 18:41	
EPA 6020B	Lead	0.000089J	mg/L	0.0010	03/30/21 18:41	
EPA 6020B	Lithium	0.0081J	mg/L	0.030	03/30/21 18:41	
EPA 6020B	Molybdenum	0.044	mg/L	0.010	03/30/21 18:41	
SM 2540C-2011	Total Dissolved Solids	614	mg/L	20.0	03/23/21 07:59	
EPA 300.0 Rev 2.1 1993	Chloride	56.8	mg/L	1.0	03/22/21 01:05	
EPA 300.0 Rev 2.1 1993	Fluoride	0.20	mg/L	0.10	03/22/21 01:05	
EPA 300.0 Rev 2.1 1993	Sulfate	248	mg/L	5.0	03/22/21 10:25	
92527268018	**MW-5**					
	Performed by	CUSTOMER			03/22/21 11:58	
	pH	5.78	Std. Units		03/22/21 11:58	
EPA 6010D	Calcium	71.8	mg/L	1.0	03/26/21 17:57	
EPA 6020B	Barium	0.046	mg/L	0.0050	03/30/21 18:46	
EPA 6020B	Boron	0.037J	mg/L	0.040	03/30/21 18:46	
EPA 6020B	Chromium	0.0024J	mg/L	0.0050	03/30/21 18:46	B
EPA 6020B	Selenium	0.0026J	mg/L	0.0050	03/30/21 18:46	
SM 2540C-2011	Total Dissolved Solids	333	mg/L	10.0	03/23/21 08:00	
EPA 300.0 Rev 2.1 1993	Chloride	1.4	mg/L	1.0	03/22/21 01:18	
EPA 300.0 Rev 2.1 1993	Sulfate	162	mg/L	4.0	03/22/21 10:40	
92527268019	**MW-6**					
	Performed by	CUSTOMER			03/22/21 11:58	
	pH	6.96	Std. Units		03/22/21 11:58	
EPA 6010D	Calcium	184	mg/L	1.0	03/26/21 18:01	
EPA 6020B	Barium	0.081	mg/L	0.0050	03/30/21 18:52	
EPA 6020B	Boron	0.81	mg/L	0.040	03/30/21 18:52	
EPA 6020B	Cobalt	0.00042J	mg/L	0.0050	03/30/21 18:52	
EPA 6020B	Lead	0.000036J	mg/L	0.0010	03/30/21 18:52	
EPA 6020B	Molybdenum	0.0023J	mg/L	0.010	03/30/21 18:52	
SM 2540C-2011	Total Dissolved Solids	600	mg/L	20.0	03/23/21 08:00	
EPA 300.0 Rev 2.1 1993	Chloride	49.8	mg/L	1.0	03/22/21 01:32	
EPA 300.0 Rev 2.1 1993	Fluoride	0.060J	mg/L	0.10	03/22/21 01:32	
EPA 300.0 Rev 2.1 1993	Sulfate	189	mg/L	4.0	03/22/21 10:55	
92527268020	**MW-25D**					
	Performed by	CUSTOMER			03/22/21 11:58	
	pH	7.76	Std. Units		03/22/21 11:58	
EPA 6010D	Calcium	24.8	mg/L	1.0	03/26/21 18:06	
EPA 6020B	Barium	0.51	mg/L	0.0050	03/30/21 18:58	
EPA 6020B	Boron	0.40	mg/L	0.040	03/30/21 18:58	
EPA 6020B	Lithium	0.049	mg/L	0.030	03/30/21 18:58	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92527268020	**MW-25D**					
SM 2540C-2011	Total Dissolved Solids	347	mg/L	10.0	03/23/21 08:00	
EPA 300.0 Rev 2.1 1993	Chloride	29.2	mg/L	1.0	03/22/21 01:46	
EPA 300.0 Rev 2.1 1993	Fluoride	1.7	mg/L	0.10	03/22/21 01:46	
EPA 300.0 Rev 2.1 1993	Sulfate	9.4	mg/L	1.0	03/22/21 01:46	
92527268021	**DUP-1**					
EPA 6010D	Calcium	24.8	mg/L	1.0	03/26/21 18:11	
EPA 6020B	Barium	0.51	mg/L	0.0050	03/30/21 19:04	
EPA 6020B	Boron	0.41	mg/L	0.040	03/30/21 19:04	
EPA 6020B	Lithium	0.050	mg/L	0.030	03/30/21 19:04	
SM 2540C-2011	Total Dissolved Solids	351	mg/L	10.0	03/23/21 08:00	
EPA 300.0 Rev 2.1 1993	Chloride	29.7	mg/L	1.0	03/22/21 01:59	
EPA 300.0 Rev 2.1 1993	Fluoride	1.7	mg/L	0.10	03/22/21 01:59	
EPA 300.0 Rev 2.1 1993	Sulfate	9.6	mg/L	1.0	03/22/21 01:59	
92527268022	**EB-1**					
SM 2540C-2011	Total Dissolved Solids	10.0	mg/L	10.0	03/23/21 08:00	
92527268023	**FB-1**					
EPA 6020B	Antimony	0.00029J	mg/L	0.0030	04/02/21 15:31	
92527268024	**HGWC-13**					
	Performed by	CUSTOMER			03/22/21 11:58	
	pH	7.33	Std. Units		03/22/21 11:58	
EPA 6010D	Calcium	184	mg/L	1.0	03/26/21 18:26	
EPA 6020B	Antimony	0.00049J	mg/L	0.0030	03/29/21 11:47	
EPA 6020B	Arsenic	0.39	mg/L	0.0050	03/29/21 11:47	
EPA 6020B	Barium	0.056	mg/L	0.0050	03/29/21 11:47	
EPA 6020B	Beryllium	0.000090J	mg/L	0.00050	03/29/21 11:47	
EPA 6020B	Boron	0.89	mg/L	0.040	03/29/21 11:47	
EPA 6020B	Cobalt	0.0029J	mg/L	0.0050	03/29/21 11:47	
EPA 6020B	Lead	0.00015J	mg/L	0.0010	03/29/21 11:47	
EPA 6020B	Lithium	0.031	mg/L	0.030	03/29/21 11:47	
EPA 6020B	Molybdenum	0.035	mg/L	0.010	03/29/21 11:47	
EPA 6020B	Thallium	0.00037J	mg/L	0.0010	03/29/21 11:47	
SM 2540C-2011	Total Dissolved Solids	716	mg/L	20.0	03/23/21 08:41	
EPA 300.0 Rev 2.1 1993	Chloride	31.4	mg/L	1.0	03/23/21 09:00	
EPA 300.0 Rev 2.1 1993	Fluoride	0.65	mg/L	0.10	03/23/21 09:00	
EPA 300.0 Rev 2.1 1993	Sulfate	384	mg/L	8.0	03/23/21 16:15	
92527268025	**MW-19**					
	Performed by	CUSTOMER			03/22/21 11:58	
	pH	6.34	Std. Units		03/22/21 11:58	
EPA 6010D	Calcium	130	mg/L	1.0	03/26/21 18:40	
EPA 6020B	Barium	0.049	mg/L	0.0050	04/02/21 15:37	
EPA 6020B	Boron	0.69	mg/L	0.040	04/02/21 15:37	
EPA 6020B	Cadmium	0.00016J	mg/L	0.00050	04/02/21 15:37	
EPA 6020B	Chromium	0.0022J	mg/L	0.0050	04/02/21 15:37	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92527268025	**MW-19**					
EPA 6020B	Cobalt	0.037	mg/L	0.0050	04/02/21 15:37	
EPA 6020B	Lead	0.000038J	mg/L	0.0010	04/02/21 15:37	
EPA 6020B	Lithium	0.012J	mg/L	0.030	04/02/21 15:37	
EPA 6020B	Molybdenum	0.043	mg/L	0.010	04/02/21 15:37	
EPA 6020B	Thallium	0.00026J	mg/L	0.0010	04/02/21 15:37	
SM 2540C-2011	Total Dissolved Solids	543	mg/L	10.0	03/23/21 08:41	
EPA 300.0 Rev 2.1 1993	Chloride	19.8	mg/L	1.0	03/23/21 09:13	
EPA 300.0 Rev 2.1 1993	Fluoride	0.18	mg/L	0.10	03/23/21 09:13	
EPA 300.0 Rev 2.1 1993	Sulfate	260	mg/L	5.0	03/23/21 16:30	
92527268026	**MW-24D**					
	Performed by	CUSTOMER			03/22/21 11:58	
	pH	7.66	Std. Units		03/22/21 11:58	
EPA 6010D	Calcium	102	mg/L	1.0	03/26/21 18:45	
EPA 6020B	Barium	0.055	mg/L	0.0050	04/02/21 15:42	
EPA 6020B	Boron	0.49	mg/L	0.040	04/02/21 15:42	
EPA 6020B	Chromium	0.0017J	mg/L	0.0050	04/02/21 15:42	
EPA 6020B	Lead	0.000040J	mg/L	0.0010	04/02/21 15:42	
EPA 6020B	Lithium	0.0027J	mg/L	0.030	04/02/21 15:42	
EPA 6020B	Molybdenum	0.0010J	mg/L	0.010	04/02/21 15:42	
SM 2540C-2011	Total Dissolved Solids	420	mg/L	10.0	03/23/21 08:41	
EPA 300.0 Rev 2.1 1993	Chloride	42.9	mg/L	1.0	03/23/21 09:27	
EPA 300.0 Rev 2.1 1993	Sulfate	137	mg/L	3.0	03/23/21 16:45	
92527268027	**MW-26D**					
	Performed by	CUSTOMER			03/22/21 11:58	
	pH	7.14	Std. Units		03/22/21 11:58	
EPA 6010D	Calcium	175	mg/L	1.0	03/26/21 18:50	
EPA 6020B	Barium	0.094	mg/L	0.0050	04/02/21 15:48	
EPA 6020B	Boron	2.1	mg/L	0.040	04/02/21 15:48	
EPA 6020B	Chromium	0.0015J	mg/L	0.0050	04/02/21 15:48	
EPA 6020B	Cobalt	0.00044J	mg/L	0.0050	04/02/21 15:48	
EPA 6020B	Lithium	0.0040J	mg/L	0.030	04/02/21 15:48	
EPA 6020B	Molybdenum	0.023	mg/L	0.010	04/02/21 15:48	
SM 2540C-2011	Total Dissolved Solids	738	mg/L	20.0	03/23/21 08:41	
EPA 300.0 Rev 2.1 1993	Chloride	95.3	mg/L	4.0	03/23/21 17:29	
EPA 300.0 Rev 2.1 1993	Fluoride	0.072J	mg/L	0.10	03/23/21 09:40	
EPA 300.0 Rev 2.1 1993	Sulfate	212	mg/L	4.0	03/23/21 17:29	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Sample: HGWA-1 **Lab ID: 92527268001** Collected: 03/10/21 16:10 Received: 03/11/21 15:55 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		03/22/21 11:58		
pH	**6.95**	Std. Units			1		03/22/21 11:58		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**111**	mg/L	1.0	0.070	1	03/15/21 14:10	03/19/21 04:13	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	0.00028	1	03/15/21 14:35	03/16/21 15:56	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/15/21 14:35	03/16/21 15:56	7440-38-2	
Barium	**0.030**	mg/L	0.0050	0.00071	1	03/15/21 14:35	03/16/21 15:56	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/15/21 14:35	03/16/21 15:56	7440-41-7	
Boron	**0.015J**	mg/L	0.040	0.0052	1	03/15/21 14:35	03/16/21 15:56	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/15/21 14:35	03/16/21 15:56	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/15/21 14:35	03/16/21 15:56	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/15/21 14:35	03/16/21 15:56	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/15/21 14:35	03/16/21 15:56	7439-92-1	
Lithium	**0.00090J**	mg/L	0.030	0.00081	1	03/15/21 14:35	03/16/21 15:56	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/15/21 14:35	03/16/21 15:56	7439-98-7	
Selenium	**0.0047J**	mg/L	0.0050	0.0016	1	03/15/21 14:35	03/16/21 15:56	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/15/21 14:35	03/16/21 15:56	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**348**	mg/L	10.0	10.0	1		03/15/21 13:15		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**7.4**	mg/L	1.0	0.60	1		03/17/21 20:51	16887-00-6	
Fluoride	**0.079J**	mg/L	0.10	0.050	1		03/17/21 20:51	16984-48-8	
Sulfate	**49.6**	mg/L	1.0	0.50	1		03/17/21 20:51	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Sample: HGWA-44D **Lab ID: 92527268002** Collected: 03/10/21 14:30 Received: 03/11/21 15:55 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		03/22/21 11:58		
pH	**7.92**	Std. Units			1		03/22/21 11:58		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**5.9**	mg/L	1.0	0.070	1	03/15/21 14:10	03/19/21 04:18	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00037J**	mg/L	0.0030	0.00028	1	03/15/21 14:35	03/16/21 16:13	7440-36-0	B
Arsenic	ND	mg/L	0.0050	0.00078	1	03/15/21 14:35	03/16/21 16:13	7440-38-2	
Barium	**0.26**	mg/L	0.0050	0.00071	1	03/15/21 14:35	03/16/21 16:13	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/15/21 14:35	03/16/21 16:13	7440-41-7	
Boron	**0.39**	mg/L	0.040	0.0052	1	03/15/21 14:35	03/16/21 16:13	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/15/21 14:35	03/16/21 16:13	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/15/21 14:35	03/16/21 16:13	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/15/21 14:35	03/16/21 16:13	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/15/21 14:35	03/16/21 16:13	7439-92-1	
Lithium	**0.030**	mg/L	0.030	0.00081	1	03/15/21 14:35	03/16/21 16:13	7439-93-2	
Molybdenum	**0.0019J**	mg/L	0.010	0.00069	1	03/15/21 14:35	03/16/21 16:13	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/15/21 14:35	03/16/21 16:13	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/15/21 14:35	03/16/21 16:13	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**289**	mg/L	10.0	10.0	1		03/15/21 13:15		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**12.3**	mg/L	1.0	0.60	1		03/17/21 22:28	16887-00-6	
Fluoride	**0.65**	mg/L	0.10	0.050	1		03/17/21 22:28	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		03/17/21 22:28	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Sample: HGWA-2 **Lab ID: 92527268003** Collected: 03/11/21 09:59 Received: 03/12/21 13:43 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		03/22/21 11:58		
pH	**5.80**	Std. Units			1		03/22/21 11:58		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**43.8**	mg/L	1.0	0.070	1	03/22/21 11:22	03/22/21 20:09	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	0.00028	1	03/19/21 12:10	03/19/21 20:54	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/19/21 12:10	03/19/21 20:54	7440-38-2	
Barium	**0.070**	mg/L	0.0050	0.00071	1	03/19/21 12:10	03/19/21 20:54	7440-39-3	
Beryllium	**0.000086J**	mg/L	0.00050	0.000046	1	03/19/21 12:10	03/19/21 20:54	7440-41-7	
Boron	**0.056**	mg/L	0.040	0.0052	1	03/19/21 12:10	03/19/21 20:54	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/19/21 12:10	03/19/21 20:54	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/19/21 12:10	03/19/21 20:54	7440-47-3	
Cobalt	**0.013**	mg/L	0.0050	0.00038	1	03/19/21 12:10	03/19/21 20:54	7440-48-4	
Lead	**0.000076J**	mg/L	0.0010	0.000036	1	03/19/21 12:10	03/19/21 20:54	7439-92-1	
Lithium	**0.0011J**	mg/L	0.030	0.00081	1	03/19/21 12:10	03/19/21 20:54	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/19/21 12:10	03/19/21 20:54	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/19/21 12:10	03/19/21 20:54	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/19/21 12:10	03/19/21 20:54	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**169**	mg/L	10.0	10.0	1		03/16/21 15:08		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.1**	mg/L	1.0	0.60	1		03/19/21 00:00	16887-00-6	
Fluoride	**0.10**	mg/L	0.10	0.050	1		03/19/21 00:00	16984-48-8	
Sulfate	**52.9**	mg/L	1.0	0.50	1		03/19/21 00:00	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Sample: HGWA-3 **Lab ID: 92527268004** Collected: 03/11/21 11:25 Received: 03/12/21 13:43 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		03/22/21 11:58		
pH	**7.33**	Std. Units			1		03/22/21 11:58		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**83.8**	mg/L	1.0	0.070	1	03/22/21 11:22	03/22/21 20:29	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	0.00028	1	03/19/21 12:10	03/19/21 21:00	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/19/21 12:10	03/19/21 21:00	7440-38-2	
Barium	**0.13**	mg/L	0.0050	0.00071	1	03/19/21 12:10	03/19/21 21:00	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/19/21 12:10	03/19/21 21:00	7440-41-7	
Boron	**0.015J**	mg/L	0.040	0.0052	1	03/19/21 12:10	03/19/21 21:00	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/19/21 12:10	03/19/21 21:00	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/19/21 12:10	03/19/21 21:00	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/19/21 12:10	03/19/21 21:00	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/19/21 12:10	03/19/21 21:00	7439-92-1	
Lithium	**0.0035J**	mg/L	0.030	0.00081	1	03/19/21 12:10	03/19/21 21:00	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/19/21 12:10	03/19/21 21:00	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/19/21 12:10	03/19/21 21:00	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/19/21 12:10	03/19/21 21:00	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**267**	mg/L	10.0	10.0	1		03/16/21 15:08		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.9**	mg/L	1.0	0.60	1		03/19/21 00:00	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/19/21 00:00	16984-48-8	
Sulfate	**50.4**	mg/L	1.0	0.50	1		03/19/21 00:00	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Sample: HGWA-43D **Lab ID: 92527268005** Collected: 03/11/21 09:57 Received: 03/12/21 13:43 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		03/22/21 11:58		
pH	**7.46**	Std. Units			1		03/22/21 11:58		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**59.6**	mg/L	1.0	0.070	1	03/22/21 11:22	03/22/21 20:33	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00057J**	mg/L	0.0030	0.00028	1	03/19/21 12:10	03/19/21 21:06	7440-36-0	
Arsenic	**0.0013J**	mg/L	0.0050	0.00078	1	03/19/21 12:10	03/19/21 21:06	7440-38-2	
Barium	**0.32**	mg/L	0.0050	0.00071	1	03/19/21 12:10	03/19/21 21:06	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/19/21 12:10	03/19/21 21:06	7440-41-7	
Boron	**0.060**	mg/L	0.040	0.0052	1	03/19/21 12:10	03/19/21 21:06	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/19/21 12:10	03/19/21 21:06	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/19/21 12:10	03/19/21 21:06	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/19/21 12:10	03/19/21 21:06	7440-48-4	
Lead	**0.000094J**	mg/L	0.0010	0.000036	1	03/19/21 12:10	03/19/21 21:06	7439-92-1	
Lithium	**0.0022J**	mg/L	0.030	0.00081	1	03/19/21 12:10	03/19/21 21:06	7439-93-2	
Molybdenum	**0.0064J**	mg/L	0.010	0.00069	1	03/19/21 12:10	03/19/21 21:06	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/19/21 12:10	03/19/21 21:06	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/19/21 12:10	03/19/21 21:06	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**279**	mg/L	10.0	10.0	1		03/17/21 17:40		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.5**	mg/L	1.0	0.60	1		03/19/21 00:00	16887-00-6	
Fluoride	**0.20**	mg/L	0.10	0.050	1		03/19/21 00:00	16984-48-8	
Sulfate	**38.6**	mg/L	1.0	0.50	1		03/19/21 00:00	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Sample: HGWC-10 **Lab ID: 92527268006** Collected: 03/12/21 10:11 Received: 03/15/21 12:00 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		03/22/21 11:58		
pH	**6.76**	Std. Units			1		03/22/21 11:58		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**146**	mg/L	1.0	0.070	1	03/26/21 10:56	03/26/21 19:19	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	0.00028	1	03/27/21 11:30	03/29/21 18:43	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/27/21 11:30	03/29/21 18:43	7440-38-2	
Barium	**0.058**	mg/L	0.0050	0.00071	1	03/27/21 11:30	03/29/21 18:43	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/27/21 11:30	03/29/21 18:43	7440-41-7	
Boron	**0.64**	mg/L	0.040	0.0052	1	03/27/21 11:30	03/29/21 18:43	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/27/21 11:30	03/29/21 18:43	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/27/21 11:30	03/29/21 18:43	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/27/21 11:30	03/29/21 18:43	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/27/21 11:30	03/29/21 18:43	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/27/21 11:30	03/29/21 18:43	7439-93-2	
Molybdenum	**0.00070J**	mg/L	0.010	0.00069	1	03/27/21 11:30	03/29/21 18:43	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/27/21 11:30	03/29/21 18:43	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/21 11:30	03/29/21 18:43	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**490**	mg/L	10.0	10.0	1		03/23/21 07:39		H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**35.0**	mg/L	1.0	0.60	1		03/21/21 01:09	16887-00-6	
Fluoride	**0.054J**	mg/L	0.10	0.050	1		03/21/21 01:09	16984-48-8	
Sulfate	**120**	mg/L	3.0	1.5	3		03/23/21 19:12	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Sample: MW-27D **Lab ID: 92527268007** Collected: 03/12/21 09:47 Received: 03/15/21 12:00 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		03/22/21 11:58		
pH	**7.88**	Std. Units			1		03/22/21 11:58		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**28.0**	mg/L	1.0	0.070	1	03/26/21 10:56	03/26/21 19:48	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	0.00028	1	03/27/21 11:30	03/29/21 18:48	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/27/21 11:30	03/29/21 18:48	7440-38-2	
Barium	**1.1**	mg/L	0.025	0.0036	5	03/27/21 11:30	03/30/21 12:03	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/27/21 11:30	03/29/21 18:48	7440-41-7	
Boron	**0.13**	mg/L	0.040	0.0052	1	03/27/21 11:30	03/29/21 18:48	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/27/21 11:30	03/29/21 18:48	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/27/21 11:30	03/29/21 18:48	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/27/21 11:30	03/29/21 18:48	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/27/21 11:30	03/29/21 18:48	7439-92-1	
Lithium	**0.0090J**	mg/L	0.030	0.00081	1	03/27/21 11:30	03/29/21 18:48	7439-93-2	
Molybdenum	**0.00080J**	mg/L	0.010	0.00069	1	03/27/21 11:30	03/29/21 18:48	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/27/21 11:30	03/29/21 18:48	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/21 11:30	03/29/21 18:48	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**215**	mg/L	10.0	10.0	1		03/23/21 07:39		H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**31.3**	mg/L	1.0	0.60	1		03/21/21 01:24	16887-00-6	
Fluoride	**0.24**	mg/L	0.10	0.050	1		03/21/21 01:24	16984-48-8	
Sulfate	**7.4**	mg/L	1.0	0.50	1		03/21/21 01:24	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Sample: HGWC-7 FILTERED **Lab ID: 92527268008** Collected: 03/15/21 16:25 Received: 03/16/21 13:42 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		03/22/21 11:58		
pH	**7.19**	Std. Units			1		03/22/21 11:58		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**109**	mg/L	1.0	0.070	1	03/26/21 10:56	03/26/21 19:53	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	0.00028	1	03/27/21 11:30	03/29/21 18:54	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/27/21 11:30	03/29/21 18:54	7440-38-2	
Barium	**0.068**	mg/L	0.0050	0.00071	1	03/27/21 11:30	03/29/21 18:54	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/27/21 11:30	03/29/21 18:54	7440-41-7	
Boron	**1.1**	mg/L	0.040	0.0052	1	03/27/21 11:30	03/29/21 18:54	7440-42-8	
Cadmium	**0.00021J**	mg/L	0.00050	0.00012	1	03/27/21 11:30	03/29/21 18:54	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/27/21 11:30	03/29/21 18:54	7440-47-3	
Cobalt	**0.00053J**	mg/L	0.0050	0.00038	1	03/27/21 11:30	03/29/21 18:54	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/27/21 11:30	03/29/21 18:54	7439-92-1	
Lithium	**0.0020J**	mg/L	0.030	0.00081	1	03/27/21 11:30	03/29/21 18:54	7439-93-2	
Molybdenum	**0.050**	mg/L	0.010	0.00069	1	03/27/21 11:30	03/29/21 18:54	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/27/21 11:30	03/29/21 18:54	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/21 11:30	03/29/21 18:54	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**366**	mg/L	10.0	10.0	1		03/22/21 15:10		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**44.4**	mg/L	1.0	0.60	1		03/20/21 16:46	16887-00-6	
Fluoride	**0.088J**	mg/L	0.10	0.050	1		03/20/21 16:46	16984-48-8	
Sulfate	**80.6**	mg/L	2.0	1.0	2		03/21/21 07:17	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Sample: HGWC-7 **Lab ID: 92527268009** Collected: 03/15/21 16:10 Received: 03/16/21 13:42 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		03/22/21 11:58		
pH	**7.19**	Std. Units			1		03/22/21 11:58		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**113**	mg/L	1.0	0.070	1	03/26/21 10:28	03/26/21 17:13	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	0.00028	1	03/27/21 11:30	03/29/21 19:00	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/27/21 11:30	03/29/21 19:00	7440-38-2	
Barium	**0.074**	mg/L	0.0050	0.00071	1	03/27/21 11:30	03/29/21 19:00	7440-39-3	
Beryllium	**0.00019J**	mg/L	0.00050	0.000046	1	03/27/21 11:30	03/29/21 19:00	7440-41-7	
Boron	**1.1**	mg/L	0.040	0.0052	1	03/27/21 11:30	03/29/21 19:00	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/27/21 11:30	03/29/21 19:00	7440-43-9	
Chromium	**0.0021J**	mg/L	0.0050	0.00055	1	03/27/21 11:30	03/29/21 19:00	7440-47-3	
Cobalt	**0.0014J**	mg/L	0.0050	0.00038	1	03/27/21 11:30	03/29/21 19:00	7440-48-4	
Lead	**0.0013**	mg/L	0.0010	0.000036	1	03/27/21 11:30	03/29/21 19:00	7439-92-1	
Lithium	**0.0038J**	mg/L	0.030	0.00081	1	03/27/21 11:30	03/29/21 19:00	7439-93-2	
Molybdenum	**0.047**	mg/L	0.010	0.00069	1	03/27/21 11:30	03/29/21 19:00	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/27/21 11:30	03/29/21 19:00	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/21 11:30	03/29/21 19:00	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**370**	mg/L	10.0	10.0	1		03/22/21 15:10		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**44.5**	mg/L	1.0	0.60	1		03/20/21 17:00	16887-00-6	
Fluoride	**0.086J**	mg/L	0.10	0.050	1		03/20/21 17:00	16984-48-8	
Sulfate	**107**	mg/L	2.0	1.0	2		03/21/21 07:33	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Sample: HGWC-8 **Lab ID: 92527268010** Collected: 03/15/21 11:00 Received: 03/16/21 13:42 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		03/22/21 11:58		
pH	**7.09**	Std. Units			1		03/22/21 11:58		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**156**	mg/L	1.0	0.070	1	03/26/21 10:56	03/26/21 19:58	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	0.00028	1	03/27/21 11:30	03/29/21 19:06	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/27/21 11:30	03/29/21 19:06	7440-38-2	
Barium	**0.063**	mg/L	0.0050	0.00071	1	03/27/21 11:30	03/29/21 19:06	7440-39-3	
Beryllium	**0.000078J**	mg/L	0.00050	0.000046	1	03/27/21 11:30	03/29/21 19:06	7440-41-7	
Boron	**1.7**	mg/L	0.040	0.0052	1	03/27/21 11:30	03/29/21 19:06	7440-42-8	
Cadmium	**0.00017J**	mg/L	0.00050	0.00012	1	03/27/21 11:30	03/29/21 19:06	7440-43-9	
Chromium	**0.00082J**	mg/L	0.0050	0.00055	1	03/27/21 11:30	03/29/21 19:06	7440-47-3	
Cobalt	**0.0019J**	mg/L	0.0050	0.00038	1	03/27/21 11:30	03/29/21 19:06	7440-48-4	
Lead	**0.00011J**	mg/L	0.0010	0.000036	1	03/27/21 11:30	03/29/21 19:06	7439-92-1	
Lithium	**0.0029J**	mg/L	0.030	0.00081	1	03/27/21 11:30	03/29/21 19:06	7439-93-2	
Molybdenum	**0.41**	mg/L	0.010	0.00069	1	03/27/21 11:30	03/29/21 19:06	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/27/21 11:30	03/29/21 19:06	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/21 11:30	03/29/21 19:06	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**614**	mg/L	20.0	20.0	1		03/22/21 15:10		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**72.4**	mg/L	1.0	0.60	1		03/20/21 17:14	16887-00-6	
Fluoride	**0.51**	mg/L	0.10	0.050	1		03/20/21 17:14	16984-48-8	
Sulfate	**272**	mg/L	6.0	3.0	6		03/21/21 07:47	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Sample: MW-7 **Lab ID: 92527268011** Collected: 03/15/21 12:00 Received: 03/16/21 13:42 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		03/22/21 11:58		
pH	**6.66**	Std. Units			1		03/22/21 11:58		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**76.9**	mg/L	1.0	0.070	1	03/26/21 10:56	03/26/21 20:03	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	0.00028	1	03/27/21 11:30	03/29/21 19:11	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/27/21 11:30	03/29/21 19:11	7440-38-2	
Barium	**0.053**	mg/L	0.0050	0.00071	1	03/27/21 11:30	03/29/21 19:11	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/27/21 11:30	03/29/21 19:11	7440-41-7	
Boron	**0.16**	mg/L	0.040	0.0052	1	03/27/21 11:30	03/29/21 19:11	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/27/21 11:30	03/29/21 19:11	7440-43-9	
Chromium	**0.0018J**	mg/L	0.0050	0.00055	1	03/27/21 11:30	03/29/21 19:11	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/27/21 11:30	03/29/21 19:11	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/27/21 11:30	03/29/21 19:11	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/27/21 11:30	03/29/21 19:11	7439-93-2	
Molybdenum	**0.0015J**	mg/L	0.010	0.00069	1	03/27/21 11:30	03/29/21 19:11	7439-98-7	
Selenium	**0.0021J**	mg/L	0.0050	0.0016	1	03/27/21 11:30	03/29/21 19:11	7782-49-2	B
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/21 11:30	03/29/21 19:11	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**293**	mg/L	10.0	10.0	1		03/22/21 15:10		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**6.8**	mg/L	1.0	0.60	1		03/20/21 17:27	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/20/21 17:27	16984-48-8	
Sulfate	**92.1**	mg/L	2.0	1.0	2		03/21/21 08:03	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Sample: MW-20 **Lab ID: 92527268012** Collected: 03/15/21 14:22 Received: 03/16/21 13:42 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		03/22/21 11:58		
pH	**6.97**	Std. Units			1		03/22/21 11:58		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**121**	mg/L	1.0	0.070	1	03/26/21 10:56	03/26/21 20:07	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/27/21 11:30	03/29/21 19:17	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/27/21 11:30	03/29/21 19:17	7440-38-2	
Barium	**0.096**	mg/L	0.0050	0.00071	1	03/27/21 11:30	03/29/21 19:17	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/27/21 11:30	03/29/21 19:17	7440-41-7	
Boron	**0.12**	mg/L	0.040	0.0052	1	03/27/21 11:30	03/29/21 19:17	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/27/21 11:30	03/29/21 19:17	7440-43-9	
Chromium	**0.00068J**	mg/L	0.0050	0.00055	1	03/27/21 11:30	03/29/21 19:17	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/27/21 11:30	03/29/21 19:17	7440-48-4	
Lead	**0.00010J**	mg/L	0.0010	0.000036	1	03/27/21 11:30	03/29/21 19:17	7439-92-1	
Lithium	**0.0011J**	mg/L	0.030	0.00081	1	03/27/21 11:30	03/29/21 19:17	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/27/21 11:30	03/29/21 19:17	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/27/21 11:30	03/29/21 19:17	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/21 11:30	03/29/21 19:17	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**406**	mg/L	10.0	10.0	1		03/22/21 15:10		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**31.1**	mg/L	1.0	0.60	1		03/20/21 17:41	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/20/21 17:41	16984-48-8	
Sulfate	**109**	mg/L	2.0	1.0	2		03/21/21 08:19	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Sample: MW-28D **Lab ID: 92527268013** Collected: 03/15/21 18:25 Received: 03/16/21 13:42 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		03/22/21 11:58		
pH	**7.61**	Std. Units			1		03/22/21 11:58		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**66.1**	mg/L	1.0	0.070	1	03/26/21 10:56	03/26/21 20:12	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	0.00028	1	03/27/21 11:30	03/29/21 19:23	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/27/21 11:30	03/29/21 19:23	7440-38-2	
Barium	**0.45**	mg/L	0.0050	0.00071	1	03/27/21 11:30	03/29/21 19:23	7440-39-3	
Beryllium	**0.000048J**	mg/L	0.00050	0.000046	1	03/27/21 11:30	03/29/21 19:23	7440-41-7	
Boron	**0.36**	mg/L	0.040	0.0052	1	03/27/21 11:30	03/29/21 19:23	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/27/21 11:30	03/29/21 19:23	7440-43-9	
Chromium	**0.00078J**	mg/L	0.0050	0.00055	1	03/27/21 11:30	03/29/21 19:23	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/27/21 11:30	03/29/21 19:23	7440-48-4	
Lead	**0.00034J**	mg/L	0.0010	0.000036	1	03/27/21 11:30	03/29/21 19:23	7439-92-1	
Lithium	**0.013J**	mg/L	0.030	0.00081	1	03/27/21 11:30	03/29/21 19:23	7439-93-2	
Molybdenum	**0.013**	mg/L	0.010	0.00069	1	03/27/21 11:30	03/29/21 19:23	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/27/21 11:30	03/29/21 19:23	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/21 11:30	03/29/21 19:23	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**293**	mg/L	10.0	10.0	1		03/22/21 15:10		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**35.8**	mg/L	1.0	0.60	1		03/20/21 18:21	16887-00-6	
Fluoride	**0.24**	mg/L	0.10	0.050	1		03/20/21 18:21	16984-48-8	
Sulfate	**50.1**	mg/L	1.0	0.50	1		03/20/21 18:21	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Sample: MW-29 **Lab ID: 92527268014** Collected: 03/15/21 12:52 Received: 03/16/21 13:42 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		03/22/21 11:58		
pH	**7.05**	Std. Units			1		03/22/21 11:58		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**145**	mg/L	1.0	0.070	1	03/26/21 10:56	03/26/21 20:17	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/27/21 11:30	03/29/21 19:40	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/27/21 11:30	03/29/21 19:40	7440-38-2	
Barium	**0.078**	mg/L	0.0050	0.00071	1	03/27/21 11:30	03/29/21 19:40	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/27/21 11:30	03/29/21 19:40	7440-41-7	
Boron	**1.2**	mg/L	0.040	0.0052	1	03/27/21 11:30	03/29/21 19:40	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/27/21 11:30	03/29/21 19:40	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/27/21 11:30	03/29/21 19:40	7440-47-3	
Cobalt	**0.0011J**	mg/L	0.0050	0.00038	1	03/27/21 11:30	03/29/21 19:40	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/27/21 11:30	03/29/21 19:40	7439-92-1	
Lithium	**0.0022J**	mg/L	0.030	0.00081	1	03/27/21 11:30	03/29/21 19:40	7439-93-2	
Molybdenum	**0.0031J**	mg/L	0.010	0.00069	1	03/27/21 11:30	03/29/21 19:40	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/27/21 11:30	03/29/21 19:40	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/21 11:30	03/29/21 19:40	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**555**	mg/L	10.0	10.0	1		03/22/21 15:10		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**73.6**	mg/L	1.0	0.60	1		03/20/21 18:35	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/20/21 18:35	16984-48-8	
Sulfate	**148**	mg/L	3.0	1.5	3		03/21/21 08:34	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Sample: HGWC-9 **Lab ID: 92527268015** Collected: 03/16/21 14:48 Received: 03/17/21 13:10 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		03/22/21 11:58		
pH	**7.10**	Std. Units			1		03/22/21 11:58		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**182**	mg/L	1.0	0.070	1	03/26/21 10:28	03/26/21 17:42	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	0.00028	1	03/27/21 11:30	03/29/21 19:46	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/27/21 11:30	03/29/21 19:46	7440-38-2	
Barium	**0.11**	mg/L	0.0050	0.00071	1	03/27/21 11:30	03/29/21 19:46	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/27/21 11:30	03/29/21 19:46	7440-41-7	
Boron	**2.2**	mg/L	0.040	0.0052	1	03/27/21 11:30	03/29/21 19:46	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/27/21 11:30	03/29/21 19:46	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/27/21 11:30	03/29/21 19:46	7440-47-3	
Cobalt	**0.00069J**	mg/L	0.0050	0.00038	1	03/27/21 11:30	03/29/21 19:46	7440-48-4	
Lead	**0.00027J**	mg/L	0.0010	0.000036	1	03/27/21 11:30	03/29/21 19:46	7439-92-1	
Lithium	**0.0046J**	mg/L	0.030	0.00081	1	03/27/21 11:30	03/29/21 19:46	7439-93-2	
Molybdenum	**0.035**	mg/L	0.010	0.00069	1	03/27/21 11:30	03/29/21 19:46	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/27/21 11:30	03/29/21 19:46	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/21 11:30	03/29/21 19:46	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**672**	mg/L	20.0	20.0	1		03/23/21 07:59		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**94.7**	mg/L	5.0	3.0	5		03/22/21 09:56	16887-00-6	
Fluoride	**0.098J**	mg/L	0.10	0.050	1		03/22/21 00:11	16984-48-8	
Sulfate	**211**	mg/L	5.0	2.5	5		03/22/21 09:56	14808-79-8	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Sample: HGWC-11 **Lab ID: 92527268016** Collected: 03/16/21 09:45 Received: 03/17/21 13:10 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		03/22/21 11:58		
pH	**5.95**	Std. Units			1		03/22/21 11:58		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**132**	mg/L	1.0	0.070	1	03/26/21 10:28	03/26/21 17:47	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	0.00028	1	03/27/21 11:54	03/30/21 18:35	7440-36-0	
Arsenic	**0.0017J**	mg/L	0.0050	0.00078	1	03/27/21 11:54	03/30/21 18:35	7440-38-2	
Barium	**0.035**	mg/L	0.0050	0.00071	1	03/27/21 11:54	03/30/21 18:35	7440-39-3	
Beryllium	**0.000081J**	mg/L	0.00050	0.000046	1	03/27/21 11:54	03/30/21 18:35	7440-41-7	
Boron	**0.53**	mg/L	0.040	0.0052	1	03/27/21 11:54	03/30/21 18:35	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/27/21 11:54	03/30/21 18:35	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/27/21 11:54	03/30/21 18:35	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/27/21 11:54	03/30/21 18:35	7440-48-4	
Lead	**0.000099J**	mg/L	0.0010	0.000036	1	03/27/21 11:54	03/30/21 18:35	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/27/21 11:54	03/30/21 18:35	7439-93-2	
Molybdenum	**0.015**	mg/L	0.010	0.00069	1	03/27/21 11:54	03/30/21 18:35	7439-98-7	
Selenium	**0.015**	mg/L	0.0050	0.0016	1	03/27/21 11:54	03/30/21 18:35	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/21 11:54	03/30/21 18:35	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**558**	mg/L	10.0	10.0	1		03/23/21 07:59		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**11.5**	mg/L	1.0	0.60	1		03/22/21 00:51	16887-00-6	
Fluoride	**0.21**	mg/L	0.10	0.050	1		03/22/21 00:51	16984-48-8	
Sulfate	**291**	mg/L	6.0	3.0	6		03/22/21 10:11	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Sample: HGWC-12 **Lab ID: 92527268017** Collected: 03/16/21 11:12 Received: 03/17/21 13:10 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		03/22/21 11:58		
pH	**7.15**	Std. Units			1		03/22/21 11:58		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**166**	mg/L	1.0	0.070	1	03/26/21 10:28	03/26/21 17:52	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/27/21 11:54	03/30/21 18:41	7440-36-0	
Arsenic	**0.0038J**	mg/L	0.0050	0.00078	1	03/27/21 11:54	03/30/21 18:41	7440-38-2	
Barium	**0.084**	mg/L	0.0050	0.00071	1	03/27/21 11:54	03/30/21 18:41	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/27/21 11:54	03/30/21 18:41	7440-41-7	
Boron	**1.9**	mg/L	0.040	0.0052	1	03/27/21 11:54	03/30/21 18:41	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/27/21 11:54	03/30/21 18:41	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/27/21 11:54	03/30/21 18:41	7440-47-3	
Cobalt	**0.0012J**	mg/L	0.0050	0.00038	1	03/27/21 11:54	03/30/21 18:41	7440-48-4	
Lead	**0.000089J**	mg/L	0.0010	0.000036	1	03/27/21 11:54	03/30/21 18:41	7439-92-1	
Lithium	**0.0081J**	mg/L	0.030	0.00081	1	03/27/21 11:54	03/30/21 18:41	7439-93-2	
Molybdenum	**0.044**	mg/L	0.010	0.00069	1	03/27/21 11:54	03/30/21 18:41	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/27/21 11:54	03/30/21 18:41	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/21 11:54	03/30/21 18:41	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**614**	mg/L	20.0	20.0	1		03/23/21 07:59		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**56.8**	mg/L	1.0	0.60	1		03/22/21 01:05	16887-00-6	
Fluoride	**0.20**	mg/L	0.10	0.050	1		03/22/21 01:05	16984-48-8	
Sulfate	**248**	mg/L	5.0	2.5	5		03/22/21 10:25	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Sample: MW-5 **Lab ID: 92527268018** Collected: 03/16/21 16:08 Received: 03/17/21 13:10 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		03/22/21 11:58		
pH	**5.78**	Std. Units			1		03/22/21 11:58		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**71.8**	mg/L	1.0	0.070	1	03/26/21 10:28	03/26/21 17:57	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	0.00028	1	03/27/21 11:54	03/30/21 18:46	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/27/21 11:54	03/30/21 18:46	7440-38-2	
Barium	**0.046**	mg/L	0.0050	0.00071	1	03/27/21 11:54	03/30/21 18:46	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/27/21 11:54	03/30/21 18:46	7440-41-7	
Boron	**0.037J**	mg/L	0.040	0.0052	1	03/27/21 11:54	03/30/21 18:46	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/27/21 11:54	03/30/21 18:46	7440-43-9	
Chromium	**0.0024J**	mg/L	0.0050	0.00055	1	03/27/21 11:54	03/30/21 18:46	7440-47-3	B
Cobalt	ND	mg/L	0.0050	0.00038	1	03/27/21 11:54	03/30/21 18:46	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/27/21 11:54	03/30/21 18:46	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/27/21 11:54	03/30/21 18:46	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/27/21 11:54	03/30/21 18:46	7439-98-7	
Selenium	**0.0026J**	mg/L	0.0050	0.0016	1	03/27/21 11:54	03/30/21 18:46	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/21 11:54	03/30/21 18:46	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**333**	mg/L	10.0	10.0	1		03/23/21 08:00		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.4**	mg/L	1.0	0.60	1		03/22/21 01:18	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/22/21 01:18	16984-48-8	
Sulfate	**162**	mg/L	4.0	2.0	4		03/22/21 10:40	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Sample: MW-6 **Lab ID: 92527268019** Collected: 03/16/21 15:43 Received: 03/17/21 13:10 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		03/22/21 11:58		
pH	**6.96**	Std. Units			1		03/22/21 11:58		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**184**	mg/L	1.0	0.070	1	03/26/21 10:28	03/26/21 18:01	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	0.00028	1	03/27/21 11:54	03/30/21 18:52	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/27/21 11:54	03/30/21 18:52	7440-38-2	
Barium	**0.081**	mg/L	0.0050	0.00071	1	03/27/21 11:54	03/30/21 18:52	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/27/21 11:54	03/30/21 18:52	7440-41-7	
Boron	**0.81**	mg/L	0.040	0.0052	1	03/27/21 11:54	03/30/21 18:52	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/27/21 11:54	03/30/21 18:52	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/27/21 11:54	03/30/21 18:52	7440-47-3	
Cobalt	**0.00042J**	mg/L	0.0050	0.00038	1	03/27/21 11:54	03/30/21 18:52	7440-48-4	
Lead	**0.000036J**	mg/L	0.0010	0.000036	1	03/27/21 11:54	03/30/21 18:52	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/27/21 11:54	03/30/21 18:52	7439-93-2	
Molybdenum	**0.0023J**	mg/L	0.010	0.00069	1	03/27/21 11:54	03/30/21 18:52	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/27/21 11:54	03/30/21 18:52	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/21 11:54	03/30/21 18:52	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**600**	mg/L	20.0	20.0	1		03/23/21 08:00		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**49.8**	mg/L	1.0	0.60	1		03/22/21 01:32	16887-00-6	
Fluoride	**0.060J**	mg/L	0.10	0.050	1		03/22/21 01:32	16984-48-8	
Sulfate	**189**	mg/L	4.0	2.0	4		03/22/21 10:55	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Sample: MW-25D **Lab ID: 92527268020** Collected: 03/16/21 12:32 Received: 03/17/21 13:10 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		03/22/21 11:58		
pH	**7.76**	Std. Units			1		03/22/21 11:58		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**24.8**	mg/L	1.0	0.070	1	03/26/21 10:28	03/26/21 18:06	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	0.00028	1	03/27/21 11:54	03/30/21 18:58	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/27/21 11:54	03/30/21 18:58	7440-38-2	
Barium	**0.51**	mg/L	0.0050	0.00071	1	03/27/21 11:54	03/30/21 18:58	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/27/21 11:54	03/30/21 18:58	7440-41-7	
Boron	**0.40**	mg/L	0.040	0.0052	1	03/27/21 11:54	03/30/21 18:58	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/27/21 11:54	03/30/21 18:58	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/27/21 11:54	03/30/21 18:58	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/27/21 11:54	03/30/21 18:58	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/27/21 11:54	03/30/21 18:58	7439-92-1	
Lithium	**0.049**	mg/L	0.030	0.00081	1	03/27/21 11:54	03/30/21 18:58	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/27/21 11:54	03/30/21 18:58	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/27/21 11:54	03/30/21 18:58	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/21 11:54	03/30/21 18:58	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**347**	mg/L	10.0	10.0	1		03/23/21 08:00		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**29.2**	mg/L	1.0	0.60	1		03/22/21 01:46	16887-00-6	
Fluoride	**1.7**	mg/L	0.10	0.050	1		03/22/21 01:46	16984-48-8	
Sulfate	**9.4**	mg/L	1.0	0.50	1		03/22/21 01:46	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Sample: DUP-1 **Lab ID: 92527268021** Collected: 03/16/21 00:00 Received: 03/17/21 13:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**24.8**	mg/L	1.0	0.070	1	03/26/21 10:28	03/26/21 18:11	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	0.00028	1	03/27/21 11:54	03/30/21 19:04	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/27/21 11:54	03/30/21 19:04	7440-38-2	
Barium	**0.51**	mg/L	0.0050	0.00071	1	03/27/21 11:54	03/30/21 19:04	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/27/21 11:54	03/30/21 19:04	7440-41-7	
Boron	**0.41**	mg/L	0.040	0.0052	1	03/27/21 11:54	03/30/21 19:04	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/27/21 11:54	03/30/21 19:04	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/27/21 11:54	03/30/21 19:04	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/27/21 11:54	03/30/21 19:04	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/27/21 11:54	03/30/21 19:04	7439-92-1	
Lithium	**0.050**	mg/L	0.030	0.00081	1	03/27/21 11:54	03/30/21 19:04	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/27/21 11:54	03/30/21 19:04	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/27/21 11:54	03/30/21 19:04	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/21 11:54	03/30/21 19:04	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**351**	mg/L	10.0	10.0	1		03/23/21 08:00		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**29.7**	mg/L	1.0	0.60	1		03/22/21 01:59	16887-00-6	
Fluoride	**1.7**	mg/L	0.10	0.050	1		03/22/21 01:59	16984-48-8	
Sulfate	**9.6**	mg/L	1.0	0.50	1		03/22/21 01:59	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Sample: EB-1 **Lab ID: 92527268022** Collected: 03/16/21 16:40 Received: 03/17/21 13:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.070	1	03/26/21 10:28	03/26/21 18:16	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	0.00028	1	03/27/21 11:54	03/30/21 19:09	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/27/21 11:54	03/30/21 19:09	7440-38-2	
Barium	ND	mg/L	0.0050	0.00071	1	03/27/21 11:54	03/30/21 19:09	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/27/21 11:54	03/30/21 19:09	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/27/21 11:54	03/30/21 19:09	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/27/21 11:54	03/30/21 19:09	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/27/21 11:54	03/30/21 19:09	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/27/21 11:54	03/30/21 19:09	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/27/21 11:54	03/30/21 19:09	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/27/21 11:54	03/30/21 19:09	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/27/21 11:54	03/30/21 19:09	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/27/21 11:54	03/30/21 19:09	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/21 11:54	03/30/21 19:09	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**10.0**	mg/L	10.0	10.0	1		03/23/21 08:00		
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		03/23/21 02:54	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/23/21 02:54	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		03/23/21 02:54	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Sample: FB-1 **Lab ID: 92527268023** Collected: 03/16/21 16:25 Received: 03/17/21 13:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.070	1	03/26/21 10:28	03/26/21 18:21	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00029J**	mg/L	0.0030	0.00028	1	03/27/21 11:00	04/02/21 15:31	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/27/21 11:00	04/02/21 15:31	7440-38-2	
Barium	ND	mg/L	0.0050	0.00071	1	03/27/21 11:00	04/02/21 15:31	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/27/21 11:00	04/02/21 15:31	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/27/21 11:00	04/02/21 15:31	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/27/21 11:00	04/02/21 15:31	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/27/21 11:00	04/02/21 15:31	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/27/21 11:00	04/02/21 15:31	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/27/21 11:00	04/02/21 15:31	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/27/21 11:00	04/02/21 15:31	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/27/21 11:00	04/02/21 15:31	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/27/21 11:00	04/02/21 15:31	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/21 11:00	04/02/21 15:31	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		03/23/21 08:00		
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		03/23/21 03:35	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/23/21 03:35	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		03/23/21 03:35	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Sample: HGWC-13 **Lab ID: 92527268024** Collected: 03/17/21 14:58 Received: 03/18/21 13:17 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		03/22/21 11:58		
pH	**7.33**	Std. Units			1		03/22/21 11:58		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**184**	mg/L	1.0	0.070	1	03/26/21 10:28	03/26/21 18:26	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00049J**	mg/L	0.0030	0.00028	1	03/27/21 11:00	03/29/21 11:47	7440-36-0	
Arsenic	**0.39**	mg/L	0.0050	0.00078	1	03/27/21 11:00	03/29/21 11:47	7440-38-2	
Barium	**0.056**	mg/L	0.0050	0.00071	1	03/27/21 11:00	03/29/21 11:47	7440-39-3	
Beryllium	**0.000090J**	mg/L	0.00050	0.000046	1	03/27/21 11:00	03/29/21 11:47	7440-41-7	
Boron	**0.89**	mg/L	0.040	0.0052	1	03/27/21 11:00	03/29/21 11:47	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/27/21 11:00	03/29/21 11:47	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/27/21 11:00	03/29/21 11:47	7440-47-3	
Cobalt	**0.0029J**	mg/L	0.0050	0.00038	1	03/27/21 11:00	03/29/21 11:47	7440-48-4	
Lead	**0.00015J**	mg/L	0.0010	0.000036	1	03/27/21 11:00	03/29/21 11:47	7439-92-1	
Lithium	**0.031**	mg/L	0.030	0.00081	1	03/27/21 11:00	03/29/21 11:47	7439-93-2	
Molybdenum	**0.035**	mg/L	0.010	0.00069	1	03/27/21 11:00	03/29/21 11:47	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/27/21 11:00	03/29/21 11:47	7782-49-2	
Thallium	**0.00037J**	mg/L	0.0010	0.00014	1	03/27/21 11:00	03/29/21 11:47	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**716**	mg/L	20.0	20.0	1		03/23/21 08:41		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**31.4**	mg/L	1.0	0.60	1		03/23/21 09:00	16887-00-6	
Fluoride	**0.65**	mg/L	0.10	0.050	1		03/23/21 09:00	16984-48-8	
Sulfate	**384**	mg/L	8.0	4.0	8		03/23/21 16:15	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Sample: MW-19 **Lab ID: 92527268025** Collected: 03/17/21 10:20 Received: 03/18/21 13:17 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		03/22/21 11:58		
pH	**6.34**	Std. Units			1		03/22/21 11:58		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**130**	mg/L	1.0	0.070	1	03/26/21 10:28	03/26/21 18:40	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	0.00028	1	03/27/21 11:00	04/02/21 15:37	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/27/21 11:00	04/02/21 15:37	7440-38-2	
Barium	**0.049**	mg/L	0.0050	0.00071	1	03/27/21 11:00	04/02/21 15:37	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/27/21 11:00	04/02/21 15:37	7440-41-7	
Boron	**0.69**	mg/L	0.040	0.0052	1	03/27/21 11:00	04/02/21 15:37	7440-42-8	
Cadmium	**0.00016J**	mg/L	0.00050	0.00012	1	03/27/21 11:00	04/02/21 15:37	7440-43-9	
Chromium	**0.0022J**	mg/L	0.0050	0.00055	1	03/27/21 11:00	04/02/21 15:37	7440-47-3	
Cobalt	**0.037**	mg/L	0.0050	0.00038	1	03/27/21 11:00	04/02/21 15:37	7440-48-4	
Lead	**0.000038J**	mg/L	0.0010	0.000036	1	03/27/21 11:00	04/02/21 15:37	7439-92-1	
Lithium	**0.012J**	mg/L	0.030	0.00081	1	03/27/21 11:00	04/02/21 15:37	7439-93-2	
Molybdenum	**0.043**	mg/L	0.010	0.00069	1	03/27/21 11:00	04/02/21 15:37	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/27/21 11:00	04/02/21 15:37	7782-49-2	
Thallium	**0.00026J**	mg/L	0.0010	0.00014	1	03/27/21 11:00	04/02/21 15:37	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**543**	mg/L	10.0	10.0	1		03/23/21 08:41		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**19.8**	mg/L	1.0	0.60	1		03/23/21 09:13	16887-00-6	
Fluoride	**0.18**	mg/L	0.10	0.050	1		03/23/21 09:13	16984-48-8	
Sulfate	**260**	mg/L	5.0	2.5	5		03/23/21 16:30	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Sample: MW-24D **Lab ID: 92527268026** Collected: 03/17/21 16:00 Received: 03/18/21 13:17 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		03/22/21 11:58		
pH	**7.66**	Std. Units			1		03/22/21 11:58		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**102**	mg/L	1.0	0.070	1	03/26/21 10:28	03/26/21 18:45	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/27/21 11:00	04/02/21 15:42	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/27/21 11:00	04/02/21 15:42	7440-38-2	
Barium	**0.055**	mg/L	0.0050	0.00071	1	03/27/21 11:00	04/02/21 15:42	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/27/21 11:00	04/02/21 15:42	7440-41-7	
Boron	**0.49**	mg/L	0.040	0.0052	1	03/27/21 11:00	04/02/21 15:42	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/27/21 11:00	04/02/21 15:42	7440-43-9	
Chromium	**0.0017J**	mg/L	0.0050	0.00055	1	03/27/21 11:00	04/02/21 15:42	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/27/21 11:00	04/02/21 15:42	7440-48-4	
Lead	**0.000040J**	mg/L	0.0010	0.000036	1	03/27/21 11:00	04/02/21 15:42	7439-92-1	
Lithium	**0.0027J**	mg/L	0.030	0.00081	1	03/27/21 11:00	04/02/21 15:42	7439-93-2	
Molybdenum	**0.0010J**	mg/L	0.010	0.00069	1	03/27/21 11:00	04/02/21 15:42	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/27/21 11:00	04/02/21 15:42	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/21 11:00	04/02/21 15:42	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**420**	mg/L	10.0	10.0	1		03/23/21 08:41		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**42.9**	mg/L	1.0	0.60	1		03/23/21 09:27	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/23/21 09:27	16984-48-8	
Sulfate	**137**	mg/L	3.0	1.5	3		03/23/21 16:45	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Sample: MW-26D **Lab ID: 92527268027** Collected: 03/17/21 08:50 Received: 03/18/21 13:17 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		03/22/21 11:58		
pH	**7.14**	Std. Units			1		03/22/21 11:58		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**175**	mg/L	1.0	0.070	1	03/26/21 10:28	03/26/21 18:50	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	0.00028	1	03/27/21 11:00	04/02/21 15:48	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/27/21 11:00	04/02/21 15:48	7440-38-2	
Barium	**0.094**	mg/L	0.0050	0.00071	1	03/27/21 11:00	04/02/21 15:48	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/27/21 11:00	04/02/21 15:48	7440-41-7	
Boron	**2.1**	mg/L	0.040	0.0052	1	03/27/21 11:00	04/02/21 15:48	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/27/21 11:00	04/02/21 15:48	7440-43-9	
Chromium	**0.0015J**	mg/L	0.0050	0.00055	1	03/27/21 11:00	04/02/21 15:48	7440-47-3	
Cobalt	**0.00044J**	mg/L	0.0050	0.00038	1	03/27/21 11:00	04/02/21 15:48	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/27/21 11:00	04/02/21 15:48	7439-92-1	
Lithium	**0.0040J**	mg/L	0.030	0.00081	1	03/27/21 11:00	04/02/21 15:48	7439-93-2	
Molybdenum	**0.023**	mg/L	0.010	0.00069	1	03/27/21 11:00	04/02/21 15:48	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/27/21 11:00	04/02/21 15:48	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/21 11:00	04/02/21 15:48	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**738**	mg/L	20.0	20.0	1		03/23/21 08:41		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**95.3**	mg/L	4.0	2.4	4		03/23/21 17:29	16887-00-6	
Fluoride	**0.072J**	mg/L	0.10	0.050	1		03/23/21 09:40	16984-48-8	
Sulfate	**212**	mg/L	4.0	2.0	4		03/23/21 17:29	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

QC Batch: 606634
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92527268001, 92527268002

METHOD BLANK: 3196175 Matrix: Water
Associated Lab Samples: 92527268001, 92527268002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.070	03/19/21 03:10	

LABORATORY CONTROL SAMPLE: 3196176

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3196177 3196178

Parameter	Units	92526031001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	207	1	1	209	202	181	-447	75-125	3	20	M1

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

QC Batch: 608195
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92527268003, 92527268004, 92527268005

METHOD BLANK: 3204024 Matrix: Water
Associated Lab Samples: 92527268003, 92527268004, 92527268005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.070	03/22/21 19:59	

LABORATORY CONTROL SAMPLE: 3204025

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.95J	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3204026 3204027

Parameter	Units	92527256006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	43.8	1	1	44.4	43.0	63	-72	75-125	3	20	M1

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

QC Batch: 609342
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92527268006, 92527268007, 92527268008, 92527268010, 92527268011, 92527268012, 92527268013, 92527268014

METHOD BLANK: 3209682 Matrix: Water
Associated Lab Samples: 92527268006, 92527268007, 92527268008, 92527268010, 92527268011, 92527268012, 92527268013, 92527268014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.070	03/26/21 19:09	

LABORATORY CONTROL SAMPLE: 3209683

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3209684 3209685

Parameter	Units	92527268006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	146	1	1	147	153	8	641	75-125	4	20	M1

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

QC Batch: 609345
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92527268009, 92527268015, 92527268016, 92527268017, 92527268018, 92527268019, 92527268020, 92527268021, 92527268022, 92527268023, 92527268024, 92527268025, 92527268026, 92527268027

METHOD BLANK: 3209690 Matrix: Water
Associated Lab Samples: 92527268009, 92527268015, 92527268016, 92527268017, 92527268018, 92527268019, 92527268020, 92527268021, 92527268022, 92527268023, 92527268024, 92527268025, 92527268026, 92527268027

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.070	03/26/21 17:03	

LABORATORY CONTROL SAMPLE: 3209691

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3209692 3209693

Parameter	Units	92527268009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	113	1	1	108	110	-542	-380	75-125	1	20	M1

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

QC Batch: 606644
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92527268001, 92527268002

METHOD BLANK: 3196234 Matrix: Water
Associated Lab Samples: 92527268001, 92527268002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00035J	0.0030	0.00028	03/16/21 14:38	
Arsenic	mg/L	ND	0.0050	0.00078	03/16/21 14:38	
Barium	mg/L	ND	0.0050	0.00071	03/16/21 14:38	
Beryllium	mg/L	ND	0.00050	0.000046	03/16/21 14:38	
Boron	mg/L	ND	0.040	0.0052	03/16/21 14:38	
Cadmium	mg/L	ND	0.00050	0.00012	03/16/21 14:38	
Chromium	mg/L	ND	0.0050	0.00055	03/16/21 14:38	
Cobalt	mg/L	ND	0.0050	0.00038	03/16/21 14:38	
Lead	mg/L	ND	0.0010	0.000036	03/16/21 14:38	
Lithium	mg/L	ND	0.030	0.00081	03/16/21 14:38	
Molybdenum	mg/L	ND	0.010	0.00069	03/16/21 14:38	
Selenium	mg/L	ND	0.0050	0.0016	03/16/21 14:38	
Thallium	mg/L	ND	0.0010	0.00014	03/16/21 14:38	

LABORATORY CONTROL SAMPLE: 3196235

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.096	96	80-120	
Arsenic	mg/L	0.1	0.096	96	80-120	
Barium	mg/L	0.1	0.095	95	80-120	
Beryllium	mg/L	0.1	0.098	98	80-120	
Boron	mg/L	1	1.0	103	80-120	
Cadmium	mg/L	0.1	0.097	97	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.094	94	80-120	
Lithium	mg/L	0.1	0.096	96	80-120	
Molybdenum	mg/L	0.1	0.094	94	80-120	
Selenium	mg/L	0.1	0.090	90	80-120	
Thallium	mg/L	0.1	0.093	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3196236 3196237

Parameter	Units	92526031002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00079J	0.1	0.1	0.098	0.099	98	98	75-125	0	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	1	20	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3196236 3196237

Parameter	Units	92526031002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.016	0.1	0.1	0.11	0.11	96	95	75-125	1	20	
Beryllium	mg/L	0.000097J	0.1	0.1	0.083	0.080	82	80	75-125	3	20	
Boron	mg/L	0.36	1	1	1.2	1.2	84	83	75-125	1	20	
Cadmium	mg/L	0.017	0.1	0.1	0.11	0.11	96	95	75-125	1	20	
Chromium	mg/L	0.00080J	0.1	0.1	0.092	0.092	92	91	75-125	0	20	
Cobalt	mg/L	0.019	0.1	0.1	0.11	0.11	93	92	75-125	1	20	
Lead	mg/L	0.00017J	0.1	0.1	0.088	0.087	88	86	75-125	2	20	
Lithium	mg/L	0.026J	0.1	0.1	0.11	0.11	82	81	75-125	1	20	
Molybdenum	mg/L	ND	0.1	0.1	0.093	0.092	93	91	75-125	2	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.097	100	96	75-125	4	20	
Thallium	mg/L	ND	0.1	0.1	0.089	0.087	89	86	75-125	3	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

QC Batch: 607964
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92527268003, 92527268004, 92527268005

METHOD BLANK: 3202640 Matrix: Water
Associated Lab Samples: 92527268003, 92527268004, 92527268005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	03/19/21 19:29	
Arsenic	mg/L	ND	0.0050	0.00078	03/19/21 19:29	
Barium	mg/L	ND	0.0050	0.00071	03/19/21 19:29	
Beryllium	mg/L	ND	0.00050	0.000046	03/19/21 19:29	
Boron	mg/L	ND	0.040	0.0052	03/19/21 19:29	
Cadmium	mg/L	ND	0.00050	0.00012	03/19/21 19:29	
Chromium	mg/L	ND	0.0050	0.00055	03/19/21 19:29	
Cobalt	mg/L	ND	0.0050	0.00038	03/19/21 19:29	
Lead	mg/L	ND	0.0010	0.000036	03/19/21 19:29	
Lithium	mg/L	ND	0.030	0.00081	03/19/21 19:29	
Molybdenum	mg/L	ND	0.010	0.00069	03/19/21 19:29	
Selenium	mg/L	ND	0.0050	0.0016	03/19/21 19:29	
Thallium	mg/L	ND	0.0010	0.00014	03/19/21 19:29	

LABORATORY CONTROL SAMPLE: 3202641

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.12	120	80-120	
Arsenic	mg/L	0.1	0.11	106	80-120	
Barium	mg/L	0.1	0.11	106	80-120	
Beryllium	mg/L	0.1	0.11	109	80-120	
Boron	mg/L	1	1.0	105	80-120	
Cadmium	mg/L	0.1	0.11	107	80-120	
Chromium	mg/L	0.1	0.10	104	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Lead	mg/L	0.1	0.11	108	80-120	
Lithium	mg/L	0.1	0.11	107	80-120	
Molybdenum	mg/L	0.1	0.11	105	80-120	
Selenium	mg/L	0.1	0.10	103	80-120	
Thallium	mg/L	0.1	0.10	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3202642 3202643

Parameter	Units	92526941001 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	118	118	75-125	0	20	
Arsenic	mg/L	ND	0.1	0.1	0.11	0.10	107	104	75-125	2	20	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3202642 3202643

Parameter	Units	92526941001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	ND	0.1	0.1	0.11	0.11	107	106	75-125	1	20	
Beryllium	mg/L	ND	0.1	0.1	0.11	0.10	107	104	75-125	2	20	
Boron	mg/L	0.0052J	1	1	1.1	1.0	106	102	75-125	4	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	105	104	75-125	1	20	
Chromium	mg/L	0.00062J	0.1	0.1	0.11	0.10	108	103	75-125	4	20	
Cobalt	mg/L	ND	0.1	0.1	0.11	0.10	106	101	75-125	5	20	
Lead	mg/L	ND	0.1	0.1	0.11	0.11	107	106	75-125	1	20	
Lithium	mg/L	ND	0.1	0.1	0.11	0.10	106	104	75-125	3	20	
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.11	107	106	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.11	0.10	105	101	75-125	4	20	
Thallium	mg/L	ND	0.1	0.1	0.10	0.10	103	102	75-125	1	20	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

QC Batch: 609688
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92527268006, 92527268007, 92527268008, 92527268009, 92527268010, 92527268011, 92527268012, 92527268013, 92527268014, 92527268015

METHOD BLANK: 3211367 Matrix: Water
Associated Lab Samples: 92527268006, 92527268007, 92527268008, 92527268009, 92527268010, 92527268011, 92527268012, 92527268013, 92527268014, 92527268015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	03/29/21 18:31	
Arsenic	mg/L	ND	0.0050	0.00078	03/29/21 18:31	
Barium	mg/L	ND	0.0050	0.00071	03/29/21 18:31	
Beryllium	mg/L	ND	0.00050	0.000046	03/29/21 18:31	
Boron	mg/L	ND	0.040	0.0052	03/29/21 18:31	
Cadmium	mg/L	ND	0.00050	0.00012	03/29/21 18:31	
Chromium	mg/L	ND	0.0050	0.00055	03/29/21 18:31	
Cobalt	mg/L	ND	0.0050	0.00038	03/29/21 18:31	
Lead	mg/L	ND	0.0010	0.000036	03/29/21 18:31	
Lithium	mg/L	ND	0.030	0.00081	03/29/21 18:31	
Molybdenum	mg/L	ND	0.010	0.00069	03/29/21 18:31	
Selenium	mg/L	ND	0.0050	0.0016	03/29/21 18:31	
Thallium	mg/L	ND	0.0010	0.00014	03/29/21 18:31	

LABORATORY CONTROL SAMPLE: 3211368

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	104	80-120	
Arsenic	mg/L	0.1	0.096	96	80-120	
Barium	mg/L	0.1	0.091	91	80-120	
Beryllium	mg/L	0.1	0.096	96	80-120	
Boron	mg/L	1	0.96	96	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Chromium	mg/L	0.1	0.094	94	80-120	
Cobalt	mg/L	0.1	0.090	90	80-120	
Lead	mg/L	0.1	0.096	96	80-120	
Lithium	mg/L	0.1	0.097	97	80-120	
Molybdenum	mg/L	0.1	0.094	94	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	
Thallium	mg/L	0.1	0.095	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3211369 3211370

Parameter	Units	92528826005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	107	112	75-125	5	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3211369 3211370

Parameter	Units	92528826005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	ND	0.1	0.1	0.093	0.094	92	93	75-125	1	20	
Barium	mg/L	61.8 ug/L	0.1	0.1	0.16	0.17	98	108	75-125	6	20	
Beryllium	mg/L	ND	0.1	0.1	0.092	0.094	92	94	75-125	2	20	
Boron	mg/L	ND	1	1	0.91	0.92	90	90	75-125	0	20	
Cadmium	mg/L	13.6 ug/L	0.1	0.1	0.11	0.11	100	100	75-125	0	20	
Chromium	mg/L	ND	0.1	0.1	0.095	0.097	94	96	75-125	2	20	
Cobalt	mg/L	3.2 ug/L	0.1	0.1	0.095	0.095	92	92	75-125	0	20	
Lead	mg/L	ND	0.1	0.1	0.091	0.096	91	95	75-125	5	20	
Lithium	mg/L	ND	0.1	0.1	0.10	0.11	90	97	75-125	7	20	
Molybdenum	mg/L	ND	0.1	0.1	0.097	0.11	97	105	75-125	8	20	
Selenium	mg/L	ND	0.1	0.1	0.093	0.091	90	88	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.090	0.094	90	94	75-125	4	20	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

QC Batch: 609689
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92527268016, 92527268017, 92527268018, 92527268019, 92527268020, 92527268021, 92527268022

METHOD BLANK: 3211380 Matrix: Water
Associated Lab Samples: 92527268016, 92527268017, 92527268018, 92527268019, 92527268020, 92527268021, 92527268022

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	03/30/21 18:18	
Arsenic	mg/L	ND	0.0050	0.00078	03/30/21 18:18	
Barium	mg/L	ND	0.0050	0.00071	03/30/21 18:18	
Beryllium	mg/L	ND	0.00050	0.000046	03/30/21 18:18	
Boron	mg/L	ND	0.040	0.0052	03/30/21 18:18	
Cadmium	mg/L	ND	0.00050	0.00012	03/30/21 18:18	
Chromium	mg/L	0.0011J	0.0050	0.00055	03/30/21 18:18	
Cobalt	mg/L	ND	0.0050	0.00038	03/30/21 18:18	
Lead	mg/L	ND	0.0010	0.000036	03/30/21 18:18	
Lithium	mg/L	ND	0.030	0.00081	03/30/21 18:18	
Molybdenum	mg/L	ND	0.010	0.00069	03/30/21 18:18	
Selenium	mg/L	ND	0.0050	0.0016	03/30/21 18:18	
Thallium	mg/L	ND	0.0010	0.00014	03/30/21 18:18	

LABORATORY CONTROL SAMPLE: 3211381

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	0.097	97	80-120	
Barium	mg/L	0.1	0.097	97	80-120	
Beryllium	mg/L	0.1	0.095	95	80-120	
Boron	mg/L	1	0.99	99	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Chromium	mg/L	0.1	0.097	97	80-120	
Cobalt	mg/L	0.1	0.096	96	80-120	
Lead	mg/L	0.1	0.096	96	80-120	
Lithium	mg/L	0.1	0.099	99	80-120	
Molybdenum	mg/L	0.1	0.097	97	80-120	
Selenium	mg/L	0.1	0.095	95	80-120	
Thallium	mg/L	0.1	0.094	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3211382 3211383

Parameter	Units	92528827004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.10	108	102	75-125	6	20	
Arsenic	mg/L	ND	0.1	0.1	0.098	0.094	97	93	75-125	4	20	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3211382 3211383

Parameter	Units	92528827004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	65.7 ug/L	0.1	0.1	0.17	0.16	105	94	75-125	7	20	
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	102	101	75-125	1	20	
Boron	mg/L	47.7 ug/L	1	1	1.1	1.0	103	100	75-125	3	20	
Cadmium	mg/L	ND	0.1	0.1	0.099	0.097	99	97	75-125	2	20	
Chromium	mg/L	ND	0.1	0.1	0.097	0.096	95	94	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.096	0.092	95	91	75-125	4	20	
Lead	mg/L	ND	0.1	0.1	0.097	0.094	97	94	75-125	3	20	
Lithium	mg/L	ND	0.1	0.1	0.11	0.10	106	103	75-125	3	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.097	99	96	75-125	3	20	
Selenium	mg/L	ND	0.1	0.1	0.095	0.093	94	92	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.094	0.091	94	91	75-125	4	20	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

QC Batch: 609693
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92527268023, 92527268024, 92527268025, 92527268026, 92527268027

METHOD BLANK: 3211404 Matrix: Water
Associated Lab Samples: 92527268023, 92527268024, 92527268025, 92527268026, 92527268027

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	03/29/21 11:36	
Arsenic	mg/L	ND	0.0050	0.00078	03/29/21 11:36	
Barium	mg/L	ND	0.0050	0.00071	03/29/21 11:36	
Beryllium	mg/L	ND	0.00050	0.000046	03/29/21 11:36	
Boron	mg/L	0.0061J	0.040	0.0052	03/29/21 11:36	
Cadmium	mg/L	ND	0.00050	0.00012	03/29/21 11:36	
Chromium	mg/L	ND	0.0050	0.00055	03/29/21 11:36	
Cobalt	mg/L	ND	0.0050	0.00038	03/29/21 11:36	
Lead	mg/L	ND	0.0010	0.000036	03/29/21 11:36	
Lithium	mg/L	ND	0.030	0.00081	03/29/21 11:36	
Molybdenum	mg/L	ND	0.010	0.00069	03/29/21 11:36	
Selenium	mg/L	ND	0.0050	0.0016	03/29/21 11:36	
Thallium	mg/L	ND	0.0010	0.00014	03/29/21 11:36	

LABORATORY CONTROL SAMPLE: 3211405

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.097	97	80-120	
Arsenic	mg/L	0.1	0.091	91	80-120	
Barium	mg/L	0.1	0.092	92	80-120	
Beryllium	mg/L	0.1	0.093	93	80-120	
Boron	mg/L	1	0.95	95	80-120	
Cadmium	mg/L	0.1	0.092	92	80-120	
Chromium	mg/L	0.1	0.096	96	80-120	
Cobalt	mg/L	0.1	0.094	94	80-120	
Lead	mg/L	0.1	0.094	94	80-120	
Lithium	mg/L	0.1	0.098	98	80-120	
Molybdenum	mg/L	0.1	0.096	96	80-120	
Selenium	mg/L	0.1	0.089	89	80-120	
Thallium	mg/L	0.1	0.095	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3211748 3211749

Parameter	Units	92527268024 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00049J	0.1	0.1	0.10	0.098	103	98	75-125	5	20	
Arsenic	mg/L	0.39	0.1	0.1	0.49	0.49	104	100	75-125	1	20	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3211748 3211749

Parameter	Units	92527268024 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.056	0.1	0.1	0.16	0.15	100	96	75-125	2	20	
Beryllium	mg/L	0.000090J	0.1	0.1	0.095	0.092	95	92	75-125	3	20	
Boron	mg/L	0.89	1	1	1.8	1.8	96	91	75-125	2	20	
Cadmium	mg/L	ND	0.1	0.1	0.095	0.092	95	92	75-125	3	20	
Chromium	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	1	20	
Cobalt	mg/L	0.0029J	0.1	0.1	0.10	0.099	98	96	75-125	2	20	
Lead	mg/L	0.00015J	0.1	0.1	0.098	0.092	98	92	75-125	6	20	
Lithium	mg/L	0.031	0.1	0.1	0.13	0.13	99	98	75-125	1	20	
Molybdenum	mg/L	0.035	0.1	0.1	0.14	0.14	106	103	75-125	2	20	
Selenium	mg/L	ND	0.1	0.1	0.092	0.091	91	91	75-125	1	20	
Thallium	mg/L	0.00037J	0.1	0.1	0.099	0.094	99	94	75-125	5	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

QC Batch: 606587
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92527268001, 92527268002

METHOD BLANK: 3195825 Matrix: Water
Associated Lab Samples: 92527268001, 92527268002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	03/15/21 13:13	

LABORATORY CONTROL SAMPLE: 3195826

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	362	90	90-111	

SAMPLE DUPLICATE: 3195827

Parameter	Units	92527234005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	2120	2390	12	10	D6

SAMPLE DUPLICATE: 3195998

Parameter	Units	92527273001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	223	190	16	10	D6

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

QC Batch: 607345
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92527268003, 92527268004, 92527268005

METHOD BLANK: 3199736 Matrix: Water
Associated Lab Samples: 92527268003, 92527268004, 92527268005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	03/16/21 15:05	

LABORATORY CONTROL SAMPLE: 3199737

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	386	96	90-111	

SAMPLE DUPLICATE: 3213092

Parameter	Units	92527261005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	279	278	0	10	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

QC Batch: 608133 | Analysis Method: SM 2540C-2011
QC Batch Method: SM 2540C-2011 | Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92527268008, 92527268009, 92527268010, 92527268011, 92527268012, 92527268013, 92527268014

METHOD BLANK: 3203640 Matrix: Water
Associated Lab Samples: 92527268008, 92527268009, 92527268010, 92527268011, 92527268012, 92527268013, 92527268014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	03/22/21 15:08	

LABORATORY CONTROL SAMPLE: 3203641

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	370	92	90-111	

SAMPLE DUPLICATE: 3203642

Parameter	Units	92527261013 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	614	640	4	10	

SAMPLE DUPLICATE: 3203644

Parameter	Units	92527234025 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	11.0	18.0	48	10	D6

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

QC Batch: 608136
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92527268015, 92527268016, 92527268017, 92527268018, 92527268019, 92527268020, 92527268021, 92527268022, 92527268023

METHOD BLANK: 3203650 Matrix: Water
Associated Lab Samples: 92527268015, 92527268016, 92527268017, 92527268018, 92527268019, 92527268020, 92527268021, 92527268022, 92527268023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	03/23/21 07:58	

LABORATORY CONTROL SAMPLE: 3203651

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	414	104	90-111	

SAMPLE DUPLICATE: 3203652

Parameter	Units	92527612006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	99.0	97.0	2	10	

SAMPLE DUPLICATE: 3203653

Parameter	Units	92528339001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	952	1020	7	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

QC Batch: 608146
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92527268006, 92527268007

METHOD BLANK: 3203677 Matrix: Water
Associated Lab Samples: 92527268006, 92527268007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	03/23/21 07:38	

LABORATORY CONTROL SAMPLE: 3203678

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

SAMPLE DUPLICATE: 3203679

Parameter	Units	92527268006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	490	502	2	10	H1

SAMPLE DUPLICATE: 3203680

Parameter	Units	92528629001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	158	72.0	75	10	D6

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

QC Batch: 608443 | Analysis Method: SM 2540C-2011
QC Batch Method: SM 2540C-2011 | Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92527268024, 92527268025, 92527268026, 92527268027

METHOD BLANK: 3204949 Matrix: Water
Associated Lab Samples: 92527268024, 92527268025, 92527268026, 92527268027

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	03/23/21 08:29	

LABORATORY CONTROL SAMPLE: 3204950

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	398	100	90-111	

SAMPLE DUPLICATE: 3204951

Parameter	Units	92527612008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	213	225	5	10	

SAMPLE DUPLICATE: 3204952

Parameter	Units	92528787024 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	47.0	72.0	42	10	D6

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

QC Batch: 607170
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: 92527268001, 92527268002

METHOD BLANK: 3198670 Matrix: Water
Associated Lab Samples: 92527268001, 92527268002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/17/21 17:51	
Fluoride	mg/L	ND	0.10	0.050	03/17/21 17:51	
Sulfate	mg/L	ND	1.0	0.50	03/17/21 17:51	

LABORATORY CONTROL SAMPLE: 3198671

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.3	101	90-110	
Fluoride	mg/L	2.5	2.7	107	90-110	
Sulfate	mg/L	50	52.7	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3198672 3198673

Parameter	Units	92527256001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	7.4	50	50	59.6	59.8	104	105	90-110	0	10	
Fluoride	mg/L	0.079J	2.5	2.5	2.7	2.7	106	107	90-110	0	10	
Sulfate	mg/L	49.6	50	50	94.1	95.1	89	91	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3198674 3198675

Parameter	Units	92527256002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.9	50	50	54.4	53.4	103	101	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	3.0	2.8	118	112	90-110	6	10	M1
Sulfate	mg/L	1.2	50	50	54.5	53.7	107	105	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

QC Batch: 607751
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: 92527268003, 92527268004, 92527268005

METHOD BLANK: 3201757 Matrix: Water
Associated Lab Samples: 92527268003, 92527268004, 92527268005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/19/21 17:15	
Fluoride	mg/L	ND	0.10	0.050	03/19/21 17:15	
Sulfate	mg/L	ND	1.0	0.50	03/19/21 17:15	

LABORATORY CONTROL SAMPLE: 3201758

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.2	100	90-110	
Fluoride	mg/L	2.5	2.3	91	90-110	
Sulfate	mg/L	50	50.2	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3201759 3201760

Parameter	Units	92528475003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2510	50	50	2520	2520	27	27	90-110	0	10	M6
Fluoride	mg/L	4.6	2.5	2.5	12.1	11.9	302	294	90-110	2	10	M6
Sulfate	mg/L	1530	50	50	1510	1480	-49	-112	90-110	2	10	M6

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3201761 3201762

Parameter	Units	92527256007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	5.9	50	50	58.9	57.5	106	103	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	2.3	2.3	91	90	90-110	1	10	
Sulfate	mg/L	50.4	50	50	102	101	103	101	90-110	1	10	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

QC Batch: 607758
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: 92527268006, 92527268007

METHOD BLANK: 3201801 Matrix: Water
Associated Lab Samples: 92527268006, 92527268007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/20/21 19:43	
Fluoride	mg/L	ND	0.10	0.050	03/20/21 19:43	
Sulfate	mg/L	ND	1.0	0.50	03/20/21 19:43	

LABORATORY CONTROL SAMPLE: 3201802

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.0	100	90-110	
Fluoride	mg/L	2.5	2.6	103	90-110	
Sulfate	mg/L	50	53.0	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3201803 3201804

Parameter	Units	92526996007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	8.0	50	50	57.8	58.5	99	101	90-110	1	10	
Fluoride	mg/L	0.058J	2.5	2.5	2.5	2.6	98	100	90-110	2	10	
Sulfate	mg/L	154	50	50	255	259	201	210	90-110	2	10	M6

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3201805 3201806

Parameter	Units	92527261012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.2	50	50	53.9	53.4	101	100	90-110	1	10	
Fluoride	mg/L	0.83	2.5	2.5	3.5	3.5	107	106	90-110	1	10	
Sulfate	mg/L	166	50	50	183	208	33	84	90-110	13	10	M1,R1

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

QC Batch: 607981
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: 92527268008, 92527268009, 92527268010, 92527268011, 92527268012

METHOD BLANK: 3202723 Matrix: Water
Associated Lab Samples: 92527268008, 92527268009, 92527268010, 92527268011, 92527268012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/20/21 10:55	
Fluoride	mg/L	ND	0.10	0.050	03/20/21 10:55	
Sulfate	mg/L	ND	1.0	0.50	03/20/21 10:55	

LABORATORY CONTROL SAMPLE: 3202724

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.1	102	90-110	
Fluoride	mg/L	2.5	2.5	102	90-110	
Sulfate	mg/L	50	51.5	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3202725 3202726

Parameter	Units	92528548005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	363	50	50	402	403	79	81	90-110	0	10	M6
Fluoride	mg/L	0.13	2.5	2.5	2.6	2.7	100	101	90-110	1	10	
Sulfate	mg/L	27.1	50	50	76.5	77.1	99	100	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3202727 3202728

Parameter	Units	92527261015 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.5	50	50	54.6	54.8	104	105	90-110	0	10	
Fluoride	mg/L	0.30	2.5	2.5	2.9	2.9	102	103	90-110	1	10	
Sulfate	mg/L	236	50	50	281	282	90	93	90-110	0	10	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

QC Batch: 607982
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: 92527268013, 92527268014

METHOD BLANK: 3202733 Matrix: Water
Associated Lab Samples: 92527268013, 92527268014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/20/21 17:54	
Fluoride	mg/L	ND	0.10	0.050	03/20/21 17:54	
Sulfate	mg/L	ND	1.0	0.50	03/20/21 17:54	

LABORATORY CONTROL SAMPLE: 3202734

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.7	103	90-110	
Fluoride	mg/L	2.5	2.6	102	90-110	
Sulfate	mg/L	50	52.5	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3202737 3202738

Parameter	Units	92528140001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	57.9	50	50	105	105	94	94	90-110	0	10	
Fluoride	mg/L	ND	2.5	2.5	1.9	2.0	73	74	90-110	2	10	M6
Sulfate	mg/L	17.2	50	50	66.0	66.0	98	98	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3203204 3203205

Parameter	Units	92528440001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	319	50	50	332	332	26	27	90-110	0	10	M6
Fluoride	mg/L	0.34	2.5	2.5	2.6	2.7	90	94	90-110	3	10	
Sulfate	mg/L	132	50	50	178	179	94	94	90-110	0	10	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

QC Batch: 607984
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: 92527268015, 92527268016, 92527268017, 92527268018, 92527268019, 92527268020, 92527268021

METHOD BLANK: 3202745 Matrix: Water
Associated Lab Samples: 92527268015, 92527268016, 92527268017, 92527268018, 92527268019, 92527268020, 92527268021

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/21/21 19:26	
Fluoride	mg/L	ND	0.10	0.050	03/21/21 19:26	
Sulfate	mg/L	ND	1.0	0.50	03/21/21 19:26	

LABORATORY CONTROL SAMPLE: 3202746

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	2.6	104	90-110	
Sulfate	mg/L	50	52.8	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3202747 3202748

Parameter	Units	92527234030 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	51.8	50.4	104	101	90-110	3	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.5	104	101	90-110	3	10	
Sulfate	mg/L	ND	50	50	52.2	50.8	104	102	90-110	3	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3202749 3202750

Parameter	Units	92527612006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1.6	50	50	52.6	51.8	102	100	90-110	1	10	
Fluoride	mg/L	0.18	2.5	2.5	2.7	2.7	99	102	90-110	2	10	
Sulfate	mg/L	7.7	50	50	57.9	57.5	100	100	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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

QC Batch: 608283
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: 92527268022, 92527268023

METHOD BLANK: 3204500 Matrix: Water
Associated Lab Samples: 92527268022, 92527268023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/22/21 20:49	
Fluoride	mg/L	ND	0.10	0.050	03/22/21 20:49	
Sulfate	mg/L	ND	1.0	0.50	03/22/21 20:49	

LABORATORY CONTROL SAMPLE: 3204501

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	52.5	105	90-110	
Fluoride	mg/L	2.5	2.5	102	90-110	
Sulfate	mg/L	50	52.9	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3204502 3204503

Parameter	Units	92528546001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	18.7	50	50	69.8	70.2	102	103	90-110	1	10	
Fluoride	mg/L	10.4	2.5	2.5	12.8	12.8	96	95	90-110	0	10	
Sulfate	mg/L	1220	50	50	1340	1340	237	231	90-110	0	10	M6

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3204504 3204505

Parameter	Units	92528730001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	8.8	50	50	60.7	58.7	104	100	90-110	3	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.5	104	99	90-110	5	10	
Sulfate	mg/L	10.4	50	50	62.6	60.5	104	100	90-110	3	10	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

QC Batch: 608285
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: 92527268024, 92527268025, 92527268026, 92527268027

METHOD BLANK: 3204508 Matrix: Water
Associated Lab Samples: 92527268024, 92527268025, 92527268026, 92527268027

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/23/21 04:02	
Fluoride	mg/L	ND	0.10	0.050	03/23/21 04:02	
Sulfate	mg/L	ND	1.0	0.50	03/23/21 04:02	

LABORATORY CONTROL SAMPLE: 3204509

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	100	90-110	
Sulfate	mg/L	50	51.8	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3204510 3204511

Parameter	Units	92528339002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	53.4	50	50	91.2	90.1	75	73	90-110	1	10	M6
Fluoride	mg/L	0.74	2.5	2.5	3.3	3.2	102	100	90-110	2	10	
Sulfate	mg/L	457	50	50	503	503	93	93	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3204512 3204513

Parameter	Units	92527612010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	4.7	50	50	58.1	56.8	107	104	90-110	2	10	
Fluoride	mg/L	0.089J	2.5	2.5	2.8	2.7	107	104	90-110	2	10	
Sulfate	mg/L	28.3	50	50	80.9	79.7	105	103	90-110	2	10	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALIFIERS

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

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.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
H1	Analysis conducted outside the EPA method holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
M6	Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.
R1	RPD value was outside control limits.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92527268001	HGWA-1				
92527268002	HGWA-44D				
92527268003	HGWA-2				
92527268004	HGWA-3				
92527268005	HGWA-43D				
92527268006	HGWC-10				
92527268007	MW-27D				
92527268008	HGWC-7 FILTERED				
92527268009	HGWC-7				
92527268010	HGWC-8				
92527268011	MW-7				
92527268012	MW-20				
92527268013	MW-28D				
92527268014	MW-29				
92527268015	HGWC-9				
92527268016	HGWC-11				
92527268017	HGWC-12				
92527268018	MW-5				
92527268019	MW-6				
92527268020	MW-25D				
92527268024	HGWC-13				
92527268025	MW-19				
92527268026	MW-24D				
92527268027	MW-26D				
92527268001	HGWA-1	EPA 3010A	606634	EPA 6010D	606723
92527268002	HGWA-44D	EPA 3010A	606634	EPA 6010D	606723
92527268003	HGWA-2	EPA 3010A	608195	EPA 6010D	608261
92527268004	HGWA-3	EPA 3010A	608195	EPA 6010D	608261
92527268005	HGWA-43D	EPA 3010A	608195	EPA 6010D	608261
92527268006	HGWC-10	EPA 3010A	609342	EPA 6010D	609604
92527268007	MW-27D	EPA 3010A	609342	EPA 6010D	609604
92527268008	HGWC-7 FILTERED	EPA 3010A	609342	EPA 6010D	609604
92527268009	HGWC-7	EPA 3010A	609345	EPA 6010D	609584
92527268010	HGWC-8	EPA 3010A	609342	EPA 6010D	609604
92527268011	MW-7	EPA 3010A	609342	EPA 6010D	609604
92527268012	MW-20	EPA 3010A	609342	EPA 6010D	609604
92527268013	MW-28D	EPA 3010A	609342	EPA 6010D	609604
92527268014	MW-29	EPA 3010A	609342	EPA 6010D	609604
92527268015	HGWC-9	EPA 3010A	609345	EPA 6010D	609584
92527268016	HGWC-11	EPA 3010A	609345	EPA 6010D	609584
92527268017	HGWC-12	EPA 3010A	609345	EPA 6010D	609584
92527268018	MW-5	EPA 3010A	609345	EPA 6010D	609584
92527268019	MW-6	EPA 3010A	609345	EPA 6010D	609584
92527268020	MW-25D	EPA 3010A	609345	EPA 6010D	609584
92527268021	DUP-1	EPA 3010A	609345	EPA 6010D	609584
92527268022	EB-1	EPA 3010A	609345	EPA 6010D	609584

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92527268023	FB-1	EPA 3010A	609345	EPA 6010D	609584
92527268024	HGWC-13	EPA 3010A	609345	EPA 6010D	609584
92527268025	MW-19	EPA 3010A	609345	EPA 6010D	609584
92527268026	MW-24D	EPA 3010A	609345	EPA 6010D	609584
92527268027	MW-26D	EPA 3010A	609345	EPA 6010D	609584
92527268001	HGWA-1	EPA 3005A	606644	EPA 6020B	606712
92527268002	HGWA-44D	EPA 3005A	606644	EPA 6020B	606712
92527268003	HGWA-2	EPA 3005A	607964	EPA 6020B	608044
92527268004	HGWA-3	EPA 3005A	607964	EPA 6020B	608044
92527268005	HGWA-43D	EPA 3005A	607964	EPA 6020B	608044
92527268006	HGWC-10	EPA 3005A	609688	EPA 6020B	609797
92527268007	MW-27D	EPA 3005A	609688	EPA 6020B	609797
92527268008	HGWC-7 FILTERED	EPA 3005A	609688	EPA 6020B	609797
92527268009	HGWC-7	EPA 3005A	609688	EPA 6020B	609797
92527268010	HGWC-8	EPA 3005A	609688	EPA 6020B	609797
92527268011	MW-7	EPA 3005A	609688	EPA 6020B	609797
92527268012	MW-20	EPA 3005A	609688	EPA 6020B	609797
92527268013	MW-28D	EPA 3005A	609688	EPA 6020B	609797
92527268014	MW-29	EPA 3005A	609688	EPA 6020B	609797
92527268015	HGWC-9	EPA 3005A	609688	EPA 6020B	609797
92527268016	HGWC-11	EPA 3005A	609689	EPA 6020B	609798
92527268017	HGWC-12	EPA 3005A	609689	EPA 6020B	609798
92527268018	MW-5	EPA 3005A	609689	EPA 6020B	609798
92527268019	MW-6	EPA 3005A	609689	EPA 6020B	609798
92527268020	MW-25D	EPA 3005A	609689	EPA 6020B	609798
92527268021	DUP-1	EPA 3005A	609689	EPA 6020B	609798
92527268022	EB-1	EPA 3005A	609689	EPA 6020B	609798
92527268023	FB-1	EPA 3005A	609693	EPA 6020B	609800
92527268024	HGWC-13	EPA 3005A	609693	EPA 6020B	609800
92527268025	MW-19	EPA 3005A	609693	EPA 6020B	609800
92527268026	MW-24D	EPA 3005A	609693	EPA 6020B	609800
92527268027	MW-26D	EPA 3005A	609693	EPA 6020B	609800
92527268001	HGWA-1	SM 2540C-2011	606587		
92527268002	HGWA-44D	SM 2540C-2011	606587		
92527268003	HGWA-2	SM 2540C-2011	607345		
92527268004	HGWA-3	SM 2540C-2011	607345		
92527268005	HGWA-43D	SM 2540C-2011	607345		
92527268006	HGWC-10	SM 2540C-2011	608146		
92527268007	MW-27D	SM 2540C-2011	608146		
92527268008	HGWC-7 FILTERED	SM 2540C-2011	608133		
92527268009	HGWC-7	SM 2540C-2011	608133		
92527268010	HGWC-8	SM 2540C-2011	608133		
92527268011	MW-7	SM 2540C-2011	608133		
92527268012	MW-20	SM 2540C-2011	608133		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HAMMOND AP-1 SEMIANNUAL
Pace Project No.: 92527268

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92527268013	MW-28D	SM 2540C-2011	608133		
92527268014	MW-29	SM 2540C-2011	608133		
92527268015	HGWC-9	SM 2540C-2011	608136		
92527268016	HGWC-11	SM 2540C-2011	608136		
92527268017	HGWC-12	SM 2540C-2011	608136		
92527268018	MW-5	SM 2540C-2011	608136		
92527268019	MW-6	SM 2540C-2011	608136		
92527268020	MW-25D	SM 2540C-2011	608136		
92527268021	DUP-1	SM 2540C-2011	608136		
92527268022	EB-1	SM 2540C-2011	608136		
92527268023	FB-1	SM 2540C-2011	608136		
92527268024	HGWC-13	SM 2540C-2011	608443		
92527268025	MW-19	SM 2540C-2011	608443		
92527268026	MW-24D	SM 2540C-2011	608443		
92527268027	MW-26D	SM 2540C-2011	608443		
92527268001	HGWA-1	EPA 300.0 Rev 2.1 1993	607170		
92527268002	HGWA-44D	EPA 300.0 Rev 2.1 1993	607170		
92527268003	HGWA-2	EPA 300.0 Rev 2.1 1993	607751		
92527268004	HGWA-3	EPA 300.0 Rev 2.1 1993	607751		
92527268005	HGWA-43D	EPA 300.0 Rev 2.1 1993	607751		
92527268006	HGWC-10	EPA 300.0 Rev 2.1 1993	607758		
92527268007	MW-27D	EPA 300.0 Rev 2.1 1993	607758		
92527268008	HGWC-7 FILTERED	EPA 300.0 Rev 2.1 1993	607981		
92527268009	HGWC-7	EPA 300.0 Rev 2.1 1993	607981		
92527268010	HGWC-8	EPA 300.0 Rev 2.1 1993	607981		
92527268011	MW-7	EPA 300.0 Rev 2.1 1993	607981		
92527268012	MW-20	EPA 300.0 Rev 2.1 1993	607981		
92527268013	MW-28D	EPA 300.0 Rev 2.1 1993	607982		
92527268014	MW-29	EPA 300.0 Rev 2.1 1993	607982		
92527268015	HGWC-9	EPA 300.0 Rev 2.1 1993	607984		
92527268016	HGWC-11	EPA 300.0 Rev 2.1 1993	607984		
92527268017	HGWC-12	EPA 300.0 Rev 2.1 1993	607984		
92527268018	MW-5	EPA 300.0 Rev 2.1 1993	607984		
92527268019	MW-6	EPA 300.0 Rev 2.1 1993	607984		
92527268020	MW-25D	EPA 300.0 Rev 2.1 1993	607984		
92527268021	DUP-1	EPA 300.0 Rev 2.1 1993	607984		
92527268022	EB-1	EPA 300.0 Rev 2.1 1993	608283		
92527268023	FB-1	EPA 300.0 Rev 2.1 1993	608283		
92527268024	HGWC-13	EPA 300.0 Rev 2.1 1993	608285		
92527268025	MW-19	EPA 300.0 Rev 2.1 1993	608285		
92527268026	MW-24D	EPA 300.0 Rev 2.1 1993	608285		
92527268027	MW-26D	EPA 300.0 Rev 2.1 1993	608285		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

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

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO# : 92527268

92527268

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

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

Date/Initials Person Examining Contents: [illegible]

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☑ Other

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

Thermometer: ☐ IR Gun ID: 233 ☑ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 2.0 **Correction Factor:** Add/Subtract (°C) ±0.4

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: WT				
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™
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Geosyntec Contacts	Company Name:	
				Address:	
Email To:	SCS Contacts	Purchase Order No.:		Pace Quote Reference:	
Phone:	Fax:	Project Name:	Plant Hammond AP-1 Semiannual	Pace Project Manager:	Kevin Herring
Requested Due Date/TAT:	10 Day	Project Number:	GW6581B	Pace Profile #:	10839-10

REGULATORY AGENCY

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

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 DATE	COLLECTED TIME	COMPOSITE DATE	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	App. III & IV Metals*	RAD 226/228	TDS											Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																				N	N	N	N													
1	HGWA-1		WT	G	3/10/21	1610	--	--	17	5	2		3							X	X	X	X												N	pH = 6.95
2	HGWA-2		WT	G			--	--		5	2		3							X	X	X	X												N	pH =
3	HGWA-3		WT	G			--	--		5	2		3							X	X	X	X												N	pH =
4	HGWA-43D		WT	G			--	--		5	2		3							X	X	X	X												N	pH =
5	HGWA-44D		WT	G	3/10/21	1430	--	--	19	5	2		3							X	X	X	X												N	pH = 7.92
6	HGWC-7		WT	G			--	--		5	2		3							X	X	X	X												N	pH =
7	HGWC-8		WT	G			--	--		5	2		3							X	X	X	X												N	pH =
8	HGWC-9		WT	G			--	--		5	2		3							X	X	X	X												N	pH =
9	HGWC-10		WT	G			--	--		5	2		3							X	X	X	X												N	pH =
10	HGWC-11		WT	G			--	--		5	2		3							X	X	X	X												N	pH =
11	HGWC-12		WT	G			--	--		5	2		3							X	X	X	X												N	pH =
12	HGWC-13		WT	G			--	--		5	2		3							X	X	X	X												N	pH =

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Please note dry wells, strike though any wells not sampled, and note when the last sample for the event has been taken.	Ueshirth Tenkoor	3/10/21	1730	Thomas Hensley/Pace	3/10/21	1730				
*App. III & IV Metals = Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Mo, Se, Tl	Thomas Hensley/Pace	3/11/21	1040	Upn At Pace	3.11.21	1040				
One sample set submitted for HGWA-1/2/3/43D/44D but they will be reported for AP-1/2/3 SDGs	Upn At Pace	3.11.21	1555	Pace	3/11/21	1555	2.0	Y	N	Y
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ueshirth Tenkoor

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 03/10/21

*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
www.pacelabs.com

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

Page: 1 of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Geosyntec Contacts	Company Name:	
				Address:	
Email To:	SCS Contacts	Purchase Order No.:		Pace Quote Reference:	
Phone:	Fax:	Project Name:	Plant Hammond AP-1 Semiannual	Pace Project Manager:	Kevin Herring
Requested Due Date/TAT:	10 Day	Project Number:	GW6581B	Pace Profile #:	10839-10

REGULATORY AGENCY

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

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 DATE	COLLECTED TIME	COMPOSITE DATE	COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate N	App. III & IV Metals* N	RAD 226/228 N	TDS N	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	HGWA-1	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
2	HGWA-2	WT	G	3/11/21	0959	–	–	16	5	2		3							X	X	X	X	N	pH = 5.80
3	HGWA-3	WT	G	3/11/21	1175	–	–	17	5	2		3							X	X	X	X	N	pH = 7.33
4	HGWA-43D	WT	G	3/11/21	0952	–	–	16	5	2		3							X	X	X	X	N	pH = 7.46
5	HGWA-44D	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
6	HGWC-7	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
7	HGWC-8	WT	G						5	2		3							X	X	X	X	N	pH =
8	HGWC-9	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
9	HGWC-10	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
10	HGWC-11	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
11	HGWC-12	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
12	HGWC-13	WT	G			–	–		5	2		3							X	X	X	X	N	pH =

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	Thomas Kessler / Geo	3/12/21	1310	VASHISH TAUKOOR / GEO	3/12/21	1310	
*App. III & IV Metals = Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Mo, Se, Tl	VASHISH TAUKOOR / GEO	3/12/21	1343	[signature] / Pace	3.12.21	1343	
One sample set submitted for HGWA-1/2/3/43D/44D but they will be reported for AP-1/2/3 SDGs	[signature] / Pace	3.12.21	1639	[signature]	3/12/21	1639	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Kessler, Vashish Taukoor

SIGNATURE of SAMPLER: [signature] [signature]

DATE Signed (MM/DD/YY): 03/11/21

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
www.pacelabs.com

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

Page: 1 of 2

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

Section B Required Project Information:
Report To: SCS Contacts
Copy To: Geosyntec Contacts
Purchase Order No.:
Project Name: Plant Hammond AP-1 Semiannual
Project Number: GW6581B

Section C Invoice Information:
Attention: Southern Co.
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Kevin Herring
Pace Profile #: 10839-10

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

ITEM #	SAMPLE ID	MATRIX CODE (use valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	COMPOSITE DATE	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.
																		Analysis Test	Chloride, Fluoride, Sulfate	App. III & IV Metals*	RAD 226/228	TDS		
1	HGWA-1	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
2	HGWA-2	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
3	HGWA-3	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
4	HGWA-43D	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
5	HGWA-44D	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
6	HGWC-7	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
7	HGWC-8	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
8	HGWC-9	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
9	HGWC-10	WT	G	3/2/21	1011	–	–	18	5	2		3							X	X	X	X	N	pH = 6.76
10	HGWC-11	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
11	HGWC-12	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
12	HGWC-13	WT	G			–	–		5	2		3							X	X	X	X	N	pH =

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.		3/15/21	1145		3/15/21	1145
App. III & IV Metals = Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Mo, Se, Tl		3/15/21	1145	/ Pace	3/15/21	1200
One sample set submitted for HGWA-1/2/3/43D/44D but they will be reported for AP-1/2/3 SDGs	/ Pace	3/15/21	1458		3/15/21	1452

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

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Chad Russo
SIGNATURE of SAMPLER: (CR) DATE Signed (MM/DD/YY): 03/12/21

*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
www.pacelabs.com

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

Page: 2 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:	Plant Hammond AP-1 Semiannual	Pace Project Manager:	Kevin Herring
Requested Due Date/TAT:	10 Day	Project Number:	GW6581B	Pace Profile #:	10839-10

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ~~COR~~

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 DATE	COLLECTED TIME	COMPOSITE DATE	COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	Chloride, Fluoride, Sulfate (N)	App. III & IV Metals* (N)	RAD 226/228 (N)	TDS (N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-5	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
2	MW-6	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
3	MW-7	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
4	MW-19	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
5	MW-20	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
6	MW-24D	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
7	MW-25D	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
8	MW-26D	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
9	MW-27D	WT	G	3/12/21	0947	–	–	17	5	2		3							X	X	X	X	N	pH = 7.88
10	MW-28D	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
11	MW-29	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
12	Dup-1	WT	G		–	–	–		5	2		3							X	X	X	X	N	

3/12/2021

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	[signature] / SCS	3/15/21	1145	[signature]	3/15/21	1145
App. III & IV Metals = Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Mo, Se, Tl	[signature]	3/15/21	1145	[signature] / Pace	3/15/21	1260
One sample set submitted for HGWA-1/2/3/43D/44D but they will be reported for AP-1/2/3 SDGs	[signature] / Pace	3/15/21	1458	Charles [signature]	3/15/21	1458

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Kessler

SIGNATURE of SAMPLER: TK

DATE Signed (MM/DD/YY): 03/12/21

*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
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 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:	Plant Hammond AP-1 Semiannual	Pace Project Manager:	Kevin Herring
Requested Due Date/TAT:	10 Day	Project Number:	GW6581B	Pace Profile #:	10839-10

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 DATE	COLLECTED TIME	COMPOSITE DATE	COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	Chloride, Fluoride, Sulfate (N)	App. III & IV Metals* (N)	RAD 226/228 (N)	TDS (N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	HGWA-1	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
2	HGWA-2	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
3	HGWA-3	WT	G				–		5	2		3							X	X	X	X	N	pH =
4	~~HGWA-43D~~	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
5	HGWC-7 ~~HGWA-44D~~ filtered	WT	G	3/15/21	1625	–	–	18	5	2		3							X	X	X	X	N	pH = 7.19
6	HGWC-7	WT	G	3/15/21	1610	–	–	18	5	2		3							X	X	X	X	N	pH = 7.19
7	HGWC-8	WT	G	3/15/21	1100	–	–	18	5	2		3							X	X	X	X	N	pH = 7.09
8	HGWC-9	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
9	HGWC-10	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
10	HGWC-11	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
11	HGWC-12	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
12	HGWC-13	WT	G			–	–		5	2		3							X	X	X	X	N	pH =

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Please note dry wells; strike through any wells not sampled, and note when the last sample for the event has been taken.	Thomas Kessler	3/16/21	1340	Ryan Williams / Pace	3/16/21	1342	3.3			
*App. III & IV Metals = Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Mo, Se, Tl	Ryan Williams / Pace	3/16/21	1532	[signature] Pace	3/16/21	1532	3.3	Y	Y	Y
One sample set submitted for HGWA-1/2/3/43D/44D but they will be reported for AP-1/2/3 SDGs										

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Kessler, Vashish Tankoor

SIGNATURE of SAMPLER: [signature] [signature]

DATE Signed (MM/DD/YY): 3/15/21

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

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

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 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:	Plant Hammond AP-1 Semiannual
Project Number:	GW6581B

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	10839-10

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ~~OOR~~

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 DATE	COLLECTED TIME	COMPOSITE DATE	COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate N	App. III & IV Metals* N	RAD 226/228 N	TDS N	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-5	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
2	MW-6	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
3	MW-7	WT	G	3/15/21	1200	–	–	18	5	2		3							X	X	X	X	N	pH = 6.66
4	MW-19	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
5	MW-20	WT	G	3/15/21	1422	–	–	18	5	2		3							X	X	X	X	N	pH = 6.97
6	MW-24D	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
7	MW-25D	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
8	MW-26D	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
9	MW-27D	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
10	MW-28D	WT	G	3/15/21	1825	–	–	18	5	2		3							X	X	X	X	N	pH = 7.61
11	MW-29	WT	G	3/15/21	1252	–	–	17	5	2		3							X	X	X	X	N	pH = 7.05
12	Dup-1	WT	G						5	2		3							X	X	X	X	N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	Thomas Kessler	3/16/21	1340	Ryan Williams / Pace	3/16/21	1342				
*App. III & IV Metals = Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Mo, Se, Tl	Ryan Williams / Pace	3/16/21	1532	[signature] / Pace	3/16/21	1532	3.3	Y	Y	Y
One sample set submitted for HGWA-1/2/3/43D/44D but they will be reported for AP-1/2/3 SDGs										
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Kessler, Vashish ~~[illegible]~~ [illegible]

SIGNATURE of SAMPLER: [signature] [signature]

DATE Signed (MM/DD/YY): 3/15/21

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

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

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 3

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 AP-1 Semiannual
Project Number:	GW6581B

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	10839-10

REGULATORY AGENCY

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

Site Location STATE: GA

Section D Required Client Information

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

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	COMPOSITE DATE	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	App. III & IV Metals*	RAD 226/228	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Y/N	N	N	N	N		
1	HGWA-1	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
2	HGWA-2	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
3	HGWA-3	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
4	HGWA-43D	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
5	HGWA-44D	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
6	HGWC-7	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
7	HGWC-8	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
8	HGWC-9	WT	G	3/16/21	1448	–	–	17	5	2		3							X	X	X	X	N	pH = 7.10
9	HGWC-10	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
10	HGWC-11	WT	G	3/16/21	0945	–	–	15	5	2		3							X	X	X	X	N	pH = 5.95
11	HGWC-12	WT	G	3/16/21	1112	–	–	16	5	2		3							X	X	X	X	N	pH = 7.15
12	HGWC-13	WT	G			–	–		5	2		3							X	X	X	X	N	pH =

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	Thomas Hessler	3/17/21	1310	Ryan Williams / Pace	3/17/21	1310
*App. III & IV Metals = Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Mo, Se, Tl	Ryan Williams / Pace	3/17/21	1510		3/17/21	1510
One sample set submitted for HGWA-1/2/3/43D/44D but they will be reported for AP-1/2/3 SDGs						

SAMPLE CONDITIONS

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Hessler, Vectren Infrastructure

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 3/16/21

*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
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: 2 of 3

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 AP-1 Semiannual
Project Number:	GW6581B

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	10839-10

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ~~OCR~~

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 DATE	COLLECTED TIME	COMPOSITE DATE	COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate	App. III & IV Metals*	RAD 226/228	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Y/N	N	N	N	N		
1	MW-5	WT	G	3/16/21	1608	--	--	17	5	2		3							X	X	X	X	N	pH = 5.78
2	MW-6	WT	G	3/16/21	1543	--	--	18	5	2		3							X	X	X	X	N	pH = 6.96
3	~~MW-7~~	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
4	~~MW-19~~	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
5	~~MW-20~~	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
6	~~MW-24D~~	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
7	MW-25D	WT	G	3/16/21	1232	--	--	17	5	2		3							X	X	X	X	N	pH = 2.76
8	~~MW-26D~~	WT	G						5	2		3							X	X	X	X	N	pH =
9	~~MW-27D~~	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
10	~~MW-28D~~	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
11	~~MW-29~~	WT	G						5	2		3							X	X	X	X	N	pH =
12	Dup-1	WT	G	3/16/21	--	--	--	17	5	2		3							X	X	X	X	N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Please note dry wells, strike through any wells not sampled, and note when the last sample for the event has been taken.	Thomas Hessler	3/17/21	310	Ryan Williams / Pace	3/17/21	1310
*App. III & IV Metals = Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Mo, Se, Tl	Ryan Williams / Pace	3/17/21	1610	[illegible]	3/17/21	1610
One sample set submitted for HGWA-1/2/3/43D/44D but they will be reported for AP-1/2/3 SDGs						

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Vaishnish Tankoor, Chad Russo

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 3/16/21

*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
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: 3 of 3

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 AP-1 Semiannual
Project Number: GW6581B

Section C Invoice Information:

Attention: Southern Co.
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Kevin Herring
Pace Profile #: 10839-10

REGULATORY AGENCY

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

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 DATE	COLLECTED TIME	COMPOSITE DATE	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	App. III & IV Metals*	RAD 226/228	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Requested Analysis Filtered (Y/N)	N	N	N	N		
1	EB-1	WT	G	3/16/21	1645	--	--		5	2		3							X	X	X	X	N	
2	FB-1	WT	G	3/16/21	1625	--	--		5	2		3							X	X	X	X	N	
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	Thomas Hessler	3/17/21	310	Ryan Williams / Pace	3/17/21	1315				
*App. III & IV Metals = Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Mo, Se, Tl	Ryan Williams / Pace	3/17/21	1570	[signature]	3/17/21	1570	5.9	Y	N	Y
One sample set submitted for HGWA-1/2/3/430/44D but they will be reported for AP-1/2/3 SDG.										

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Hessler, Chad Russo
SIGNATURE of SAMPLER: [signature]
DATE Signed (MM/DD/YY): 3/16/21

*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
www.pacelabs.com

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

Page: 1 of 2

Section A Required Client Information:

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

Section B Required Project Information:

Report To:	SCS Contacts
Copy To:	Geosyntec Contacts
Purchase Order No.:	
Project Name:	Plant Hammond AP-1 Semiannual
Project Number:	GW6581B

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	10839-10

REGULATORY AGENCY

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

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 DATE	COLLECTED TIME	COMPOSITE DATE	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	App. III & IV Metals*	RAD 226/228	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Y/N	N	N	N	N		
1	HGWA-1	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
2	HGWA-2	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
3	HGWA-3	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
4	HGWA-43D	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
5	HGWA-44D	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
6	HGWC-7	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
7	HGWC-8	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
8	HGWC-9	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
9	HGWC-10	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
10	HGWC-11	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
11	HGWC-12	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
12	HGWC-13	WT	G	3/17/21	1458	--	--	R	5	2		3							X	X	X	X	N	pH = 7.33

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	Yaroslav Hrebsha / Geo	3/18	1317	Ryan Williams / Pace	3/18/21	1317	
*App. III & IV Metals = Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Mo, Se, Tl	Ryan Williams / Pace	3/18/21	1521	Charles Hunter	3/18/21	1521	
One sample set submitted for HGWA-1/2/3/43D/44D but they will be reported for AP-1/2/3 SDGs							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Yashish Hrebsha

SIGNATURE of SAMPLER: YH

DATE Signed (MM/DD/YY): 3/16/21

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
www.pacelabs.com

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

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:	Plant Hammond AP-1 Semiannual
Project Number:	GW6581B

Section C Invoice Information:

Attention:	Southern Co
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	10839-10

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATE ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ~~CGR~~

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 DATE	COLLECTED TIME	COMPOSITE DATE	COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	Chloride, Fluoride, Sulfate (N)	App. III & IV Metals* (N)	RAD 226/228 (N)	TDS (N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-5	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
2	MW-6	WT	G			–	–		5										X	X	X	X	N	pH =
3	~~MW-7~~	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
4	MW-19	WT	G	3/17/21	1020	–	–	18	5	2		3							X	X	X	X	N	pH = 6.34
5	~~MW-20~~ MW-24D	WT	G	3/17/21	1600	–	–	18	5	2		3							X	X	X	X	N	pH = 7.66
6	~~MW-24D~~	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
7	~~MW-25D~~	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
8	MW-26D	WT	G	3/17/21	0850	–	–	17	5	2		3							X	X	X	X	N	pH = 7.14
9	~~MW-27D~~	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
10	MW-28D	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
11	MW-29	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
12	Dup-1	WT	G		–	–	–		5	2		3							X	X	X	X	N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	Thomas Kessler Geo	3/17/21	1317	Ryan Willim / Pace	3/19/21	1317
*App. III & IV Metals = Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Mo, Se, Tl	Ryan Willim / Pace	3/19/21	1521	Charles [illegible]	3/18/21	1521
One sample set submitted for HGWA-1/2/3/43D/44D but they will be reported for AP-1/2/3 SDGs						

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Joshish Tankar

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 3/16/21

*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

April 26, 2021

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

RE: Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between March 11, 2021 and March 18, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Greensburg

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

Sincerely,

Kevin Herring
kevin.herring@pacelabs.com
1(704)875-9092
HORIZON Database Administrator

Enclosures

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

CERTIFICATIONS

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SAMPLE SUMMARY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92527270001	**HGWA-1**	Water	03/10/21 16:10	03/11/21 15:55
92527270002	**HGWA-44D**	Water	03/10/21 14:30	03/11/21 15:55
92527270003	**HGWA-2**	Water	03/11/21 09:59	03/12/21 13:43
92527270004	**HGWA-3**	Water	03/11/21 11:25	03/12/21 13:43
92527270005	**HGWA-43D**	Water	03/11/21 09:57	03/12/21 13:43
92527270006	**HGWC-10**	Water	03/12/21 10:11	03/15/21 12:00
92527270007	**MW-27D**	Water	03/12/21 09:47	03/15/21 12:00
92527270008	**HGWC-7 FILTERED**	Water	03/15/21 16:25	03/16/21 13:42
92527270009	**HGWC-7**	Water	03/15/21 16:10	03/16/21 13:42
92527270010	**HGWC-8**	Water	03/15/21 11:00	03/16/21 13:42
92527270011	**MW-7**	Water	03/15/21 12:00	03/16/21 13:42
92527270012	**MW-20**	Water	03/15/21 14:22	03/16/21 13:42
92527270013	**MW-28D**	Water	03/15/21 18:25	03/16/21 13:42
92527270014	**MW-29**	Water	03/15/21 12:52	03/16/21 13:42
92527270015	**HGWC-9**	Water	03/16/21 14:48	03/17/21 13:10
92527270016	**HGWC-11**	Water	03/16/21 09:45	03/17/21 13:10
92527270017	**HGWC-12**	Water	03/16/21 11:12	03/17/21 13:10
92527270018	**MW-5**	Water	03/16/21 16:08	03/17/21 13:10
92527270019	**MW-6**	Water	03/16/21 15:43	03/17/21 13:10
92527270020	**MW-25D**	Water	03/16/21 12:32	03/17/21 13:10
92527270021	**DUP-1**	Water	03/16/21 00:00	03/17/21 13:10
92527270022	**EB-1**	Water	03/16/21 16:40	03/17/21 13:10
92527270023	**FB-1**	Water	03/16/21 16:25	03/17/21 13:10
92527270024	**HGWC-13**	Water	03/17/21 14:58	03/18/21 13:17
92527270025	**MW-19**	Water	03/17/21 10:20	03/18/21 13:17
92527270026	**MW-24D**	Water	03/17/21 16:00	03/18/21 13:17
92527270027	**MW-26D**	Water	03/17/21 08:50	03/18/21 13:17

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SAMPLE ANALYTE COUNT

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92527270001	**HGWA-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92527270002	**HGWA-44D**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92527270003	**HGWA-2**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92527270004	**HGWA-3**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92527270005	**HGWA-43D**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92527270006	**HGWC-10**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92527270007	**MW-27D**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92527270008	**HGWC-7 FILTERED**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92527270009	**HGWC-7**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92527270010	**HGWC-8**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92527270011	**MW-7**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92527270012	**MW-20**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92527270013	**MW-28D**	EPA 9315	LAL	1	PASI-PA

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SAMPLE ANALYTE COUNT

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92527270014	**MW-29**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92527270015	**HGWC-9**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92527270016	**HGWC-11**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92527270017	**HGWC-12**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92527270018	**MW-5**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92527270019	**MW-6**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92527270020	**MW-25D**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92527270021	**DUP-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92527270022	**EB-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92527270023	**FB-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92527270024	**HGWC-13**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92527270025	**MW-19**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SAMPLE ANALYTE COUNT

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		Total Radium Calculation	JAL	1	PASI-PA
92527270026	**MW-24D**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92527270027	**MW-26D**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92527270001	**HGWA-1**					
EPA 9315	Radium-226	-0.0744 ± 0.0713 (0.306) C:76% T:NA	pCi/L		03/29/21 07:58	
EPA 9320	Radium-228	-0.473 ± 0.501 (1.24) C:75% T:67%	pCi/L		04/09/21 13:14	
Total Radium Calculation	Total Radium	0.000 ± 0.572 (1.55)	pCi/L		04/14/21 16:39	
92527270002	**HGWA-44D**					
EPA 9315	Radium-226	0.119 ± 0.127 (0.231) C:79% T:NA	pCi/L		03/29/21 07:58	
EPA 9320	Radium-228	0.692 ± 0.477 (0.922) C:63% T:82%	pCi/L		04/09/21 15:22	
Total Radium Calculation	Total Radium	0.811 ± 0.604 (1.15)	pCi/L		04/14/21 16:39	
92527270003	**HGWA-2**					
EPA 9315	Radium-226	0.206 ± 0.172 (0.304) C:81% T:NA	pCi/L		03/29/21 07:58	
EPA 9320	Radium-228	0.531 ± 0.488 (0.990) C:58% T:71%	pCi/L		04/09/21 15:22	
Total Radium Calculation	Total Radium	0.737 ± 0.660 (1.29)	pCi/L		04/14/21 16:39	
92527270004	**HGWA-3**					
EPA 9315	Radium-226	0.128 ± 0.181 (0.393) C:82% T:NA	pCi/L		03/29/21 07:58	
EPA 9320	Radium-228	-0.0144 ± 0.302 (0.724) C:65% T:75%	pCi/L		04/09/21 15:22	
Total Radium Calculation	Total Radium	0.128 ± 0.483 (1.12)	pCi/L		04/14/21 16:39	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92527270005	**HGWA-43D**					
EPA 9315	Radium-226	0.118 ± 0.160 (0.335) C:68% T:NA	pCi/L		03/29/21 07:58	
EPA 9320	Radium-228	1.39 ± 0.825 (1.53) C:62% T:77%	pCi/L		04/09/21 19:20	
Total Radium Calculation	Total Radium	1.51 ± 0.985 (1.87)	pCi/L		04/14/21 16:39	
92527270006	**HGWC-10**					
EPA 9315	Radium-226	0.286 ± 0.243 (0.471) C:84% T:NA	pCi/L		04/05/21 09:41	
EPA 9320	Radium-228	0.829 ± 0.526 (1.00) C:64% T:80%	pCi/L		04/09/21 11:34	
Total Radium Calculation	Total Radium	1.12 ± 0.769 (1.47)	pCi/L		04/14/21 16:39	
92527270007	**MW-27D**					
EPA 9315	Radium-226	0.649 ± 0.300 (0.455) C:92% T:NA	pCi/L		04/05/21 09:42	
EPA 9320	Radium-228	-0.139 ± 0.407 (0.968) C:63% T:88%	pCi/L		04/09/21 11:34	
Total Radium Calculation	Total Radium	0.649 ± 0.707 (1.42)	pCi/L		04/14/21 16:39	
92527270008	**HGWC-7 FILTERED**					
EPA 9315	Radium-226	0.0393 ± 0.241 (0.593) C:77% T:NA	pCi/L		04/05/21 09:45	
EPA 9320	Radium-228	0.110 ± 0.432 (0.980) C:62% T:80%	pCi/L		04/09/21 14:42	
Total Radium Calculation	Total Radium	0.149 ± 0.673 (1.57)	pCi/L		04/14/21 16:39	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92527270009	**HGWC-7**					
EPA 9315	Radium-226	0.243 ± 0.197 (0.352) C:76% T:NA	pCi/L		04/05/21 09:45	
EPA 9320	Radium-228	0.423 ± 0.460 (0.955) C:65% T:77%	pCi/L		04/09/21 14:42	
Total Radium Calculation	Total Radium	0.666 ± 0.657 (1.31)	pCi/L		04/14/21 16:39	
92527270010	**HGWC-8**					
EPA 9315	Radium-226	0.478 ± 0.311 (0.584) C:88% T:NA	pCi/L		04/05/21 09:45	
EPA 9320	Radium-228	0.825 ± 0.471 (0.845) C:63% T:83%	pCi/L		04/09/21 14:42	
Total Radium Calculation	Total Radium	1.30 ± 0.782 (1.43)	pCi/L		04/14/21 16:39	
92527270011	**MW-7**					
EPA 9315	Radium-226	-0.0446 ± 0.252 (0.651) C:76% T:NA	pCi/L		04/05/21 10:07	
EPA 9320	Radium-228	0.386 ± 0.541 (1.16) C:67% T:78%	pCi/L		04/09/21 14:42	
Total Radium Calculation	Total Radium	0.386 ± 0.793 (1.81)	pCi/L		04/14/21 16:39	
92527270012	**MW-20**					
EPA 9315	Radium-226	0.270 ± 0.231 (0.456) C:90% T:NA	pCi/L		04/05/21 10:07	
EPA 9320	Radium-228	0.966 ± 0.478 (0.826) C:83% T:76%	pCi/L		04/09/21 14:42	
Total Radium Calculation	Total Radium	1.24 ± 0.709 (1.28)	pCi/L		04/14/21 16:39	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92527270013	**MW-28D**					
EPA 9315	Radium-226	0.389 ± 0.277 (0.524) C:84% T:NA	pCi/L		04/05/21 10:08	
EPA 9320	Radium-228	0.175 ± 0.459 (1.02) C:68% T:77%	pCi/L		04/09/21 14:42	
Total Radium Calculation	Total Radium	0.564 ± 0.736 (1.54)	pCi/L		04/14/21 16:39	
92527270014	**MW-29**					
EPA 9315	Radium-226	0.272 ± 0.190 (0.287) C:72% T:NA	pCi/L		04/05/21 11:04	
EPA 9320	Radium-228	0.164 ± 0.439 (0.983) C:69% T:73%	pCi/L		04/09/21 14:42	
Total Radium Calculation	Total Radium	0.436 ± 0.629 (1.27)	pCi/L		04/14/21 16:39	
92527270015	**HGWC-9**					
EPA 9315	Radium-226	0.222 ± 0.171 (0.291) C:85% T:NA	pCi/L		04/05/21 11:04	
EPA 9320	Radium-228	0.224 ± 0.344 (0.744) C:79% T:83%	pCi/L		04/09/21 12:06	
Total Radium Calculation	Total Radium	0.446 ± 0.515 (1.04)	pCi/L		04/14/21 16:39	
92527270016	**HGWC-11**					
EPA 9315	Radium-226	0.139 ± 0.146 (0.282) C:87% T:NA	pCi/L		04/05/21 11:04	
EPA 9320	Radium-228	1.57 ± 0.520 (0.731) C:79% T:90%	pCi/L		04/09/21 12:06	
Total Radium Calculation	Total Radium	1.71 ± 0.666 (1.01)	pCi/L		04/14/21 16:39	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92527270017	**HGWC-12**					
EPA 9315	Radium-226	0.245 ± 0.174 (0.279) C:83% T:NA	pCi/L		04/05/21 11:04	
EPA 9320	Radium-228	-0.244 ± 0.404 (0.969) C:75% T:82%	pCi/L		04/09/21 12:06	
Total Radium Calculation	Total Radium	0.245 ± 0.578 (1.25)	pCi/L		04/14/21 16:39	
92527270018	**MW-5**					
EPA 9315	Radium-226	0.0838 ± 0.130 (0.281) C:74% T:NA	pCi/L		04/05/21 11:04	
EPA 9320	Radium-228	1.14 ± 0.493 (0.800) C:74% T:76%	pCi/L		04/09/21 12:06	
Total Radium Calculation	Total Radium	1.22 ± 0.623 (1.08)	pCi/L		04/14/21 16:39	
92527270019	**MW-6**					
EPA 9315	Radium-226	0.307 ± 0.196 (0.306) C:84% T:NA	pCi/L		04/05/21 11:04	
EPA 9320	Radium-228	0.420 ± 0.365 (0.734) C:73% T:83%	pCi/L		04/09/21 12:07	
Total Radium Calculation	Total Radium	0.727 ± 0.561 (1.04)	pCi/L		04/14/21 16:39	
92527270020	**MW-25D**					
EPA 9315	Radium-226	0.324 ± 0.223 (0.398) C:89% T:NA	pCi/L		04/05/21 11:04	
EPA 9320	Radium-228	0.418 ± 0.371 (0.753) C:74% T:84%	pCi/L		04/09/21 12:07	
Total Radium Calculation	Total Radium	0.742 ± 0.594 (1.15)	pCi/L		04/14/21 16:39	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92527270021	**DUP-1**					
EPA 9315	Radium-226	0.455 ± 0.228 (0.291) C:82% T:NA	pCi/L		04/05/21 11:04	
EPA 9320	Radium-228	0.713 ± 0.447 (0.838) C:74% T:85%	pCi/L		04/09/21 13:13	
Total Radium Calculation	Total Radium	1.17 ± 0.675 (1.13)	pCi/L		04/16/21 09:20	
92527270022	**EB-1**					
EPA 9315	Radium-226	-0.0125 ± 0.0916 (0.273) C:89% T:NA	pCi/L		04/05/21 11:04	
EPA 9320	Radium-228	0.181 ± 0.395 (0.872) C:74% T:83%	pCi/L		04/09/21 12:36	
Total Radium Calculation	Total Radium	0.181 ± 0.487 (1.15)	pCi/L		04/16/21 09:20	
92527270023	**FB-1**					
EPA 9315	Radium-226	0.0600 ± 0.214 (0.515) C:87% T:NA	pCi/L		04/05/21 10:10	
EPA 9320	Radium-228	0.137 ± 0.376 (0.841) C:75% T:84%	pCi/L		04/09/21 13:14	
Total Radium Calculation	Total Radium	0.197 ± 0.590 (1.36)	pCi/L		04/16/21 09:20	
92527270024	**HGWC-13**					
EPA 9315	Radium-226	0.490 ± 0.296 (0.435) C:93% T:NA	pCi/L		04/16/21 07:31	
EPA 9320	Radium-228	0.961 ± 0.708 (1.41) C:63% T:68%	pCi/L		04/20/21 12:16	
Total Radium Calculation	Total Radium	1.45 ± 1.00 (1.85)	pCi/L		04/21/21 12:50	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

SUMMARY OF DETECTION

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92527270025	**MW-19**					
EPA 9315	Radium-226	0.261 ± 0.244 (0.455) C:93% T:NA	pCi/L		04/16/21 07:31	
EPA 9320	Radium-228	0.205 ± 0.509 (1.13) C:65% T:74%	pCi/L		04/20/21 12:16	
Total Radium Calculation	Total Radium	0.466 ± 0.753 (1.59)	pCi/L		04/21/21 12:50	
92527270026	**MW-24D**					
EPA 9315	Radium-226	0.143 ± 0.219 (0.478) C:87% T:NA	pCi/L		04/16/21 07:31	
EPA 9320	Radium-228	0.0313 ± 0.534 (1.22) C:68% T:73%	pCi/L		04/20/21 12:16	
Total Radium Calculation	Total Radium	0.174 ± 0.753 (1.70)	pCi/L		04/21/21 12:50	
92527270027	**MW-26D**					
EPA 9315	Radium-226	0.165 ± 0.191 (0.372) C:94% T:NA	pCi/L		04/16/21 07:31	
EPA 9320	Radium-228	-0.289 ± 0.632 (1.49) C:68% T:66%	pCi/L		04/20/21 12:16	
Total Radium Calculation	Total Radium	0.165 ± 0.823 (1.86)	pCi/L		04/21/21 12:50	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Sample: HGWA-1 **Lab ID: 92527270001** Collected: 03/10/21 16:10 Received: 03/11/21 15:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.0744 ± 0.0713 (0.306) C:76% T:NA**	pCi/L	03/29/21 07:58	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.473 ± 0.501 (1.24) C:75% T:67%**	pCi/L	04/09/21 13:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.000 ± 0.572 (1.55)**	pCi/L	04/14/21 16:39	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Sample: HGWA-44D **Lab ID: 92527270002** Collected: 03/10/21 14:30 Received: 03/11/21 15:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.119 ± 0.127 (0.231) C:79% T:NA**	pCi/L	03/29/21 07:58	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.692 ± 0.477 (0.922) C:63% T:82%**	pCi/L	04/09/21 15:22	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.811 ± 0.604 (1.15)**	pCi/L	04/14/21 16:39	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Sample: HGWA-2 **Lab ID: 92527270003** Collected: 03/11/21 09:59 Received: 03/12/21 13:43 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	**0.206 ± 0.172 (0.304) C:81% T:NA**	pCi/L	03/29/21 07:58	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.531 ± 0.488 (0.990) C:58% T:71%**	pCi/L	04/09/21 15:22	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.737 ± 0.660 (1.29)**	pCi/L	04/14/21 16:39	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Sample: HGWA-3 **Lab ID: 92527270004** Collected: 03/11/21 11:25 Received: 03/12/21 13:43 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	**0.128 ± 0.181 (0.393) C:82% T:NA**	pCi/L	03/29/21 07:58	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0144 ± 0.302 (0.724) C:65% T:75%**	pCi/L	04/09/21 15:22	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.128 ± 0.483 (1.12)**	pCi/L	04/14/21 16:39	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Sample: HGWA-43D **Lab ID: 92527270005** Collected: 03/11/21 09:57 Received: 03/12/21 13:43 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	**0.118 ± 0.160 (0.335) C:68% T:NA**	pCi/L	03/29/21 07:58	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.39 ± 0.825 (1.53) C:62% T:77%**	pCi/L	04/09/21 19:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.51 ± 0.985 (1.87)**	pCi/L	04/14/21 16:39	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Sample: HGWC-10 **Lab ID: 92527270006** Collected: 03/12/21 10:11 Received: 03/15/21 12:00 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	**0.286 ± 0.243 (0.471) C:84% T:NA**	pCi/L	04/05/21 09:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.829 ± 0.526 (1.00) C:64% T:80%**	pCi/L	04/09/21 11:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.12 ± 0.769 (1.47)**	pCi/L	04/14/21 16:39	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Sample: MW-27D **Lab ID: 92527270007** Collected: 03/12/21 09:47 Received: 03/15/21 12:00 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	**0.649 ± 0.300 (0.455) C:92% T:NA**	pCi/L	04/05/21 09:42	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.139 ± 0.407 (0.968) C:63% T:88%**	pCi/L	04/09/21 11:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.649 ± 0.707 (1.42)**	pCi/L	04/14/21 16:39	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Sample: HGWC-7 FILTERED **Lab ID: 92527270008** Collected: 03/15/21 16:25 Received: 03/16/21 13:42 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	**0.0393 ± 0.241 (0.593) C:77% T:NA**	pCi/L	04/05/21 09:45	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.110 ± 0.432 (0.980) C:62% T:80%**	pCi/L	04/09/21 14:42	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.149 ± 0.673 (1.57)**	pCi/L	04/14/21 16:39	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Sample: HGWC-7 **Lab ID: 92527270009** Collected: 03/15/21 16:10 Received: 03/16/21 13:42 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	**0.243 ± 0.197 (0.352) C:76% T:NA**	pCi/L	04/05/21 09:45	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.423 ± 0.460 (0.955) C:65% T:77%**	pCi/L	04/09/21 14:42	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.666 ± 0.657 (1.31)**	pCi/L	04/14/21 16:39	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Sample: HGWC-8 **Lab ID: 92527270010** Collected: 03/15/21 11:00 Received: 03/16/21 13:42 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	**0.478 ± 0.311 (0.584) C:88% T:NA**	pCi/L	04/05/21 09:45	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.825 ± 0.471 (0.845) C:63% T:83%**	pCi/L	04/09/21 14:42	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.30 ± 0.782 (1.43)**	pCi/L	04/14/21 16:39	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Sample: MW-7 **Lab ID: 92527270011** Collected: 03/15/21 12:00 Received: 03/16/21 13:42 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	**-0.0446 ± 0.252 (0.651) C:76% T:NA**	pCi/L	04/05/21 10:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.386 ± 0.541 (1.16) C:67% T:78%**	pCi/L	04/09/21 14:42	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.386 ± 0.793 (1.81)**	pCi/L	04/14/21 16:39	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Sample: MW-20 **Lab ID: 92527270012** Collected: 03/15/21 14:22 Received: 03/16/21 13:42 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	**0.270 ± 0.231 (0.456) C:90% T:NA**	pCi/L	04/05/21 10:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.966 ± 0.478 (0.826) C:83% T:76%**	pCi/L	04/09/21 14:42	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.24 ± 0.709 (1.28)**	pCi/L	04/14/21 16:39	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Sample: MW-28D **Lab ID: 92527270013** Collected: 03/15/21 18:25 Received: 03/16/21 13:42 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	**0.389 ± 0.277 (0.524) C:84% T:NA**	pCi/L	04/05/21 10:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.175 ± 0.459 (1.02) C:68% T:77%**	pCi/L	04/09/21 14:42	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.564 ± 0.736 (1.54)**	pCi/L	04/14/21 16:39	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Sample: MW-29 **Lab ID: 92527270014** Collected: 03/15/21 12:52 Received: 03/16/21 13:42 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	**0.272 ± 0.190 (0.287) C:72% T:NA**	pCi/L	04/05/21 11:04	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.164 ± 0.439 (0.983) C:69% T:73%**	pCi/L	04/09/21 14:42	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.436 ± 0.629 (1.27)**	pCi/L	04/14/21 16:39	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Sample: HGWC-9 **Lab ID: 92527270015** Collected: 03/16/21 14:48 Received: 03/17/21 13:10 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.222 ± 0.171 (0.291) C:85% T:NA**	pCi/L	04/05/21 11:04	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.224 ± 0.344 (0.744) C:79% T:83%**	pCi/L	04/09/21 12:06	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.446 ± 0.515 (1.04)**	pCi/L	04/14/21 16:39	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Sample: HGWC-11 **Lab ID: 92527270016** Collected: 03/16/21 09:45 Received: 03/17/21 13:10 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.139 ± 0.146 (0.282) C:87% T:NA**	pCi/L	04/05/21 11:04	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.57 ± 0.520 (0.731) C:79% T:90%**	pCi/L	04/09/21 12:06	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.71 ± 0.666 (1.01)**	pCi/L	04/14/21 16:39	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Sample: HGWC-12 **Lab ID: 92527270017** Collected: 03/16/21 11:12 Received: 03/17/21 13:10 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.245 ± 0.174 (0.279) C:83% T:NA**	pCi/L	04/05/21 11:04	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.244 ± 0.404 (0.969) C:75% T:82%**	pCi/L	04/09/21 12:06	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.245 ± 0.578 (1.25)**	pCi/L	04/14/21 16:39	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Sample: MW-5 **Lab ID: 92527270018** Collected: 03/16/21 16:08 Received: 03/17/21 13:10 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0838 ± 0.130 (0.281) C:74% T:NA**	pCi/L	04/05/21 11:04	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.14 ± 0.493 (0.800) C:74% T:76%**	pCi/L	04/09/21 12:06	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.22 ± 0.623 (1.08)**	pCi/L	04/14/21 16:39	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Sample: MW-6 **Lab ID: 92527270019** Collected: 03/16/21 15:43 Received: 03/17/21 13:10 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.307 ± 0.196 (0.306) C:84% T:NA**	pCi/L	04/05/21 11:04	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.420 ± 0.365 (0.734) C:73% T:83%**	pCi/L	04/09/21 12:07	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.727 ± 0.561 (1.04)**	pCi/L	04/14/21 16:39	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Sample: MW-25D **Lab ID: 92527270020** Collected: 03/16/21 12:32 Received: 03/17/21 13:10 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.324 ± 0.223 (0.398) C:89% T:NA**	pCi/L	04/05/21 11:04	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.418 ± 0.371 (0.753) C:74% T:84%**	pCi/L	04/09/21 12:07	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.742 ± 0.594 (1.15)**	pCi/L	04/14/21 16:39	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Sample: DUP-1 **Lab ID: 92527270021** Collected: 03/16/21 00:00 Received: 03/17/21 13:10 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.455 ± 0.228 (0.291) C:82% T:NA**	pCi/L	04/05/21 11:04	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.713 ± 0.447 (0.838) C:74% T:85%**	pCi/L	04/09/21 13:13	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.17 ± 0.675 (1.13)**	pCi/L	04/16/21 09:20	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Sample: EB-1 **Lab ID: 92527270022** Collected: 03/16/21 16:40 Received: 03/17/21 13:10 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.0125 ± 0.0916 (0.273) C:89% T:NA**	pCi/L	04/05/21 11:04	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.181 ± 0.395 (0.872) C:74% T:83%**	pCi/L	04/09/21 12:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.181 ± 0.487 (1.15)**	pCi/L	04/16/21 09:20	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Sample: FB-1 **Lab ID: 92527270023** Collected: 03/16/21 16:25 Received: 03/17/21 13:10 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0600 ± 0.214 (0.515) C:87% T:NA**	pCi/L	04/05/21 10:10	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.137 ± 0.376 (0.841) C:75% T:84%**	pCi/L	04/09/21 13:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.197 ± 0.590 (1.36)**	pCi/L	04/16/21 09:20	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Sample: HGWC-13 **Lab ID: 92527270024** Collected: 03/17/21 14:58 Received: 03/18/21 13:17 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	**0.490 ± 0.296 (0.435) C:93% T:NA**	pCi/L	04/16/21 07:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.961 ± 0.708 (1.41) C:63% T:68%**	pCi/L	04/20/21 12:16	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.45 ± 1.00 (1.85)**	pCi/L	04/21/21 12:50	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Sample: MW-19 **Lab ID: 92527270025** Collected: 03/17/21 10:20 Received: 03/18/21 13:17 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	**0.261 ± 0.244 (0.455) C:93% T:NA**	pCi/L	04/16/21 07:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.205 ± 0.509 (1.13) C:65% T:74%**	pCi/L	04/20/21 12:16	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.466 ± 0.753 (1.59)**	pCi/L	04/21/21 12:50	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Sample: MW-24D **Lab ID: 92527270026** Collected: 03/17/21 16:00 Received: 03/18/21 13:17 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	**0.143 ± 0.219 (0.478) C:87% T:NA**	pCi/L	04/16/21 07:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0313 ± 0.534 (1.22) C:68% T:73%**	pCi/L	04/20/21 12:16	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.174 ± 0.753 (1.70)**	pCi/L	04/21/21 12:50	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Sample: MW-26D **Lab ID: 92527270027** Collected: 03/17/21 08:50 Received: 03/18/21 13:17 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	**0.165 ± 0.191 (0.372) C:94% T:NA**	pCi/L	04/16/21 07:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.289 ± 0.632 (1.49) C:68% T:66%**	pCi/L	04/20/21 12:16	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.165 ± 0.823 (1.86)**	pCi/L	04/21/21 12:50	7440-14-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

QC Batch: 440498
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92527270006, 92527270007, 92527270008, 92527270009, 92527270010, 92527270011, 92527270012, 92527270013, 92527270014, 92527270015, 92527270016, 92527270017, 92527270018, 92527270019, 92527270020, 92527270021, 92527270022

METHOD BLANK: 2126660
Matrix: Water
Associated Lab Samples: 92527270006, 92527270007, 92527270008, 92527270009, 92527270010, 92527270011, 92527270012, 92527270013, 92527270014, 92527270015, 92527270016, 92527270017, 92527270018, 92527270019, 92527270020, 92527270021, 92527270022

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0542 ± 0.165 (0.401) C:87% T:NA	pCi/L	04/05/21 09:41	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

QC Batch: 440499
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92527270023

METHOD BLANK: 2126661
Matrix: Water
Associated Lab Samples: 92527270023

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0900 ± 0.196 (0.458) C:77% T:NA	pCi/L	04/05/21 10:10	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

QC Batch: 440197
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92527270006, 92527270007, 92527270008, 92527270009, 92527270010, 92527270011, 92527270012, 92527270013, 92527270014

METHOD BLANK: 2125126 Matrix: Water
Associated Lab Samples: 92527270006, 92527270007, 92527270008, 92527270009, 92527270010, 92527270011, 92527270012, 92527270013, 92527270014

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.833 ± 0.523 (0.984) C:64% T:74%	pCi/L	04/09/21 11:35	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

QC Batch: 443236
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92527270024, 92527270025, 92527270026, 92527270027

METHOD BLANK: 2139349 Matrix: Water
Associated Lab Samples: 92527270024, 92527270025, 92527270026, 92527270027

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0175 ± 0.115 (0.371) C:93% T:NA	pCi/L	04/16/21 07:31	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

QC Batch: 443103
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92527270024, 92527270025, 92527270026, 92527270027

METHOD BLANK: 2138547 Matrix: Water
Associated Lab Samples: 92527270024, 92527270025, 92527270026, 92527270027

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.751 ± 0.461 (0.850) C:65% T:74%	pCi/L	04/20/21 12:17	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

QC Batch: 440490 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92527270001, 92527270015, 92527270016, 92527270017, 92527270018, 92527270019, 92527270020, 92527270021, 92527270022, 92527270023

METHOD BLANK: 2126643 Matrix: Water
Associated Lab Samples: 92527270001, 92527270015, 92527270016, 92527270017, 92527270018, 92527270019, 92527270020, 92527270021, 92527270022, 92527270023

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.738 ± 0.321 (0.495) C:74% T:97%	pCi/L	04/09/21 12:06	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

QC Batch: 440491
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92527270002, 92527270003, 92527270004, 92527270005

METHOD BLANK: 2126646 Matrix: Water
Associated Lab Samples: 92527270002, 92527270003, 92527270004, 92527270005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.826 ± 0.447 (0.791) C:67% T:78%	pCi/L	04/09/21 15:22	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

QC Batch: 439773 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92527270001, 92527270002, 92527270003, 92527270004, 92527270005

METHOD BLANK: 2123469 Matrix: Water
Associated Lab Samples: 92527270001, 92527270002, 92527270003, 92527270004, 92527270005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0133 ± 0.113 (0.309) C:70% T:NA	pCi/L	03/29/21 07:58	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALIFIERS

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

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.

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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92527270001	HGWA-1	EPA 9315	439773		
92527270002	HGWA-44D	EPA 9315	439773		
92527270003	HGWA-2	EPA 9315	439773		
92527270004	HGWA-3	EPA 9315	439773		
92527270005	HGWA-43D	EPA 9315	439773		
92527270006	HGWC-10	EPA 9315	440498		
92527270007	MW-27D	EPA 9315	440498		
92527270008	HGWC-7 FILTERED	EPA 9315	440498		
92527270009	HGWC-7	EPA 9315	440498		
92527270010	HGWC-8	EPA 9315	440498		
92527270011	MW-7	EPA 9315	440498		
92527270012	MW-20	EPA 9315	440498		
92527270013	MW-28D	EPA 9315	440498		
92527270014	MW-29	EPA 9315	440498		
92527270015	HGWC-9	EPA 9315	440498		
92527270016	HGWC-11	EPA 9315	440498		
92527270017	HGWC-12	EPA 9315	440498		
92527270018	MW-5	EPA 9315	440498		
92527270019	MW-6	EPA 9315	440498		
92527270020	MW-25D	EPA 9315	440498		
92527270021	DUP-1	EPA 9315	440498		
92527270022	EB-1	EPA 9315	440498		
92527270023	FB-1	EPA 9315	440499		
92527270024	HGWC-13	EPA 9315	443236		
92527270025	MW-19	EPA 9315	443236		
92527270026	MW-24D	EPA 9315	443236		
92527270027	MW-26D	EPA 9315	443236		
92527270001	HGWA-1	EPA 9320	440490		
92527270002	HGWA-44D	EPA 9320	440491		
92527270003	HGWA-2	EPA 9320	440491		
92527270004	HGWA-3	EPA 9320	440491		
92527270005	HGWA-43D	EPA 9320	440491		
92527270006	HGWC-10	EPA 9320	440197		
92527270007	MW-27D	EPA 9320	440197		
92527270008	HGWC-7 FILTERED	EPA 9320	440197		
92527270009	HGWC-7	EPA 9320	440197		
92527270010	HGWC-8	EPA 9320	440197		
92527270011	MW-7	EPA 9320	440197		
92527270012	MW-20	EPA 9320	440197		
92527270013	MW-28D	EPA 9320	440197		
92527270014	MW-29	EPA 9320	440197		
92527270015	HGWC-9	EPA 9320	440490		
92527270016	HGWC-11	EPA 9320	440490		
92527270017	HGWC-12	EPA 9320	440490		
92527270018	MW-5	EPA 9320	440490		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HAMMOND AP-1 SEMIANNUAL RADS
Pace Project No.: 92527270

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92527270019	**MW-6**	EPA 9320	440490		
92527270020	**MW-25D**	EPA 9320	440490		
92527270021	**DUP-1**	EPA 9320	440490		
92527270022	**EB-1**	EPA 9320	440490		
92527270023	**FB-1**	EPA 9320	440490		
92527270024	**HGWC-13**	EPA 9320	443103		
92527270025	**MW-19**	EPA 9320	443103		
92527270026	**MW-24D**	EPA 9320	443103		
92527270027	**MW-26D**	EPA 9320	443103		
92527270001	**HGWA-1**	Total Radium Calculation	443374		
92527270002	**HGWA-44D**	Total Radium Calculation	443374		
92527270003	**HGWA-2**	Total Radium Calculation	443374		
92527270004	**HGWA-3**	Total Radium Calculation	443374		
92527270005	**HGWA-43D**	Total Radium Calculation	443374		
92527270006	**HGWC-10**	Total Radium Calculation	443374		
92527270007	**MW-27D**	Total Radium Calculation	443374		
92527270008	**HGWC-7 FILTERED**	Total Radium Calculation	443374		
92527270009	**HGWC-7**	Total Radium Calculation	443374		
92527270010	**HGWC-8**	Total Radium Calculation	443374		
92527270011	**MW-7**	Total Radium Calculation	443374		
92527270012	**MW-20**	Total Radium Calculation	443374		
92527270013	**MW-28D**	Total Radium Calculation	443374		
92527270014	**MW-29**	Total Radium Calculation	443374		
92527270015	**HGWC-9**	Total Radium Calculation	443374		
92527270016	**HGWC-11**	Total Radium Calculation	443374		
92527270017	**HGWC-12**	Total Radium Calculation	443374		
92527270018	**MW-5**	Total Radium Calculation	443374		
92527270019	**MW-6**	Total Radium Calculation	443374		
92527270020	**MW-25D**	Total Radium Calculation	443374		
92527270021	**DUP-1**	Total Radium Calculation	443625		
92527270022	**EB-1**	Total Radium Calculation	443625		
92527270023	**FB-1**	Total Radium Calculation	443625		
92527270024	**HGWC-13**	Total Radium Calculation	444310		
92527270025	**MW-19**	Total Radium Calculation	444310		
92527270026	**MW-24D**	Total Radium Calculation	444310		
92527270027	**MW-26D**	Total Radium Calculation	444310		

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

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: 3/12/24 CM

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

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

Thermometer: ☑ IR Gun ID: 230 ☑ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 1.8 **Correction Factor:** Add/Subtract (°C) 0.0

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

Cooler Temp Corrected (°C): 1.8

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, 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
www.pacelabs.com

CHAIN-OF-CUSTOI

The Chain-of-Custody is a LEGAL

WO# : 92527270

92527270

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 AP-1 Semiannual
Project Number:	GW6581B

Section C
Invoice Information

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	10839-1

Page: 1 of 1

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 DATE	COLLECTED TIME	COMPOSITE DATE	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	App. III & IV Metals*	RAD 226/228	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Requested Analysis Filtered (Y/N)	N	N	N	N		
1	HGWA-1	WT	G	3/10/21	1610	–	–	17	5	2		3							X	X	X	X	N	pH = 6.95
2	HGWA-2	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
3	HGWA-3	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
4	HGWA-43D	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
5	HGWA-44D	WT	G	3/10/21	1430	–	–	19	5	2		3							X	X	X	X	N	pH = 7.92
6	HGWC-7	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
7	HGWC-8	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
8	HGWC-9	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
9	HGWC-10	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
10	HGWC-11	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
11	HGWC-12	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
12	HGWC-13	WT	G			–	–		5	2		3							X	X	X	X	N	pH =

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	[illegible] Ueshrishtankar	3/10/21	1730	[illegible]	3/10/21	1730				
*App. III & IV Metals = Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Mo, Se, Tl	[illegible]	3/11/21	1010	[illegible]	3/11/21	1040				
One sample set submitted for HGWA-1/2/3/43D/44D but they will be reported for AP-1/2/3 SDGs	[illegible]	3/11/21	1555	[illegible]	3/11/21	1555	2.0	Y	N	Y
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ueshrishtankar

SIGNATURE of SAMPLER: [illegible] DATE Signed (MM/DD/YY): 03/10/21

*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
www.pacelabs.com

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 AP-1 Semiannual
Project Number:	GW6581B

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	10839-10

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 DATE	COLLECTED TIME	COMPOSITE DATE	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	App. III & IV Metals*	RAD 226/228	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Requested Analysis Filtered (Y/N)	N	N	N	N		
1	HGWA-1	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
2	HGWA-2	WT	G	3/11/21	0959	--	--	16	5	2		3							X	X	X	X	N	pH = 5.80
3	HGWA-3	WT	G	3/11/21	1175	--	--	17	5	2		3							X	X	X	X	N	pH = 7.53
4	HGWA-43D	WT	G	3/11/21	0952	--	--	16	5	2		3							X	X	X	X	N	pH = 7.46
5	HGWA-44D	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
6	HGWC-7	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
7	HGWC-8	WT	G						5	2		3							X	X	X	X	N	pH =
8	HGWC-9	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
9	HGWC-10	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
10	HGWC-11	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
11	HGWC-12	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
12	HGWC-13	WT	G			--	--		5	2		3							X	X	X	X	N	pH =

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	Thomas Hessler / Geo	3/12/21	1310	Vishish Thakur / GED	3/12/21	1310
*App. III & IV Metals = Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Mo, Se, Tl	Vishish Thakur / GED	3/12/21	1343	AA / Pace	3.12.21	1343
One sample set submitted for HGWA-1/2/3/43D/44D but they will be reported for AP-1/2/3 SDGs	AA / Pace	3.12.21	1639	Charles Kinde	3/12/21	1639

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Hessler, Vishish Thakur

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 03/11/21

*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
www.pacelabs.com

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

Page: 1 of 2

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

Section B
Required Project Information:
Report To: SCS Contacts
Copy To: Geosyntec Contacts
Purchase Order No.:
Project Name: Plant Hammond AP-1 Semiannual
Project Number: GW6581B

Section C
Invoice Information:
Attention: Southern Co.
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Kevin Herring
Pace Profile #: 10839-10

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 DATE	COLLECTED TIME	COMPOSITE DATE	COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Requested Analysis Filtered (Y/N): Chloride, Fluoride, Sulfate	App. III & IV Metals*	RAD 226/228	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																			N	N	N	N		
1	HGWA-1	WT	G						5	2		3							X	X	X	X	N	pH =
2	HGWA-2	WT	G						5	2		3							X	X	X	X	N	pH =
3	HGWA-3	WT	G						5	2		3							X	X	X	X	N	pH =
4	HGWA-43D	WT	G						5	2		3							X	X	X	X	N	pH =
5	HGWA-44D	WT	G						5	2		3							X	X	X	X	N	pH =
6	HGWC-7	WT	G						5	2		3							X	X	X	X	N	pH =
7	HGWC-8	WT	G						5	2		3							X	X	X	X	N	pH =
8	HGWC-9	WT	G						5	2		3							X	X	X	X	N	pH =
9	HGWC-10	WT	G	3/12/21	1011			18	5	2		3							X	X	X	X	N	pH = 6.76
10	HGWC-11	WT	G						5	2		3							X	X	X	X	N	pH =
11	HGWC-12	WT	G						5	2		3							X	X	X	X	N	pH =
12	HGWC-13	WT	G						5	2		3							X	X	X	X	N	pH =

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	CR / GPC	3/15/21	1145	/ GPC	3/15/21	1145	
App. III & IV Metals = Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Mo, Se, Tl	/ Pace	3/15/21	1145	/ Pace	3/15/21	1200	
One sample set submitted for HGWA-1/2/3/43D/44D but they will be reported for AP-1/2/3 SDGs	/ Pace	3/15/21	1458	/	3/15/21	1458	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Chad Russo
SIGNATURE of SAMPLER: (CR)
DATE Signed (MM/DD/YY): 03/12/21

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
www.pacelabs.com

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

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: Plant Hammond AP-1 Semiannual
Project Number: GW6581B

Section C Invoice Information:
Attention: Southern Co.
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Kevin Herring
Pace Profile #: 10839-10

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 DATE	COLLECTED TIME	COMPOSITE DATE	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	App. III & IV Metals*	RAD 226/228	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Requested Analysis Filtered (Y/N)	N	N	N	N		
1	MW-5	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
2	MW-6	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
3	MW-7	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
4	MW-19	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
5	MW-20	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
6	MW-24D	WT	G			--	--		5	3/12/21									X	X	X	X	N	pH =
7	MW-25D	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
8	MW-26D	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
9	MW-27D	WT	G	3/12/21	0947	--	--	17	5	2		3							X	X	X	X	N	pH = 7.88
10	MW-28D	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
11	MW-29	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
12	Dup-1	WT	G			--	--		5	2		3							X	X	X	X	N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please note dry wells, strike through any wells not sampled, and note when the last sample for the event has been taken.	SCS	3/15/21	1145	Pace	3/15/21	1145	
App. III & IV Metals = Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Mo, Se, Tl	Pace	3/15/21	1145	Pace	3/15/21	1200	
One sample set submitted for HGWA-1/2/3/43D/44D but they will be reported for AP-1/2/3 SDGs	Pace	3/15/21	1459	Charles Austin	3/15/21	1459	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Thomas Kessler
SIGNATURE of SAMPLER: TK
DATE Signed (MM/DD/YY): 03/12/21

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

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

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

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 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:	Plant Hammond AP-1 Semiannual
Project Number:	GW6581B

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	10839-10

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ~~OGR~~

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 DATE	COLLECTED TIME	COMPOSITE DATE	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	App. III & IV Metals*	RAD 226/228	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Requested Analysis Filtered (Y/N)	N	N	N	N		
1	HGWA-1	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
2	HGWA-2	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
3	HGWA-3	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
4	~~HGWA-43D~~	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
5	HGWC-7 ~~HGWA-44D~~ Filtered	WT	G	3/15/21	1625	–	–	18	5	2		3							X	X	X	X	N	pH = 7.19
6	HGWC-7	WT	G	3/15/21	1610	–	–	18	5	2		3							X	X	X	X	N	pH = 7.19
7	HGWC-8	WT	G	3/15/21	1100	–	–	18	5	2		3							X	X	X	X	N	pH = 7.09
8	~~HGWC-9~~	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
9	HGWC-10	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
10	HGWC-11	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
11	HGWC-12	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
12	HGWC-13	WT	G			–	–		5	2		3							X	X	X	X	N	pH =

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	Thomas Hessler	3/16/21	1340	Lynn Williams / Pace	3/16/21	1342	3.3
*App. III & IV Metals = Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Mo, Se, Tl	Lynn Williams / Pace	3/16/21	1532	[signature] / Pace	3/16/21	1532	3.3
One sample set submitted for HGWA-1/2/3/43D/44D but they will be reported for AP-1/2/3 SDGs							

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Hessler, Vcshish Fculcar

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 3/15/21

*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
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: 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:	Plant Hammond AP-1 Semiannual
Project Number:	GW6581B

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	10839-10

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ~~OOR~~

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 DATE	COLLECTED TIME	COMPOSITE DATE	COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	Chloride, Fluoride, Sulfate (N)	App. III & IV Metals* (N)	RAD 226/228 (N)	TDS (N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-5	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
2	MW-6	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
3	MW-7	WT	G	3/15/21	1200	–	–	18	5	2		3							X	X	X	X	N	pH = 6.66
4	MW-19	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
5	MW-20	WT	G	3/15/21	1422	–	–	18	5	2		3							X	X	X	X	N	pH = 6.97
6	MW-24D	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
7	MW-25D	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
8	MW-26D	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
9	MW-27D	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
10	MW-28D	WT	G	3/15/21	1825	–	–	18	5	2		3							X	X	X	X	N	pH = 7.61
11	MW-29	WT	G	3/15/21	1252	–	–	17	5	2		3							X	X	X	X	N	pH = 7.05
12	Dup-1	WT	G						5	2		3							X	X	X	X	N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	Thomas Kessler	3/16/21	1340	Ryan Williams / Pace	3/16/21	1342				
*App. III & IV Metals = Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Mo, Se, Tl	Ryan Williams / Pace	3/16/21	1532	[signature] / Pace	3/16/21	1532	3.3	Y	Y	Y
One sample set submitted for HGWA-1/2/3/43D/44D but they will be reported for AP-1/2/3 SDGs										

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Kessler, Vashish ~~[illegible]~~ [illegible]

SIGNATURE of SAMPLER: [signature] [signature]

DATE Signed (MM/DD/YY): 3/15/21

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

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

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 3

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 AP-1 Semiannual	Pace Project Manager:	Kevin Herring
Requested Due Date/TAT:	10 Day	Project Number:	GW6581B	Pace Profile #:	10839-10

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ~~OBR~~

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 DATE	COLLECTED TIME	COMPOSITE DATE	COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	Chloride, Fluoride, Sulfate (N)	App. III & IV Metals* (N)	RAD 226/228 (N)	TDS (N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	HGWA-1	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
2	HGWA-2	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
3	HGWA-3	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
4	HGWA-43D	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
5	HGWA-44D	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
6	HGWC-7	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
7	HGWC-8	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
8	HGWC-9	WT	G	3/16/21	1448	–	–	17	5	2		3							X	X	X	X	N	pH = 7.10
9	HGWC-10	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
10	HGWC-11	WT	G	3/16/21	0945	–	–	15	5	2		3							X	X	X	X	N	pH = 5.95
11	HGWC-12	WT	G	3/16/21	1112	–	–	14	5	2		3							X	X	X	X	N	pH = 7.15
12	HGWC-13	WT	G			–	–		5	2		3							X	X	X	X	N	pH =

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	Thomas Kessler	3/17/21	1310	Ryan Williams / Pace	3/17/21	1310				
*App. III & IV Metals = Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Mo, Se, Tl	Ryan Williams / Pace	3/17/21	1510	[signature]	3/17/21	1510	5.9	Y	N	Y
One sample set submitted for HGWA-1/2/3/43D/44D but they will be reported for AP-1/2/3 SDGs										

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Chad Russo, Vashist Jankoor

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 3/16/21

*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
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: 2 of 3

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 AP-1 Semiannual
Project Number:	GW6581B

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	10839-10

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 DATE	COLLECTED TIME	COMPOSITE DATE	COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate	App. III & IV Metals*	RAD 226/228	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
										Preservatives								N	N	N	N	N		
1	MW-5	WT	G	3/16/21	1608	–	–	17	5	2		3							X	X	X	X	N	pH = 5.78
2	MW-6	WT	G	3/16/21	1543	–	–	18	5	2		3							X	X	X	X	N	pH = 6.96
3	MW-7	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
4	MW-19	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
5	MW-20	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
6	MW-24D	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
7	MW-25D	WT	G	3/16/21	1232	–	–	17	5	2		3							X	X	X	X	N	pH = 2.76
8	MW-26D	WT	G						5	2		3							X	X	X	X	N	pH =
9	MW-27D	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
10	MW-28D	WT	G			–	–		5	2		3							X	X	X	X	N	pH =
11	MW-29	WT	G						5	2		3							X	X	X	X	N	pH =
12	Dup-1	WT	G	3/16/21	–	–	–	17	5	2		3							X	X	X	X	N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	Thomas Heath	3/17/21	310	Ryan Williams / Pace	3/17/21	1310
*App. III & IV Metals = Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Mo, Se, Tl	Ryan Williams / Pace	3/17/21	1610		3/17/21	1510
One sample set submitted for HGWA-1/2/3/43D/44D but they will be reported for AP-1/2/3 SDGs						

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Vaghish Tankoor, Chad Russo

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 3/16/21

*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
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: 3 of 3

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 AP-1 Semiannual
Project Number:	GW6581B

Section C — Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	10839-10

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ~~OCR~~

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 DATE	COLLECTED TIME	COMPOSITE DATE	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	App. III & IV Metals*	RAD 225/226	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Requested Analysis Filtered (Y/N)	N	N	N	N		
1	EB-1	WT	G	3/16/21	1646	--	--	18	5	2		3							X	X	X	X	N	
2	FB-1	WT	G	3/16/21	1635	--	--	18	5	2		3							X	X	X	X	N	
3																							N	
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Please note dry wells, strike through any wells not sampled, and note when the last sample for the event has been taken.	Thomas Hessler	3/17/21	310	Ryan Williams / Pace	3/17/21	1310				
*App. III & IV Metals = Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Mo, Se, Tl	Ryan Williams / Pace	3/17/21	1510		3/17/21	1510	5.9	Y	N	Y
One sample set submitted for HGWA-1/2/3/43D/44D but they will be reported for AP-1/2/3 SDG.										

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Hessler, Chad Russell

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 3/16/21

*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
www.pacelabs.com

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:	Plant Hammond AP-1 Semiannual	Pace Project Manager:	Kevin Herring
Requested Due Date/TAT:	10 Day	Project Number:	GW6581B	Pace Profile #:	10839-10

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 DATE	COLLECTED TIME	COMPOSITE DATE	COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	Chloride, Fluoride, Sulfate (N)	App. III & IV Metals* (N)	RAD 226/228 (N)	TDS (N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	HGWA-1	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
2	HGWA-2	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
3	HGWA-3	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
4	HGWA-43D	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
5	HGWA-44D	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
6	HGWC-7	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
7	HGWC-8	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
8	HGWC-9	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
9	HGWC-10	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
10	HGWC-11	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
11	HGWC-12	WT	G			--	--		5	2		3							X	X	X	X	N	pH =
12	HGWC-13	WT	G	3/17/21	1458	--	--	14	5	2		3							X	X	X	X	N	pH = 7.33

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	[signature] / Geo	3/18	1317	[signature] / Pace	3/19/21	1317	
*App. III & IV Metals = Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Mo, Se, Tl	[signature] / Pace	3/18/21	1521	[signature]	3/18/21	1521	
One sample set submitted for HGWA-1/2/3/43D/44D but they will be reported for AP-1/2/3 SDGs							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Vashish Kulkar

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 3/16/21

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
www.pacelabs.com

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

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:	Plant Hammond AP-1 Semiannual
Project Number:	GW6581B

Section C Invoice Information:

Attention:	Southern Co
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	10839-10

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 DATE	COLLECTED TIME	COMPOSITE DATE	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	App. III & IV Metals*	RAD 226/228	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
										Requested Analysis Filtered (Y/N)									N	N	N	N		
1	MW-5	WT	G						5		2								X	X	X	X	N	pH =
2	MW-6	WT	G						5		2								X	X	X	X	N	pH =
3	~~MW-7~~	WT	G						5		2		3						X	X	X	X	N	pH =
4	MW-19	WT	G	3/17/21	1020			18	5		2		3						X	X	X	X	N	pH = 6.34
5	~~MW-20~~ MW-24D	WT	G	3/17/21	1600			18	5		2		3						X	X	X	X	N	pH = 7.66
6	~~MW-24D~~	WT	G						5		2		3						X	X	X	X	N	pH =
7	~~MW-25D~~	WT	G						5		2		3						X	X	X	X	N	pH =
8	MW-26D	WT	G	3/17/21	0950			17	5		2		3						X	X	X	X	N	pH = 7.14
9	MW-27D	WT	G						5		2		3						X	X	X	X	N	pH =
10	MW-28D	WT	G						5		2		3						X	X	X	X	N	pH =
11	MW-29	WT	G						5		2		3						X	X	X	X	N	pH =
12	Dup-1	WT	G						5		2		3						X	X	X	X	N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	Thomas Hensley Geosyntec	3/17/21	1317	Ryan Willim / Pace	3/19/21	1317	
*App. III & IV Metals = Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Mo, Se, Tl	Ryan Willim / Pace	3/19/21	1521	Charles Hunter	3/19/21	1521	
One sample set submitted for HGWA-1/2/3/43D/44D but they will be reported for AP-1/2/3 SDGs							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Joshua Henderson

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 3/16/21

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

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

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-226
Analyst:	CLA
Date:	3/26/2021
Worklist:	59450
Matrix:	DW

Method Blank Assessment	
MB Sample ID	2123469
MB concentration:	0.013
M/B Counting Uncertainty:	0.113
MB MDC:	0.309
MB Numerical Performance Indicator:	0.23
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS59450	LCSD59450
Count Date:	3/29/2021	3/29/2021
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.039	24.039
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.505	0.504
Target Conc. (pCi/L, g, F):	4.763	4.773
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	4.437	5.482
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.594	0.737
Numerical Performance Indicator:	-1.07	1.88
Percent Recovery:	93.15%	114.86%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS59450	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD59450	
Sample Result (pCi/L, g, F):	4.437	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.594	
Sample Duplicate Result (pCi/L, g, F):	5.482	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.737	
Are sample and/or duplicete results below RL?	NO	
Duplicate Numerical Performance Indicator:	-2.166	92527258001
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	20.88%	92527258001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

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

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

Comments:

iAm 3/29/21

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	CLA
Date:	3/26/2021
Worklist:	59450
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2123469
MB concentration:	0.013
M/B Counting Uncertainty:	0.113
MB MDC:	0.309
MB Numerical Performance Indicator:	0.23
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS59450	LCSD59450
Count Date:	3/29/2021	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.039	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.505	
Target Conc. (pCi/L, g, F):	4.763	
Uncertainty (Calculated):	0.057	
Result (pCi/L, g, F):	4.437	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.594	
Numerical Performance Indicator:	-1.07	
Percent Recovery:	93.15%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

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

Duplicate Sample Assessment		
Sample I.D.:	92527258001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	92527258001DUP	
Sample Result (pCi/L, g, F):	-0.074	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.070	
Sample Duplicate Result (pCi/L, g, F):	0.120	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.145	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	-2.367	92527258001
Duplicate RPD:	852.72%	92527258001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	
% RPD Limit:	25%	

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

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

Comments:

~~***Batch must be re-prepped due to unacceptable precision.~~ N/A LAM 3/29/21

CLA 3/29/21

LAM 3/29/21

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test: Ra-226
Analyst: LAL
Date: 4/5/2021
Worklist: 59559
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2126660
MB concentration:	0.054
M/B Counting Uncertainty:	0.165
MB MDC:	0.401
MB Numerical Performance Indicator:	0.64
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS59559	LCSD59559
Count Date:	4/5/2021	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.039	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.517	
Target Conc. (pCi/L, g, F):	4.653	
Uncertainty (Calculated):	0.056	
Result (pCi/L, g, F):	5.219	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.630	
Numerical Performance Indicator:	1.75	
Percent Recovery:	112.16%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

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

Duplicate Sample Assessment		
Sample I.D.:	92527263017	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	92527263017DUP	
Sample Result (pCi/L, g, F):	0.425	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.274	
Sample Duplicate Result (pCi/L, g, F):	0.294	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.289	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	0.645	92527263017
Duplicate RPD:	36.56%	92527263017DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	
% RPD Limit:	25%	

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

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

Comments:

~~***Batch must be re-prepped due to unacceptable precision.~~ N/A LAM 4/5/21

LAM 4/5/21

CMT 4/5/21

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test: Ra-226
Analyst: LAL
Date: 4/5/2021
Worklist: 59559
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2126660
MB concentration:	0.054
M/B Counting Uncertainty:	0.165
MB MDC:	0.401
MB Numerical Performance Indicator:	0.64
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS59559	LCSD59559
Count Date:	4/5/2021	4/5/2021
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.039	24.039
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.517	0.511
Target Conc. (pCi/L, g, F):	4.653	4.706
Uncertainty (Calculated):	0.056	0.056
Result (pCi/L, g, F):	5.219	4.719
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.630	0.614
Numerical Performance Indicator:	1.75	0.04
Percent Recovery:	112.16%	100.28%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS59559	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicata Sample I.D.	LCSD59559	
Sample Result (pCi/L, g, F):	5.219	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.630	
Sample Duplicate Result (pCi/L, g, F):	4.719	
Sample Duplicete Result Counting Uncertainty (pCi/L, g, F):	0.614	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	1.112	92527263017
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	11.19%	92527263017DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

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

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

Comments:

VAM 4/5/21

CMT 4/5/21

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	4/5/2021
Worklist:	59560
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2126661
MB concentration:	0.090
M/B Counting Uncertainty:	0.196
MB MDC:	0.458
MB Numerical Performance Indicator:	0.90
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS59560	LCSD59560
Count Date:	4/5/2021	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.039	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.504	
Target Conc. (pCi/L, g, F):	4.771	
Uncertainty (Calculated):	0.057	
Result (pCi/L, g, F):	5.065	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.277	
Numerical Performance Indicator:	2.04	
Percent Recovery:	106.17%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

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

Duplicate Sample Assessment		
Sample I.D.:	92527258011	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	92527258011DUP	
Sample Result (pCi/L, g, F):	-0.015	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.075	
Sample Duplicate Result (pCi/L, g, F):	0.050	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.058	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	-1.338	92527258011
Duplicate RPD:	375.86%	92527258011DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	
% RPD Limit:	25%	

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

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

Comments:

***~~Batch must be re-prepped due to unacceptable precision.~~ N/A LAM 4/12/21

4/12/21

LAM 4/12/21

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	4/5/2021
Worklist:	59560
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2126661
MB concentration:	0.090
M/B Counting Uncertainty:	0.196
MB MDC:	0.458
MB Numerical Performance Indicator:	0.90
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS59560	LCSD59560
Count Date:	4/5/2021	4/5/2021
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.039	24.039
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.504	0.518
Target Conc. (pCi/L, g, F):	4.771	4.641
Uncertainty (Calculated):	0.057	0.056
Result (pCi/L, g, F):	5.065	4.810
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.277	0.261
Numerical Performance Indicator:	2.04	1.24
Percent Recovery:	106.17%	103.65%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS59560	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD59560	
Sample Result (pCi/L, g, F):	5.065	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.277	
Sample Duplicate Result (pCi/L, g, F):	4.810	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.261	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	1.314	92527258011
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	2.40%	92527258011DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

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

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

Comments:

LAM 4/12/21

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	4/15/2021
Worklist:	59924
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2139349
MB concentration:	-0.018
M/B Counting Uncertainty:	0.115
MB MDC:	0.371
MB Numerical Performance Indicator:	-0.30
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS59924	LCSD59924
Count Date:	4/16/2021	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.038	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.503	
Target Conc. (pCi/L, g, F):	4.781	
Uncertainty (Calculated):	0.057	
Result (pCi/L, g, F):	4.639	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.848	
Numerical Performance Indicator:	-0.33	
Percent Recovery:	97.03%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

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

Duplicate Sample Assessment		
Sample I.D.:	92527270024	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Semple I.D.	92527270024DUP	
Sample Result (pCi/L, g, F):	0.490	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.287	
Sample Duplicate Result (pCi/L, g, F):	0.322	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.341	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	0.741 CK	92527270024
Duplicate RPD:	41.45%	92527270024DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	
% RPD Limit:	25%	

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

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

Comments:

~~***Batch must be re-prepped due to unacceptable precision.~~ LAM 4/16/21

CK 4/16/21

LAM 4/16/21

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	4/5/2021
Worklist:	59551
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2126643
MB concentration:	0.738
MB 2 Sigma CSU:	0.321
MB MDC:	0.495
MB Numerical Performance Indicator:	4.51
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS59551	LCSD59551
Count Date:	4/9/2021	4/9/2021
Spike I.D.:	21-003	21-003
Decay Corrected Spike Concentration (pCi/mL):	38.142	38.142
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.804	0.812
Target Conc. (pCi/L, g, F):	4.743	4.697
Uncertainty (Calculated):	0.232	0.230
Result (pCi/L, g, F):	5.331	5.382
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.169	1.184
Numerical Performance Indicator:	0.97	1.11
Percent Recovery:	112.40%	114.58%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS59551	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD59551	
Sample Result (pCi/L, g, F):	5.331	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.169	
Sample Duplicate Result (pCi/L, g, F):	5.382	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.184	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.060	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	1.92%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

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

Comments:
*The method blank result is below the reporting limit for this analysis and is acceptable. ✓

4/12/21

4/12/2021

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	4/6/2021
Worklist:	59552
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2126646
MB concentration:	0.826
M/B 2 Sigma CSU:	0.447
MB MDC:	0.791
MB Numerical Performance Indicator:	3.62
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS59552	LCSD59552
Count Date:	4/9/2021	4/9/2021
Spike I.D.:	21-003	21-003
Decay Corrected Spike Concentration (pCi/mL):	38.140	38.140
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.803	0.815
Target Conc. (pCi/L, g, F):	4.752	4.682
Uncertainty (Calculated):	0.233	0.229
Result (pCi/L, g, F):	4.576	4.583
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.088	1.068
Numerical Performance Indicator:	-0.31	-0.18
Percent Recovery:	96.30%	97.88%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS59552	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD59552	
Sample Result (pCi/L, g, F):	4.576	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.088	
Sample Duplicate Result (pCi/L, g, F):	4.583	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.068	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.008	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	1.62%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

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

Comments:
*The method blank result is below the reporting limit for this analysis and is acceptable.

4/12/21

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	4/15/2021
Worklist:	59924
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2139349
MB concentration:	-0.018
M/B Counting Uncertainty:	0.115
MB MDC:	0.371
MB Numerical Performance Indicator:	-0.30
MB Status vs Numerical Indicator:	N/A
MB Status vs. MOC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS59924	LCSD59924
Count Date:	4/16/2021	4/16/2021
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.038	24.038
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.503	0.513
Target Conc. (pCi/L, g, F):	4.781	4.687
Uncertainty (Calculated):	0.057	0.056
Result (pCi/L, g, F):	4.639	4.453
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.848	0.822
Numerical Performance Indicator:	-0.33	-0.56
Percent Recovery:	97.03%	95.00%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS59924	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD59924	
Sample Result (pCi/L, g, F):	4.639	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.848	
Sample Duplicate Result (pCi/L, g, F):	4.453	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.822	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.309	92527270024
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	2.12%	92527270024DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

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

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

Comments:

4/16/21

vam 4/16/21

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	4/16/2021
Worklist:	59913
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2138547
MB concentration:	0.751
M/B 2 Sigma CSU:	0.461
MB MDC:	0.850
MB Numerical Performanca Indicator:	3.19
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS59913	LCSD59913
Count Date:	4/20/2021	4/20/2021
Spike I.D.:	21-003	21-003
Decay Corrected Spike Concentration (pCi/mL):	38.002	38.002
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.819	0.809
Target Conc. (pCi/L, g, F):	4.641	4.696
Uncertainty (Calculated):	0.227	0.230
Result (pCi/L, g, F):	5.523	5.739
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.421	1.456
Numerical Performance Indicator:	1.20	1.39
Percent Recovery:	119.00%	122.21%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS59913	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD59913	
Sample Result (pCi/L, g, F):	5.523	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.421	
Sample Duplicate Result (pCi/L, g, F):	5.739	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.456	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.208	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	2.66%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

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

Comments:

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

MB < MDC is acceptable
4/21/21

4/21/21

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test: Ra-228
Analyst: VAL
Date: 4/5/2021
Worklist: 59502
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2125126
MB concentration:	0.833
M/B 2 Sigma CSU:	0.523
MB MDC:	0.984
MB Numerical Performance Indicator:	3.12
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS59502	LCSD59502
Count Date:	4/9/2021	4/9/2021
Spike I.D.:	21-003	21-003
Decay Corrected Spike Concentration (pCi/mL):	38.142	38.142
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.808	0.810
Target Conc. (pCi/L, g, F):	4.723	4.707
Uncertainty (Calculated):	0.231	0.231
Result (pCi/L, g, F):	5.736	5.059
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.327	1.202
Numerical Performance Indicator:	1.47	0.56
Percent Recovery:	121.45%	107.49%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS59502	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD59502	
Sample Result (pCi/L, g, F):	5.736	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.327	
Sample Duplicate Result (pCi/L, g, F):	5.059	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.202	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.741	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	12.20%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

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

Comments:

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

4/12/21

VALIDATION REPORTS

December 2020

Geosyntec consultants

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

Memorandum

Date:	February 8, 2021
To:	Whitney Law
From:	Kristoffer Henderson
CC:	J. Caprio
Subject:	**Stage 2A Data Validation - Level II Data Deliverables – Pace Analytical Services, LLC Project Numbers 92512535 and 92512572**

SITE: Plant Hammond AP-1

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of two aqueous samples and one equipment blank, collected 15 December 2020, 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 (US) Environmental Protection Agency (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

The samples were analyzed at Pace Analytical Services, LLC, Greensburg, Pennsylvania, for the following analytical tests:

- Radium-226 by USEPA Method 9315
- Radium-228 by USEPA Method 9320
- Total Radium by Calculation

EXECUTIVE SUMMARY

Based on the Stage 2A data validation covering the quality control (QC) parameters listed below and the information provided, the data are usable for meeting project objectives.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment, and the following documents:

- US EPA Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011);
- USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, January 2017 (EPA 540-R-2017-001); 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
92512535001	HGWA-43D
92512535002	HGWA-44D
92512535003	EB-01

Laboratory ID	Client ID
92512572001	HGWA-43D
92512572002	HGWA-44D
92512572003	EB-01

The samples were received within 0-6 degrees Celsius (ºC). No sample preservation issues were noted by the laboratory.

The following issues were noted with the chain of custody (COC) forms:

- The year was not documented for the *relinquished by* date for the first sample transfer.
- The year was not documented for the collection times of the samples The samples were logged in with the collection year of 2020.

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 meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this data set is 100%.

1.2 Holding Time

The holding time for the metals analysis of a water sample is 180 days from sample collection to analysis. The holding times were met for the sample analyses.

1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two method blanks were reported (batches 589396 and 589337). 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 using sample HGWA-44D. Since the calcium concentration in sample HGWA-44D was greater than four times the spiked concentration, no qualifications were applied based on the MS/MSD results.

One batch MS/MSD pair was also reported. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

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). Two LCSs were reported. The recovery results were within the laboratory specified acceptance criteria.

1.6 Equipment Blank

One equipment blank was collected with the sample set, EB-01. Metals were not detected in the equipment blank above the MDLs, with the following exception.

Calcium was detected in EB-01 at an estimated concentration greater than the MDL and less than the reporting limit (RL). Since calcium was detected in the associated samples at concentration greater than the RL, no qualifications were applied to the data.

1.7 Field Blank

A field blank was not collected with the sample set.

1.8 Field Duplicate

A field duplicate 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 (EDD) Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

2.0 MERCURY

The samples were analyzed for mercury by 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 meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this data set is 100%.

2.2 Holding Time

The holding time for mercury analysis of a water sample is 28 days from sample collection to analysis. The holding times were met for the sample analyses.

2.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 587972). 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 these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

2.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery result was within the laboratory specified acceptance criteria.

2.6 Equipment Blank

One equipment blank was collected with the sample set, EB-01. Mercury was not detected in the equipment blank above the MDL.

2.7 Field Blank

A field blank was not collected with the sample set.

2.8 Field Duplicate

A field duplicate 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 meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for these analyses, for this data set is 100%.

3.2 Holding Times

The holding time for the TDS analysis of a water sample is 7 days from sample collection to analysis. The holding time for the anions (chloride, fluoride, and sulfate) analysis of a water sample is 28 days from sample collection to analysis. The holding times were met for the sample analyses.

3.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported for TDS (batch 588373) and one method blank was reported for the anions (batch 589104). The wet chemistry parameters were not detected in the method blanks above the MDLs.

3.4 Matrix Spike/Matrix Spike Duplicate

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two 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 one LCS was 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

One equipment blank was collected with the sample set, EB-01. The wet chemistry parameters were not detected in the equipment blank above the MDL.

3.8 Field Blank

A field blank was not collected with the sample set.

3.9 Field Duplicate

A field duplicate was not collected with the sample set.

3.10 Sensitivity

The samples were reported to the MDLs. No elevated non-detect results were reported.

3.11 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

4.0 RADIOCHEMISTRY

The samples were analyzed for radium-226 by USEPA method 9315, radium-228 by USEPA method 9320 and total radium by calculation.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Times
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Laboratory Duplicate
- ✓ Tracers and Carriers
- ✓ Equipment Blank
- ✓ Field Blank
- ✓ Field Duplicate

- ✓ Sensitivity
- ✓ Electronic Data Deliverables Review

4.1 Overall Assessment

The radium-226 and radium-228 data reported in this data set are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this data set is 100%.

4.2 Holding Times

The holding times for the radium-226 and radium-228 analyses of a water sample are 180 days from sample collection to analysis. The holding times were met for the sample analyses.

4.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported for the radium-228 data (batch 428750). One method blank was reported for the radium-226 data (batch 429175). Radium-226 was not detected in the method blank above the minimum detectable concentrations (MDCs).

Radium-228 (0.694 pCi/L) was detected in the method blank in batch 428750 at a concentration greater than the MDC. Since radium-228 was not detected at concentrations greater than the MDCs in the associated samples, no qualifications were applied to the data.

4.4 Matrix Spike/Matrix Spike Duplicate

MS/MSD pairs were not reported with the data.

4.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS/LCS duplicate (LCSD) pair was reported for radium-226. One LCS/LCSD pair was reported for radium-228. The recovery and replicate error ratio (RER) [1 sigma (1σ)] results were within the laboratory specified acceptance criteria.

4.6 Laboratory Duplicate

One batch laboratory duplicate was reported for radium-226. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

4.7 Tracers and Carriers

Carriers were reported for the radium-226 and radium-228 analyses and a tracer was reported for the radium-228 analyses. The recovery results were within the laboratory specified acceptance criteria.

4.8 Equipment Blank

One equipment blank was collected with the sample set, EB-01. Radium-226 and Radium-228 were not detected in the equipment blank above the MDCs.

4.9 Field Blank

A field blank was not collected with the sample set.

4.10 Field Duplicate

A field duplicate was not collected with the sample set.

4.11 Sensitivity

The samples were reported to the MDCs. No elevated non-detect results were reported.

4.12 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

---

* * * * *

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

January 2021

Geosyntec consultants

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

Memorandum

Date:	April 5, 2021
To:	Whitney Law
From:	Kristoffer Henderson
CC:	J. Caprio
Subject:	**Stage 2A Data Validation - Level II Data Deliverables – Pace Analytical Services, LLC Project Numbers 92517856 and 92517888**

SITE: Plant Hammond AP-1

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of two aqueous samples and one equipment blank, collected 19-20 January 2021, as part of the Plant Hammond AP on-site sampling event.

The samples were analyzed at Pace Analytical Services Atlanta, Peachtree Corners, Georgia, for the following analytical tests:

- Calcium by United States Environmental Protection Agency (US EPA) Methods 3010A/6010D
- Metals by 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

The samples were analyzed at Pace Analytical Services, LLC, Greensburg, Pennsylvania, for the following analytical tests:

- Radium-226 by USEPA Method 9315
- Radium-228 by USEPA Method 9320
- Total Radium by Calculation

EXECUTIVE SUMMARY

Based on the Stage 2A data validation covering the quality control (QC) parameters listed below and the information provided, the data as qualified are usable for meeting project objectives. Qualified data should be used within the limitation of the qualification.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment, and the following documents:

- US EPA Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011);
- USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, November 2020 (EPA 542-R-20-006); and
- American National Standard, Verification and Validation of Radiological Data for use in Waste Management and Environmental Remediation, February 15, 2012 (ANSI/ANS-41.5-2012).

The following samples were analyzed and reported in the laboratory reports:

Laboratory ID	Client ID
92517856001	HGWA-43D
92517856002	HGWA-44D
92517856003	EB-01

Laboratory ID	Client ID
92517888001	HGWA-43D
92517888002	HGWA-44D
92517888003	EB-01

The samples were received within 0-6 degrees Celsius (°C). No sample preservation issues were noted by the laboratory.

The field pH data included in the laboratory report were not validated.

1.0 METALS

The samples were analyzed for metals by 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 meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this data set is 100%.

1.2 Holding Time

The holding time for the metals analysis of a water sample is 180 days from sample collection to analysis. The holding times were met for the sample analyses.

1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two method blanks were reported (batches 596653 and 596887). Metals were not detected in the method blanks above the method detection limits (MDLs), with the following exception.

Antimony was detected in the method blank in batch 596887 at an estimated concentration greater than the MDL and less than the RL. Therefore, the estimated antimony concentrations in the associated samples were U qualified as not detected at the RL.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
HGWA-43D	Antimony	0.00029	J B	0.003	U	3
HGWA-44D	Antimony	0.00067	J B	0.003	U	3

mg/L-milligrams per liter
J-estimated concentration greater than the MDL and less than the RL
B-laboratory indicating the analyte was detected in both the method blank and sample
* 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

1.4 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Three batch MS/MSD pairs were reported. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

1.5 Laboratory Control Sample (LCS)

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two LCSs were reported. The recovery results were within the laboratory specified acceptance criteria.

1.6 Equipment Blank

One equipment blank was collected with the sample set, EB-01. Metals were not detected in the equipment blank above the MDLs.

1.7 Field Blank

A field blank was not collected with the sample set.

1.8 Field Duplicate

A field duplicate was not collected with the sample set.

1.9 Sensitivity

The samples were reported to the MDLs. No elevated non-detect results were reported.

1.10 Electronic Data Deliverable (EDD) Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

2.0 MERCURY

The samples were analyzed for mercury by 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 meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this data set is 100%.

2.2 Holding Time

The holding time for mercury analysis of a water sample is 28 days from sample collection to analysis. The holding times were met for the sample analyses.

2.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 594784). 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 these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

2.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery result was within the laboratory specified acceptance criteria.

2.6 Equipment Blank

One equipment blank was collected with the sample set, EB-01. Mercury was not detected in the equipment blank above the MDL.

2.7 Field Blank

A field blank was not collected with the sample set.

2.8 Field Duplicate

A field duplicate 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 meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for these analyses, for this data set is 100%.

3.2 Holding Times

The holding time for the TDS analysis of a water sample is 7 days from sample collection to analysis. The holding time for the anions (chloride, fluoride, and sulfate) analysis of a water sample is 28 days from sample collection to analysis. The holding times were met for the sample analyses.

3.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two method blanks were reported for TDS (batches 594633 and 594779) and one method blank was reported for the anions (batch 594878). The wet chemistry parameters were not detected in the method blanks above the MDLs.

3.4 Matrix Spike/Matrix Spike Duplicate

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two 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). Two LCSs were reported for TDS and one LCS was reported for the anions. The recovery results were within the laboratory specified acceptance criteria.

3.6 Laboratory Duplicate

Four 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, EB-01. The wet chemistry parameters were not detected in the equipment blank above the MDL.

3.8 Field Blank

A field blank was not collected with the sample set.

3.9 Field Duplicate

A field duplicate was not collected with the sample set.

3.10 Sensitivity

The samples were reported to the MDLs. No elevated non-detect results were reported.

3.11 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

4.0 RADIOCHEMISTRY

The samples were analyzed for radium-226 by USEPA method 9315, radium-228 by USEPA method 9320 and total radium by calculation.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Times
✓ Method Blank
✓ Matrix Spike/Matrix Spike Duplicate
⊗ Laboratory Control Sample

- ✓ Laboratory Duplicate
- ✓ Tracers and Carriers
- ✓ Equipment Blank
- ✓ Field Blank
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverables Review

4.1 Overall Assessment

The radium-226 and radium-228 data reported in this data set are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this data set is 100%.

4.2 Holding Times

The holding times for the radium-226 and radium-228 analyses of a water sample are 180 days from sample collection to analysis. The holding times were met for the sample analyses.

4.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported for the radium-228 data (batch 432561). One method blank was reported for the radium-226 data (batch 433326). Radium-226 and radium-228 were not detected in the method blank above the minimum detectable concentrations (MDCs).

4.4 Matrix Spike/Matrix Spike Duplicate

MS/MSD pairs were not reported with the data.

4.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS/LCS duplicate (LCSD) pair was reported for radium-226. One LCS/LCSD pair was reported for radium-228. The recovery and replicate error ratio (RER) [1 sigma (1σ)] results were within the laboratory specified acceptance criteria, with the following exception.

The recovery of radium-228 in the LCS in batch 432561 was low and outside of the laboratory specified acceptance criteria. Therefore, the radium-228 and total radium concentrations less than the MDCs in the associated samples were UJ qualified as estimated less than the MDCs.

Sample	Analyte	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier	Reason Code
HGWA-43D	Radium-228	0.482	U	0.482	UJ	5
HGWA-43D	Combined Radium 226 + 228	0.685	U	0.685	UJ	5
HGWA-44D	Radium-228	0.531	U	0.531	UJ	5
HGWA-44D	Combined Radium 226 + 228	0.790	U	0.790	UJ	5
EB-01	Radium-228	0.365	U	0.365	UJ	5
EB-01	Combined Radium 226 + 228	0.404	U	0.404	UJ	5

pCi/L-picocuries per liter
U-not detected at or above the MDC

4.6 Laboratory Duplicate

One sample set specific laboratory duplicate was reported for radium-226 using sample HGWA-43D.

The RER result was high and outside of the laboratory specified acceptance criteria. Since the radium-226 concentration in sample HGWA-43D was less than the MDC, no qualifications were applied to the data.

4.7 Tracers and Carriers

Carriers were reported for the radium-226 and radium-228 analyses and a tracer was reported for the radium-228 analyses. The recovery results were within the laboratory specified acceptance criteria.

4.8 Equipment Blank

One equipment blank was collected with the sample set, EB-01. Radium-226 and Radium-228 were not detected in the equipment blank above the MDCs.

4.9 Field Blank

A field blank was not collected with the sample set.

4.10 Field Duplicate

A field duplicate was not collected with the sample set.

4.11 Sensitivity

The samples were reported to the MDCs. No elevated non-detect results were reported.

4.12 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

---

* * * * *

ATTACHMENT 1
DATA VALIDATION QUALIFIER DEFINITIONS AND INTERPRETATION KEY
Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

U The analyte was analyzed for but was not detected above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to "not detected at or above the reported result".

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.

J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
DATA VALIDATION REASON CODES
Assigned by Geosyntec's Data Validation Team

Valid Value	Description
1	Preservation requirement not met
2	Analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS or RPD recovery outside limits (LCS/LCSD)
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other
14	Lab flag removed or modified: no validation qualification required

LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample duplicate
RPD - Relative percent difference

February 2021

Geosyntec consultants

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

Memorandum

Date:	April 23, 2021
To:	Whitney Law
From:	Kristoffer Henderson
CC:	J. Caprio
Subject:	**Stage 2A Data Validation - Level II Data Deliverables – Pace Analytical Services, LLC Project Numbers 92521131 and 92521151**

SITE: Plant Hammond AP-1

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of twenty-three aqueous samples, two filtered aqueous samples, one field duplicate, one field blank and one equipment blank, collected 8/22 February 2021, as part of the Plant Hammond AP on-site sampling event.

The samples were analyzed at Pace Analytical Services Atlanta, Peachtree Corners, Georgia, for the following analytical tests:

- Metals by United States (US) Environmental Protection Agency (EPA) USEPA Methods 3005A/6020B
- Mercury by USEPA Method 7470A

The samples were analyzed at Pace Analytical Services Asheville, North Carolina, for the following analytical test:

- Fluoride by USEPA Method 300.0

The samples were analyzed at Pace Analytical Services, LLC, Greensburg, Pennsylvania, for the following analytical tests:

- Radium-226 by USEPA Method 9315
- Radium-228 by USEPA Method 9320
- Total Radium by Calculation

EXECUTIVE SUMMARY

Based on the Stage 2A data validation covering the quality control (QC) parameters listed below and the information provided, the data as qualified are usable for meeting project objectives. Qualified data should be used within the limitation of the qualification.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment, and the following documents:

- US EPA Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011);
- USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, November 2020 (EPA 542-R-20-006); and
- American National Standard, Verification and Validation of Radiological Data for use in Waste Management and Environmental Remediation, February 15, 2012 (ANSI/ANS-41.5-2012).

The following samples were analyzed and reported in the laboratory reports:

Laboratory ID	Client ID
92521131001	HGWA-1
92521131002	HGWA-2
92521131003	HGWA-3
92521131004	HGWA-43D
92521131005	HGWA-44D
92521131006	HGWC-7
92521131007	MW-28D
92521131008	MW-28D FILTERED
92521131009	MW-20
92521131010	HGWC-11
92521131011	HGWC-12
92521131012	MW-19
92521131013	DUP-1
92521131014	MW-25D
92521131015	FB-1
92521131016	EB-1
92521131017	HGWC-10
92521131018	MW-7
92521131019	MW-29
92521131020	HGWC-8
92521131021	HGWC-9
92521131022	MW-5
92521131023	MW-6

Laboratory ID	Client ID
92521131024	MW-24D
92521131025	MW-26D
92521131026	MW-27D
92521131027	MW-27D FILTERED
92521131028	HGWC-13
92521151001	HGWA-1
92521151002	HGWA-2
92521151003	HGWA-3
92521151004	HGWA-43D
92521151005	HGWA-44D
92521151006	HGWC-7
92521151007	MW-28D
92521151008	MW-28D FILTERED
92521151009	MW-20
92521151010	HGWC-11
92521151011	HGWC-12
92521151012	MW-19
92521151013	DUP-1
92521151014	MW-25D
92521151015	FB-1
92521151016	EB-1
92521151017	HGWC-10
92521151018	MW-7

Laboratory ID	Client ID
92521151019	MW-29
92521151020	HGWC-8
92521151021	HGWC-9
92521151022	MW-5
92521151023	MW-6

Laboratory ID	Client ID
92521151024	MW-24D
92521151025	MW-26D
92521151026	MW-27D
92521151027	MW-27D FILTERED
92521151028	HGWC-13

The samples were received within 0-6 degrees Celsius (ºC). No sample preservation issues were noted by the laboratory.

The following issues were noted on the chain of custody (COC). No qualifications were applied based on these issues.

- A collection time was not listed on the COC for the field duplicate, DUP-1. The field duplicate was logged in with the collection time of 00:00.
- The relinquished by signature, date and time were missing for the final sample transfer on page 2 of the COC.
- The received by signature, date and time were missing for the final sample transfer on pages 4 and 5 of the COC.
- There were time discrepancies for sample transfers on pages 2-3 of the COC. The relinquished by time was documented as 2/10/21 0933 and the received by time was documented as 2/11/21 0936.
- There were time discrepancies for sample transfers on pages 4-5 of the COC. The relinquished by time was documented as 2/11/21 0915 and the received by time was documented as 2/11/21 0919.
- There were time discrepancies for a sample transfer on page 14 of the COC. The relinquished by time was documented as 2/17/21 1055 and the received by time was documented as 2/17/21 1154.

The field pH data included in the laboratory report were not validated.

1.0 METALS

The samples were analyzed for metals by USEPA methods 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
⊗ Total vs Dissolved Metals Assessment
✓ Electronic Data Deliverables Review

1.1 Overall Assessment

The metals data reported in this data set are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this data set is 100%.

1.2 Holding Time

The holding time for the metals analysis of a water sample is 180 days from sample collection to analysis. The holding times were met for the sample analyses.

1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Three method blanks were reported (batches 601892, 601924 and 603830). Metals were not detected in the method blanks above the method detection limits (MDLs), with the following exceptions.

Antimony and arsenic were detected in the method blank in batch 601892 at estimated concentrations greater than the MDLs and less than the reporting limits (RLs). Therefore, the estimated antimony and arsenic concentrations in the associated samples were U qualified as not detected at the RLs.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
HGWA-2	Antimony	0.00062	J B	0.0030	U	3
HGWA-3	Antimony	0.00031	J B	0.0030	U	3

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
HGWA-43D	Antimony	0.00037	J B	0.0030	U	3
HGWA-43D	Arsenic	0.0017	J B	0.0050	U	3
HGWA-44D	Antimony	0.00042	J B	0.0030	U	3
HGWA-44D	Arsenic	0.00083	J B	0.0050	U	3

mg/L-milligrams per liter
J-estimated concentration greater than the MDL and less than the RL
B-laboratory indicating the analyte was detected in both the method blank and sample
* 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

1.4 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two sample set specific MS/MSD pairs were reported using samples HGWC-7 and HGWC-10. The recovery and relative percent difference (RPD) results were within the laboratory specified acceptance criteria.

One batch MS/MSD pair was also reported. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

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 LCSs were reported. The recovery results were within the laboratory specified acceptance criteria.

1.6 Equipment Blank

One equipment blank was collected with the sample set, EB-01. Metals were not detected in the equipment blank above the MDLs.

1.7 Field Blank

One field blank was collected with the sample set, FB-01. Metals were not detected in the field blank above the MDLs.

1.8 Field Duplicate

One field duplicate sample was collected with the sample set, DUP-01. Acceptable precision (RPD $\leq$ 20% or the difference between the concentrations < RL) was demonstrated between the field duplicate and the original sample, MW-19, with the following exception.

Chromium was detected in MW-19 at an estimated concentration greater than the MDL and less than the RL and was not detected in DUP-1, resulting in a noncalculable RPD. Therefore, the chromium concentration in MW-19 was J qualified as estimated and the non-detect chromium result in DUP-1 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
MW-19	Chromium	0.00059	J	NC	0.00059	J	7
DUP-1	Chromium	0.00055	U		0.00055	UJ	7

mg/L-milligrams per liter
J-estimated concentration greater than the MDL and less than the RL
U-not detected at or above the MDL
NC-not calculable

1.9 Sensitivity

The samples were reported to the MDLs. No elevated non-detect results were reported.

1.10 Total vs Dissolved Metals Assessment

Two samples were reported for total and dissolved metals (MW-27D and MW-28D). The total metals concentrations were greater than or equal to the dissolved metals concentrations or the RPD was less than 30%, with the following exceptions.

Total cadmium was not detected in sample MW-28D and dissolved cadmium was detected MW-28D FILTERED at an estimated concentration greater than the MDL and less than the RL. Therefore, based on professional and technical judgment, the non-detect total cadmium result in sample MW-28D was UJ qualified as estimated less than the MDL and the dissolved cadmium concentration in sample MW-28D FILTERED was J qualified as estimated.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
MW-28D	Cadmium	0.00012	U	0.00012	UJ	13
MW-28D FILTERED	Cadmium	0.00021	J	0.00021	J	13

mg/L-milligrams per liter
J-estimated concentration greater than the MDL and less than the RL
U-not detected at or above the MDL

1.11 Electronic Data Deliverable (EDD) Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

2.0 MERCURY

The samples were analyzed for mercury by 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
- ✓ Total vs Dissolved Metals Assessment
- ✓ Electronic Data Deliverables Review

2.1 Overall Assessment

The mercury data reported in this data set are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this data set is 100%.

2.2 Holding Time

The holding time for mercury analysis of a water sample is 28 days from sample collection to analysis. The holding times were met for the sample analyses.

2.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Five method blanks were reported (batches 600377, 601295, 601590, 601883 and 602268). 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). One sample set specific MS/MSD pair was reported using sample HGWC-9. The recovery and RPD results were within the laboratory specified acceptance criteria.

Four batch MS/MSD pairs were also reported. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

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). Five LCSs were reported. The recovery results were within the laboratory specified acceptance criteria.

2.6 Equipment Blank

One equipment blank was collected with the sample set, EB-01. Mercury was not detected in the equipment blank above the MDL.

2.7 Field Blank

One field blank was collected with the sample set, 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, DUP-01. Acceptable precision (RPD $\leq$ 20% or the difference between the concentrations < RL) was demonstrated between the field duplicate and the original sample, MW-19.

2.9 Sensitivity

The samples were reported to the MDL. No elevated non-detect results were reported.

2.10 Total vs Dissolved Mercury Assessment

Two samples were reported for total and dissolved mercury (MW-27D and MW-28D). The total mercury concentrations were greater than or equal to the dissolved metals concentrations or the RPD was less than 30%.

2.11 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.

3.0 FLUORIDE

The samples were analyzed for fluoride 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
- ✓ Equipment Blank
- ✓ Field Blank
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Total vs Dissolved Fluoride Assessment
- ✓ Electronic Data Deliverables Review

3.1 Overall Assessment

The fluoride data reported in this data set are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for these analyses, for this data set is 100%.

3.2 Holding Times

The holding time for the fluoride analysis of a water sample is 28 days from sample collection to analysis. The holding time was 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). Seven method blanks were reported (batches 598903, 599257, 599863, 600235, 600783, 601397 and 604773). Fluoride was not detected in the method blanks above the MDL.

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). Three sample set specific MS/MSD pairs were reported using samples MW-28D FILTERED, FB-1 and MW-26D. The recovery and RPD results were within the laboratory specified acceptance criteria.

Eleven batch MS/MSD pairs were also reported. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

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). Seven LCSs were reported. The recovery results were within the laboratory specified acceptance criteria.

3.6 Equipment Blank

One equipment blank was collected with the sample set, EB-01. Fluoride was not detected in the equipment blank above the MDL.

3.7 Field Blank

One field blank was collected with the sample set, FB-01. Fluoride was not detected in the field blank above the MDL.

3.8 Field Duplicate

One field duplicate sample was collected with the sample set, DUP-01. Acceptable precision (RPD $\leq$ 20% or the difference between the concentrations < RL) was demonstrated between the field duplicate and the original sample, MW-19.

3.9 Sensitivity

The samples were reported to the MDLs. No elevated non-detect results were reported.

3.10 Total vs Dissolved Fluoride Assessment

The samples were reported for total and dissolved fluoride. The total fluoride concentrations were greater than or equal to the dissolved fluoride concentrations or the RPD was less than 30%.

3.11 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

4.0 RADIOCHEMISTRY

The samples were analyzed for radium-226 by USEPA method 9315, radium-228 by USEPA 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
✓ Total vs Dissolved Radiochemistry Assessment
✓ Electronic Data Deliverables Review

4.1 Overall Assessment

The radium-226 and radium-228 data reported in this data set are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this data set is 100%.

4.2 Holding Times

The holding times for the radium-226 and radium-228 analyses of a water sample are 180 days from sample collection to analysis. The holding times were met for the sample analyses.

4.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Five method blanks were reported for the radium-228 data (batches 435116, 435836, 435838, 437641 and 435787). Five method blanks were reported for the radium-226 data (batches 435459, 435786, 437599, 435837 and 435835). Radium-226 and radium-228 were not detected in the method blanks above the minimum detectable concentrations (MDCs), with the following exceptions.

Radium-226 (0.276 pCi/L) was detected in the method blank in batch 435459 at a concentration greater than the MDC. Since radium-226 was not detected at a concentration greater than the MDC in the associated sample, no qualifications were applied to the data.

4.4 Matrix Spike/Matrix Spike Duplicate

MS/MSD pairs were not reported with the data.

4.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Five LCS/LCS duplicate (LCSD) pairs were reported for radium-226. Five 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.

4.6 Laboratory Duplicate

One sample set specific laboratory duplicate was reported for radium-226 using sample MW-19. The RER result was within the laboratory specified acceptance criteria.

Three batch laboratory duplicates were also reported for radium-226. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

4.7 Tracers and Carriers

Carriers were reported for the radium-226 and radium-228 analyses and a tracer was reported for the radium-228 analyses. The recovery results were within the laboratory specified acceptance criteria.

4.8 Equipment Blank

One equipment blank was collected with the sample set, EB-01. Radium-226 was not detected in the equipment blank above the MDC.

Radium-228 (2.12 pCi/L) was detected in EB-01 at a concentration greater than the MDC. Therefore, the radium-228 concentrations greater than the MDCs and less than the equipment blank concentration were U qualified as not detected at the reported concentrations, and based on professional and technical judgment the total radium concentrations in samples HGWC-11 and MW-27D FILTERED were J+ qualified as estimated with high biases, and the total radium concentrations in samples DUP-1, HGWC-10 and HGWC-13 were U qualified as not detected at the reported concentrations.

Sample	Analyte	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier	Reason Code
HGWC-11	Radium-228	0.829	NA	0.829	U	3
HGWC-11	Combined Radium 226 + 228	1.10	NA	1.10	J+	3
DUP-1	Radium-228	0.618	NA	0.618	U	3
DUP-1	Combined Radium 226 + 228	0.760	NA	0.760	U	3
HGWC-10	Radium-228	1.85	NA	1.85	U	3
HGWC-10	Combined Radium 226 + 228	1.91	NA	1.91	U	3
MW-27D FILTERED	Radium-228	0.877	NA	0.877	U	3
MW-27D FILTERED	Combined Radium 226 + 228	1.39	NA	1.39	J+	3
HGWC-13	Radium-228	0.857	NA	0.857	U	3
HGWC-13	Combined Radium 226 + 228	1.02	NA	1.02	U	3

pCi/L-picocuries per liter
NA-not applicable

4.9 Field Blank

One field blank was collected with the sample set, FB-01. Radium-228 was not detected in the field blank above the MDC.

Radium-226 (0.209 pCi/L) was detected in FB-01 at a concentration greater than the MDC. Therefore, the radim-226 concentrations greater than the field blank concentration in the associated samples were J+ qualified as estimated with high biases, and based on professional and technical judgment the total radium concentrations in samples MW-25D, MW-27D and MW-27D FILTERED were J+ qualified as estimated with high biases.

Sample	Analyte	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier	Reason Code
HGWA-2	Radium-226	0.465	NA	0.465	J+	3
HGWC-7	Radium-226	0.255	NA	0.255	J+	3
HGWC-11	Radium-226	0.273	NA	0.273	J+	3
MW-25D	Radium-226	0.601	NA	0.601	J+	3
MW-25D	Combined Radium 226 + 228	1.17	NA	1.17	J+	3
MW-7	Radium-226	0.237	NA	0.237	J+	3
MW-29	Radium-226	0.280	NA	0.280	J+	3
HGWC-8	Radium-226	0.270	NA	0.270	J+	3
MW-27D	Radium-226	0.552	NA	0.552	J+	3
MW-27D	Combined Radium 226 + 228	1.21	NA	1.21	J+	3
MW-27D FILTERED	Radium-226	0.512	NA	0.512	J+	3
MW-27D FILTERED	Combined Radium 226 + 228	1.39	NA	1.39	J+	3

pCi/L-picocuries per liter
NA-not applicable

4.10 Field Duplicate

One field duplicate sample was collected with the sample set, DUP-01. Acceptable precision (RER (1σ) < 3) was demonstrated between the field duplicate and the original sample, MW-19.

4.11 Sensitivity

The samples were reported to the MDCs. No elevated non-detect results were reported.

4.12 Total vs Dissolved Radiochemistry Assessment

The samples were reported for total and dissolved radiochemistry. The total radiochemistry concentrations were greater than or equal to the dissolved radiochemistry concentrations or the RER was less than 3.

4.13 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

March 2021

Geosyntec consultants

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

Memorandum

Date:	April 26, 2021
To:	Whitney Law
From:	Kristoffer Henderson
CC:	J. Caprio
Subject:	**Stage 2A Data Validation - Level II Data Deliverables – Pace Analytical Services, LLC Project Numbers 92527268 and 92527270**

SITE: Plant Hammond AP-1

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of twenty-three aqueous samples, one filtered aqueous sample, one field duplicate, one field blank and one equipment blank, collected 10-17 March 2021, as part of the Plant Hammond AP on-site sampling event.

The samples were analyzed at Pace Analytical Services Atlanta, Peachtree Corners, Georgia, for the following analytical tests:

- Calcium by United States (US) Environmental Protection Agency (EPA) Method
- Metals by USEPA Methods 3005A/6020B
- Total Dissolved Solids (TDS) by Standard Method 2450C

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

The samples were analyzed at Pace Analytical Services, LLC, Greensburg, Pennsylvania, for the following analytical tests:

- Radium-226 by USEPA Method 9315
- Radium-228 by USEPA Method 9320
- Total Radium by Calculation

EXECUTIVE SUMMARY

Based on the Stage 2A data validation covering the quality control (QC) parameters listed below and the information provided, the data as qualified are usable for meeting project objectives. Qualified data should be used within the limitation of the qualification.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment, and the following documents:

- US EPA Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011);
- USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, November 2020 (EPA 542-R-20-006); and
- American National Standard, Verification and Validation of Radiological Data for use in Waste Management and Environmental Remediation, February 15, 2012 (ANSI/ANS-41.5-2012).

The following samples were analyzed and reported in the laboratory reports:

Client ID	Laboratory ID
92527268001	HGWA-1
92527268002	HGWA-44D
92527268003	HGWA-2
92527268004	HGWA-3
92527268005	HGWA-43D
92527268006	HGWC-10
92527268007	MW-27D
92527268008	HGWC-7 FILTERED
92527268009	HGWC-7
92527268010	HGWC-8
92527268011	MW-7
92527268012	MW-20
92527268013	MW-28D
92527268014	MW-29
92527268015	HGWC-9
92527268016	HGWC-11
92527268017	HGWC-12
92527268018	MW-5
92527268019	MW-6
92527268020	MW-25D
92527268021	DUP-1
92527268022	EB-1
92527268023	FB-1
92527268024	HGWC-13
92527268025	MW-19

Client ID	Laboratory ID
92527268026	MW-24D
92527268027	MW-26D
92527270001	HGWA-1
92527270002	HGWA-44D
92527270003	HGWA-2
92527270004	HGWA-3
92527270005	HGWA-43D
92527270006	HGWC-10
92527270007	MW-27D
92527270008	HGWC-7 FILTERED
92527270009	HGWC-7
92527270010	HGWC-8
92527270011	MW-7
92527270012	MW-20
92527270013	MW-28D
92527270014	MW-29
92527270015	HGWC-9
92527270016	HGWC-11
92527270017	HGWC-12
92527270018	MW-5
92527270019	MW-6
92527270020	MW-25D
92527270021	DUP-1
92527270022	EB-1
92527270023	FB-1

Client ID	Laboratory ID
92527270024	HGWC-13
92527270025	MW-19

Client ID	Laboratory ID
92527270026	MW-24D
92527270027	MW-26D

The samples were received within 0-6 degrees Celsius (ºC). No sample preservation issues were noted by the laboratory.

The field pH data included in the laboratory report were not validated.

1.0 METALS

The samples were analyzed for metals by USEPA methods USEPA methods 3005A/6020B.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Time
⊗ Method Blank
✓ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Equipment Blank
⊗ Field Blank
✓ Field Duplicate
✓ Sensitivity
⊗ Total vs Dissolved Metals Assessment
✓ Electronic Data Deliverables Review

1.1 Overall Assessment

The metals data reported in this data set are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this data set is 100%.

1.2 Holding Time

The holding time for the metals analysis of a water sample is 180 days from sample collection to analysis. The holding times for the dissolved metals analysis of a water sample is 15 minutes from sample collection to filtration and 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). Nine method blanks were reported (batches 606634, 608195, 609342, 609345, 606644, 607964, 609688, 609689 and 609693). Metals were not detected in the method blanks above the method detection limits (MDLs), with the following exceptions.

Antimony was detected in the method blank in batch 606644 at an estimated concentration greater than the MDL and less than the reporting limit (RL). Therefore, the estimated antimony concentration in the associated sample was U qualified as not detected at the RL.

Chromium was detected in the method blank in batch 609689 at an estimated concentration greater than the MDL and less than the RL. Therefore, the estimated chromium concentration in the associated sample was U qualified as not detected at the RL.

Boron was detected in the method blank in batch 609693 at an estimated concentration greater than the MDL and less than the RL. Since boron was either not detected or detected above the RL in the associated samples, no qualifications were applied to the data.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
HGWA-44D	Antimony	0.00037	J B	0.0030	U	3
MW-5	Chromium	0.0024	J B	0.0050	U	3

mg/L-milligrams per liter
J-estimated concentration greater than the MDL and less than the RL
B-laboratory indicating the analyte was detected in both the method blank and sample
* 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

1.4 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Three sample set specific MS/MSD pairs were reported using samples HGWC-10, HGWC-7 and HGWC-13. The recovery and relative percent difference (RPD) results were within the laboratory specified acceptance criteria.

Six batch MS/MSD pairs were also reported. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

For sample concentrations greater than four times the spiked concentration the MS/MSD recovery results were not considered for validation and no qualifications were applied based on the MS/MSD recovery results.

1.5 Laboratory Control Sample (LCS)

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Nine LCSs were reported. The recovery results were within the laboratory specified acceptance criteria.

1.6 Equipment Blank

One equipment blank was collected with the sample set, EB-01. Metals were not detected in the equipment blank above the MDLs.

1.7 Field Blank

One field blank was collected with the sample set, FB-01. Metals were not detected in the field blank above the MDLs. with the following exception.

Antimony was detected in FB-01 at an estimated concentration greater than the MDL and less than the RL. Therefore, the estimated antimony concentrations in the associated samples were U qualified as not detected at the RL.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
HGWA-44D	Antimony	0.00037	J B	0.0030	U	3
HGWA-43D	Antimony	0.00057	J	0.0030	U	3
HGWC-13	Antimony	0.00049	J	0.0030	U	3

mg/L-milligrams per liter
J-estimated concentration greater than the MDL and less than the RL
B-laboratory indicating the analyte was detected in both the method blank and sample

1.8 Field Duplicate

One field duplicate sample was collected with the sample set, DUP-01. Acceptable precision (RPD $\leq$ 20% or the difference between the concentrations < RL) was demonstrated between the field duplicate and the original sample, MW-25D.

1.9 Sensitivity

The samples were reported to the MDLs. No elevated non-detect results were reported.

1.10 Total vs Dissolved Metals Assessment

One sample was reported for total and dissolved metals (HGWC-7). The total metals concentrations were greater than or equal to the dissolved metals concentrations or the RPD was less than 30%, with the following exceptions.

Total cadmium was not detected in sample HGWC-7 and dissolved cadmium was detected in HGWC-7 FILTERED at an estimated concentration greater than the MDL and less than the RL. Therefore, based on professional and technical judgment, the non-detect total cadmium result in sample HGWC-7 was UJ qualified as estimated less than the MDL and the dissolved cadmium concentration in sample HGWC-7 FILTERED was J qualified as estimated.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	RPD	Validation Result (mg/L)	Validation Qualifier	Reason Code
HGWC-7 FILTERED	Cadmium	0.00021	J	NC	0.00021	J	13
HGWC-7	Cadmium	0.00012	U		0.00012	U	13

mg/L-milligrams per liter
J-estimated concentration greater than the MDL and less than the RL
U-not detected at or above the MDL
NC-not calculable

1.11 Electronic Data Deliverable (EDD) Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

2.0 WET CHEMISTRY

The samples were analyzed for anions (chloride, fluoride and sulfate) by USEPA method 300.0 and TDS by Standard Method 2540C.

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
- ✓ Total vs Dissolved Wet Chemistry Assessment
- ✓ Electronic Data Deliverables Review

2.1 Overall Assessment

The wet chemistry data reported in this data set are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for these analyses, for this data set is 100%.

2.2 Holding Times

The holding time for TDS analysis of a water sample is 7 days from sample collection to analysis. The holding time for the anions analysis of a water sample is 28 days from sample collection to analysis. The holding time was met for the sample analyses, with the following exceptions.

The TDS analyses for samples HGWC-10 and MW-27D were performed outside of the holding time. Therefore, the TDS concentrations in samples HGWC-10 and MW-27D were J qualified as estimated.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
HGWC-10	TDS	490	H1	490	J	2
MW-27D	TDS	215	H1	215	J	2

mg/L-milligrams per liter
H1-laboratory flag indicating the analysis was performed outside the holding time

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). Six method blanks were reported (batches 606587, 607345, 608133, 608136, 608146 and 608443) for TDS. Eight method blanks were reported (batches 607170, 607751, 607758, 607981, 607982, 607984, 608283 and 608285) for anions. The wet chemistry parameters were 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). 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.

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). LCSs were reported for each analysis and batch. The recovery results were within the laboratory specified acceptance criteria.

2.6 Laboratory Duplicate

One sample set specific laboratory duplicate was reported using sample HGWC-10. The RPD result was within the laboratory specified acceptance criteria.

Batch laboratory duplicate were also reported for TDS. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

2.7 Equipment Blank

One equipment blank was collected with the sample set, EB-01. The wet chemistry parameters were not detected in the equipment blank above the MDL, with the following exception.

TDS (10.0 mg/L) was detected in EB-1 at a concentration greater than the RL. Since TDS was detected in the associated samples at concentrations greater than ten times the equipment blank concentration, no qualifications were applied to the data.

2.8 Field Blank

One field blank was collected with the sample set, FB-01. The wet chemistry parameters were not detected in the field blank above the MDL.

2.9 Field Duplicate

One field duplicate sample was collected with the sample set, DUP-01. Acceptable precision (RPD $\leq$ 20% or the difference between the concentrations < RL) was demonstrated between the field duplicate and the original sample, MW-25D.

2.10 Sensitivity

The samples were reported to the MDLs. No elevated non-detect results were reported.

2.11 Total vs Dissolved Wet Chemistry Assessment

One sample was reported for total and dissolved wet chemistry parameters (HGWC-7). The total wet chemistry concentrations were greater than or equal to the dissolved wet chemistry concentrations or the RPD was less than 30%.

2.12 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

3.0 RADIOCHEMISTRY

The samples were analyzed for radium-226 by USEPA method 9315, radium-228 by USEPA 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
✓ Total vs Dissolved Radiochemistry Assessment
✓ Electronic Data Deliverables Review

3.1 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%.

3.2 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.

3.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Four method blanks were reported for the radium-228 data (batches 440197, 443103, 440490 and 440491). Four method blanks were reported for the radium-226 data (batches 440498, 440499, 443236 and 439773). Radium-226 and radium-228 were not detected in the method blanks above the minimum detectable concentrations (MDCs), with the following exceptions.

Radium-228 (0.738 pCi/L) was detected in the method blanks in batches 440490 (0.738 pCi/L) and 440491 (0.826 pCi/L) at concentrations greater than the MDCs. Therefore, based on professional and technical judgment the radium-228 and total radium concentrations in the associated samples greater than the MDCs were J+ qualified as estimated with high biases.

Sample	Analyte	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier	Reason Code
HGWC-11	Radium-228	1.57	NA	1.57	J+	3
HGWC-11	Combined Radium 226 + 228	1.71	NA	1.71	J+	3
MW-5	Radium-228	1.14	NA	1.14	J+	3
MW-5	Combined Radium 226 + 228	1.22	NA	1.22	J+	3

pCi/L-picocuries per liter
NA-not applicable

3.4 Matrix Spike/Matrix Spike Duplicate

MS/MSD pairs were not reported with 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). Four LCS/LCS duplicate (LCSD) pairs were reported for radium-226. Four LCS/LCSD pairs were reported for radium-228. The recovery and replicate error ratio (RER) [1 sigma (1σ)] results were within the laboratory specified acceptance criteria.

3.6 Laboratory Duplicate

One sample set specific laboratory duplicate was reported for radium-226 using sample HGWC-13. The RER result was within the laboratory specified acceptance criteria.

Three batch laboratory duplicates were also 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.

3.7 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.

3.8 Equipment Blank

One equipment blank was collected with the sample set, EB-01. Radium-226 and radium-228 were not detected in the equipment blank above the MDCs.

3.9 Field Blank

One field blank was collected with the sample set, FB-01. Radium-226 and radium-228 were not detected in the field blank above the MDCs.

3.10 Field Duplicate

One field duplicate sample was collected with the sample set, DUP-01. Acceptable precision (RER (1σ) < 3) was demonstrated between the field duplicate and the original sample, MW-25D.

3.11 Sensitivity

The samples were reported to the MDCs. No elevated non-detect results were reported.

3.12 Total vs Dissolved Radiochemistry Assessment

One sample was reported for total and dissolved radiochemistry parameters (HGWC-7). The total radiochemistry concentrations were greater than or equal to the dissolved radiochemistry concentrations or the RER was less than 3.

3.13 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

FIELD SAMPLING REPORTS

December 2020

Low-Flow Test Report:

Test Date / Time: 12/15/2020 9:50:43 AM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: HGWA-43D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 52.55 ft** **Initial Depth to Water: 14.51 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 57.55 ft** **Estimated Total Volume Pumped: 9 liters** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min Final Draw Down: 1.6 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728634**

Test Notes:
Five bottles: Two 1-L plastic bottles with HNO3 for radium (EPA 9315/9320); one 500-mL plastic bottle for TDS (EPA 2540C); one 250-mL plastic bottle for Cl, F, SO4 (EPA 300.0); and one 250-mL plastic bottle with HNO3 for App. III and IV metals (EPA 6010D/6020B/7470A). Total depth = 61.80 ft.

Weather Conditions:
Sunny, cold

Low-Flow 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	
12/15/2020 9:50 AM	00:00	7.34 pH	14.21 °C	526.82 µS/cm	1.46 mg/L	29.90 NTU	-59.7 mV	14.51 ft	100.00 ml/min
12/15/2020 9:55 AM	05:00	7.30 pH	15.61 °C	517.14 µS/cm	0.70 mg/L	37.61 NTU	-60.6 mV	15.00 ft	100.00 ml/min
12/15/2020 10:00 AM	10:00	7.31 pH	16.28 °C	515.08 µS/cm	0.96 mg/L	33.61 NTU	-108.1 mV	15.34 ft	100.00 ml/min
12/15/2020 10:05 AM	15:00	7.32 pH	16.55 °C	508.92 µS/cm	0.89 mg/L	24.82 NTU	-115.1 mV	15.61 ft	100.00 ml/min
12/15/2020 10:10 AM	20:00	7.34 pH	16.75 °C	498.96 µS/cm	0.60 mg/L	21.50 NTU	-69.4 mV	15.75 ft	100.00 ml/min
12/15/2020 10:15 AM	25:00	7.35 pH	16.80 °C	484.29 µS/cm	0.48 mg/L	19.06 NTU	-67.3 mV	15.85 ft	100.00 ml/min
12/15/2020 10:20 AM	30:00	7.35 pH	16.93 °C	475.04 µS/cm	0.57 mg/L	15.28 NTU	-65.8 mV	15.92 ft	100.00 ml/min
12/15/2020 10:25 AM	35:00	7.36 pH	17.09 °C	465.50 µS/cm	0.45 mg/L	14.47 NTU	-110.0 mV	15.97 ft	100.00 ml/min
12/15/2020 10:30 AM	40:00	7.36 pH	17.08 °C	459.56 µS/cm	0.35 mg/L	14.03 NTU	-108.6 mV	16.02 ft	100.00 ml/min
12/15/2020 10:35 AM	45:00	7.37 pH	17.28 °C	453.06 µS/cm	0.42 mg/L	12.14 NTU	-110.5 mV	16.05 ft	100.00 ml/min
12/15/2020 10:40 AM	50:00	7.37 pH	17.31 °C	447.42 µS/cm	0.32 mg/L	11.04 NTU	-61.9 mV	16.08 ft	100.00 ml/min

12/15/2020 10:45 AM	55:00	7.37 pH	17.26 °C	447.49 µS/cm	0.82 mg/L	10.63 NTU	-60.8 mV	16.10 ft	100.00 ml/min
12/15/2020 10:50 AM	01:00:00	7.38 pH	17.18 °C	447.76 µS/cm	0.74 mg/L	9.65 NTU	-58.5 mV	16.11 ft	100.00 ml/min
12/15/2020 10:55 AM	01:05:00	7.38 pH	16.87 °C	454.65 µS/cm	0.71 mg/L	8.89 NTU	-104.5 mV	16.11 ft	100.00 ml/min
12/15/2020 11:00 AM	01:10:00	7.39 pH	16.77 °C	455.20 µS/cm	0.44 mg/L	7.34 NTU	-101.8 mV	16.11 ft	100.00 ml/min
12/15/2020 11:05 AM	01:15:00	7.39 pH	17.04 °C	451.13 µS/cm	0.31 mg/L	6.63 NTU	-58.6 mV	16.11 ft	100.00 ml/min
12/15/2020 11:10 AM	01:20:00	7.40 pH	17.26 °C	448.17 µS/cm	0.31 mg/L	6.43 NTU	-56.8 mV	16.11 ft	100.00 ml/min
12/15/2020 11:15 AM	01:25:00	7.40 pH	17.20 °C	452.85 µS/cm	0.27 mg/L	5.33 NTU	-56.6 mV	16.11 ft	100.00 ml/min
12/15/2020 11:20 AM	01:30:00	7.39 pH	17.11 °C	453.03 µS/cm	0.22 mg/L	4.88 NTU	-55.8 mV	16.11 ft	100.00 ml/min

Samples

Sample ID:	Description:
HGWA-43D	Grab Sample

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 12/15/2020 1:09:32 PM
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: 103.25 ft** **Initial Depth to Water: 14.4 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 108 ft** **Estimated Total Volume Pumped: 18.5 liters** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 2.33 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728634**

Test Notes:
Five bottles: Two 1-L plastic bottles with HNO3 for radium (EPA 9315/9320); one 500-mL plastic bottle for TDS (EPA 2540C); one 250-mL plastic bottle for Cl, F, SO4 (EPA 300.0); and one 250-mL plastic bottle with HNO3 for App. III and IV metals (EPA 6010D/6020B/7470A). Total depth = 111.3 ft.

Weather Conditions:
Sunny, cold

Low-Flow 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	
12/15/2020 1:09 PM	00:00	7.90 pH	15.77 °C	484.96 µS/cm	1.80 mg/L	63.27 NTU	-106.7 mV	14.40 ft	100.00 ml/min
12/15/2020 1:14 PM	05:00	7.90 pH	16.46 °C	498.20 µS/cm	1.07 mg/L	98.00 NTU	-105.8 mV	14.55 ft	100.00 ml/min
12/15/2020 1:19 PM	10:00	7.90 pH	16.38 °C	499.17 µS/cm	0.74 mg/L	114.00 NTU	-182.1 mV	14.70 ft	100.00 ml/min
12/15/2020 1:24 PM	15:00	7.90 pH	16.30 °C	497.96 µS/cm	0.64 mg/L	112.00 NTU	-186.3 mV	14.93 ft	100.00 ml/min
12/15/2020 1:29 PM	20:00	7.90 pH	16.37 °C	496.40 µS/cm	0.57 mg/L	139.00 NTU	-114.7 mV	15.13 ft	100.00 ml/min
12/15/2020 1:34 PM	25:00	7.90 pH	16.26 °C	494.15 µS/cm	0.52 mg/L	128.00 NTU	-191.2 mV	15.28 ft	100.00 ml/min
12/15/2020 1:39 PM	30:00	7.90 pH	16.24 °C	491.16 µS/cm	0.48 mg/L	92.00 NTU	-194.6 mV	15.45 ft	100.00 ml/min
12/15/2020 1:44 PM	35:00	7.90 pH	16.52 °C	488.12 µS/cm	0.43 mg/L	50.00 NTU	-119.5 mV	15.60 ft	100.00 ml/min
12/15/2020 1:49 PM	40:00	7.90 pH	16.59 °C	483.68 µS/cm	0.40 mg/L	61.95 NTU	-200.0 mV	15.65 ft	100.00 ml/min
12/15/2020 1:54 PM	45:00	7.90 pH	16.81 °C	479.85 µS/cm	0.37 mg/L	49.82 NTU	-123.8 mV	15.77 ft	100.00 ml/min
12/15/2020 1:59 PM	50:00	7.90 pH	16.55 °C	493.05 µS/cm	0.35 mg/L	58.41 NTU	-124.2 mV	15.82 ft	100.00 ml/min
12/15/2020 2:04 PM	55:00	7.90 pH	16.64 °C	494.17 µS/cm	0.35 mg/L	38.92 NTU	-126.4 mV	15.90 ft	100.00 ml/min

12/15/2020 2:09 PM	01:00:00	7.90 pH	16.69 °C	492.65 µS/cm	0.32 mg/L	28.72 NTU	-207.7 mV	15.90 ft	100.00 ml/min
12/15/2020 2:14 PM	01:05:00	7.89 pH	16.55 °C	490.67 µS/cm	0.30 mg/L	23.69 NTU	-126.3 mV	15.91 ft	100.00 ml/min
12/15/2020 2:19 PM	01:10:00	7.88 pH	16.37 °C	492.49 µS/cm	0.29 mg/L	21.04 NTU	-124.5 mV	15.95 ft	100.00 ml/min
12/15/2020 2:24 PM	01:15:00	7.89 pH	16.26 °C	489.74 µS/cm	0.28 mg/L	18.27 NTU	-124.8 mV	15.95 ft	100.00 ml/min
12/15/2020 2:29 PM	01:20:00	7.88 pH	16.10 °C	488.48 µS/cm	0.28 mg/L	17.32 NTU	-207.2 mV	16.00 ft	100.00 ml/min
12/15/2020 2:34 PM	01:25:00	7.88 pH	15.93 °C	489.52 µS/cm	0.27 mg/L	15.96 NTU	-126.3 mV	16.05 ft	100.00 ml/min
12/15/2020 2:39 PM	01:30:00	7.88 pH	15.96 °C	489.65 µS/cm	0.26 mg/L	18.00 NTU	-126.0 mV	16.00 ft	100.00 ml/min
12/15/2020 2:44 PM	01:35:00	7.88 pH	15.96 °C	486.86 µS/cm	0.26 mg/L	16.95 NTU	-206.9 mV	16.00 ft	100.00 ml/min
12/15/2020 2:49 PM	01:40:00	7.88 pH	16.15 °C	485.86 µS/cm	0.25 mg/L	16.43 NTU	-207.8 mV	16.05 ft	100.00 ml/min
12/15/2020 2:54 PM	01:45:00	7.88 pH	16.01 °C	489.56 µS/cm	0.24 mg/L	16.22 NTU	-125.5 mV	16.05 ft	100.00 ml/min
12/15/2020 2:59 PM	01:50:00	7.88 pH	15.89 °C	489.90 µS/cm	0.24 mg/L	16.47 NTU	-124.1 mV	16.05 ft	100.00 ml/min
12/15/2020 3:04 PM	01:55:00	7.88 pH	15.74 °C	490.53 µS/cm	0.25 mg/L	13.59 NTU	-204.7 mV	16.05 ft	100.00 ml/min
12/15/2020 3:09 PM	02:00:00	7.87 pH	15.83 °C	489.04 µS/cm	0.25 mg/L	14.49 NTU	-206.8 mV	16.05 ft	100.00 ml/min
12/15/2020 3:14 PM	02:05:00	7.87 pH	16.38 °C	488.60 µS/cm	0.22 mg/L	14.19 NTU	-126.3 mV	16.20 ft	100.00 ml/min
12/15/2020 3:19 PM	02:10:00	7.87 pH	16.44 °C	486.41 µS/cm	0.19 mg/L	13.34 NTU	-209.6 mV	16.30 ft	100.00 ml/min
12/15/2020 3:24 PM	02:15:00	7.86 pH	16.46 °C	487.69 µS/cm	0.17 mg/L	13.09 NTU	-127.4 mV	16.35 ft	100.00 ml/min
12/15/2020 3:29 PM	02:20:00	7.88 pH	16.38 °C	491.48 µS/cm	0.16 mg/L	13.05 NTU	-126.5 mV	16.43 ft	100.00 ml/min
12/15/2020 3:34 PM	02:25:00	7.88 pH	16.35 °C	491.38 µS/cm	0.15 mg/L	12.11 NTU	-125.1 mV	16.50 ft	100.00 ml/min
12/15/2020 3:39 PM	02:30:00	7.88 pH	16.30 °C	489.46 µS/cm	0.15 mg/L	12.06 NTU	-207.6 mV	16.50 ft	100.00 ml/min
12/15/2020 3:44 PM	02:35:00	7.88 pH	16.30 °C	488.61 µS/cm	0.14 mg/L	11.87 NTU	-208.3 mV	16.60 ft	100.00 ml/min
12/15/2020 3:49 PM	02:40:00	7.87 pH	16.28 °C	488.02 µS/cm	0.13 mg/L	11.04 NTU	-124.4 mV	16.62 ft	100.00 ml/min
12/15/2020 3:54 PM	02:45:00	7.88 pH	16.30 °C	487.19 µS/cm	0.13 mg/L	11.03 NTU	-206.7 mV	16.65 ft	100.00 ml/min
12/15/2020 3:59 PM	02:50:00	7.88 pH	16.30 °C	487.66 µS/cm	0.13 mg/L	10.78 NTU	-122.7 mV	16.67 ft	100.00 ml/min
12/15/2020 4:04 PM	02:55:00	7.88 pH	16.28 °C	486.45 µS/cm	0.12 mg/L	8.75 NTU	-204.0 mV	16.70 ft	100.00 ml/min
12/15/2020 4:09 PM	03:00:00	7.86 pH	16.28 °C	486.14 µS/cm	0.12 mg/L	9.69 NTU	-203.7 mV	16.69 ft	100.00 ml/min
12/15/2020 4:14 PM	03:05:00	7.87 pH	16.32 °C	488.28 µS/cm	0.12 mg/L	9.00 NTU	-203.5 mV	16.73 ft	100.00 ml/min

Samples

Sample ID:	Description:

HGWA-44D	Grab Sample

Created using VuSitu from In-Situ, Inc.

January 2021

Low-Flow Test Report:

Test Date / Time: 1/19/2021 2:58:28 PM
Project: GP-Plant Hammond (4)
Operator Name: Connor Cain

Location Name: HGWA-43D **Well Diameter: 2 in** **Casing Type: PVC** **Initial Depth to Water: 16.76 ft**	**Pump Type: QED** **Tubing Type: polyethylene** **Tubing Inner Diameter: 0.17 in** **Estimated Total Volume Pumped: 13500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min Final Draw Down: 3.94 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728638**

Test Notes:
Total Depth: 61.71 ft

Low-Flow 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	+/- .3	
1/19/2021 2:58 PM	00:00	7.49 pH	15.85 °C	0.53 µS/cm	7.61 mg/L	38.60 NTU	-69.0 mV	18.84 ft	200.00 ml/min
1/19/2021 3:03 PM	05:00	7.44 pH	15.96 °C	0.53 µS/cm	5.84 mg/L	30.20 NTU	-66.7 mV	19.43 ft	200.00 ml/min
1/19/2021 3:08 PM	10:00	7.42 pH	15.97 °C	0.53 µS/cm	4.66 mg/L	25.00 NTU	-122.3 mV	19.86 ft	200.00 ml/min
1/19/2021 3:13 PM	15:00	7.40 pH	15.98 °C	0.53 µS/cm	3.85 mg/L	14.00 NTU	-62.8 mV	20.32 ft	200.00 ml/min
1/19/2021 3:18 PM	20:00	7.40 pH	15.87 °C	0.52 µS/cm	2.77 mg/L	11.60 NTU	-116.6 mV	20.44 ft	200.00 ml/min
1/19/2021 3:23 PM	25:00	7.39 pH	15.84 °C	0.52 µS/cm	2.30 mg/L	10.68 NTU	-56.1 mV	20.49 ft	200.00 ml/min
1/19/2021 3:28 PM	30:00	7.39 pH	15.74 °C	0.51 µS/cm	2.20 mg/L	8.80 NTU	-106.6 mV	20.66 ft	200.00 ml/min
1/19/2021 3:33 PM	35:00	7.39 pH	15.75 °C	0.51 µS/cm	2.01 mg/L	8.22 NTU	-49.7 mV	20.74 ft	200.00 ml/min
1/19/2021 3:38 PM	40:00	7.39 pH	15.60 °C	0.51 µS/cm	1.54 mg/L	6.60 NTU	-99.3 mV	20.76 ft	200.00 ml/min
1/19/2021 3:43 PM	45:00	7.39 pH	15.83 °C	0.50 µS/cm	1.76 mg/L	6.79 NTU	-96.2 mV	20.78 ft	100.00 ml/min
1/19/2021 3:48 PM	50:00	7.40 pH	15.43 °C	0.50 µS/cm	1.81 mg/L	7.01 NTU	-90.9 mV	20.79 ft	100.00 ml/min
1/19/2021 3:53 PM	55:00	7.38 pH	15.16 °C	0.50 µS/cm	0.90 mg/L	4.52 NTU	-91.3 mV	20.72 ft	100.00 ml/min
1/19/2021 3:58 PM	01:00:00	7.39 pH	15.14 °C	0.49 µS/cm	1.30 mg/L	4.32 NTU	-87.6 mV	20.69 ft	100.00 ml/min
1/19/2021 4:03 PM	01:05:00	7.37 pH	15.65 °C	0.50 µS/cm	1.15 mg/L	4.04 NTU	-87.6 mV	20.68 ft	100.00 ml/min
1/19/2021 4:08 PM	01:10:00	7.39 pH	15.74 °C	0.49 µS/cm	1.59 mg/L	6.02 NTU	-82.9 mV	20.68 ft	100.00 ml/min

1/19/2021 4:13 PM	01:15:00	7.39 pH	15.88 °C	0.49 µS/cm	1.41 mg/L	4.49 NTU	-37.4 mV	20.71 ft	100.00 ml/min
1/19/2021 4:18 PM	01:20:00	7.39 pH	15.46 °C	0.49 µS/cm	1.11 mg/L	4.23 NTU	-80.1 mV	20.70 ft	100.00 ml/min
1/19/2021 4:23 PM	01:25:00	7.38 pH	15.21 °C	0.49 µS/cm	1.02 mg/L	3.20 NTU	-36.1 mV	20.74 ft	100.00 ml/min
1/19/2021 4:28 PM	01:30:00	7.39 pH	14.79 °C	0.49 µS/cm	0.98 mg/L	3.88 NTU	-78.1 mV	20.70 ft	100.00 ml/min

Samples

Sample ID:	Description:
HGWA-43D	Grab sample

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 1/19/2021 2:36:54 PM
Project: GP-Plant Hammond (3)
Operator Name: Chad Russo

Location Name: HGWA-44D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 103 ft** **Initial Depth to Water: 16.28 ft**	**Pump Type: Alexis** **Tubing Type: polyethylene** **Tubing Inner Diameter: 0.17 in** **Estimated Total Volume Pumped: 20500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 2.32 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728634**

Test Notes:
Total Depth: 111.53 ft

Low-Flow 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	
1/19/2021 2:36 PM	00:00	7.83 pH	15.29 °C	506.34 µS/cm	1.46 mg/L		-91.3 mV	16.28 ft	200.00 ml/min
1/19/2021 2:41 PM	05:00	7.84 pH	16.03 °C	500.24 µS/cm	0.44 mg/L	82.00 NTU	-97.3 mV	17.19 ft	200.00 ml/min
1/19/2021 2:46 PM	10:00	7.85 pH	16.14 °C	495.76 µS/cm	0.31 mg/L	98.00 NTU	-98.2 mV	17.51 ft	200.00 ml/min
1/19/2021 2:51 PM	15:00	7.86 pH	16.16 °C	491.34 µS/cm	0.26 mg/L	77.00 NTU	-99.1 mV	18.04 ft	200.00 ml/min
1/19/2021 2:56 PM	20:00	7.85 pH	16.14 °C	489.93 µS/cm	0.22 mg/L	22.00 NTU	-100.6 mV	18.40 ft	200.00 ml/min
1/19/2021 3:01 PM	25:00	7.84 pH	15.74 °C	485.07 µS/cm	0.22 mg/L	44.40 NTU	-98.0 mV	18.35 ft	100.00 ml/min
1/19/2021 3:06 PM	30:00	7.84 pH	15.57 °C	484.09 µS/cm	0.24 mg/L	34.10 NTU	-98.8 mV	18.35 ft	100.00 ml/min
1/19/2021 3:11 PM	35:00	7.84 pH	15.58 °C	481.64 µS/cm	0.25 mg/L	33.00 NTU	-99.5 mV	18.45 ft	100.00 ml/min
1/19/2021 3:16 PM	40:00	7.84 pH	15.59 °C	479.88 µS/cm	0.24 mg/L	25.90 NTU	-99.5 mV	18.50 ft	100.00 ml/min
1/19/2021 3:21 PM	45:00	7.83 pH	15.59 °C	483.16 µS/cm	0.22 mg/L	18.50 NTU	-96.8 mV	18.55 ft	100.00 ml/min
1/19/2021 3:26 PM	50:00	7.83 pH	15.56 °C	482.00 µS/cm	0.20 mg/L	19.20 NTU	-96.5 mV	18.60 ft	100.00 ml/min
1/19/2021 3:31 PM	55:00	7.82 pH	15.40 °C	479.95 µS/cm	0.20 mg/L	16.50 NTU	-95.5 mV	18.60 ft	100.00 ml/min
1/19/2021 3:36 PM	01:00:00	7.83 pH	15.25 °C	482.48 µS/cm	0.20 mg/L	14.60 NTU	-95.8 mV	18.55 ft	100.00 ml/min
1/19/2021 3:41 PM	01:05:00	7.83 pH	15.24 °C	482.12 µS/cm	0.20 mg/L	14.60 NTU	-94.8 mV	18.55 ft	100.00 ml/min
1/19/2021 3:46 PM	01:10:00	7.83 pH	15.29 °C	481.12 µS/cm	0.19 mg/L	14.50 NTU	-95.1 mV	18.50 ft	100.00 ml/min

1/19/2021 3:51 PM	01:15:00	7.83 pH	15.29 °C	480.83 µS/cm	0.19 mg/L	12.90 NTU	-94.8 mV	18.55 ft	100.00 ml/min
1/19/2021 3:56 PM	01:20:00	7.83 pH	15.29 °C	479.33 µS/cm	0.18 mg/L	12.80 NTU	-94.6 mV	18.55 ft	100.00 ml/min
1/19/2021 4:01 PM	01:25:00	7.84 pH	15.29 °C	481.00 µS/cm	0.18 mg/L	11.40 NTU	-94.2 mV	18.55 ft	100.00 ml/min
1/19/2021 4:06 PM	01:30:00	7.84 pH	15.16 °C	479.47 µS/cm	0.18 mg/L	10.15 NTU	-93.1 mV	18.40 ft	100.00 ml/min
1/19/2021 4:11 PM	01:35:00	7.84 pH	15.03 °C	481.23 µS/cm	0.18 mg/L	13.40 NTU	-92.7 mV	18.50 ft	100.00 ml/min
1/19/2021 4:16 PM	01:40:00	7.84 pH	15.25 °C	478.27 µS/cm	0.18 mg/L	22.80 NTU	-93.1 mV	18.50 ft	100.00 ml/min
1/19/2021 4:21 PM	01:45:00	7.84 pH	15.14 °C	477.80 µS/cm	0.18 mg/L	20.30 NTU	-91.5 mV	18.50 ft	100.00 ml/min
1/19/2021 4:26 PM	01:50:00	7.84 pH	15.02 °C	475.66 µS/cm	0.18 mg/L	16.10 NTU	-90.8 mV	18.50 ft	100.00 ml/min
1/19/2021 4:31 PM	01:55:00	7.85 pH	14.91 °C	478.31 µS/cm	0.16 mg/L	12.39 NTU	-90.1 mV	18.60 ft	100.00 ml/min
1/19/2021 4:36 PM	02:00:00	7.84 pH	14.59 °C	482.53 µS/cm	0.15 mg/L	11.95 NTU	-88.5 mV	18.60 ft	100.00 ml/min
1/19/2021 4:41 PM	02:05:00	7.85 pH	14.52 °C	486.75 µS/cm	0.15 mg/L	12.84 NTU	-88.6 mV	18.60 ft	100.00 ml/min
1/19/2021 4:46 PM	02:10:00	7.86 pH	14.42 °C	483.95 µS/cm	0.15 mg/L	11.56 NTU	-87.4 mV	18.60 ft	100.00 ml/min
1/19/2021 4:51 PM	02:15:00	7.85 pH	14.41 °C	484.00 µS/cm	0.14 mg/L	11.67 NTU	-87.0 mV	18.60 ft	100.00 ml/min
1/19/2021 4:56 PM	02:20:00	7.86 pH	14.30 °C	483.23 µS/cm	0.15 mg/L	12.43 NTU	-158.9 mV	18.60 ft	100.00 ml/min
1/19/2021 5:01 PM	02:25:00	7.85 pH	14.34 °C	485.05 µS/cm	0.15 mg/L	12.12 NTU	-87.2 mV	18.60 ft	100.00 ml/min
1/19/2021 5:06 PM	02:30:00	7.87 pH	14.39 °C	484.74 µS/cm	0.14 mg/L	10.12 NTU	-159.9 mV	18.60 ft	100.00 ml/min
1/19/2021 5:11 PM	02:35:00	7.87 pH	14.34 °C	484.08 µS/cm	0.15 mg/L	10.94 NTU	-86.3 mV	18.60 ft	100.00 ml/min
1/19/2021 5:16 PM	02:40:00	7.87 pH	14.24 °C	489.94 µS/cm	0.15 mg/L	11.81 NTU	-158.9 mV	18.60 ft	100.00 ml/min
1/19/2021 5:21 PM	02:45:00	7.86 pH	14.25 °C	491.19 µS/cm	0.15 mg/L	11.14 NTU	-87.4 mV	18.60 ft	100.00 ml/min
1/19/2021 5:26 PM	02:50:00	7.85 pH	14.21 °C	497.24 µS/cm	0.16 mg/L	10.54 NTU	-84.7 mV	18.60 ft	100.00 ml/min
1/19/2021 5:31 PM	02:55:00	7.85 pH	14.41 °C	494.66 µS/cm	0.16 mg/L	10.42 NTU	-157.5 mV	18.60 ft	100.00 ml/min
1/19/2021 5:36 PM	03:00:00	7.86 pH	14.48 °C	493.23 µS/cm	0.16 mg/L	9.73 NTU	-158.4 mV	18.60 ft	100.00 ml/min

Samples

Sample ID:	Description:
HGWA-44D	Grab

February 2021

Low-Flow Test Report:

Test Date / Time: 2/8/2021 3:34:14 PM
Project: GP-Plant Hammond
Operator Name: Chad Russo

Location Name: HGWA-1 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 22.5 ft** **Total Depth: 32.5 ft** **Initial Depth to Water: 13.59 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 28 ft** **Estimated Total Volume Pumped: 6680 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.66 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728634**

Test Notes:

Four bottles: Two 1-L plastic bottles with HNO3 for radium (EPA 9315/9320); one 120-mL plastic bottle for F (EPA 300.0); and one 250-mL plastic bottle with HNO3 for App. IV metals (EPA 6010D/6020B/7470A).

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	+/- 10	+/- 10	+/- 0.3	
2/8/2021 3:34 PM	00:00	7.14 pH	17.08 °C	579.20 µS/cm	2.07 mg/L		70.9 mV	13.59 ft	200.00 ml/min
2/8/2021 3:39 PM	05:00	7.15 pH	17.13 °C	583.74 µS/cm	1.41 mg/L		47.2 mV	14.15 ft	200.00 ml/min
2/8/2021 3:40 PM	06:44	7.14 pH	17.19 °C	567.43 µS/cm	1.19 mg/L	8.62 NTU	46.0 mV	14.15 ft	200.00 ml/min
2/8/2021 3:45 PM	11:44	7.13 pH	17.27 °C	584.98 µS/cm	0.83 mg/L	4.92 NTU	53.6 mV	14.20 ft	200.00 ml/min
2/8/2021 3:50 PM	16:44	7.13 pH	17.34 °C	584.50 µS/cm	0.68 mg/L	3.22 NTU	35.0 mV	14.20 ft	200.00 ml/min
2/8/2021 3:55 PM	21:44	7.12 pH	17.40 °C	580.08 µS/cm	0.60 mg/L	2.44 NTU	31.9 mV	14.25 ft	200.00 ml/min
2/8/2021 3:57 PM	23:24	7.12 pH	17.43 °C	558.18 µS/cm	0.56 mg/L	2.44 NTU	31.9 mV	14.25 ft	200.00 ml/min
2/8/2021 4:02 PM	28:24	7.12 pH	17.43 °C	582.77 µS/cm	0.46 mg/L	2.08 NTU	34.2 mV	14.25 ft	200.00 ml/min
2/8/2021 4:07 PM	33:24	7.11 pH	17.39 °C	587.09 µS/cm	0.40 mg/L	1.74 NTU	29.3 mV	14.25 ft	200.00 ml/min

Samples

Sample ID:	Description:
HGWA-1	Grab Sample.

Low-Flow Test Report:

Test Date / Time: 2/9/2021 9:46:32 AM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: HGWA-2 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 17.95 ft** **Total Depth: 28.45 ft** **Initial Depth to Water: 8.1 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 22.95 ft** **Estimated Total Volume Pumped: 9.8 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.05 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728541**

Test Notes:

Four bottles: Two 1-L plastic bottles with HNO3 for radium (EPA 9315/9320); one 120-mL plastic bottle for F (EPA 300.0); and one 250-mL plastic bottle with HNO3 for App. IV metals (EPA 6010D/6020B/7470A).

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	+/- 0.03	
2/9/2021 9:46 AM	00:00	5.84 pH	14.99 °C	229.06 µS/cm	6.18 mg/L	26.90 NTU	101.0 mV	8.10 ft	200.00 ml/min
2/9/2021 9:49 AM	03:18	5.68 pH	16.11 °C	249.70 µS/cm	3.22 mg/L	24.00 NTU	103.9 mV	8.14 ft	200.00 ml/min
2/9/2021 9:50 AM	04:09	5.66 pH	16.20 °C	246.42 µS/cm	2.98 mg/L	24.00 NTU	94.6 mV	8.14 ft	200.00 ml/min
2/9/2021 9:56 AM	09:45	5.50 pH	16.47 °C	218.63 µS/cm	1.47 mg/L	17.60 NTU	108.7 mV	8.14 ft	200.00 ml/min
2/9/2021 10:01 AM	14:45	5.49 pH	16.52 °C	220.74 µS/cm	1.55 mg/L	12.50 NTU	97.9 mV	8.14 ft	200.00 ml/min
2/9/2021 10:06 AM	19:45	5.47 pH	16.56 °C	220.10 µS/cm	1.91 mg/L	12.30 NTU	99.6 mV	8.14 ft	200.00 ml/min
2/9/2021 10:11 AM	24:45	5.44 pH	16.62 °C	217.52 µS/cm	1.55 mg/L	8.22 NTU	97.3 mV	8.14 ft	200.00 ml/min
2/9/2021 10:16 AM	29:45	5.43 pH	16.64 °C	216.58 µS/cm	1.07 mg/L	7.46 NTU	103.0 mV	8.15 ft	200.00 ml/min
2/9/2021 10:21 AM	34:45	5.44 pH	16.69 °C	216.07 µS/cm	0.54 mg/L	6.90 NTU	104.8 mV	8.15 ft	200.00 ml/min
2/9/2021 10:26 AM	39:45	5.42 pH	16.56 °C	213.99 µS/cm	0.27 mg/L	4.67 NTU	103.4 mV	8.15 ft	200.00 ml/min
2/9/2021 10:31 AM	44:45	5.42 pH	16.53 °C	212.92 µS/cm	0.27 mg/L	4.71 NTU	105.1 mV	8.15 ft	200.00 ml/min
2/9/2021 10:36 AM	49:45	5.42 pH	16.48 °C	214.52 µS/cm	0.24 mg/L		105.5 mV	8.15 ft	200.00 ml/min

Samples

Sample ID:	Description:
HGWA-2	Grab Sample.

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 2/9/2021 11:22:55 AM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: HGWA-3 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 34.87 ft** **Total Depth: 45.4 ft** **Initial Depth to Water: 7.7 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 39.87 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: 728541**

Test Notes:

Four bottles: Two 1-L plastic bottles with HNO3 for radium (EPA 9315/9320); one 120-mL plastic bottle for F (EPA 300.0); and one 250-mL plastic bottle with HNO3 for App. IV metals (EPA 6010D/6020B/7470A).

Weather Conditions:
Sunny, 46 degrees.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.03	
2/9/2021 11:22 AM	00:00	7.01 pH	17.95 °C	451.18 µS/cm	1.75 mg/L	4.20 NTU	-33.3 mV	7.70 ft	200.00 ml/min
2/9/2021 11:27 AM	05:00	7.11 pH	17.08 °C	461.05 µS/cm	0.44 mg/L	2.49 NTU	-48.0 mV	7.70 ft	200.00 ml/min
2/9/2021 11:32 AM	10:00	7.15 pH	17.23 °C	457.34 µS/cm	0.33 mg/L	1.24 NTU	-53.3 mV	7.70 ft	200.00 ml/min
2/9/2021 11:37 AM	15:00	7.17 pH	17.28 °C	455.26 µS/cm	0.27 mg/L	1.54 NTU	-92.6 mV	7.70 ft	200.00 ml/min
2/9/2021 11:42 AM	20:00	7.20 pH	17.28 °C	455.00 µS/cm	0.27 mg/L	1.52 NTU	-95.6 mV	7.70 ft	200.00 ml/min
2/9/2021 11:47 AM	25:00	7.22 pH	17.40 °C	453.59 µS/cm	0.23 mg/L	1.39 NTU	-97.9 mV	7.70 ft	200.00 ml/min
2/9/2021 11:52 AM	30:00	7.23 pH	17.54 °C	451.62 µS/cm	0.22 mg/L	0.86 NTU	-99.4 mV	7.70 ft	200.00 ml/min

Samples

Sample ID:	Description:
HGWA-3	Grab Sample.

Low-Flow Test Report:

Test Date / Time: 2/9/2021 2:33:12 PM
Project: GP-Plant Hammond
Operator Name: Chad Russo

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: 13.39 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 56 ft** **Estimated Total Volume Pumped: 20000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 1.18 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728634**

Test Notes:

Four bottles: Two 1-L plastic bottles with HNO3 for radium (EPA 9315/9320); one 120-mL plastic bottle for F (EPA 300.0); and one 250-mL plastic bottle with HNO3 for App. IV metals (EPA 6010D/6020B/7470A).

Weather Conditions:
Sunny, 46 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	+/- 10	+/- 10	+/- 0.3	
2/9/2021 2:33 PM	00:00	7.48 pH	20.47 °C	499.44 µS/cm	2.96 mg/L		-41.6 mV	13.39 ft	100.00 ml/min
2/9/2021 2:38 PM	05:00	7.44 pH	18.98 °C	502.27 µS/cm	1.31 mg/L	84.70 NTU	-44.5 mV	14.49 ft	100.00 ml/min
2/9/2021 2:43 PM	10:00	7.43 pH	19.03 °C	500.77 µS/cm	0.88 mg/L	97.20 NTU	-98.8 mV	14.56 ft	100.00 ml/min
2/9/2021 2:48 PM	15:00	7.44 pH	19.04 °C	497.98 µS/cm	0.75 mg/L	101.90 NTU	-50.5 mV	14.56 ft	100.00 ml/min
2/9/2021 2:53 PM	20:00	7.44 pH	18.91 °C	492.45 µS/cm	0.66 mg/L	92.80 NTU	-48.1 mV	14.60 ft	100.00 ml/min
2/9/2021 2:58 PM	25:00	7.45 pH	19.05 °C	485.46 µS/cm	0.60 mg/L	91.20 NTU	-47.6 mV	14.51 ft	100.00 ml/min
2/9/2021 3:03 PM	30:00	7.45 pH	18.73 °C	482.58 µS/cm	0.55 mg/L	96.10 NTU	-97.3 mV	14.56 ft	100.00 ml/min
2/9/2021 3:08 PM	35:00	7.44 pH	18.06 °C	483.81 µS/cm	0.46 mg/L	89.20 NTU	-43.3 mV	14.56 ft	100.00 ml/min
2/9/2021 3:13 PM	40:00	7.45 pH	17.89 °C	491.52 µS/cm	0.57 mg/L	89.20 NTU	-91.6 mV	14.56 ft	100.00 ml/min
2/9/2021 3:18 PM	45:00	7.44 pH	17.67 °C	491.90 µS/cm	0.37 mg/L	97.50 NTU	-91.6 mV	14.66 ft	100.00 ml/min
2/9/2021 3:23 PM	50:00	7.45 pH	17.57 °C	488.23 µS/cm	0.26 mg/L	73.40 NTU	-91.0 mV	14.85 ft	100.00 ml/min
2/9/2021 3:28 PM	55:00	7.44 pH	17.44 °C	484.07 µS/cm	0.22 mg/L	63.20 NTU	-39.5 mV	15.00 ft	100.00 ml/min

2/9/2021 3:33 PM	01:00:00	7.45 pH	17.35 °C	482.96 µS/cm	0.21 mg/L	58.60 NTU	-38.3 mV	15.11 ft	100.00 ml/min
2/9/2021 3:38 PM	01:05:00	7.46 pH	17.33 °C	479.44 µS/cm	0.19 mg/L	49.80 NTU	-37.3 mV	14.96 ft	100.00 ml/min
2/9/2021 3:43 PM	01:10:00	7.45 pH	17.17 °C	477.67 µS/cm	0.24 mg/L	48.90 NTU	-81.5 mV	14.90 ft	100.00 ml/min
2/9/2021 3:48 PM	01:15:00	7.44 pH	17.10 °C	472.09 µS/cm	0.23 mg/L	38.70 NTU	-33.1 mV	14.80 ft	100.00 ml/min
2/9/2021 3:53 PM	01:20:00	7.45 pH	17.09 °C	470.08 µS/cm	0.20 mg/L	30.30 NTU	-76.8 mV	14.77 ft	100.00 ml/min
2/9/2021 3:58 PM	01:25:00	7.44 pH	17.08 °C	469.73 µS/cm	0.20 mg/L	28.50 NTU	-30.1 mV	14.69 ft	100.00 ml/min
2/9/2021 4:03 PM	01:30:00	7.44 pH	17.04 °C	468.72 µS/cm	0.19 mg/L	28.80 NTU	-30.4 mV	14.62 ft	100.00 ml/min
2/9/2021 4:08 PM	01:35:00	7.45 pH	17.06 °C	469.22 µS/cm	0.19 mg/L	29.10 NTU	-30.0 mV	14.62 ft	100.00 ml/min
2/9/2021 4:13 PM	01:40:00	7.45 pH	17.09 °C	469.93 µS/cm	0.18 mg/L	28.70 NTU	-73.5 mV	14.62 ft	100.00 ml/min
2/9/2021 4:18 PM	01:45:00	7.44 pH	17.22 °C	470.76 µS/cm	0.18 mg/L	26.40 NTU	-29.8 mV	14.62 ft	100.00 ml/min
2/9/2021 4:23 PM	01:50:00	7.44 pH	17.22 °C	469.98 µS/cm	0.17 mg/L	24.80 NTU	-28.7 mV	14.62 ft	100.00 ml/min
2/9/2021 4:28 PM	01:55:00	7.45 pH	17.16 °C	469.46 µS/cm	0.17 mg/L	22.50 NTU	-29.0 mV	14.62 ft	100.00 ml/min
2/9/2021 4:33 PM	02:00:00	7.44 pH	16.95 °C	470.80 µS/cm	0.16 mg/L	23.80 NTU	-27.6 mV	14.57 ft	100.00 ml/min
2/9/2021 4:38 PM	02:05:00	7.44 pH	16.86 °C	472.08 µS/cm	0.16 mg/L	22.80 NTU	-27.7 mV	14.57 ft	100.00 ml/min
2/9/2021 4:43 PM	02:10:00	7.45 pH	16.86 °C	471.18 µS/cm	0.15 mg/L	21.60 NTU	-27.6 mV	14.57 ft	100.00 ml/min
2/9/2021 4:48 PM	02:15:00	7.44 pH	16.81 °C	472.85 µS/cm	0.14 mg/L	20.80 NTU	-27.1 mV	14.57 ft	100.00 ml/min
2/9/2021 4:53 PM	02:20:00	7.45 pH	16.73 °C	481.44 µS/cm	0.31 mg/L	28.40 NTU	-66.8 mV	14.57 ft	100.00 ml/min
2/9/2021 4:58 PM	02:25:00	7.45 pH	16.64 °C	479.86 µS/cm	0.28 mg/L	20.10 NTU	-25.7 mV	14.57 ft	100.00 ml/min
2/9/2021 5:03 PM	02:30:00	7.44 pH	16.64 °C	477.43 µS/cm	0.25 mg/L	16.70 NTU	-24.9 mV	14.57 ft	100.00 ml/min
2/9/2021 5:08 PM	02:35:00	7.44 pH	16.60 °C	476.94 µS/cm	0.23 mg/L	15.80 NTU	-25.0 mV	14.57 ft	100.00 ml/min
2/9/2021 5:13 PM	02:40:00	7.45 pH	16.59 °C	478.67 µS/cm	0.20 mg/L	14.20 NTU	-24.5 mV	14.57 ft	100.00 ml/min
2/9/2021 5:18 PM	02:45:00	7.44 pH	16.55 °C	475.63 µS/cm	0.17 mg/L	13.90 NTU	-24.0 mV	14.57 ft	100.00 ml/min
2/9/2021 5:23 PM	02:50:00	7.44 pH	16.57 °C	475.73 µS/cm	0.16 mg/L	13.60 NTU	-24.4 mV	14.57 ft	100.00 ml/min
2/9/2021 5:28 PM	02:55:00	7.44 pH	16.55 °C	472.82 µS/cm	0.15 mg/L	12.60 NTU	-24.2 mV	14.57 ft	100.00 ml/min
2/9/2021 5:33 PM	03:00:00	7.44 pH	16.55 °C	473.54 µS/cm	0.14 mg/L	11.30 NTU	-23.9 mV	14.57 ft	100.00 ml/min
2/9/2021 5:38 PM	03:05:00	7.44 pH	16.50 °C	471.84 µS/cm	0.13 mg/L	11.00 NTU	-23.7 mV	14.57 ft	100.00 ml/min

2/9/2021 5:43 PM	03:10:00	7.45 pH	16.46 °C	470.56 µS/cm	0.12 mg/L	11.97 NTU	-23.7 mV	14.57 ft	100.00 ml/min
2/9/2021 5:48 PM	03:15:00	7.45 pH	16.41 °C	470.42 µS/cm	0.12 mg/L	11.00 NTU	-23.4 mV	14.57 ft	100.00 ml/min
2/9/2021 5:53 PM	03:20:00	7.44 pH	16.37 °C	471.57 µS/cm	0.11 mg/L	9.22 NTU	-23.2 mV	14.57 ft	100.00 ml/min

Samples

Sample ID:	Description:
HGWA-43D	Grab Sample.

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 2/9/2021 10:04:37 AM
Project: GP-Plant Hammond
Operator Name: Chad Russo

Location Name: HGWA-44D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 103.28 ft** **Total Depth: 113.28 ft** **Initial Depth to Water: 12.11 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 108 ft** **Estimated Total Volume Pumped: 18000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 3.35 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728634**

Test Notes:

Four bottles: Two 1-L plastic bottles with HNO3 for radium (EPA 9315/9320); one 120-mL plastic bottle for F (EPA 300.0); and one 250-mL plastic bottle with HNO3 for App. IV metals (EPA 6010D/6020B/7470A).

Weather Conditions:
Sunny, 46 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	+/- 10	+/- 10	+/- 0.3	
2/9/2021 10:04 AM	00:00	7.71 pH	15.52 °C	501.55 µS/cm	1.51 mg/L		-68.7 mV	12.11 ft	100.00 ml/min
2/9/2021 10:09 AM	05:00	7.79 pH	15.93 °C	498.49 µS/cm	0.84 mg/L	25.00 NTU	-76.9 mV	13.61 ft	100.00 ml/min
2/9/2021 10:14 AM	10:00	7.82 pH	15.58 °C	495.77 µS/cm	0.64 mg/L	19.90 NTU	-147.0 mV	13.85 ft	100.00 ml/min
2/9/2021 10:19 AM	15:00	7.83 pH	15.48 °C	494.19 µS/cm	0.56 mg/L	16.90 NTU	-80.8 mV	14.08 ft	100.00 ml/min
2/9/2021 10:24 AM	20:00	7.83 pH	15.42 °C	492.43 µS/cm	0.52 mg/L	13.30 NTU	-83.2 mV	14.26 ft	100.00 ml/min
2/9/2021 10:29 AM	25:00	7.84 pH	15.41 °C	490.58 µS/cm	0.50 mg/L	11.80 NTU	-84.5 mV	14.41 ft	100.00 ml/min
2/9/2021 10:34 AM	30:00	7.84 pH	15.41 °C	489.95 µS/cm	0.47 mg/L	12.48 NTU	-84.8 mV	14.56 ft	100.00 ml/min
2/9/2021 10:39 AM	35:00	7.83 pH	15.47 °C	486.80 µS/cm	0.45 mg/L	11.22 NTU	-153.6 mV	14.64 ft	100.00 ml/min
2/9/2021 10:44 AM	40:00	7.83 pH	15.49 °C	486.36 µS/cm	0.44 mg/L	9.71 NTU	-82.8 mV	14.76 ft	100.00 ml/min
2/9/2021 10:49 AM	45:00	7.82 pH	15.70 °C	484.60 µS/cm	0.40 mg/L	9.43 NTU	-82.1 mV	14.83 ft	100.00 ml/min
2/9/2021 10:54 AM	50:00	7.82 pH	15.94 °C	483.12 µS/cm	0.35 mg/L	9.21 NTU	-80.8 mV	14.91 ft	100.00 ml/min
2/9/2021 10:59 AM	55:00	7.81 pH	16.28 °C	485.63 µS/cm	0.32 mg/L	9.30 NTU	-79.5 mV	14.98 ft	100.00 ml/min

2/9/2021 11:04 AM	01:00:00	7.82 pH	16.19 °C	484.56 µS/cm	0.30 mg/L	7.57 NTU	-78.1 mV	15.05 ft	100.00 ml/min
2/9/2021 11:09 AM	01:05:00	7.82 pH	16.59 °C	486.83 µS/cm	0.29 mg/L	7.49 NTU	-77.0 mV	15.11 ft	100.00 ml/min
2/9/2021 11:14 AM	01:10:00	7.81 pH	16.83 °C	483.83 µS/cm	0.26 mg/L	6.32 NTU	-142.7 mV	15.17 ft	100.00 ml/min
2/9/2021 11:19 AM	01:15:00	7.81 pH	16.73 °C	483.69 µS/cm	0.25 mg/L	6.87 NTU	-75.3 mV	15.22 ft	100.00 ml/min
2/9/2021 11:24 AM	01:20:00	7.82 pH	16.59 °C	485.43 µS/cm	0.24 mg/L	7.87 NTU	-73.7 mV	15.28 ft	100.00 ml/min
2/9/2021 11:29 AM	01:25:00	7.81 pH	16.48 °C	488.10 µS/cm	0.24 mg/L	7.50 NTU	-72.8 mV	15.30 ft	100.00 ml/min
2/9/2021 11:34 AM	01:30:00	7.82 pH	16.47 °C	487.19 µS/cm	0.23 mg/L	7.69 NTU	-73.4 mV	15.35 ft	100.00 ml/min
2/9/2021 11:39 AM	01:35:00	7.81 pH	16.55 °C	488.27 µS/cm	0.21 mg/L	8.18 NTU	-72.7 mV	15.40 ft	100.00 ml/min
2/9/2021 11:44 AM	01:40:00	7.81 pH	16.46 °C	488.63 µS/cm	0.21 mg/L	8.76 NTU	-71.5 mV	15.42 ft	100.00 ml/min
2/9/2021 11:49 AM	01:45:00	7.81 pH	16.36 °C	489.31 µS/cm	0.21 mg/L	8.26 NTU	-136.4 mV	15.45 ft	100.00 ml/min
2/9/2021 11:54 AM	01:50:00	7.83 pH	16.33 °C	493.57 µS/cm	0.19 mg/L	7.30 NTU	-70.1 mV	15.50 ft	100.00 ml/min
2/9/2021 11:59 AM	01:55:00	7.81 pH	16.41 °C	502.52 µS/cm	0.20 mg/L	8.80 NTU	-69.3 mV	15.51 ft	100.00 ml/min
2/9/2021 12:04 PM	02:00:00	7.82 pH	16.41 °C	502.73 µS/cm	0.20 mg/L	9.03 NTU	-67.4 mV	15.53 ft	100.00 ml/min
2/9/2021 12:09 PM	02:05:00	7.82 pH	16.33 °C	503.19 µS/cm	0.20 mg/L	9.59 NTU	-68.4 mV	15.56 ft	100.00 ml/min
2/9/2021 12:14 PM	02:10:00	7.83 pH	16.37 °C	502.88 µS/cm	0.18 mg/L	9.27 NTU	-68.8 mV	15.56 ft	100.00 ml/min
2/9/2021 12:19 PM	02:15:00	7.82 pH	16.41 °C	504.39 µS/cm	0.17 mg/L	9.58 NTU	-67.8 mV	15.60 ft	100.00 ml/min
2/9/2021 12:24 PM	02:20:00	7.83 pH	16.45 °C	504.74 µS/cm	0.17 mg/L	8.78 NTU	-67.3 mV	15.60 ft	100.00 ml/min
2/9/2021 12:29 PM	02:25:00	7.83 pH	16.52 °C	505.67 µS/cm	0.19 mg/L	8.60 NTU	-66.6 mV	15.60 ft	100.00 ml/min
2/9/2021 12:34 PM	02:30:00	7.83 pH	16.91 °C	505.02 µS/cm	0.18 mg/L	9.45 NTU	-69.1 mV	15.52 ft	100.00 ml/min
2/9/2021 12:39 PM	02:35:00	7.83 pH	17.15 °C	506.24 µS/cm	0.18 mg/L	8.90 NTU	-69.1 mV	15.50 ft	100.00 ml/min
2/9/2021 12:44 PM	02:40:00	7.83 pH	17.31 °C	505.12 µS/cm	0.18 mg/L	8.78 NTU	-68.6 mV	15.48 ft	100.00 ml/min
2/9/2021 12:49 PM	02:45:00	7.83 pH	17.22 °C	507.67 µS/cm	0.19 mg/L	8.84 NTU	-68.7 mV	15.46 ft	100.00 ml/min
2/9/2021 12:54 PM	02:50:00	7.84 pH	17.05 °C	509.41 µS/cm	0.18 mg/L	8.37 NTU	-68.6 mV	15.46 ft	100.00 ml/min
2/9/2021 12:59 PM	02:55:00	7.84 pH	16.89 °C	508.68 µS/cm	0.17 mg/L	8.21 NTU	-69.0 mV	15.46 ft	100.00 ml/min
2/9/2021 1:04 PM	03:00:00	7.84 pH	16.84 °C	507.84 µS/cm	0.17 mg/L	7.69 NTU	-133.0 mV	15.46 ft	100.00 ml/min

Samples

Sample ID:	Description:
HGWA-44D	Grab Sample.

Low-Flow Test Report:

Test Date / Time: 2/10/2021 9:38:50 AM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: HGWC-7 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 18.17 ft** **Total Depth: 30.4 ft** **Initial Depth to Water: 4.82 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 22.95 ft** **Estimated Total Volume Pumped: 36.5 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.08 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728541**

Test Notes:

Four bottles: Two 1-L plastic bottles with HNO3 for radium (EPA 9315/9320); one 120-mL plastic bottle for F (EPA 300.0); and one 250-mL plastic bottle with HNO3 for App. IV metals (EPA 6010D/6020B/7470A).

Weather Conditions:
Sunny, 43 degrees.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.03	
2/10/2021 9:38 AM	00:00	7.44 pH	14.13 °C	681.87 µS/cm	4.22 mg/L	72.00 NTU	-21.3 mV	4.82 ft	200.00 ml/min
2/10/2021 9:43 AM	05:00	7.32 pH	16.39 °C	671.05 µS/cm	0.71 mg/L	77.50 NTU	5.5 mV	4.82 ft	200.00 ml/min
2/10/2021 9:48 AM	10:00	7.30 pH	16.83 °C	662.91 µS/cm	0.66 mg/L	56.00 NTU	9.6 mV	4.82 ft	200.00 ml/min
2/10/2021 9:53 AM	15:00	7.29 pH	17.00 °C	661.15 µS/cm	0.31 mg/L	921.00 NTU	10.7 mV	4.82 ft	200.00 ml/min
2/10/2021 9:58 AM	20:00	7.28 pH	17.09 °C	664.55 µS/cm	0.19 mg/L	1,024.0 NTU	9.0 mV	4.90 ft	200.00 ml/min
2/10/2021 10:03 AM	25:00	7.28 pH	17.19 °C	660.96 µS/cm	0.15 mg/L	1,002.0 NTU	10.1 mV	4.90 ft	200.00 ml/min
2/10/2021 10:08 AM	30:00	7.28 pH	17.27 °C	660.76 µS/cm	0.12 mg/L	926.00 NTU	9.9 mV	4.90 ft	200.00 ml/min
2/10/2021 10:13 AM	35:00	7.28 pH	17.36 °C	660.63 µS/cm	0.12 mg/L	769.00 NTU	9.6 mV	4.90 ft	200.00 ml/min
2/10/2021 10:18 AM	40:00	7.28 pH	17.41 °C	660.75 µS/cm	0.11 mg/L	643.00 NTU	9.5 mV	4.90 ft	200.00 ml/min
2/10/2021 10:23 AM	45:00	7.28 pH	17.52 °C	660.77 µS/cm	0.11 mg/L	129.00 NTU	9.4 mV	4.90 ft	200.00 ml/min
2/10/2021 10:28 AM	50:00	7.28 pH	17.60 °C	660.65 µS/cm	0.12 mg/L	160.00 NTU	9.5 mV	4.90 ft	200.00 ml/min
2/10/2021 10:33 AM	55:00	7.29 pH	17.63 °C	659.43 µS/cm	0.11 mg/L	84.00 NTU	9.7 mV	4.90 ft	200.00 ml/min
2/10/2021 10:38 AM	01:00:00	7.29 pH	17.68 °C	664.09 µS/cm	0.12 mg/L	100.90 NTU	8.1 mV	4.90 ft	200.00 ml/min

2/10/2021 10:43 AM	01:05:00	7.29 pH	17.77 °C	666.59 µS/cm	0.11 mg/L	98.10 NTU	8.3 mV	4.90 ft	200.00 ml/min
2/10/2021 10:48 AM	01:10:00	7.29 pH	17.73 °C	658.09 µS/cm	0.11 mg/L	79.40 NTU	9.1 mV	4.90 ft	200.00 ml/min
2/10/2021 10:53 AM	01:15:00	7.29 pH	17.82 °C	660.47 µS/cm	0.11 mg/L	70.30 NTU	9.1 mV	4.90 ft	200.00 ml/min
2/10/2021 11:00 AM	01:21:23	7.29 pH	17.89 °C	671.55 µS/cm	0.13 mg/L	73.90 NTU	11.8 mV	4.90 ft	200.00 ml/min
2/10/2021 11:05 AM	01:26:23	7.29 pH	17.61 °C	663.37 µS/cm	0.09 mg/L	54.50 NTU	7.7 mV	4.90 ft	200.00 ml/min
2/10/2021 11:10 AM	01:31:23	7.29 pH	17.72 °C	660.58 µS/cm	0.10 mg/L	50.80 NTU	8.8 mV	4.90 ft	200.00 ml/min
2/10/2021 11:15 AM	01:36:23	7.29 pH	17.65 °C	659.95 µS/cm	0.10 mg/L	40.60 NTU	9.0 mV	4.90 ft	200.00 ml/min
2/10/2021 11:20 AM	01:41:23	7.29 pH	17.74 °C	659.68 µS/cm	0.11 mg/L	35.60 NTU	8.9 mV	4.90 ft	200.00 ml/min
2/10/2021 11:25 AM	01:46:23	7.29 pH	17.79 °C	659.85 µS/cm	0.11 mg/L	35.70 NTU	8.8 mV	4.90 ft	200.00 ml/min
2/10/2021 11:30 AM	01:51:23	7.29 pH	17.79 °C	659.71 µS/cm	0.11 mg/L	28.80 NTU	8.9 mV	4.90 ft	200.00 ml/min
2/10/2021 11:32 AM	01:53:11	7.29 pH	17.86 °C	674.81 µS/cm	0.11 mg/L	28.20 NTU	11.1 mV	4.90 ft	200.00 ml/min
2/10/2021 11:37 AM	01:58:11	7.29 pH	17.94 °C	663.44 µS/cm	0.10 mg/L	25.00 NTU	7.4 mV	4.90 ft	200.00 ml/min
2/10/2021 11:42 AM	02:03:11	7.29 pH	17.90 °C	659.57 µS/cm	0.10 mg/L	23.20 NTU	8.4 mV	4.90 ft	200.00 ml/min
2/10/2021 11:47 AM	02:08:11	7.29 pH	17.93 °C	662.25 µS/cm	0.12 mg/L	23.00 NTU	8.0 mV	4.90 ft	200.00 ml/min
2/10/2021 11:52 AM	02:13:11	7.29 pH	17.97 °C	659.57 µS/cm	0.11 mg/L	20.20 NTU	8.8 mV	4.90 ft	200.00 ml/min
2/10/2021 11:57 AM	02:18:11	7.29 pH	17.99 °C	658.47 µS/cm	0.13 mg/L	18.20 NTU	9.2 mV	4.90 ft	200.00 ml/min
2/10/2021 12:02 PM	02:23:11	7.29 pH	18.03 °C	663.13 µS/cm	0.13 mg/L	17.90 NTU	7.9 mV	4.90 ft	200.00 ml/min
2/10/2021 12:07 PM	02:28:11	7.29 pH	18.00 °C	664.87 µS/cm	0.16 mg/L	16.70 NTU	8.1 mV	4.90 ft	200.00 ml/min
2/10/2021 12:12 PM	02:33:11	7.29 pH	18.02 °C	657.04 µS/cm	0.19 mg/L	15.00 NTU	9.3 mV	4.90 ft	200.00 ml/min
2/10/2021 12:17 PM	02:38:11	7.29 pH	18.04 °C	658.48 µS/cm	0.21 mg/L	13.80 NTU	9.6 mV	4.90 ft	200.00 ml/min
2/10/2021 12:22 PM	02:43:11	7.29 pH	18.04 °C	657.97 µS/cm	0.21 mg/L	12.00 NTU	9.6 mV	4.90 ft	200.00 ml/min
2/10/2021 12:27 PM	02:48:11	7.29 pH	18.09 °C	660.58 µS/cm	0.19 mg/L	11.00 NTU	7.7 mV	4.90 ft	200.00 ml/min
2/10/2021 12:32 PM	02:53:11	7.29 pH	18.10 °C	657.92 µS/cm	0.19 mg/L	10.00 NTU	9.5 mV	4.90 ft	200.00 ml/min
2/10/2021 12:37 PM	02:58:11	7.29 pH	18.17 °C	660.82 µS/cm	0.20 mg/L	9.35 NTU	8.0 mV	4.90 ft	200.00 ml/min
2/10/2021 12:42 PM	03:03:49	7.29 pH	18.19 °C	671.68 µS/cm	0.19 mg/L	8.30 NTU	10.9 mV	4.90 ft	200.00 ml/min
2/10/2021 12:43 PM	03:04:25	7.29 pH	18.21 °C	668.42 µS/cm	0.19 mg/L		8.6 mV	4.90 ft	200.00 ml/min

Samples

Sample ID:	Description:

HGWC-7	Grab Sample.

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 2/16/2021 1:05:57 PM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: HGWC-8 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 16.65 ft** **Total Depth: 25.07** **Initial Depth to Water: 5.23 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 21.65 ft** **Estimated Total Volume Pumped: 23.4 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.02 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728541**

Test Notes:
Four bottles: Two 1-L plastic bottles with HNO3 for radium (EPA 9315/9320); one 120-mL plastic bottle for F (EPA 300.0); and one 250-mL plastic bottle with HNO3 for App. IV metals (EPA 6010D/6020B/7470A).

Weather Conditions:
Cloudy, 20 degrees.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.03	
2/16/2021 1:05 PM	00:00	7.27 pH	11.04 °C	870.86 µS/cm	6.57 mg/L	9.69 NTU	27.1 mV	5.23 ft	200.00 ml/min
2/16/2021 1:10 PM	05:00	7.19 pH	12.62 °C	959.79 µS/cm	0.42 mg/L	27.60 NTU	10.3 mV	5.23 ft	200.00 ml/min
2/16/2021 1:15 PM	10:00	7.17 pH	13.13 °C	950.59 µS/cm	0.32 mg/L	28.40 NTU	16.8 mV	5.24 ft	200.00 ml/min
2/16/2021 1:20 PM	15:00	7.16 pH	13.09 °C	960.29 µS/cm	0.24 mg/L	28.30 NTU	15.1 mV	5.24 ft	200.00 ml/min
2/16/2021 1:25 PM	20:00	7.16 pH	13.18 °C	964.66 µS/cm	0.20 mg/L	29.90 NTU	13.8 mV	5.25 ft	200.00 ml/min
2/16/2021 1:30 PM	25:00	7.16 pH	13.54 °C	972.88 µS/cm	0.18 mg/L	27.30 NTU	5.7 mV	5.25 ft	200.00 ml/min
2/16/2021 1:35 PM	30:00	7.16 pH	13.68 °C	969.69 µS/cm	0.16 mg/L	21.70 NTU	11.1 mV	5.25 ft	200.00 ml/min
2/16/2021 1:40 PM	35:00	7.16 pH	13.45 °C	965.75 µS/cm	0.16 mg/L	20.00 NTU	11.1 mV	5.25 ft	200.00 ml/min
2/16/2021 1:45 PM	40:00	7.16 pH	13.57 °C	967.46 µS/cm	0.16 mg/L	15.80 NTU	4.7 mV	5.25 ft	200.00 ml/min
2/16/2021 1:50 PM	45:00	7.15 pH	13.61 °C	967.84 µS/cm	0.15 mg/L	13.30 NTU	4.8 mV	5.25 ft	200.00 ml/min
2/16/2021 1:55 PM	50:00	7.16 pH	13.77 °C	968.87 µS/cm	0.15 mg/L	11.60 NTU	8.9 mV	5.25 ft	200.00 ml/min
2/16/2021 2:00 PM	55:00	7.16 pH	13.31 °C	968.90 µS/cm	0.14 mg/L	10.91 NTU	4.2 mV	5.25 ft	200.00 ml/min
2/16/2021 2:05 PM	01:00:00	7.16 pH	13.13 °C	965.07 µS/cm	0.14 mg/L	9.59 NTU	8.8 mV	5.25 ft	200.00 ml/min

2/16/2021 2:10 PM	01:05:00	7.16 pH	13.04 °C	961.96 µS/cm	0.14 mg/L	7.95 NTU	8.2 mV	5.25 ft	200.00 ml/min
2/16/2021 2:15 PM	01:10:00	7.16 pH	13.36 °C	971.78 µS/cm	0.15 mg/L	7.59 NTU	7.9 mV	5.25 ft	200.00 ml/min
2/16/2021 2:20 PM	01:15:00	7.15 pH	13.50 °C	969.17 µS/cm	0.14 mg/L	6.67 NTU	8.1 mV	5.25 ft	200.00 ml/min
2/16/2021 2:25 PM	01:20:00	7.16 pH	13.31 °C	973.32 µS/cm	0.14 mg/L	7.07 NTU	3.7 mV	5.25 ft	200.00 ml/min
2/16/2021 2:30 PM	01:25:00	7.16 pH	13.81 °C	970.17 µS/cm	0.14 mg/L	6.87 NTU	3.3 mV	5.25 ft	200.00 ml/min
2/16/2021 2:35 PM	01:30:00	7.15 pH	14.22 °C	969.59 µS/cm	0.15 mg/L	6.07 NTU	6.8 mV	5.25 ft	200.00 ml/min
2/16/2021 2:40 PM	01:35:00	7.16 pH	14.29 °C	968.28 µS/cm	0.12 mg/L	5.05 NTU	7.8 mV	5.25 ft	200.00 ml/min
2/16/2021 2:43 PM	01:38:00	7.16 pH	14.13 °C	962.92 µS/cm	0.14 mg/L	5.05 NTU	4.5 mV	5.25 ft	200.00 ml/min
2/16/2021 2:48 PM	01:43:00	7.15 pH	14.51 °C	970.80 µS/cm	0.14 mg/L	4.96 NTU	3.1 mV	5.25 ft	200.00 ml/min
2/16/2021 2:53 PM	01:48:00	7.16 pH	14.57 °C	964.80 µS/cm	0.14 mg/L	4.70 NTU	4.1 mV	5.25 ft	200.00 ml/min
2/16/2021 2:56 PM	01:50:59	7.15 pH	14.67 °C	961.30 µS/cm	0.13 mg/L	4.70 NTU	6.9 mV	5.25 ft	200.00 ml/min
2/16/2021 3:01 PM	01:55:59	7.16 pH	14.17 °C	961.04 µS/cm	0.13 mg/L	4.48 NTU	3.2 mV	5.25 ft	200.00 ml/min

Samples

Sample ID:	Description:
HGWC-8	Grab Sample.

Low-Flow Test Report:

Test Date / Time: 2/16/2021 4:12:26 PM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: HGWC-9 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 36.98 ft** **Total Depth: 46.69 ft** **Initial Depth to Water: 13.04 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 41.98 ft** **Estimated Total Volume Pumped: 28.4 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.07 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728541**

Test Notes:

Four bottles: Two 1-L plastic bottles with HNO3 for radium (EPA 9315/9320); one 120-mL plastic bottle for F (EPA 300.0); and one 250-mL plastic bottle with HNO3 for App. IV metals (EPA 6010D/6020B/7470A).

Weather Conditions:

Sunny, 20 degrees.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.03	
2/16/2021 4:12 PM	00:00	7.26 pH	13.92 °C	1,094.7 µS/cm	1.14 mg/L	31.30 NTU	-95.8 mV	13.04 ft	200.00 ml/min
2/16/2021 4:14 PM	01:52	7.24 pH	13.68 °C	1,127.1 µS/cm	0.46 mg/L	31.30 NTU	-56.9 mV	13.04 ft	200.00 ml/min
2/16/2021 4:19 PM	06:52	7.25 pH	15.23 °C	1,108.4 µS/cm	0.16 mg/L	18.80 NTU	-22.7 mV	13.08 ft	200.00 ml/min
2/16/2021 4:24 PM	11:52	7.25 pH	15.63 °C	1,117.7 µS/cm	0.13 mg/L	26.70 NTU	-26.0 mV	13.08 ft	200.00 ml/min
2/16/2021 4:29 PM	16:52	7.25 pH	15.44 °C	1,114.6 µS/cm	0.10 mg/L	47.60 NTU	-17.1 mV	13.08 ft	200.00 ml/min
2/16/2021 4:34 PM	21:52	7.26 pH	15.08 °C	1,111.6 µS/cm	0.08 mg/L	64.00 NTU	-12.1 mV	13.08 ft	200.00 ml/min
2/16/2021 4:39 PM	26:52	7.26 pH	15.02 °C	1,116.7 µS/cm	0.08 mg/L	60.40 NTU	-9.3 mV	13.08 ft	200.00 ml/min
2/16/2021 4:44 PM	31:52	7.25 pH	15.04 °C	1,114.9 µS/cm	0.09 mg/L	55.22 NTU	-7.7 mV	13.08 ft	200.00 ml/min
2/16/2021 4:49 PM	36:52	7.26 pH	15.30 °C	1,112.6 µS/cm	0.08 mg/L	48.40 NTU	-6.3 mV	13.08 ft	200.00 ml/min
2/16/2021 4:54 PM	41:52	7.25 pH	15.45 °C	1,117.2 µS/cm	0.08 mg/L	42.80 NTU	-5.4 mV	13.08 ft	200.00 ml/min
2/16/2021 4:59 PM	46:52	7.26 pH	15.29 °C	1,110.0 µS/cm	0.08 mg/L	37.30 NTU	-4.4 mV	13.09 ft	200.00 ml/min
2/16/2021 5:04 PM	51:52	7.26 pH	15.31 °C	1,113.1 µS/cm	0.09 mg/L	31.80 NTU	-3.9 mV	13.09 ft	200.00 ml/min
2/16/2021 5:09 PM	56:52	7.26 pH	15.12 °C	1,113.4 µS/cm	0.09 mg/L	28.30 NTU	-2.7 mV	13.09 ft	200.00 ml/min

2/16/2021 5:14 PM	01:01:52	7.26 pH	15.26 °C	1,114.0 µS/cm	0.10 mg/L	21.80 NTU	-3.0 mV	13.09 ft	200.00 ml/min
2/16/2021 5:19 PM	01:06:52	7.26 pH	14.85 °C	1,115.4 µS/cm	0.10 mg/L	19.30 NTU	-2.6 mV	13.10 ft	200.00 ml/min
2/16/2021 5:24 PM	01:11:52	7.26 pH	15.08 °C	1,113.9 µS/cm	0.10 mg/L	17.40 NTU	-2.6 mV	13.10 ft	200.00 ml/min
2/16/2021 5:29 PM	01:16:52	7.26 pH	15.04 °C	1,116.4 µS/cm	0.11 mg/L	14.60 NTU	-2.5 mV	13.10 ft	200.00 ml/min
2/16/2021 5:34 PM	01:21:52	7.26 pH	15.12 °C	1,117.4 µS/cm	0.11 mg/L	13.90 NTU	-1.5 mV	13.10 ft	200.00 ml/min
2/16/2021 5:39 PM	01:26:52	7.26 pH	15.12 °C	1,116.2 µS/cm	0.10 mg/L	12.10 NTU	-2.0 mV	13.10 ft	200.00 ml/min
2/16/2021 5:44 PM	01:31:52	7.26 pH	15.08 °C	1,115.3 µS/cm	0.11 mg/L	11.20 NTU	-2.0 mV	13.10 ft	200.00 ml/min
2/16/2021 5:49 PM	01:36:52	7.26 pH	15.27 °C	1,117.2 µS/cm	0.11 mg/L	10.99 NTU	-0.8 mV	13.10 ft	200.00 ml/min
2/16/2021 5:54 PM	01:41:52	7.26 pH	15.35 °C	1,116.8 µS/cm	0.11 mg/L	10.52 NTU	-1.1 mV	13.10 ft	200.00 ml/min
2/16/2021 5:59 PM	01:46:52	7.26 pH	15.27 °C	1,115.0 µS/cm	0.12 mg/L	9.70 NTU	-1.1 mV	13.10 ft	200.00 ml/min
2/16/2021 6:04 PM	01:51:52	7.25 pH	15.07 °C	1,116.0 µS/cm	0.12 mg/L	7.77 NTU	-1.7 mV	13.10 ft	200.00 ml/min
2/16/2021 6:09 PM	01:56:52	7.26 pH	14.94 °C	1,114.5 µS/cm	0.12 mg/L	6.14 NTU	-1.2 mV	13.10 ft	200.00 ml/min
2/16/2021 6:14 PM	02:01:52	7.26 pH	14.84 °C	1,115.6 µS/cm	0.12 mg/L	5.77 NTU	-1.1 mV	13.10 ft	200.00 ml/min
2/16/2021 6:19 PM	02:06:52	7.26 pH	14.72 °C	1,116.5 µS/cm	0.12 mg/L	5.47 NTU	-1.4 mV	13.10 ft	200.00 ml/min
2/16/2021 6:24 PM	02:11:52	7.26 pH	14.64 °C	1,119.9 µS/cm	0.12 mg/L	4.91 NTU	-1.1 mV	13.11 ft	200.00 ml/min
2/16/2021 6:29 PM	02:16:52	7.26 pH	14.43 °C	1,118.7 µS/cm	0.12 mg/L	4.56 NTU	-0.7 mV	13.11 ft	200.00 ml/min
2/16/2021 6:34 PM	02:21:52	7.26 pH	14.85 °C	1,120.6 µS/cm	0.12 mg/L	4.20 NTU	-1.4 mV	13.11 ft	200.00 ml/min

Samples

Sample ID:	Description:
HGWC-9	Grab Sample.

Low-Flow Test Report:

Test Date / Time: 2/15/2021 12:56:21 PM
Project: Plant Hammond
Operator Name: Chad Russo

Location Name: HGWC-10 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 13 ft** **Total Depth: 23 ft** **Initial Depth to Water: 12.42 ft**	**Pump Type: Alexis** **Tubing Type: Polyethylene** **Pump Intake From TOC: 20 ft** **Estimated Total Volume Pumped: 3000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728634**

Test Notes:
Four bottles: Two 1-L plastic bottles with HNO3 for radium (EPA 9315/9320); one 120-mL plastic bottle for F (EPA 300.0); and one 250-mL plastic bottle with HNO3 for App. IV metals (EPA 6010D/6020B/7470A).

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 10	+/- 10	+/- 0.3	
2/15/2021 12:56 PM	00:00	7.13 pH	13.02 °C	568.53 µS/cm	4.07 mg/L		75.3 mV	12.42 ft	100.00 ml/min
2/15/2021 1:01 PM	05:00	6.94 pH	13.66 °C	573.79 µS/cm	3.81 mg/L	1.01 NTU	57.8 mV	12.42 ft	100.00 ml/min
2/15/2021 1:06 PM	10:00	6.88 pH	13.75 °C	596.35 µS/cm	3.52 mg/L	1.31 NTU	56.0 mV	12.42 ft	100.00 ml/min
2/15/2021 1:11 PM	15:00	6.86 pH	13.80 °C	606.98 µS/cm	3.37 mg/L	1.18 NTU	54.8 mV	12.42 ft	100.00 ml/min
2/15/2021 1:16 PM	20:00	6.86 pH	14.07 °C	627.08 µS/cm	3.05 mg/L	1.15 NTU	77.4 mV	12.42 ft	100.00 ml/min
2/15/2021 1:21 PM	25:00	6.84 pH	14.15 °C	634.84 µS/cm	2.92 mg/L	1.19 NTU	77.1 mV	12.42 ft	100.00 ml/min
2/15/2021 1:26 PM	30:00	6.83 pH	14.07 °C	649.65 µS/cm	2.78 mg/L	0.88 NTU	76.0 mV	12.42 ft	100.00 ml/min

Samples

Sample ID:	Description:
HGWC-10	Grab Sample.

Low-Flow Test Report:

Test Date / Time: 2/12/2021 1:47:15 PM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: HGWC-11 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 15.78 ft** **Total Depth: 25.79 ft** **Initial Depth to Water: 16.93 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 20.73 ft** **Estimated Total Volume Pumped: 12 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.07 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728541**

Test Notes:

Four bottles: Two 1-L plastic bottles with HNO3 for radium (EPA 9315/9320); one 120-mL plastic bottle for F (EPA 300.0); and one 250-mL plastic bottle with HNO3 for App. IV metals (EPA 6010D/6020B/7470A).

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	+/- 0.03	
2/12/2021 1:47 PM	00:00	6.05 pH	16.02 °C	808.46 µS/cm	4.49 mg/L	7.14 NTU	47.6 mV	16.93 ft	200.00 ml/min
2/12/2021 1:52 PM	05:00	6.04 pH	16.29 °C	804.55 µS/cm	4.30 mg/L	7.08 NTU	29.9 mV	17.00 ft	200.00 ml/min
2/12/2021 1:57 PM	10:00	6.05 pH	16.31 °C	803.39 µS/cm	4.01 mg/L	3.96 NTU	41.0 mV	17.00 ft	200.00 ml/min
2/12/2021 2:02 PM	15:00	6.06 pH	16.29 °C	802.73 µS/cm	3.74 mg/L	3.11 NTU	38.3 mV	17.00 ft	200.00 ml/min
2/12/2021 2:07 PM	20:00	6.09 pH	16.29 °C	807.83 µS/cm	3.41 mg/L	2.02 NTU	35.9 mV	17.00 ft	200.00 ml/min
2/12/2021 2:12 PM	25:00	6.11 pH	16.23 °C	807.55 µS/cm	3.23 mg/L	1.70 NTU	34.3 mV	17.00 ft	200.00 ml/min
2/12/2021 2:17 PM	30:00	6.12 pH	16.26 °C	807.88 µS/cm	3.04 mg/L	1.89 NTU	33.0 mV	17.00 ft	200.00 ml/min
2/12/2021 2:22 PM	35:00	6.15 pH	16.25 °C	811.27 µS/cm	2.81 mg/L	1.29 NTU	31.4 mV	17.00 ft	200.00 ml/min
2/12/2021 2:27 PM	40:00	6.16 pH	16.28 °C	810.23 µS/cm	2.78 mg/L	1.30 NTU	30.7 mV	17.00 ft	200.00 ml/min
2/12/2021 2:32 PM	45:00	6.18 pH	16.29 °C	810.86 µS/cm	2.56 mg/L	0.97 NTU	29.7 mV	17.00 ft	200.00 ml/min
2/12/2021 2:37 PM	50:00	6.21 pH	16.16 °C	812.87 µS/cm	2.34 mg/L	1.09 NTU	28.5 mV	17.00 ft	200.00 ml/min
2/12/2021 2:42 PM	55:00	6.23 pH	16.14 °C	815.06 µS/cm	2.26 mg/L	1.26 NTU	27.9 mV	17.00 ft	200.00 ml/min
2/12/2021 2:47 PM	01:00:00	6.23 pH	16.22 °C	819.93 µS/cm	2.25 mg/L	0.87 NTU	20.6 mV	17.00 ft	200.00 ml/min

Samples

Sample ID:	Description:
HGWC-11	Grab Sample.

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 2/12/2021 11:50:41 AM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: HGWC-12 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 25.68 ft** **Total Depth: 35.68 ft** **Initial Depth to Water: 17.05 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 30.68 ft** **Estimated Total Volume Pumped: 10 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728541**

Test Notes:

Four bottles: Two 1-L plastic bottles with HNO3 for radium (EPA 9315/9320); one 120-mL plastic bottle for F (EPA 300.0); and one 250-mL plastic bottle with HNO3 for App. IV metals (EPA 6010D/6020B/7470A).

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	+/- 0.03	
2/12/2021 11:50 AM	00:00	7.60 pH	11.34 °C	1,000.4 µS/cm	8.85 mg/L	10.51 NTU	8.7 mV	17.05 ft	200.00 ml/min
2/12/2021 11:55 AM	05:00	7.42 pH	16.59 °C	1,005.7 µS/cm	1.34 mg/L	18.30 NTU	9.1 mV	17.05 ft	200.00 ml/min
2/12/2021 12:00 PM	10:00	7.39 pH	17.10 °C	1,001.5 µS/cm	1.04 mg/L	14.00 NTU	8.5 mV	17.05 ft	200.00 ml/min
2/12/2021 12:05 PM	15:00	7.34 pH	17.06 °C	999.47 µS/cm	0.46 mg/L	13.30 NTU	9.4 mV	17.05 ft	200.00 ml/min
2/12/2021 12:10 PM	20:00	7.32 pH	17.10 °C	999.52 µS/cm	0.28 mg/L	11.91 NTU	4.6 mV	17.05 ft	200.00 ml/min
2/12/2021 12:15 PM	25:00	7.30 pH	17.02 °C	998.52 µS/cm	0.23 mg/L	8.93 NTU	4.7 mV	17.05 ft	200.00 ml/min
2/12/2021 12:20 PM	30:00	7.29 pH	17.23 °C	1,002.0 µS/cm	0.20 mg/L	7.20 NTU	9.4 mV	17.05 ft	200.00 ml/min
2/12/2021 12:25 PM	35:00	7.28 pH	17.14 °C	1,001.6 µS/cm	0.18 mg/L	5.64 NTU	6.1 mV	17.05 ft	200.00 ml/min
2/12/2021 12:30 PM	40:00	7.28 pH	17.10 °C	1,000.9 µS/cm	0.18 mg/L	4.76 NTU	10.0 mV	17.05 ft	200.00 ml/min
2/12/2021 12:35 PM	45:00	7.28 pH	17.06 °C	999.94 µS/cm	0.18 mg/L	4.30 NTU	6.6 mV	17.05 ft	200.00 ml/min
2/12/2021 12:40 PM	50:00	7.27 pH	17.19 °C	996.07 µS/cm	0.17 mg/L	3.72 NTU	10.2 mV	17.05 ft	200.00 ml/min

Samples

Sample ID:	Description:
HGWC-12	Grab Sample.

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 2/22/2021 1:09:08 PM
Project: GP-Plant Hammond
Operator Name: Chad Russo

Location Name: HGWC-13 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 35.07 ft** **Total Depth: 45.07 ft** **Initial Depth to Water: 21.38 ft**	**Pump Type: QED MP50** **Tubing Type: polyethylene** **Tubing Inner Diameter: 0.17 in** **Pump Intake From TOC: 40 ft** **Estimated Total Volume Pumped: 8 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.07 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728623**

Test Notes:
Four bottles: Two 1-L plastic bottles with HNO3 for radium (EPA 9315/9320); one 120-mL plastic bottle for F (EPA 300.0); and one 250-mL plastic bottle with HNO3 for App. IV metals (EPA 6010D/6020B/7470A).

Low-Flow 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	
2/22/2021 1:09 PM	00:00	7.14 pH	19.23 °C	986.31 µS/cm	0.98 mg/L		20.6 mV	21.38 ft	200.00 ml/min
2/22/2021 1:14 PM	05:00	7.19 pH	19.59 °C	986.48 µS/cm	0.37 mg/L	82.00 NTU	-3.4 mV	21.45 ft	200.00 ml/min
2/22/2021 1:19 PM	10:00	7.21 pH	19.68 °C	982.76 µS/cm	0.19 mg/L	53.60 NTU	-15.9 mV	21.45 ft	200.00 ml/min
2/22/2021 1:24 PM	15:00	7.23 pH	19.77 °C	980.49 µS/cm	0.17 mg/L	31.30 NTU	-23.2 mV	21.45 ft	200.00 ml/min
2/22/2021 1:29 PM	20:00	7.24 pH	19.70 °C	981.51 µS/cm	0.15 mg/L	19.40 NTU	-28.1 mV	21.45 ft	200.00 ml/min
2/22/2021 1:34 PM	25:00	7.25 pH	19.82 °C	983.51 µS/cm	0.14 mg/L	13.30 NTU	-31.3 mV	21.45 ft	200.00 ml/min
2/22/2021 1:39 PM	30:00	7.26 pH	19.77 °C	984.15 µS/cm	0.14 mg/L	10.55 NTU	-33.1 mV	21.45 ft	200.00 ml/min
2/22/2021 1:44 PM	35:00	7.27 pH	19.77 °C	984.37 µS/cm	0.14 mg/L	6.80 NTU	-34.9 mV	21.45 ft	200.00 ml/min
2/22/2021 1:49 PM	40:00	7.27 pH	19.73 °C	981.02 µS/cm	0.14 mg/L	4.80 NTU	-35.6 mV	21.45 ft	200.00 ml/min

Samples

Sample ID:	Description:
HGWC-13	Grab Sample.

Low-Flow Test Report:

Test Date / Time: 2/16/2021 3:52:17 PM
Project: GP-Plant Hammond
Operator Name: Chad Russo

Location Name: MW-5 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 20.82 ft** **Total Depth: 30.82 ft** **Initial Depth to Water: 15.97 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 26 ft** **Estimated Total Volume Pumped: 6 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.18 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728634**

Test Notes:

Four bottles: Two 1-L plastic bottles with HNO3 for radium (EPA 9315/9320); one 120-mL plastic bottle for F (EPA 300.0); and one 250-mL plastic bottle with HNO3 for App. IV metals (EPA 6010D/6020B/7470A).

Weather Conditions:
Rainy, 46 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	+/- 10	+/- 10	+/- 0.3	
2/16/2021 3:52 PM	00:00	6.13 pH	16.01 °C	478.44 µS/cm	3.67 mg/L		89.6 mV		200.00 ml/min
2/16/2021 3:57 PM	05:00	6.04 pH	16.55 °C	498.50 µS/cm	3.60 mg/L	4.02 NTU	76.3 mV	16.15 ft	200.00 ml/min
2/16/2021 4:02 PM	10:00	5.99 pH	16.55 °C	500.49 µS/cm	3.33 mg/L	2.88 NTU	75.9 mV	16.15 ft	200.00 ml/min
2/16/2021 4:07 PM	15:00	5.98 pH	16.51 °C	505.14 µS/cm	3.24 mg/L	2.14 NTU	118.8 mV	16.15 ft	200.00 ml/min
2/16/2021 4:12 PM	20:00	5.96 pH	16.37 °C	500.99 µS/cm	3.19 mg/L	2.03 NTU	75.0 mV	16.15 ft	200.00 ml/min
2/16/2021 4:17 PM	25:00	5.95 pH	16.55 °C	503.00 µS/cm	3.16 mg/L	1.90 NTU	73.6 mV	16.15 ft	200.00 ml/min
2/16/2021 4:22 PM	30:00	5.95 pH	16.64 °C	504.04 µS/cm	3.13 mg/L	1.67 NTU	117.4 mV	16.15 ft	200.00 ml/min

Samples

Sample ID:	Description:
MW-5	Grab Sample.

Low-Flow Test Report:

Test Date / Time: 2/16/2021 2:22:03 PM
Project: GP-Plant Hammond
Operator Name: Chad Russo

Location Name: MW-6 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 20.82 ft** **Total Depth: 30.82 ft** **Initial Depth to Water: 15.96 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 25 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: 728634**

Test Notes:

Four bottles: Two 1-L plastic bottles with HNO3 for radium (EPA 9315/9320); one 120-mL plastic bottle for F (EPA 300.0); and one 250-mL plastic bottle with HNO3 for App. IV metals (EPA 6010D/6020B/7470A).

Weather Conditions:

Rainy, 46 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	+/- 10	+/- 10	+/- 0.3	
2/16/2021 2:22 PM	00:00	7.17 pH	14.57 °C	1,058.7 µS/cm	3.60 mg/L		-39.6 mV	15.96 ft	200.00 ml/min
2/16/2021 2:27 PM	05:00	7.05 pH	17.18 °C	1,001.9 µS/cm	0.83 mg/L	103.50 NTU	-11.0 mV	16.00 ft	200.00 ml/min
2/16/2021 2:32 PM	10:00	7.02 pH	17.63 °C	982.53 µS/cm	0.50 mg/L	64.60 NTU	4.5 mV	16.00 ft	200.00 ml/min
2/16/2021 2:37 PM	15:00	7.01 pH	17.28 °C	985.43 µS/cm	0.37 mg/L	32.40 NTU	-3.8 mV	16.00 ft	200.00 ml/min
2/16/2021 2:42 PM	20:00	7.01 pH	17.38 °C	984.64 µS/cm	0.27 mg/L	21.90 NTU	13.0 mV	16.00 ft	200.00 ml/min
2/16/2021 2:47 PM	25:00	7.00 pH	17.76 °C	984.03 µS/cm	0.21 mg/L	14.20 NTU	15.2 mV	16.00 ft	200.00 ml/min
2/16/2021 2:52 PM	30:00	7.00 pH	17.44 °C	976.16 µS/cm	0.20 mg/L	11.38 NTU	17.0 mV	16.00 ft	200.00 ml/min
2/16/2021 2:57 PM	35:00	7.00 pH	17.53 °C	977.14 µS/cm	0.21 mg/L	8.81 NTU	9.7 mV	16.00 ft	200.00 ml/min
2/16/2021 3:02 PM	40:00	7.00 pH	17.14 °C	980.79 µS/cm	0.22 mg/L	6.21 NTU	18.9 mV	16.00 ft	200.00 ml/min
2/16/2021 3:07 PM	45:00	7.00 pH	17.21 °C	984.52 µS/cm	0.22 mg/L	4.14 NTU	19.4 mV	16.00 ft	200.00 ml/min

Samples

Sample ID:	Description:
MW-6	Grab Sample.

Low-Flow Test Report:

Test Date / Time: 2/15/2021 4:12:24 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: 16.8 ft** **Total Depth: 26.70 ft** **Initial Depth to Water: 13.45 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 21.8 ft** **Estimated Total Volume Pumped: 12 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728541**

Test Notes:

Four bottles: Two 1-L plastic bottles with HNO3 for radium (EPA 9315/9320); one 120-mL plastic bottle for F (EPA 300.0); and one 250-mL plastic bottle with HNO3 for App. IV metals (EPA 6010D/6020B/7470A).

Weather Conditions:
Rainy, 46 degrees.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.03	
2/15/2021 4:12 PM	00:00	6.92 pH	13.49 °C	431.20 µS/cm	5.87 mg/L	5.82 NTU	35.6 mV	13.45 ft	200.00 ml/min
2/15/2021 4:17 PM	05:00	6.69 pH	15.86 °C	386.71 µS/cm	3.76 mg/L	4.80 NTU	21.4 mV	13.45 ft	200.00 ml/min
2/15/2021 4:22 PM	10:00	6.65 pH	16.47 °C	389.73 µS/cm	3.09 mg/L	3.18 NTU	19.6 mV	13.45 ft	200.00 ml/min
2/15/2021 4:27 PM	15:00	6.64 pH	16.72 °C	392.05 µS/cm	2.73 mg/L	2.34 NTU	17.8 mV	13.45 ft	200.00 ml/min
2/15/2021 4:32 PM	20:00	6.65 pH	16.92 °C	399.31 µS/cm	2.60 mg/L	2.18 NTU	34.0 mV	13.45 ft	200.00 ml/min
2/15/2021 4:36 PM	24:26	6.67 pH	16.94 °C	429.38 µS/cm	2.86 mg/L	1.53 NTU	22.0 mV	13.45 ft	200.00 ml/min
2/15/2021 4:41 PM	29:26	6.67 pH	16.88 °C	431.19 µS/cm	2.32 mg/L	1.05 NTU	17.8 mV	13.45 ft	200.00 ml/min
2/15/2021 4:46 PM	34:26	6.72 pH	16.98 °C	443.10 µS/cm	2.16 mg/L	1.52 NTU	16.4 mV	13.45 ft	200.00 ml/min
2/15/2021 4:51 PM	39:26	6.74 pH	17.11 °C	454.67 µS/cm	2.16 mg/L	0.89 NTU	25.9 mV	13.45 ft	200.00 ml/min
2/15/2021 4:56 PM	44:26	6.75 pH	17.10 °C	466.62 µS/cm	2.16 mg/L	0.91 NTU	26.2 mV	13.45 ft	200.00 ml/min
2/15/2021 5:01 PM	49:26	6.78 pH	17.19 °C	475.93 µS/cm	1.86 mg/L	0.83 NTU	25.1 mV	13.45 ft	200.00 ml/min
2/15/2021 5:06 PM	54:26	6.79 pH	17.04 °C	474.98 µS/cm	1.85 mg/L	0.56 NTU	24.7 mV	13.45 ft	200.00 ml/min
2/15/2021 5:11 PM	59:26	6.77 pH	16.96 °C	473.10 µS/cm	1.85 mg/L	0.60 NTU	25.2 mV	13.45 ft	200.00 ml/min

2/15/2021 5:12 PM	01:00:05	6.78 pH	16.96 °C	499.90 µS/cm	1.88 mg/L		15.9 mV	13.45 ft	200.00 ml/min

Samples

Sample ID:	Description:
MW-7	Grab Sample.

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 2/12/2021 12:15:15 PM
Project: GP-Plant Hammond
Operator Name: Aaron Reeder

Location Name: MW-19 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 39.87 ft** **Total Depth: 29.87 ft** **Initial Depth to Water: 13.6 ft**	**Pump Type: QED MP50** **Tubing Type: polyethylene** **Tubing Inner Diameter: 0.17 in** **Pump Intake From TOC: 24.87 ft** **Estimated Total Volume Pumped: 17 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728623**

Test Notes:
Four bottles: Two 1-L plastic bottles with HNO3 for radium (EPA 9315/9320); one 120-mL plastic bottle for F (EPA 300.0); and one 250-mL plastic bottle with HNO3 for App. IV metals (EPA 6010D/6020B/7470A).

Weather Conditions:
Cloudy and rain.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
2/12/2021 12:15 PM	00:00	6.08 pH	14.43 °C	744.59 µS/cm	3.19 mg/L		120.4 mV	13.60 ft	200.00 ml/min
2/12/2021 12:20 PM	05:00	6.21 pH	17.14 °C	765.56 µS/cm	1.14 mg/L	7.65 NTU	132.8 mV	13.60 ft	200.00 ml/min
2/12/2021 12:25 PM	10:00	6.28 pH	17.72 °C	785.80 µS/cm	0.74 mg/L	9.65 NTU	147.7 mV	13.60 ft	200.00 ml/min
2/12/2021 12:30 PM	15:00	6.30 pH	17.68 °C	785.39 µS/cm	0.37 mg/L	6.75 NTU	146.8 mV	13.60 ft	200.00 ml/min
2/12/2021 12:35 PM	20:00	6.30 pH	17.65 °C	786.68 µS/cm	0.44 mg/L	5.56 NTU	146.5 mV	13.60 ft	200.00 ml/min
2/12/2021 12:40 PM	25:00	6.32 pH	17.63 °C	788.80 µS/cm	0.38 mg/L	7.75 NTU	144.9 mV	13.60 ft	200.00 ml/min
2/12/2021 12:45 PM	30:00	6.33 pH	17.45 °C	791.05 µS/cm	0.37 mg/L	6.23 NTU	143.8 mV	13.60 ft	200.00 ml/min
2/12/2021 12:50 PM	35:00	6.34 pH	17.19 °C	788.49 µS/cm	0.47 mg/L	5.23 NTU	142.9 mV	13.60 ft	200.00 ml/min
2/12/2021 12:55 PM	40:00	6.35 pH	16.46 °C	791.78 µS/cm	0.72 mg/L	5.72 NTU	142.2 mV	13.60 ft	200.00 ml/min
2/12/2021 1:00 PM	45:00	6.35 pH	16.29 °C	698.63 µS/cm	0.86 mg/L	11.30 NTU	141.1 mV	13.60 ft	200.00 ml/min
2/12/2021 1:05 PM	50:00	6.35 pH	16.26 °C	790.82 µS/cm	0.87 mg/L	10.57 NTU	139.9 mV	13.60 ft	200.00 ml/min
2/12/2021 1:10 PM	55:00	6.35 pH	16.14 °C	791.87 µS/cm	0.91 mg/L	8.17 NTU	138.8 mV	13.60 ft	200.00 ml/min
2/12/2021 1:15 PM	01:00:00	6.36 pH	16.27 °C	792.42 µS/cm	0.86 mg/L	8.09 NTU	137.7 mV	13.60 ft	200.00 ml/min

2/12/2021 1:20 PM	01:05:00	6.36 pH	16.23 °C	792.02 µS/cm	0.92 mg/L	7.42 NTU	136.8 mV	13.60 ft	200.00 ml/min
2/12/2021 1:25 PM	01:10:00	6.36 pH	16.24 °C	795.66 µS/cm	0.91 mg/L	6.69 NTU	136.0 mV	13.60 ft	200.00 ml/min
2/12/2021 1:30 PM	01:15:00	6.35 pH	16.22 °C	809.12 µS/cm	0.88 mg/L	5.89 NTU	135.2 mV	13.60 ft	200.00 ml/min
2/12/2021 1:35 PM	01:20:00	6.36 pH	16.35 °C	795.13 µS/cm	0.88 mg/L	5.23 NTU	134.2 mV	13.60 ft	200.00 ml/min
2/12/2021 1:40 PM	01:25:00	6.36 pH	16.29 °C	778.47 µS/cm	0.90 mg/L	4.56 NTU	133.5 mV	13.60 ft	200.00 ml/min

Samples

Sample ID:	Description:
MW-19	Grab Sample.
DUP-1	Grab Sample.

Low-Flow Test Report:

Test Date / Time: 2/11/2021 10:22:22 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: 24.36 ft** **Total Depth: 34.4 ft** **Initial Depth to Water: 14.55 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 29.36 ft** **Estimated Total Volume Pumped: 6.4 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.35 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728541**

Test Notes:
Four bottles: Two 1-L plastic bottles with HNO3 for radium (EPA 9315/9320); one 120-mL plastic bottle for F (EPA 300.0); and one 250-mL plastic bottle with HNO3 for App. IV metals (EPA 6010D/6020B/7470A).

Weather Conditions:
Cloudy, 53 degrees.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.03	
2/11/2021 10:22 AM	00:00	6.74 pH	16.77 °C	627.36 µS/cm	3.99 mg/L	18.90 NTU	28.4 mV	14.55 ft	200.00 ml/min
2/11/2021 10:27 AM	05:00	6.67 pH	17.58 °C	620.72 µS/cm	1.96 mg/L	9.98 NTU	0.1 mV	14.70 ft	200.00 ml/min
2/11/2021 10:29 AM	07:31	6.69 pH	17.72 °C	640.89 µS/cm	1.44 mg/L	9.98 NTU	-3.3 mV	14.70 ft	200.00 ml/min
2/11/2021 10:34 AM	12:31	6.77 pH	17.75 °C	670.14 µS/cm	0.99 mg/L	5.68 NTU	-10.3 mV	14.85 ft	200.00 ml/min
2/11/2021 10:39 AM	17:31	6.84 pH	17.73 °C	683.02 µS/cm	0.74 mg/L	4.43 NTU	-14.9 mV	14.85 ft	200.00 ml/min
2/11/2021 10:44 AM	22:31	6.88 pH	17.77 °C	688.34 µS/cm	0.58 mg/L	4.47 NTU	-43.0 mV	14.85 ft	200.00 ml/min
2/11/2021 10:49 AM	27:31	6.91 pH	17.72 °C	694.85 µS/cm	0.48 mg/L	3.51 NTU	-17.1 mV	14.90 ft	200.00 ml/min
2/11/2021 10:54 AM	32:31	6.93 pH	17.77 °C	694.77 µS/cm	0.41 mg/L	3.25 NTU	-46.3 mV	14.90 ft	200.00 ml/min

Samples

Sample ID:	Description:
MW-20	Grab Sample.

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 2/16/2021 11:55:04 AM
Project: GP-Plant Hammond
Operator Name: Chad Russo

Location Name: MW-24D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 63.11 ft** **Total Depth: 73.11 ft** **Initial Depth to Water: 26.66 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 68 ft** **Estimated Total Volume Pumped: 9 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728634**

Test Notes:

Four bottles: Two 1-L plastic bottles with HNO3 for radium (EPA 9315/9320); one 120-mL plastic bottle for F (EPA 300.0); and one 250-mL plastic bottle with HNO3 for App. IV metals (EPA 6010D/6020B/7470A).

Weather Conditions:

Cloudy, 20 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	+/- 10	+/- 10	+/- 0.3	
2/16/2021 11:55 AM	00:00	6.95 pH	10.87 °C	600.76 µS/cm	3.95 mg/L		-49.0 mV		200.00 ml/min
2/16/2021 12:00 PM	05:00	7.42 pH	15.79 °C	587.16 µS/cm	0.36 mg/L	4.96 NTU	-6.1 mV	26.70 ft	200.00 ml/min
2/16/2021 12:05 PM	10:00	7.53 pH	16.23 °C	591.16 µS/cm	0.28 mg/L	6.47 NTU	0.3 mV	26.66 ft	200.00 ml/min
2/16/2021 12:10 PM	15:00	7.60 pH	16.31 °C	587.39 µS/cm	0.20 mg/L	11.40 NTU	18.7 mV	26.66 ft	200.00 ml/min
2/16/2021 12:15 PM	20:00	7.64 pH	16.37 °C	585.23 µS/cm	0.19 mg/L	10.41 NTU	20.3 mV	26.66 ft	200.00 ml/min
2/16/2021 12:20 PM	25:00	7.66 pH	16.54 °C	588.15 µS/cm	0.19 mg/L	11.82 NTU	21.3 mV	26.70 ft	200.00 ml/min
2/16/2021 12:25 PM	30:00	7.67 pH	16.52 °C	586.28 µS/cm	0.20 mg/L	10.06 NTU	21.7 mV	26.66 ft	200.00 ml/min
2/16/2021 12:30 PM	35:00	7.69 pH	16.64 °C	588.17 µS/cm	0.21 mg/L	7.61 NTU	21.5 mV	26.66 ft	200.00 ml/min
2/16/2021 12:35 PM	40:00	7.70 pH	16.49 °C	583.09 µS/cm	0.21 mg/L	6.12 NTU	21.3 mV	26.66 ft	200.00 ml/min
2/16/2021 12:40 PM	45:00	7.69 pH	16.83 °C	583.89 µS/cm	0.21 mg/L	4.87 NTU	21.4 mV	26.66 ft	200.00 ml/min

Samples

Sample ID:	Description:
MW-24D	Grab Sample.

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 2/12/2021 9:45:03 AM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: MW-25D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 53.03 ft** **Total Depth: 63.19** **Initial Depth to Water: 16.85 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 58.03 ft** **Estimated Total Volume Pumped: 4.6 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 3.5 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728541**

Test Notes:

Four bottles: Two 1-L plastic bottles with HNO3 for radium (EPA 9315/9320); one 120-mL plastic bottle for F (EPA 300.0); and one 250-mL plastic bottle with HNO3 for App. IV metals (EPA 6010D/6020B/7470A).

Weather Conditions:
Rainy, 50 degrees.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.03	
2/12/2021 9:45 AM	00:00	7.71 pH	15.12 °C	660.77 µS/cm	1.52 mg/L	4.73 NTU	-79.3 mV	16.85 ft	200.00 ml/min
2/12/2021 9:50 AM	05:00	7.71 pH	16.72 °C	654.70 µS/cm	0.17 mg/L	3.11 NTU	-92.5 mV	18.90 ft	200.00 ml/min
2/12/2021 9:55 AM	10:00	7.72 pH	15.75 °C	637.58 µS/cm	0.18 mg/L	3.31 NTU	-166.1 mV	19.18 ft	200.00 ml/min
2/12/2021 10:00 AM	15:00	7.72 pH	15.27 °C	645.56 µS/cm	0.16 mg/L	2.93 NTU	-94.3 mV	19.46 ft	200.00 ml/min
2/12/2021 10:05 AM	20:00	7.74 pH	15.22 °C	637.39 µS/cm	0.16 mg/L	1.42 NTU	-97.1 mV	19.70 ft	200.00 ml/min
2/12/2021 10:06 AM	21:02	7.74 pH	15.20 °C	651.41 µS/cm	0.16 mg/L	1.42 NTU	-95.2 mV	19.70 ft	200.00 ml/min
2/12/2021 10:11 AM	26:02	7.75 pH	15.27 °C	635.87 µS/cm	0.17 mg/L	1.96 NTU	-176.2 mV	19.90 ft	200.00 ml/min
2/12/2021 10:16 AM	31:02	7.76 pH	15.24 °C	633.54 µS/cm	0.18 mg/L	1.79 NTU	-179.1 mV	20.12 ft	200.00 ml/min
2/12/2021 10:21 AM	36:02	7.76 pH	15.30 °C	632.76 µS/cm	0.20 mg/L	2.34 NTU	-181.7 mV	20.25 ft	200.00 ml/min
2/12/2021 10:26 AM	41:02	7.77 pH	15.36 °C	634.22 µS/cm	0.21 mg/L	2.23 NTU	-184.1 mV	20.35 ft	200.00 ml/min

Samples

Sample ID:	Description:

MW-25D	Grab Sample.

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 2/16/2021 4:57:41 PM
Project: GP-Plant Hammond
Operator Name: Chad Russo

Location Name: MW-26D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 67.91 ft** **Total Depth: 77.91 ft** **Initial Depth to Water: 13.17 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 72 ft** **Estimated Total Volume Pumped: 12 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728634**

Test Notes:

Four bottles: Two 1-L plastic bottles with HNO3 for radium (EPA 9315/9320); one 120-mL plastic bottle for F (EPA 300.0); and one 250-mL plastic bottle with HNO3 for App. IV metals (EPA 6010D/6020B/7470A).

Weather Conditions:
Snowy, 20 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	+/- 10	+/- 10	+/- 0.3	
2/16/2021 4:57 PM	00:00	7.17 pH	15.15 °C	922.39 µS/cm	1.41 mg/L		-37.0 mV	13.17 ft	200.00 ml/min
2/16/2021 5:02 PM	05:00	7.25 pH	15.74 °C	994.59 µS/cm	0.50 mg/L	22.30 NTU	-17.9 mV	13.17 ft	200.00 ml/min
2/16/2021 5:07 PM	10:00	7.27 pH	15.73 °C	1,004.8 µS/cm	0.32 mg/L	34.70 NTU	-34.9 mV	13.17 ft	200.00 ml/min
2/16/2021 5:12 PM	15:00	7.27 pH	15.74 °C	1,015.6 µS/cm	0.24 mg/L	24.40 NTU	-3.0 mV	13.17 ft	200.00 ml/min
2/16/2021 5:17 PM	20:00	7.27 pH	15.11 °C	1,026.5 µS/cm	0.21 mg/L	17.40 NTU	0.5 mV	13.17 ft	200.00 ml/min
2/16/2021 5:22 PM	25:00	7.27 pH	15.53 °C	1,027.9 µS/cm	0.21 mg/L	12.70 NTU	1.8 mV	13.17 ft	200.00 ml/min
2/16/2021 5:27 PM	30:00	7.27 pH	15.46 °C	1,027.6 µS/cm	0.22 mg/L	13.20 NTU	3.1 mV	13.17 ft	200.00 ml/min
2/16/2021 5:32 PM	35:00	7.27 pH	15.38 °C	1,032.2 µS/cm	0.23 mg/L	12.41 NTU	3.7 mV	13.17 ft	200.00 ml/min
2/16/2021 5:37 PM	40:00	7.27 pH	15.42 °C	1,030.6 µS/cm	0.24 mg/L	10.51 NTU	4.8 mV	13.17 ft	200.00 ml/min
2/16/2021 5:42 PM	45:00	7.27 pH	15.26 °C	1,033.3 µS/cm	0.25 mg/L	8.78 NTU	5.9 mV	13.17 ft	200.00 ml/min
2/16/2021 5:47 PM	50:00	7.27 pH	15.29 °C	1,032.8 µS/cm	0.26 mg/L	7.84 NTU	6.9 mV	13.17 ft	200.00 ml/min

2/16/2021 5:52 PM	55:00	7.27 pH	15.34 °C	1,035.4 µS/cm	0.27 mg/L	5.82 NTU	7.3 mV	13.17 ft	200.00 ml/min
2/16/2021 5:57 PM	01:00:00	7.27 pH	15.22 °C	1,038.0 µS/cm	0.27 mg/L	4.60 NTU	8.2 mV	13.17 ft	200.00 ml/min

Samples

Sample ID:	Description:
MW-26D	Grab Sample.

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 2/15/2021 10:02:21 AM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: MW-27D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 52.97 ft** **Total Depth: 63.25 ft** **Initial Depth to Water: 4.36 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 57.97 ft** **Estimated Total Volume Pumped: 3.5 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 2.54 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728541**

Test Notes:
Well purged dry. Purged 40.5 L

Weather Conditions:
Cloudy, 38 degrees.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.03	
2/15/2021 10:02 AM	00:00	7.98 pH	10.45 °C	420.90 µS/cm	6.15 mg/L	2.17 NTU	52.1 mV	3.36 ft	100.00 ml/min
2/15/2021 10:07 AM	05:00	7.87 pH	11.34 °C	492.87 µS/cm	4.64 mg/L	22.90 NTU	-27.6 mV	3.50 ft	100.00 ml/min
2/15/2021 10:12 AM	10:00	7.79 pH	12.48 °C	496.30 µS/cm	0.96 mg/L	35.90 NTU	-34.8 mV	4.10 ft	100.00 ml/min
2/15/2021 10:17 AM	15:00	7.80 pH	12.64 °C	492.15 µS/cm	0.50 mg/L	28.30 NTU	-70.9 mV	4.60 ft	100.00 ml/min
2/15/2021 10:22 AM	20:00	7.80 pH	12.77 °C	492.30 µS/cm	0.43 mg/L	36.20 NTU	-74.5 mV	5.25 ft	100.00 ml/min
2/15/2021 10:27 AM	25:00	7.80 pH	12.95 °C	489.73 µS/cm	0.39 mg/L	26.20 NTU	-39.6 mV	5.75 ft	100.00 ml/min
2/15/2021 10:32 AM	30:00	7.81 pH	13.04 °C	484.88 µS/cm	0.36 mg/L	16.30 NTU	-83.7 mV	6.40 ft	100.00 ml/min
2/15/2021 10:37 AM	35:00	7.81 pH	13.08 °C	484.72 µS/cm	0.36 mg/L	16.70 NTU	-88.4 mV	6.90 ft	100.00 ml/min

Samples

Sample ID:	Description:
MW-27D	No Sample.

Low-Flow Test Report:

Test Date / Time: 2/16/2021 10:58:20 AM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: MW-27D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 52.97 ft** **Total Depth: 63.25 ft** **Initial Depth to Water: 5.3 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 57.97 ft** **Estimated Total Volume Pumped: 0.7 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 1.6 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728541**

Test Notes:

Four bottles: Two 1-L plastic bottles with HNO3 for radium (EPA 9315/9320); one 120-mL plastic bottle for F (EPA 300.0); and one 250-mL plastic bottle with HNO3 for App. IV metals (EPA 6010D/6020B/7470A).

Weather Conditions:

Snowy, 20 degrees.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.03	
2/16/2021 10:58 AM	00:00	8.03 pH	10.36 °C	475.59 µS/cm	8.38 mg/L	10.54 NTU	62.8 mV	5.30 ft	100.00 ml/min
2/16/2021 11:01 AM	02:47	7.99 pH	8.47 °C	468.73 µS/cm	4.92 mg/L	29.60 NTU	16.0 mV	6.20 ft	100.00 ml/min
2/16/2021 11:06 AM	07:47	7.96 pH	9.61 °C	454.12 µS/cm	1.77 mg/L	30.10 NTU	-25.9 mV	6.90 ft	100.00 ml/min

Samples

Sample ID:	Description:
MW-27D, MW-27D Filtered.	One filtered duplicate due to turbidity.

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 2/10/2021 2:21:19 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: 48.14 ft** **Total Depth: 58.2 ft** **Initial Depth to Water: 4.8 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 53.14 ft** **Estimated Total Volume Pumped: 37 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.11 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728541**

Test Notes:
Four bottles: Two 1-L plastic bottles with HNO3 for radium (EPA 9315/9320); one 120-mL plastic bottle for F (EPA 300.0); and one 250-mL plastic bottle with HNO3 for App. IV metals (EPA 6010D/6020B/7470A).

Weather Conditions:
Sunny, 50 degrees.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.03	
2/10/2021 2:21 PM	00:00	7.64 pH	22.40 °C	552.11 µS/cm	4.23 mg/L	11.39 NTU	-9.6 mV	4.80 ft	200.00 ml/min
2/10/2021 2:26 PM	05:00	7.54 pH	18.23 °C	549.74 µS/cm	0.29 mg/L	89.00 NTU	-106.8 mV	4.85 ft	200.00 ml/min
2/10/2021 2:27 PM	05:50	7.54 pH	18.26 °C	557.13 µS/cm	0.24 mg/L	90.00 NTU	-104.9 mV	4.85 ft	200.00 ml/min
2/10/2021 2:32 PM	10:50	7.54 pH	18.26 °C	545.52 µS/cm	0.16 mg/L	121.00 NTU	-109.5 mV	4.85 ft	200.00 ml/min
2/10/2021 2:37 PM	15:50	7.55 pH	18.30 °C	541.46 µS/cm	0.14 mg/L	127.00 NTU	-116.2 mV	4.85 ft	200.00 ml/min
2/10/2021 2:42 PM	20:50	7.55 pH	18.35 °C	543.56 µS/cm	0.14 mg/L	116.00 NTU	-116.7 mV	4.90 ft	200.00 ml/min
2/10/2021 2:43 PM	22:25	7.55 pH	18.35 °C	544.44 µS/cm	0.14 mg/L	81.00 NTU	-119.6 mV	4.90 ft	200.00 ml/min
2/10/2021 2:48 PM	27:25	7.56 pH	18.44 °C	541.64 µS/cm	0.14 mg/L	68.00 NTU	-197.6 mV	4.90 ft	200.00 ml/min
2/10/2021 2:53 PM	32:25	7.56 pH	18.52 °C	543.38 µS/cm	0.15 mg/L	92.40 NTU	-202.4 mV	4.90 ft	200.00 ml/min
2/10/2021 2:58 PM	37:25	7.56 pH	18.47 °C	545.20 µS/cm	0.15 mg/L	85.30 NTU	-128.2 mV	4.90 ft	200.00 ml/min
2/10/2021 3:03 PM	42:25	7.56 pH	18.57 °C	547.56 µS/cm	0.15 mg/L	83.10 NTU	-127.0 mV	4.90 ft	200.00 ml/min
2/10/2021 3:08 PM	47:25	7.56 pH	18.09 °C	552.25 µS/cm	0.16 mg/L	67.70 NTU	-129.6 mV	4.90 ft	200.00 ml/min
2/10/2021 3:13 PM	52:11	7.56 pH	18.24 °C	556.35 µS/cm	0.17 mg/L	63.90 NTU	-130.5 mV	4.90 ft	200.00 ml/min

2/10/2021 3:18 PM	57:11	7.57 pH	18.35 °C	557.32 µS/cm	0.16 mg/L	54.50 NTU	-218.9 mV	4.90 ft	200.00 ml/min
2/10/2021 3:23 PM	01:02:11	7.57 pH	18.48 °C	557.37 µS/cm	0.17 mg/L	50.50 NTU	-130.0 mV	4.90 ft	200.00 ml/min
2/10/2021 3:24 PM	01:03:00	7.56 pH	18.52 °C	561.37 µS/cm	0.17 mg/L	50.00 NTU	-123.9 mV	4.90 ft	200.00 ml/min
2/10/2021 3:25 PM	01:04:34	7.57 pH	18.52 °C	561.93 µS/cm	0.17 mg/L	50.00 NTU	-126.6 mV	4.90 ft	200.00 ml/min
2/10/2021 3:30 PM	01:09:34	7.57 pH	18.59 °C	561.01 µS/cm	0.16 mg/L	45.00 NTU	-223.6 mV	4.90 ft	200.00 ml/min
2/10/2021 3:35 PM	01:14:34	7.57 pH	18.62 °C	563.57 µS/cm	0.17 mg/L	42.30 NTU	-224.3 mV	4.90 ft	200.00 ml/min
2/10/2021 3:40 PM	01:19:34	7.56 pH	18.70 °C	565.12 µS/cm	0.17 mg/L	37.50 NTU	-130.8 mV	4.90 ft	200.00 ml/min
2/10/2021 3:42 PM	01:21:35	7.57 pH	18.69 °C	568.99 µS/cm	0.17 mg/L	37.50 NTU	-134.5 mV	4.90 ft	200.00 ml/min
2/10/2021 3:44 PM	01:23:02	7.57 pH	18.58 °C	569.30 µS/cm	0.17 mg/L	37.50 NTU	-134.8 mV	4.90 ft	200.00 ml/min
2/10/2021 3:49 PM	01:28:02	7.56 pH	18.69 °C	569.27 µS/cm	0.17 mg/L	34.70 NTU	-134.4 mV	4.90 ft	200.00 ml/min
2/10/2021 3:54 PM	01:33:02	7.56 pH	18.72 °C	575.29 µS/cm	0.17 mg/L	32.70 NTU	-132.6 mV	4.90 ft	200.00 ml/min
2/10/2021 3:59 PM	01:38:02	7.56 pH	18.75 °C	570.68 µS/cm	0.17 mg/L	27.70 NTU	-230.1 mV	4.90 ft	200.00 ml/min
2/10/2021 4:04 PM	01:43:02	7.56 pH	18.61 °C	572.61 µS/cm	0.17 mg/L	29.40 NTU	-127.7 mV	4.90 ft	200.00 ml/min
2/10/2021 4:05 PM	01:43:47	7.56 pH	18.61 °C	576.55 µS/cm	0.18 mg/L	29.40 NTU	-129.4 mV	4.90 ft	200.00 ml/min
2/10/2021 4:10 PM	01:48:47	7.56 pH	18.42 °C	575.60 µS/cm	0.16 mg/L	25.70 NTU	-233.3 mV	4.90 ft	200.00 ml/min
2/10/2021 4:15 PM	01:53:47	7.55 pH	18.75 °C	575.56 µS/cm	0.17 mg/L	22.60 NTU	-137.9 mV	4.91 ft	200.00 ml/min
2/10/2021 4:16 PM	01:55:17	7.55 pH	18.61 °C	582.77 µS/cm	0.17 mg/L	22.60 NTU	-138.1 mV	4.91 ft	200.00 ml/min
2/10/2021 4:21 PM	02:00:17	7.55 pH	18.75 °C	575.35 µS/cm	0.16 mg/L	21.90 NTU	-140.5 mV	4.91 ft	200.00 ml/min
2/10/2021 4:26 PM	02:05:17	7.55 pH	18.67 °C	577.84 µS/cm	0.17 mg/L	20.90 NTU	-238.6 mV	4.91 ft	200.00 ml/min
2/10/2021 4:31 PM	02:10:17	7.55 pH	18.73 °C	582.20 µS/cm	0.17 mg/L	20.40 NTU	-239.9 mV	4.91 ft	200.00 ml/min
2/10/2021 4:36 PM	02:15:17	7.55 pH	18.70 °C	578.64 µS/cm	0.17 mg/L	18.50 NTU	-242.1 mV	4.91 ft	200.00 ml/min
2/10/2021 4:41 PM	02:20:17	7.55 pH	18.61 °C	582.13 µS/cm	0.17 mg/L	17.20 NTU	-147.4 mV	4.91 ft	200.00 ml/min
2/10/2021 4:46 PM	02:25:17	7.55 pH	18.57 °C	584.40 µS/cm	0.16 mg/L	17.60 NTU	-147.2 mV	4.91 ft	200.00 ml/min
2/10/2021 4:51 PM	02:30:17	7.54 pH	18.61 °C	585.22 µS/cm	0.16 mg/L	16.50 NTU	-144.3 mV	4.91 ft	200.00 ml/min
2/10/2021 4:54 PM	02:33:38	7.55 pH	18.45 °C	588.91 µS/cm	0.16 mg/L	15.30 NTU	-152.3 mV	4.91 ft	200.00 ml/min
2/10/2021 4:59 PM	02:38:38	7.54 pH	18.56 °C	587.59 µS/cm	0.16 mg/L	15.80 NTU	-146.2 mV	4.91 ft	200.00 ml/min
2/10/2021 5:00 PM	02:39:25	7.54 pH	18.39 °C	592.27 µS/cm	0.16 mg/L	15.80 NTU	-146.5 mV	4.91 ft	200.00 ml/min
2/10/2021 5:02 PM	02:41:15	7.55 pH	18.47 °C	589.22 µS/cm	0.16 mg/L	15.80 NTU	-147.2 mV	4.91 ft	200.00 ml/min
2/10/2021 5:05 PM	02:44:00	7.54 pH	18.48 °C	588.68 µS/cm	0.17 mg/L	15.80 NTU	-148.7 mV	4.91 ft	200.00 ml/min

2/10/2021 5:06 PM	02:45:20	7.54 pH	18.53 °C	588.60 µS/cm	0.17 mg/L	15.80 NTU	-144.2 mV	4.91 ft	200.00 ml/min
2/10/2021 5:09 PM	02:47:42	7.54 pH	18.44 °C	590.40 µS/cm	0.17 mg/L	14.20 NTU	-146.1 mV	4.91 ft	200.00 ml/min
2/10/2021 5:10 PM	02:48:48	7.54 pH	18.40 °C	591.19 µS/cm	0.16 mg/L	14.20 NTU	-147.0 mV	4.91 ft	200.00 ml/min
2/10/2021 5:11 PM	02:50:07	7.55 pH	18.39 °C	591.09 µS/cm	0.17 mg/L	14.20 NTU	-149.0 mV	4.91 ft	200.00 ml/min
2/10/2021 5:16 PM	02:55:07	7.54 pH	18.26 °C	588.42 µS/cm	0.17 mg/L	13.90 NTU	-153.0 mV	4.91 ft	200.00 ml/min
2/10/2021 5:19 PM	02:57:42	7.56 pH	18.30 °C	589.86 µS/cm	0.17 mg/L	13.60 NTU	-157.6 mV	4.91 ft	200.00 ml/min
2/10/2021 5:20 PM	02:59:18	7.54 pH	18.35 °C	589.51 µS/cm	0.16 mg/L	13.60 NTU	-147.8 mV	4.91 ft	200.00 ml/min
2/10/2021 5:26 PM	03:04:48	7.54 pH	18.27 °C	591.48 µS/cm	0.17 mg/L	13.00 NTU	-153.2 mV	4.91 ft	200.00 ml/min
2/10/2021 5:26 PM	03:05:37	7.54 pH	18.26 °C	594.10 µS/cm	0.16 mg/L		-150.2 mV	4.91 ft	200.00 ml/min

Samples

Sample ID:	Description:
MW-28D ,MW-28D Filtered	Grab Sample.

Low-Flow Test Report:

Test Date / Time: 2/15/2021 1:49:57 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: 18.21 ft** **Total Depth: 28.21 ft** **Initial Depth to Water: 4.4 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 23.21 ft** **Estimated Total Volume Pumped: 5 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728541**

Test Notes:

Four bottles: Two 1-L plastic bottles with HNO3 for radium (EPA 9315/9320); one 120-mL plastic bottle for F (EPA 300.0); and one 250-mL plastic bottle with HNO3 for App. IV metals (EPA 6010D/6020B/7470A).

Weather Conditions:

Cloudy, 40 degrees.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.03	
2/15/2021 1:49 PM	00:00	7.12 pH	12.25 °C	828.01 µS/cm	3.65 mg/L	6.63 NTU	-20.3 mV	4.40 ft	100.00 ml/min
2/15/2021 1:54 PM	05:00	7.14 pH	12.44 °C	849.29 µS/cm	1.69 mg/L	53.80 NTU	-0.3 mV	4.40 ft	100.00 ml/min
2/15/2021 1:59 PM	10:00	7.11 pH	12.92 °C	839.87 µS/cm	1.06 mg/L	31.20 NTU	6.3 mV	4.40 ft	100.00 ml/min
2/15/2021 2:04 PM	15:00	7.10 pH	13.13 °C	836.84 µS/cm	0.97 mg/L	17.50 NTU	6.4 mV	4.40 ft	100.00 ml/min
2/15/2021 2:09 PM	20:00	7.09 pH	13.13 °C	834.32 µS/cm	0.77 mg/L	13.90 NTU	10.2 mV	4.40 ft	100.00 ml/min
2/15/2021 2:14 PM	25:00	7.08 pH	13.19 °C	833.16 µS/cm	0.53 mg/L	11.96 NTU	10.6 mV	4.40 ft	100.00 ml/min
2/15/2021 2:19 PM	30:00	7.08 pH	13.22 °C	833.35 µS/cm	0.43 mg/L	9.49 NTU	10.2 mV	4.40 ft	100.00 ml/min
2/15/2021 2:24 PM	35:00	7.08 pH	13.22 °C	834.44 µS/cm	0.38 mg/L	5.88 NTU	10.3 mV	4.40 ft	100.00 ml/min
2/15/2021 2:29 PM	40:00	7.09 pH	13.22 °C	836.22 µS/cm	0.35 mg/L	4.90 NTU	10.2 mV	4.40 ft	100.00 ml/min
2/15/2021 2:34 PM	45:00	7.09 pH	12.70 °C	830.04 µS/cm	0.34 mg/L	4.09 NTU	11.0 mV	4.40 ft	100.00 ml/min
2/15/2021 2:39 PM	50:00	7.09 pH	12.46 °C	834.05 µS/cm	0.35 mg/L	3.39 NTU	7.1 mV	4.40 ft	100.00 ml/min

Samples

Sample ID:	Description:
MW-29	Grab Sample.

Created using VuSitu from In-Situ, Inc.

March 2021

Low-Flow Test Report:

Test Date / Time: 3/10/2021 3:42:04 PM
Project: GP-Plant Hammond
Operator Name: Vashish Taukoor

Location Name: HGWA-1 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 22.5 ft** **Total Depth: 32.5 ft** **Initial Depth to Water: 10.84 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 28 ft** **Estimated Total Volume Pumped: 8 Liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 1.02 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728563**

Test Notes:
Five bottles: Metals, TDS, Inorganics, Radium.

Weather Conditions:
Sunny
Low wind
50 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
3/10/2021 3:42 PM	00:00	6.98 pH	17.27 °C	604.28 µS/cm	0.27 mg/L	2.98 NTU	14.4 mV	11.82 ft	200.00 ml/min
3/10/2021 3:47 PM	05:00	6.97 pH	17.21 °C	600.58 µS/cm	0.24 mg/L	2.44 NTU	0.8 mV	11.84 ft	200.00 ml/min
3/10/2021 3:52 PM	10:00	6.96 pH	17.19 °C	600.84 µS/cm	0.24 mg/L	1.52 NTU	-3.3 mV	11.86 ft	200.00 ml/min
3/10/2021 3:57 PM	15:00	6.96 pH	17.23 °C	599.63 µS/cm	0.22 mg/L	1.49 NTU	-7.0 mV	11.86 ft	200.00 ml/min
3/10/2021 4:02 PM	20:00	6.95 pH	17.31 °C	598.41 µS/cm	0.21 mg/L	1.40 NTU	3.4 mV	11.86 ft	200.00 ml/min
3/10/2021 4:07 PM	25:00	6.95 pH	17.29 °C	598.87 µS/cm	0.20 mg/L	1.35 NTU	-9.3 mV	11.86 ft	200.00 ml/min

Samples

Sample ID:	Description:
HGWA-1	Grab Sample.

Low-Flow Test Report:

Test Date / Time: 3/11/2021 9:07:23 AM
Project: GP-Plant Hammond
Operator Name: Vashish Taukoor

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: 7.11 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 23 ft** **Estimated Total Volume Pumped: 14.5 Liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.10 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728563**

Test Notes:
Five bottles: Metals, TDS, Inorganics, Radium.

Weather Conditions:
Sunny
55 deg F
No wind

Low-Flow 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	
3/11/2021 9:07 AM	00:00	5.93 pH	16.04 °C	330.25 µS/cm	1.23 mg/L	11.40 NTU	83.5 mV	7.21 ft	200.00 ml/min
3/11/2021 9:12 AM	05:00	5.89 pH	16.20 °C	317.44 µS/cm	1.09 mg/L	11.00 NTU	108.3 mV	7.25 ft	200.00 ml/min
3/11/2021 9:17 AM	10:00	5.87 pH	16.23 °C	310.57 µS/cm	1.08 mg/L	7.97 NTU	87.1 mV	7.25 ft	200.00 ml/min
3/11/2021 9:22 AM	15:00	5.85 pH	16.32 °C	306.71 µS/cm	1.09 mg/L	6.85 NTU	89.0 mV	7.23 ft	200.00 ml/min
3/11/2021 9:27 AM	20:00	5.85 pH	16.32 °C	305.68 µS/cm	1.08 mg/L	6.18 NTU	115.2 mV	7.25 ft	200.00 ml/min
3/11/2021 9:32 AM	25:00	5.84 pH	16.33 °C	301.10 µS/cm	1.05 mg/L	5.43 NTU	89.7 mV	7.21 ft	200.00 ml/min
3/11/2021 9:37 AM	30:00	5.80 pH	16.35 °C	288.98 µS/cm	1.03 mg/L	5.09 NTU	91.2 mV	7.25 ft	200.00 ml/min
3/11/2021 9:42 AM	35:00	5.81 pH	16.43 °C	291.38 µS/cm	0.97 mg/L	4.69 NTU	90.1 mV	7.25 ft	200.00 ml/min
3/11/2021 9:47 AM	40:00	5.81 pH	16.47 °C	294.20 µS/cm	0.93 mg/L	4.21 NTU	117.5 mV	7.21 ft	200.00 ml/min
3/11/2021 9:52 AM	45:00	5.79 pH	16.48 °C	288.27 µS/cm	0.98 mg/L	4.15 NTU	120.2 mV	7.21 ft	200.00 ml/min
3/11/2021 9:57 AM	50:00	5.80 pH	16.47 °C	288.45 µS/cm	0.98 mg/L	4.00 NTU	88.6 mV	7.21 ft	200.00 ml/min

Samples

Sample ID:	Description:
HGWA-2	Grab Sample.

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 3/11/2021 10:57:05 AM
Project: GP-Plant Hammond
Operator Name: Vashish Taukoor

Location Name: HGWA-3 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 34.87 ft Total Depth: 44.87 ft** **Initial Depth to Water: 6.71 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 40 ft** **Estimated Total Volume Pumped: 8 Liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down:0.01 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728563**

Test Notes:
Five bottles: Metals, TDS, Inorganics, Radium.

Weather Conditions:
Sunny
Low wind
50 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	+/- 5	
3/11/2021 10:57 AM	00:00	7.26 pH	17.10 °C	470.32 µS/cm	0.67 mg/L	4.21 NTU	-50.0 mV	6.72 ft	200.00 ml/min
3/11/2021 11:02 AM	05:00	7.28 pH	17.37 °C	467.49 µS/cm	0.62 mg/L	1.29 NTU	-54.2 mV	6.72 ft	200.00 ml/min
3/11/2021 11:07 AM	10:06	7.30 pH	17.25 °C	467.75 µS/cm	0.59 mg/L	0.67 NTU	-57.4 mV	6.72 ft	200.00 ml/min
3/11/2021 11:12 AM	15:06	7.31 pH	17.23 °C	466.88 µS/cm	0.57 mg/L	0.55 NTU	-59.9 mV	6.72 ft	200.00 ml/min
3/11/2021 11:17 AM	20:06	7.32 pH	17.23 °C	466.87 µS/cm	0.58 mg/L	0.50 NTU	-75.3 mV	6.72 ft	200.00 ml/min
3/11/2021 11:22 AM	24:57	7.33 pH	17.42 °C	467.54 µS/cm	0.56 mg/L	0.45 NTU	-64.5 mV	6.72 ft	200.00 ml/min

Samples

Sample ID:	Description:
HGWA-3	Grab Sample.

Low-Flow Test Report:

Test Date / Time: 3/11/2021 9:02:31 AM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: HGWA-43D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 51.25 ft** **Total Depth: 61.85 ft** **Initial Depth to Water: 11.19 ft**	**Pump Type: Bladder** **Tubing Type: polyethylene** **Pump Intake From TOC: 56.25 ft** **Estimated Total Volume Pumped: 8 Liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 1.73 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728566**

Test Notes:
Five Bottles: Metals, TDS, Inorganics, Radium.

Weather Conditions:
Cloudy, 55 degrees

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
3/11/2021 9:02 AM	00:00	7.44 pH	15.53 °C	518.31 µS/cm	1.99 mg/L	15.70 NTU	-59.3 mV	11.19 ft	200.00 ml/min
3/11/2021 9:07 AM	05:00	7.43 pH	15.84 °C	519.02 µS/cm	0.82 mg/L	16.40 NTU	-73.8 mV	12.15 ft	200.00 ml/min
3/11/2021 9:12 AM	10:00	7.44 pH	16.13 °C	514.46 µS/cm	0.56 mg/L	18.90 NTU	-78.6 mV	12.75 ft	200.00 ml/min
3/11/2021 9:17 AM	15:00	7.46 pH	16.20 °C	515.21 µS/cm	0.41 mg/L	12.80 NTU	-83.0 mV	13.20 ft	200.00 ml/min
3/11/2021 9:22 AM	20:00	7.47 pH	16.29 °C	511.87 µS/cm	0.40 mg/L	13.40 NTU	-103.2 mV	13.45 ft	200.00 ml/min
3/11/2021 9:27 AM	25:00	7.46 pH	16.42 °C	502.64 µS/cm	0.34 mg/L	8.45 NTU	-104.5 mV	13.65 ft	200.00 ml/min
3/11/2021 9:32 AM	30:00	7.45 pH	16.47 °C	496.83 µS/cm	0.13 mg/L	6.57 NTU	-87.9 mV	13.80 ft	200.00 ml/min
3/11/2021 9:37 AM	35:00	7.45 pH	16.45 °C	494.24 µS/cm	0.11 mg/L	7.73 NTU	-88.1 mV	13.80 ft	200.00 ml/min
3/11/2021 9:42 AM	40:00	7.46 pH	16.22 °C	485.88 µS/cm	0.10 mg/L	4.38 NTU	-85.0 mV	13.13 ft	200.00 ml/min
3/11/2021 9:47 AM	45:00	7.46 pH	16.21 °C	479.85 µS/cm	0.10 mg/L	2.45 NTU	-81.0 mV	13.07 ft	200.00 ml/min
3/11/2021 9:52 AM	50:00	7.46 pH	16.22 °C	475.91 µS/cm	0.10 mg/L	4.58 NTU	-77.8 mV	12.92 ft	200.00 ml/min

Samples

Sample ID:	Description:
HGWA-43D	Grab Sample.

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 3/10/2021 1:57:00 PM
Project: GP-Plant Hammond
Operator Name: Vashish Taukoor

Location Name: HGWA-44D **Well Diameter: 2 cm** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 103.28 ft** **Total Depth: 113.28 ft** **Initial Depth to Water: 11.1 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 108 ft** **Estimated Total Volume Pumped: 9.5 Liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min Final Draw Down: 3.25 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728563**

Test Notes:

Five bottles: Metals, TDS, Inorganics, Radium.

Pre-purged 6.5 L @ 200 ml/min, then dropped to 100 ml/ min

Weather Conditions:

Sunny

Low wind

55 degree 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	
3/10/2021 1:57 PM	00:00	7.85 pH	18.25 °C	495.62 µS/cm	0.23 mg/L	2.89 NTU	-107.3 mV	14.48 ft	100.00 ml/min
3/10/2021 2:02 PM	05:00	7.89 pH	18.22 °C	498.99 µS/cm	0.23 mg/L	2.45 NTU	-112.3 mV	14.45 ft	100.00 ml/min
3/10/2021 2:07 PM	10:00	7.91 pH	18.44 °C	496.45 µS/cm	0.23 mg/L	2.67 NTU	-116.4 mV	14.45 ft	100.00 ml/min
3/10/2021 2:12 PM	15:00	7.92 pH	18.58 °C	501.57 µS/cm	0.23 mg/L	2.84 NTU	-120.9 mV	14.45 ft	100.00 ml/min
3/10/2021 2:17 PM	20:00	7.92 pH	18.61 °C	504.22 µS/cm	0.23 mg/L	2.56 NTU	-124.6 mV	14.45 ft	100.00 ml/min
3/10/2021 2:22 PM	25:00	7.92 pH	18.79 °C	502.44 µS/cm	0.22 mg/L	3.54 NTU	-147.9 mV	14.35 ft	100.00 ml/min
3/10/2021 2:27 PM	30:00	7.92 pH	18.88 °C	499.04 µS/cm	0.21 mg/L	2.98 NTU	-129.8 mV	14.35 ft	100.00 ml/min

Samples

Sample ID:	Description:
HGWA-44D	Grab Sample.

Low-Flow Test Report:

Test Date / Time: 3/15/2021 1:46:48 PM
Project: GP-Plant Hammond
Operator Name: Vashish Taukoor

Location Name: HGWC-7 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 18.17 ft Total Depth: 28.17 ft** **Initial Depth to Water: 5.39 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 23 ft** **Estimated Total Volume Pumped: 30 Liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min Final Draw Down: 0.07 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728563**

Test Notes:

Five bottles: Metals, TDS, Inorganics, Radium

Pre purged 30 min @ 100 ml/min.

Turbidity above 10 NTU after 3 hours. Grab HGWC-7 and HGWC-7 FILTERED.

Weather Conditions:
Cloudy
70 deg F
Slightly windy

Low-Flow 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	
3/15/2021 1:46 PM	00:00	7.17 pH	18.16 °C	672.05 µS/cm	0.25 mg/L	1,336.0 NTU	26.0 mV	5.42 ft	200.00 ml/min
3/15/2021 2:01 PM	15:00	7.17 pH	18.21 °C	665.07 µS/cm	0.25 mg/L	202.00 NTU	25.2 mV	5.45 ft	200.00 ml/min
3/15/2021 2:16 PM	30:00	7.19 pH	18.28 °C	663.25 µS/cm	0.27 mg/L	120.00 NTU	23.9 mV	5.45 ft	200.00 ml/min
3/15/2021 2:19 PM	32:40	7.18 pH	18.26 °C	657.87 µS/cm	0.25 mg/L	113.00 NTU	25.4 mV	5.45 ft	200.00 ml/min
3/15/2021 2:34 PM	47:40	7.18 pH	18.35 °C	663.00 µS/cm	0.28 mg/L	109.00 NTU	23.5 mV	5.46 ft	200.00 ml/min
3/15/2021 2:38 PM	51:47	7.18 pH	18.37 °C	666.36 µS/cm	0.29 mg/L	107.00 NTU	24.7 mV	5.46 ft	200.00 ml/min
3/15/2021 2:53 PM	01:06:47	7.19 pH	18.39 °C	662.59 µS/cm	0.21 mg/L	71.30 NTU	22.0 mV	5.46 ft	200.00 ml/min
3/15/2021 3:08 PM	01:21:47	7.18 pH	18.38 °C	662.02 µS/cm	0.31 mg/L	68.10 NTU	22.8 mV	5.46 ft	200.00 ml/min
3/15/2021 3:23 PM	01:36:47	7.19 pH	18.39 °C	662.62 µS/cm	0.28 mg/L	54.30 NTU	22.6 mV	5.46 ft	200.00 ml/min

3/15/2021 3:38 PM	01:51:47	7.19 pH	18.40 °C	662.69 µS/cm	0.27 mg/L	43.50 NTU	22.3 mV	5.46 ft	200.00 ml/min
3/15/2021 3:44 PM	01:58:05	7.18 pH	18.39 °C	660.78 µS/cm	0.21 mg/L	42.80 NTU	16.3 mV	5.46 ft	200.00 ml/min
3/15/2021 3:54 PM	02:08:05	7.19 pH	18.46 °C	661.99 µS/cm	0.27 mg/L	39.10 NTU	22.8 mV	5.46 ft	200.00 ml/min
3/15/2021 4:04 PM	02:18:05	7.19 pH	18.44 °C	666.28 µS/cm	0.33 mg/L	38.9 NTU	23.4 mV	5.46 ft	200.00 ml/min

Samples

Sample ID:	Description:
HGWC-7	Grab Sample.
HGWC-7 FILTERED	Grab Sample.

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 2/16/2021 1:05:57 PM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: HGWC-8 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 16.65 ft** **Total Depth: 25.08 ft** **Initial Depth to Water: 5.23 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 21.65 m** **Estimated Total Volume Pumped: 23.4 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.02 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728541**

Test Notes:
Five bottles: Metals, TDS, Inorganics, Radium.

Weather Conditions:
Cloudy, 20 degrees.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.03	
2/16/2021 1:05 PM	00:00	7.27 pH	11.04 °C	870.86 µS/cm	6.57 mg/L	9.69 NTU	27.1 mV	5.23 ft	200.00 ml/min
2/16/2021 1:10 PM	05:00	7.19 pH	12.62 °C	959.79 µS/cm	0.42 mg/L	27.60 NTU	10.3 mV	5.23 ft	200.00 ml/min
2/16/2021 1:15 PM	10:00	7.17 pH	13.13 °C	950.59 µS/cm	0.32 mg/L	28.40 NTU	16.8 mV	5.24 ft	200.00 ml/min
2/16/2021 1:20 PM	15:00	7.16 pH	13.09 °C	960.29 µS/cm	0.24 mg/L	28.30 NTU	15.1 mV	5.24 ft	200.00 ml/min
2/16/2021 1:25 PM	20:00	7.16 pH	13.18 °C	964.66 µS/cm	0.20 mg/L	29.90 NTU	13.8 mV	5.25 ft	200.00 ml/min
2/16/2021 1:30 PM	25:00	7.16 pH	13.54 °C	972.88 µS/cm	0.18 mg/L	27.30 NTU	5.7 mV	5.25 ft	200.00 ml/min
2/16/2021 1:35 PM	30:00	7.16 pH	13.68 °C	969.69 µS/cm	0.16 mg/L	21.70 NTU	11.1 mV	5.25 ft	200.00 ml/min
2/16/2021 1:40 PM	35:00	7.16 pH	13.45 °C	965.75 µS/cm	0.16 mg/L	20.00 NTU	11.1 mV	5.25 ft	200.00 ml/min
2/16/2021 1:45 PM	40:00	7.16 pH	13.57 °C	967.46 µS/cm	0.16 mg/L	15.80 NTU	4.7 mV	5.25 ft	200.00 ml/min
2/16/2021 1:50 PM	45:00	7.15 pH	13.61 °C	967.84 µS/cm	0.15 mg/L	13.30 NTU	4.8 mV	5.25 ft	200.00 ml/min
2/16/2021 1:55 PM	50:00	7.16 pH	13.77 °C	968.87 µS/cm	0.15 mg/L	11.60 NTU	8.9 mV	5.25 ft	200.00 ml/min
2/16/2021 2:00 PM	55:00	7.16 pH	13.31 °C	968.90 µS/cm	0.14 mg/L	10.91 NTU	4.2 mV	5.25 ft	200.00 ml/min
2/16/2021 2:05 PM	01:00:00	7.16 pH	13.13 °C	965.07 µS/cm	0.14 mg/L	9.59 NTU	8.8 mV	5.25 ft	200.00 ml/min

2/16/2021 2:10 PM	01:05:00	7.16 pH	13.04 °C	961.96 µS/cm	0.14 mg/L	7.95 NTU	8.2 mV	5.25 ft	200.00 ml/min
2/16/2021 2:15 PM	01:10:00	7.16 pH	13.36 °C	971.78 µS/cm	0.15 mg/L	7.59 NTU	7.9 mV	5.25 ft	200.00 ml/min
2/16/2021 2:20 PM	01:15:00	7.15 pH	13.50 °C	969.17 µS/cm	0.14 mg/L	6.67 NTU	8.1 mV	5.25 ft	200.00 ml/min
2/16/2021 2:25 PM	01:20:00	7.16 pH	13.31 °C	973.32 µS/cm	0.14 mg/L	7.07 NTU	3.7 mV	5.25 ft	200.00 ml/min
2/16/2021 2:30 PM	01:25:00	7.16 pH	13.81 °C	970.17 µS/cm	0.14 mg/L	6.87 NTU	3.3 mV	5.25 ft	200.00 ml/min
2/16/2021 2:35 PM	01:30:00	7.15 pH	14.22 °C	969.59 µS/cm	0.15 mg/L	6.07 NTU	6.8 mV	5.25 ft	200.00 ml/min
2/16/2021 2:40 PM	01:35:00	7.16 pH	14.29 °C	968.28 µS/cm	0.12 mg/L	5.05 NTU	7.8 mV	5.25 ft	200.00 ml/min
2/16/2021 2:43 PM	01:38:00	7.16 pH	14.13 °C	962.92 µS/cm	0.14 mg/L	5.05 NTU	4.5 mV	5.25 ft	200.00 ml/min
2/16/2021 2:48 PM	01:43:00	7.15 pH	14.51 °C	970.80 µS/cm	0.14 mg/L	4.96 NTU	3.1 mV	5.25 ft	200.00 ml/min
2/16/2021 2:53 PM	01:48:00	7.16 pH	14.57 °C	964.80 µS/cm	0.14 mg/L	4.70 NTU	4.1 mV	5.25 ft	200.00 ml/min
2/16/2021 2:56 PM	01:50:59	7.15 pH	14.67 °C	961.30 µS/cm	0.13 mg/L	4.70 NTU	6.9 mV	5.25 ft	200.00 ml/min
2/16/2021 3:01 PM	01:55:59	7.16 pH	14.17 °C	961.04 µS/cm	0.13 mg/L	4.48 NTU	3.2 mV	5.25 ft	200.00 ml/min

Samples

Sample ID:	Description:
HGWC-8	Grab Sample.

Low-Flow Test Report:

Test Date / Time: 3/16/2021 2:23:06 PM
Project: GP-Plant Hammond
Operator Name: Vashish Taukoor

Location Name: HGWC-9 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 36.98 ft** **Total Depth: 46.98 ft** **Initial Depth to Water: 14.3 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 42 ft** **Estimated Total Volume Pumped: 7 Liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.00 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728563**

Test Notes:

Five bottles: Metals, TDS, Inorganics, Radium.

Weather Conditions:
Rainy
50 deg F
Windy

Low-Flow 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	
3/16/2021 2:23 PM	00:00	7.08 pH	17.41 °C	1,087.9 µS/cm	0.28 mg/L	1.97 NTU	40.7 mV	14.30 ft	200.00 ml/min
3/16/2021 2:28 PM	05:00	7.10 pH	17.40 °C	1,088.4 µS/cm	0.28 mg/L	5.34 NTU	35.7 mV	14.30 ft	200.00 ml/min
3/16/2021 2:33 PM	10:00	7.10 pH	17.41 °C	1,085.4 µS/cm	0.27 mg/L	4.56 NTU	36.3 mV	14.30 ft	200.00 ml/min
3/16/2021 2:38 PM	15:00	7.10 pH	17.45 °C	1,088.0 µS/cm	0.25 mg/L	4.88 NTU	35.9 mV	14.30 ft	200.00 ml/min
3/16/2021 2:43 PM	20:00	7.10 pH	17.46 °C	1,086.4 µS/cm	0.26 mg/L	4.59 NTU	36.2 mV	14.30 ft	200.00 ml/min
3/16/2021 2:48 PM	25:00	7.10 pH	17.49 °C	1,088.3 µS/cm	0.23 mg/L		35.5 mV	14.30 ft	200.00 ml/min

Samples

Sample ID:	Description:
HGWC-9	Grab Sample.

Low-Flow Test Report:

Test Date / Time: 3/12/2021 9:36:03 AM
Project: GP-Plant Hammond
Operator Name: Chad Russo

Location Name: HGWC-10 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 13 ft** **Total Depth: 23 ft** **Initial Depth to Water: 14.28 ft**	**Pump Type: Peri** **Tubing Type: Polyethylene** **Pump Intake From TOC: 18 ft** **Estimated Total Volume Pumped: 6 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: 728550**

Test Notes:
Five Bottles: Metals, TDS, Inorganics, Radium.

Low-Flow 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	
3/12/2021 9:36 AM	00:00	6.66 pH	17.81 °C	764.81 µS/cm	0.64 mg/L		81.4 mV	14.28 ft	200.00 ml/min
3/12/2021 9:41 AM	05:00	6.70 pH	17.68 °C	773.59 µS/cm	0.44 mg/L	6.40 NTU	108.8 mV	14.31 ft	200.00 ml/min
3/12/2021 9:46 AM	10:00	6.72 pH	17.81 °C	781.13 µS/cm	0.33 mg/L	2.12 NTU	90.1 mV	14.31 ft	200.00 ml/min
3/12/2021 9:51 AM	15:00	6.74 pH	17.95 °C	783.78 µS/cm	0.31 mg/L	2.01 NTU	89.5 mV	14.31 ft	200.00 ml/min
3/12/2021 9:56 AM	20:00	6.74 pH	17.81 °C	787.93 µS/cm	0.29 mg/L	0.68 NTU	150.4 mV	14.31 ft	200.00 ml/min
3/12/2021 10:01 AM	25:00	6.75 pH	17.76 °C	789.78 µS/cm	0.27 mg/L	0.41 NTU	105.1 mV	14.31 ft	200.00 ml/min
3/12/2021 10:06 AM	30:00	6.76 pH	17.81 °C	790.48 µS/cm	0.26 mg/L	0.78 NTU	165.5 mV	14.31 ft	200.00 ml/min

Samples

Sample ID:	Description:
HGWC-10	Grab Sample.

Low-Flow Test Report:

Test Date / Time: 3/16/2021 9:20:50 AM
Project: GP-Plant Hammond
Operator Name: Vashish Taukoor

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: 16.38 ft**	**Pump Type: Peri** **Tubing Type: Polyethylene** **Pump Intake From TOC: 20 ft** **Estimated Total Volume Pumped: 11000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min Final Draw Down: 0.04 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728563**

Test Notes:
Five bottles: Metals, TDS, Inorganics, Radium.
Prepurged for 30 min @ 200 ml/min

Weather Conditions:
Rain
Windy
50 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	+/- 5	
3/16/2021 9:20 AM	00:00	5.83 pH	14.81 °C	810.53 µS/cm	3.50 mg/L	0.59 NTU	110.5 mV	16.42 ft	200.00 ml/min
3/16/2021 9:25 AM	05:00	5.87 pH	14.83 °C	808.73 µS/cm	3.30 mg/L	0.66 NTU	98.3 mV	16.42 ft	200.00 ml/min
3/16/2021 9:30 AM	10:00	5.89 pH	14.81 °C	804.80 µS/cm	3.09 mg/L	0.83 NTU	129.3 mV	16.42 ft	200.00 ml/min
3/16/2021 9:35 AM	15:00	5.91 pH	14.81 °C	801.95 µS/cm	3.04 mg/L	0.23 NTU	94.3 mV	16.42 ft	200.00 ml/min
3/16/2021 9:40 AM	20:00	5.93 pH	14.86 °C	799.33 µS/cm	2.97 mg/L	0.17 NTU	92.1 mV	16.42 ft	200.00 ml/min
3/16/2021 9:45 AM	25:00	5.95 pH	14.60 °C	799.46 µS/cm	2.83 mg/L	0.11 NTU	90.9 mV	16.42 ft	200.00 ml/min

Samples

Sample ID:	Description:
HGWC-11	Grab Sample.

Low-Flow Test Report:

Test Date / Time: 3/16/2021 10:42:28 AM
Project: GP-Plant Hammond
Operator Name: Vashish Taukoor

Location Name: HGWC-12 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 25.68 ft Total Depth: 35.68 ft** **Initial Depth to Water: 16.4 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 30 ft** **Estimated Total Volume Pumped: 8 Liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: -0.02 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728563**

Test Notes:
Five bottles: Metals, TDS, Inorganics, Radium.
Pre purged for 10 min @ 200 ml/min

Weather Conditions:
Rainy
50 deg F
Windy

Low-Flow 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	
3/16/2021 10:42 AM	00:00	7.07 pH	17.45 °C	1,016.7 µS/cm	0.40 mg/L	7.85 NTU	29.6 mV	16.45 ft	200.00 ml/min
3/16/2021 10:47 AM	05:00	7.10 pH	17.32 °C	983.00 µS/cm	0.23 mg/L	14.50 NTU	34.3 mV	16.38 ft	200.00 ml/min
3/16/2021 10:52 AM	10:00	7.12 pH	17.55 °C	983.06 µS/cm	0.18 mg/L	12.20 NTU	35.6 mV	16.38 ft	200.00 ml/min
3/16/2021 10:57 AM	15:00	7.13 pH	17.54 °C	985.73 µS/cm	0.16 mg/L	5.53 NTU	35.4 mV	16.38 ft	200.00 ml/min
3/16/2021 11:02 AM	20:00	7.14 pH	17.68 °C	987.37 µS/cm	0.14 mg/L	7.78 NTU	35.7 mV	16.38 ft	200.00 ml/min
3/16/2021 11:07 AM	25:00	7.14 pH	17.70 °C	985.18 µS/cm	0.13 mg/L	4.53 NTU	35.9 mV	16.38 ft	200.00 ml/min
3/16/2021 11:12 AM	30:00	7.15 pH	17.64 °C	981.32 µS/cm	0.12 mg/L	4.22 NTU	35.5 mV	16.38 ft	200.00 ml/min

Samples

Sample ID:	Description:
HGWC-12	Grab Sample.

Low-Flow Test Report:

Test Date / Time: 3/17/2021 1:56:31 PM
Project: GP-Plant Hammond
Operator Name: Vashish Taukoor

Location Name: HGWC-13 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 35.07 ft Total Depth: 45.07 ft** **Initial Depth to Water: 21.95 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 40 ft** **Estimated Total Volume Pumped: 13 Liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.02 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728563**

Test Notes:
Five bottles: Metals, TDS, Inorganics, Radium.
Prepurged for 5 min @ 200 ml/min

Weather Conditions:
Cloudy
60 deg F
Windy

Low-Flow 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	
3/17/2021 1:56 PM	00:00	7.10 pH	19.09 °C	1,016.5 µS/cm	0.73 mg/L	40.30 NTU	-33.4 mV	22.00 ft	200.00 ml/min
3/17/2021 2:01 PM	05:00	7.18 pH	19.24 °C	1,016.0 µS/cm	0.21 mg/L	37.60 NTU	-45.9 mV	22.00 ft	200.00 ml/min
3/17/2021 2:06 PM	10:00	7.23 pH	19.24 °C	1,015.6 µS/cm	0.16 mg/L	32.80 NTU	-48.9 mV	21.95 ft	200.00 ml/min
3/17/2021 2:11 PM	15:00	7.25 pH	19.24 °C	1,015.8 µS/cm	0.15 mg/L	24.60 NTU	-50.8 mV	21.95 ft	200.00 ml/min
3/17/2021 2:16 PM	20:00	7.27 pH	19.19 °C	1,016.3 µS/cm	0.14 mg/L	20.50 NTU	-51.4 mV	21.97 ft	200.00 ml/min
3/17/2021 2:21 PM	25:00	7.28 pH	19.15 °C	1,016.7 µS/cm	0.14 mg/L	14.50 NTU	-90.5 mV	21.97 ft	200.00 ml/min
3/17/2021 2:26 PM	30:00	7.29 pH	19.10 °C	1,016.2 µS/cm	0.14 mg/L	11.80 NTU	-91.6 mV	21.97 ft	200.00 ml/min
3/17/2021 2:31 PM	35:00	7.30 pH	18.97 °C	1,016.2 µS/cm	0.14 mg/L	10.50 NTU	-52.6 mV	21.97 ft	200.00 ml/min
3/17/2021 2:36 PM	40:00	7.31 pH	18.97 °C	1,016.6 µS/cm	0.15 mg/L	9.36 NTU	-52.3 mV	21.97 ft	200.00 ml/min
3/17/2021 2:41 PM	45:00	7.32 pH	18.97 °C	1,017.1 µS/cm	0.15 mg/L	8.45 NTU	-91.0 mV	21.97 ft	200.00 ml/min
3/17/2021 2:46 PM	50:00	7.32 pH	18.88 °C	1,017.8 µS/cm	0.15 mg/L	6.54 NTU	-52.1 mV	21.97 ft	200.00 ml/min
3/17/2021 2:51 PM	55:00	7.33 pH	18.93 °C	1,017.1 µS/cm	0.15 mg/L	5.73 NTU	-90.7 mV	21.97 ft	200.00 ml/min

3/17/2021 2:56 PM	01:00:00	7.33 pH	18.84 °C	1,016.8 µS/cm	0.15 mg/L	4.69 NTU	-51.9 mV	21.97 ft	200.00 ml/min

Samples

Sample ID:	Description:
HGWC-13	Grab Sample.

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 3/16/2021 3:43:50 PM
Project: GP-Plant Hammond
Operator Name: Vashish Taukoor

Location Name: MW-5 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 20.82 ft Total Depth: 30.82 ft** **Initial Depth to Water: 17.25 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 25 ft** **Estimated Total Volume Pumped: 7 Liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.30 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728563**

Test Notes:
Five bottles: Metals, TDS, Inorganics, Radium.

Pre purged for 10 min @ 200 ml/min

Weather Conditions:
Rainy
50 deg F
Windy

Low-Flow 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	
3/16/2021 3:43 PM	00:00	5.78 pH	17.19 °C	497.46 µS/cm	2.58 mg/L	0.10 NTU	99.4 mV	17.55 ft	200.00 ml/min
3/16/2021 3:48 PM	05:00	5.77 pH	17.28 °C	500.53 µS/cm	2.53 mg/L	0.83 NTU	76.6 mV	17.55 ft	200.00 ml/min
3/16/2021 3:53 PM	10:00	5.77 pH	17.27 °C	497.95 µS/cm	2.45 mg/L	0.22 NTU	74.0 mV	17.55 ft	200.00 ml/min
3/16/2021 3:58 PM	15:00	5.76 pH	17.31 °C	498.35 µS/cm	2.44 mg/L	0.31 NTU	72.1 mV	17.55 ft	200.00 ml/min
3/16/2021 4:03 PM	20:00	5.78 pH	17.30 °C	499.39 µS/cm	2.41 mg/L	1.02 NTU	94.4 mV	17.55 ft	200.00 ml/min
3/16/2021 4:08 PM	25:00	5.78 pH	17.37 °C	500.11 µS/cm	2.41 mg/L	0.90 NTU	71.2 mV	17.55 ft	200.00 ml/min

Samples

Sample ID:	Description:
MW-5	Grab Sample.

Low-Flow Test Report:

Test Date / Time: 3/16/2021 3:08:08 PM
Project: GP-Plant Hammond
Operator Name: Chad Russo

Location Name: MW-6 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 23 ft** **Total Depth: 33 ft** **Initial Depth to Water: 17.72 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 28 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: 728550**

Test Notes:
Five Bottles: Metals, TDS, Inorganics, Radium.

Low-Flow 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	
3/16/2021 3:08 PM	00:00	6.90 pH	16.97 °C	1,004.8 µS/cm	3.60 mg/L		-51.2 mV	17.72 ft	200.00 ml/min
3/16/2021 3:13 PM	05:00	6.94 pH	18.04 °C	983.63 µS/cm	1.07 mg/L	16.70 NTU	-23.2 mV	17.72 ft	200.00 ml/min
3/16/2021 3:18 PM	10:00	6.95 pH	17.99 °C	980.15 µS/cm	0.94 mg/L	10.90 NTU	5.7 mV	17.72 ft	200.00 ml/min
3/16/2021 3:23 PM	15:00	6.94 pH	18.13 °C	982.61 µS/cm	0.54 mg/L	8.19 NTU	1.8 mV	17.72 ft	200.00 ml/min
3/16/2021 3:28 PM	20:00	6.95 pH	17.95 °C	979.71 µS/cm	0.36 mg/L	5.10 NTU	6.1 mV	17.72 ft	200.00 ml/min
3/16/2021 3:33 PM	25:00	6.95 pH	18.21 °C	979.69 µS/cm	0.29 mg/L	4.66 NTU	8.8 mV	17.72 ft	200.00 ml/min
3/16/2021 3:38 PM	30:00	6.96 pH	18.17 °C	977.83 µS/cm	0.25 mg/L	2.96 NTU	19.0 mV	17.72 ft	200.00 ml/min

Samples

Sample ID:	Description:
MW-6	Grab Sample.

Low-Flow Test Report:

Test Date / Time: 3/15/2021 11:29:54 AM
Project: GP-Plant Hammond
Operator Name: Vashish Taukoor

Location Name: MW-7 **Well Diameter: 2 in** **Casing Type; PVC** **Screen Length: 10 ft** **Top of Screen: 16.8 ft** **Total Depth: 26.8 ft** **Initial Depth to Water: 14.92 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 22 ft** **Estimated Total Volume Pumped: 8 Liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.03 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728563**

Test Notes:
Five bottles: Metals, TDS, Inorganics, Radium.
Prepurged for 10 min @ 200 ml/min

Weather Conditions:
Cloudy
70 deg F
Slight wind

Low-Flow 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	
3/15/2021 11:29 AM	00:00	6.45 pH	17.72 °C	327.33 µS/cm	2.63 mg/L	2.74 NTU	85.7 mV	14.95 ft	200.00 ml/min
3/15/2021 11:34 AM	05:00	6.50 pH	18.26 °C	352.94 µS/cm	2.34 mg/L	1.26 NTU	68.1 mV	14.95 ft	200.00 ml/min
3/15/2021 11:39 AM	10:00	6.55 pH	18.30 °C	389.90 µS/cm	2.06 mg/L	0.91 NTU	65.2 mV	14.95 ft	200.00 ml/min
3/15/2021 11:44 AM	15:00	6.59 pH	18.26 °C	401.01 µS/cm	1.97 mg/L	0.74 NTU	63.7 mV	14.95 ft	200.00 ml/min
3/15/2021 11:49 AM	20:00	6.62 pH	18.12 °C	417.99 µS/cm	1.86 mg/L	0.57 NTU	61.4 mV	14.95 ft	200.00 ml/min
3/15/2021 11:54 AM	25:00	6.64 pH	18.07 °C	424.35 µS/cm	1.81 mg/L	0.63 NTU	60.9 mV	14.95 ft	200.00 ml/min
3/15/2021 11:59 AM	29:38	6.66 pH	17.99 °C	436.20 µS/cm	1.76 mg/L	0.53 NTU	65.3 mV	14.95 ft	200.00 ml/min

Samples

Sample ID:	Description:
MW-7	Grab Sample.

Low-Flow Test Report:

Test Date / Time: 3/17/2021 9:55:04 AM
Project: GP-Plant Hammond
Operator Name: Vashish Taukoor

Location Name: MW-19 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 19.87 ft Total Depth: 29.87 ft** **Initial Depth to Water: 11.9 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 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: 728563**

Test Notes:
Five bottles: Metals, TDS, Inorganics, Radium.
Prepurged for 10 min @ 200 ml/min

Weather Conditions:
Cloudy
55 deg F
Windy

Low-Flow 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	
3/17/2021 9:55 AM	00:00	6.33 pH	17.78 °C	779.29 µS/cm	0.44 mg/L	1.93 NTU	53.5 mV	12.00 ft	200.00 ml/min
3/17/2021 10:00 AM	05:00	6.34 pH	17.84 °C	782.74 µS/cm	0.39 mg/L	0.97 NTU	49.3 mV	12.00 ft	200.00 ml/min
3/17/2021 10:05 AM	10:00	6.34 pH	17.86 °C	783.09 µS/cm	0.34 mg/L	0.76 NTU	56.5 mV	11.95 ft	200.00 ml/min
3/17/2021 10:10 AM	15:00	6.34 pH	17.90 °C	782.81 µS/cm	0.30 mg/L	0.81 NTU	57.1 mV	11.95 ft	200.00 ml/min
3/17/2021 10:15 AM	20:00	6.34 pH	17.90 °C	783.65 µS/cm	0.29 mg/L	0.67 NTU	56.7 mV	11.95 ft	200.00 ml/min
3/17/2021 10:20 AM	25:00	6.34 pH	17.90 °C	784.80 µS/cm	0.27 mg/L	0.55 NTU	48.6 mV	11.95 ft	200.00 ml/min

Samples

Sample ID:	Description:
MW-19	Grab Sample.

Low-Flow Test Report:

Test Date / Time: 3/15/2021 1:31:58 PM
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: 16.36 ft** **Total Depth: 34.40 ft** **Initial Depth to Water: 14.32 ft**	**Pump Type: Bladder** **Tubing Type: polyethylene** **Pump Intake From TOC: 21.36 ft** **Estimated Total Volume Pumped: 9000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.34 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728566**

Test Notes:
Five bottles: Metals,TDS, Inorganics, Radium.

Weather Conditions:
Cloudy, 65 degrees.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
3/15/2021 1:31 PM	00:00	6.73 pH	18.72 °C	525.07 µS/cm	4.22 mg/L	54.30 NTU	42.7 mV	14.32 ft	200.00 ml/min
3/15/2021 1:36 PM	05:00	6.73 pH	18.03 °C	591.52 µS/cm	1.23 mg/L	27.10 NTU	3.1 mV	14.51 ft	200.00 ml/min
3/15/2021 1:41 PM	10:00	6.82 pH	18.08 °C	635.97 µS/cm	0.91 mg/L	17.90 NTU	-34.2 mV	14.60 ft	200.00 ml/min
3/15/2021 1:46 PM	15:00	6.87 pH	18.07 °C	659.99 µS/cm	0.66 mg/L	13.90 NTU	-32.6 mV	14.65 ft	200.00 ml/min
3/15/2021 1:51 PM	20:00	6.91 pH	18.06 °C	671.72 µS/cm	0.52 mg/L	12.30 NTU	-58.9 mV	14.65 ft	200.00 ml/min
3/15/2021 1:56 PM	25:00	6.93 pH	18.08 °C	677.14 µS/cm	0.44 mg/L	9.45 NTU	-64.3 mV	14.65 ft	200.00 ml/min
3/15/2021 2:01 PM	30:00	6.95 pH	18.11 °C	682.02 µS/cm	0.40 mg/L	8.49 NTU	-49.8 mV	14.65 ft	200.00 ml/min
3/15/2021 2:06 PM	35:00	6.95 pH	18.15 °C	683.70 µS/cm	0.35 mg/L	6.50 NTU	-51.3 mV	14.65 ft	200.00 ml/min
3/15/2021 2:11 PM	40:00	6.96 pH	18.17 °C	685.27 µS/cm	0.31 mg/L	5.28 NTU	-53.2 mV	14.65 ft	200.00 ml/min
3/15/2021 2:16 PM	45:00	6.97 pH	18.17 °C	686.63 µS/cm	0.29 mg/L	4.35 NTU	-54.3 mV	14.66 ft	200.00 ml/min

Samples

Sample ID:	Description:

MW-20	Grab Sample.

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 3/17/2021 3:32:14 PM
Project: GP-Plant Hammond
Operator Name: Vashish Taukoor

Location Name: MW-24D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 63.11 ft Total Depth: 73.11 ft** **Initial Depth to Water: 26.65 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 68 ft** **Estimated Total Volume Pumped: 6 Liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.00 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728563**

Test Notes:
Five bottles: Metals, TDS, Inorganics, Radium
Prepurged for 5 min @ 200 ml/min

Weather Conditions:
Rainy
55 d g F
Windy

Low-Flow 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	
3/17/2021 3:32 PM	00:00	7.55 pH	18.30 °C	616.48 µS/cm	0.91 mg/L	2.11 NTU	-42.0 mV	26.65 ft	200.00 ml/min
3/17/2021 3:37 PM	05:00	7.62 pH	18.45 °C	615.92 µS/cm	0.48 mg/L	1.11 NTU	-5.8 mV	26.65 ft	200.00 ml/min
3/17/2021 3:42 PM	10:00	7.64 pH	18.52 °C	611.26 µS/cm	0.30 mg/L	1.64 NTU	-18.9 mV	26.65 ft	200.00 ml/min
3/17/2021 3:47 PM	15:00	7.65 pH	18.45 °C	611.17 µS/cm	0.25 mg/L	1.90 NTU	3.6 mV	26.65 ft	200.00 ml/min
3/17/2021 3:52 PM	20:00	7.66 pH	18.47 °C	610.25 µS/cm	0.25 mg/L	1.32 NTU	5.5 mV	26.65 ft	200.00 ml/min
3/17/2021 3:57 PM	25:00	7.66 pH	18.46 °C	610.14 µS/cm	0.24 mg/L	0.97 NTU	6.7 mV	26.65 ft	200.00 ml/min

Samples

Sample ID:	Description:
MW-24D	Grab Sample.

Low-Flow Test Report:

Test Date / Time: 3/16/2021 12:06:09 PM
Project: GP-Plant Hammond
Operator Name: Vashish Taukoor

Location Name: MW-25D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 20 ft** **Top of Screen: 53.03 ft Total Depth: 63.03 ft** **Initial Depth to Water: 16.8 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 58 ft** **Estimated Total Volume Pumped: 5 Liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 5.80 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728563**

Test Notes:
Five bottles: Metals, TDS, Inorganics, Radium

Prepurged for 10 min @ 200 ml/min. Water table dropping fast.
Reduced flow rate to 100 ml/min.
Then prepurged for 5 min @ 100 ml/min.

Weather Conditions:
Rainy
50 deg F
Windy

Low-Flow 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	
3/16/2021 12:06 PM	00:00	7.71 pH	16.74 °C	597.43 µS/cm	0.07 mg/L	0.34 NTU	-175.1 mV	21.90 ft	100.00 ml/min
3/16/2021 12:11 PM	05:00	7.73 pH	16.69 °C	613.87 µS/cm	0.09 mg/L	0.22 NTU	-222.7 mV	22.10 ft	100.00 ml/min
3/16/2021 12:16 PM	10:00	7.74 pH	16.61 °C	613.68 µS/cm	0.11 mg/L	0.19 NTU	-167.7 mV	22.38 ft	100.00 ml/min
3/16/2021 12:21 PM	15:00	7.75 pH	17.29 °C	617.06 µS/cm	0.17 mg/L	0.04 NTU	-219.0 mV	22.42 ft	100.00 ml/min
3/16/2021 12:26 PM	20:00	7.76 pH	17.18 °C	613.07 µS/cm	0.13 mg/L	0.01 NTU	-167.7 mV	22.53 ft	100.00 ml/min
3/16/2021 12:31 PM	25:00	7.76 pH	16.92 °C	610.68 µS/cm	0.13 mg/L	0.13 NTU	-165.8 mV	22.60 ft	100.00 ml/min

Samples

Sample ID:	Description:

MW-25D	Grab Sample.
DUP-1	Grab Sample.

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 3/17/2021 8:27:56 AM
Project: GP-Plant Hammond
Operator Name: Vashish Taukoor

Location Name: MW-26D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 67.91 ft Total Depth: 77.91 ft** **Initial Depth to Water: 13.45 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 73 ft** **Estimated Total Volume Pumped: 3.5 Liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 0.10 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728563**

Test Notes:
Five bottles: Metals, TDS, Inorganics, Radium.
Prepurged for 10 min @ 100 ml/min

Weather Conditions:
Cloudy, foggy
52 deg F
No wind

Low-Flow 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	
3/17/2021 8:27 AM	00:00	7.15 pH	17.01 °C	1,060.0 µS/cm	1.10 mg/L	2.97 NTU	-31.4 mV	13.55 ft	100.00 ml/min
3/17/2021 8:32 AM	05:00	7.14 pH	17.00 °C	1,060.5 µS/cm	0.68 mg/L	2.74 NTU	-48.6 mV	13.55 ft	100.00 ml/min
3/17/2021 8:37 AM	10:00	7.14 pH	16.83 °C	1,065.5 µS/cm	0.58 mg/L	2.67 NTU	-14.6 mV	13.55 ft	100.00 ml/min
3/17/2021 8:42 AM	15:00	7.15 pH	16.86 °C	1,066.5 µS/cm	0.52 mg/L	2.54 NTU	-37.8 mV	13.55 ft	100.00 ml/min
3/17/2021 8:47 AM	20:00	7.15 pH	16.78 °C	1,069.0 µS/cm	0.54 mg/L	2.33 NTU	-9.7 mV	13.55 ft	100.00 ml/min
3/17/2021 8:52 AM	25:00	7.14 pH	16.87 °C	1,069.2 µS/cm	0.54 mg/L	2.10 NTU	-34.4 mV	13.55 ft	100.00 ml/min

Samples

Sample ID:	Description:
MW-26D	Grab Sample.

Low-Flow Test Report:

Test Date / Time: 3/11/2021 2:11:12 PM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: MW-27D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 51.97 ft** **Initial Depth to Water: 5.3 ft**	**Pump Type: Bladder** **Tubing Type: polyethylene** **Pump Intake From TOC: 67.97 ft** **Estimated Total Volume Pumped: 7 Liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 4.80 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728566**

Test Notes:
No sample taken.

Weather Conditions:
Cloudy, 70 degrees.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
3/11/2021 2:11 PM	00:00	7.68 pH	21.91 °C	406.58 µS/cm	2.84 mg/L	1.01 NTU	25.0 mV	4.30 ft	200.00 ml/min
3/11/2021 2:16 PM	05:00	7.73 pH	18.93 °C	440.36 µS/cm	2.14 mg/L	18.50 NTU	7.5 mV	4.40 ft	200.00 ml/min
3/11/2021 2:21 PM	10:00	7.76 pH	18.56 °C	446.39 µS/cm	1.16 mg/L	16.80 NTU	-8.1 mV	4.80 ft	200.00 ml/min
3/11/2021 2:26 PM	15:00	7.76 pH	18.64 °C	445.51 µS/cm	0.86 mg/L	14.30 NTU	5.5 mV	5.35 ft	200.00 ml/min
3/11/2021 2:31 PM	20:00	7.77 pH	18.66 °C	444.55 µS/cm	0.81 mg/L	14.60 NTU	6.0 mV	5.92 ft	200.00 ml/min
3/11/2021 2:36 PM	25:00	7.76 pH	18.85 °C	443.01 µS/cm	0.76 mg/L	15.20 NTU	-6.6 mV	6.25 ft	200.00 ml/min
3/11/2021 2:41 PM	30:00	7.76 pH	18.61 °C	440.96 µS/cm	0.69 mg/L	14.10 NTU	6.3 mV	6.72 ft	200.00 ml/min
3/11/2021 2:46 PM	35:00	7.77 pH	18.35 °C	442.21 µS/cm	0.64 mg/L	12.80 NTU	7.2 mV	7.15 ft	200.00 ml/min
3/11/2021 2:51 PM	40:00	7.77 pH	18.51 °C	445.40 µS/cm	0.58 mg/L	11.60 NTU	-5.2 mV	7.61 ft	200.00 ml/min
3/11/2021 2:56 PM	45:00	7.78 pH	18.52 °C	443.12 µS/cm	0.55 mg/L	16.20 NTU	-6.4 mV	8.00 ft	200.00 ml/min
3/11/2021 3:01 PM	50:00	7.77 pH	18.33 °C	441.82 µS/cm	0.33 mg/L	9.74 NTU	6.8 mV	8.62 ft	200.00 ml/min
3/11/2021 3:06 PM	55:00	7.78 pH	18.59 °C	435.76 µS/cm	0.28 mg/L	9.27 NTU	5.4 mV	8.93 ft	200.00 ml/min
3/11/2021 3:11 PM	01:00:00	7.76 pH	18.72 °C	429.77 µS/cm	0.25 mg/L	8.86 NTU	-1.0 mV	9.30 ft	200.00 ml/min

3/11/2021 3:16 PM	01:05:00	7.74 pH	18.76 °C	420.40 µS/cm	0.24 mg/L	6.35 NTU	-10.7 mV	9.70 ft	200.00 ml/min
3/11/2021 3:21 PM	01:10:00	7.74 pH	18.80 °C	415.72 µS/cm	0.24 mg/L	4.79 NTU	-18.9 mV	10.10 ft	200.00 ml/min

Samples

Sample ID:	Description:
No Sample Taken.	

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 3/12/2021 9:26:41 AM
Project: GP-Plant Hammond
Operator Name: Thomas Kessler

Location Name: MW-27D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 51.97 ft** **Total Depth: 63.25 ft** **Initial Depth to Water: 11.54 ft**	**Pump Type: Bladder** **Tubing Type: polyethylene** **Pump Intake From TOC: 57.97 ft** **Estimated Total Volume Pumped: 1.5 Liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 1.31 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728566**

Test Notes:
Five bottles: Metals,TDS, Inorganics, Radium.

Weather Conditions:
Cloudy, 50 degrees.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
3/12/2021 9:26 AM	00:00	7.73 pH	18.03 °C	439.65 µS/cm	3.87 mg/L	16.40 NTU	62.0 mV	11.54 ft	200.00 ml/min
3/12/2021 9:31 AM	05:00	7.81 pH	17.01 °C	422.93 µS/cm	2.80 mg/L	9.72 NTU	-8.6 mV	12.22 ft	200.00 ml/min
3/12/2021 9:36 AM	10:00	7.86 pH	17.19 °C	417.05 µS/cm	1.31 mg/L	5.24 NTU	-64.8 mV	12.50 ft	200.00 ml/min
3/12/2021 9:41 AM	15:00	7.88 pH	17.35 °C	414.95 µS/cm	0.92 mg/L	3.61 NTU	-47.4 mV	12.85 ft	200.00 ml/min

Samples

Sample ID:	Description:
MW-27D	Grab Sample.

Low-Flow Test Report:

Test Date / Time: 3/15/2021 3:20:47 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: 48.14 ft** **Total Depth: 58.2 ft** **Initial Depth to Water: 5.46 ft**	**Pump Type: Bladder** **Tubing Type: polyethylene** **Pump Intake From TOC: 53.14 ft** **Estimated Total Volume Pumped: 36 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.13 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728566**

Test Notes:
Five bottles: Metals, TDS, Inorganics, Radium.

Weather Conditions:
Cloudy, 65 degrees.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
3/15/2021 3:20 PM	00:00	7.51 pH	18.11 °C	549.82 µS/cm	4.04 mg/L	20.50 NTU	-89.5 mV	5.46 ft	200.00 ml/min
3/15/2021 3:25 PM	05:00	7.57 pH	17.64 °C	525.11 µS/cm	0.37 mg/L	807.00 NTU	-162.8 mV	5.53 ft	200.00 ml/min
3/15/2021 3:30 PM	10:00	7.59 pH	17.72 °C	525.22 µS/cm	0.31 mg/L	772.00 NTU	-192.6 mV	5.55 ft	200.00 ml/min
3/15/2021 3:35 PM	15:00	7.60 pH	17.72 °C	524.30 µS/cm	0.27 mg/L	650.00 NTU	-217.0 mV	5.55 ft	200.00 ml/min
3/15/2021 3:40 PM	20:00	7.61 pH	17.73 °C	524.51 µS/cm	0.24 mg/L	78.00 NTU	-237.7 mV	5.58 ft	200.00 ml/min
3/15/2021 3:45 PM	25:00	7.63 pH	17.74 °C	525.12 µS/cm	0.23 mg/L	64.00 NTU	-266.6 mV	5.58 ft	200.00 ml/min
3/15/2021 3:50 PM	30:00	7.65 pH	17.79 °C	526.48 µS/cm	0.21 mg/L	50.00 NTU	-274.7 mV	5.58 ft	200.00 ml/min
3/15/2021 3:55 PM	35:00	7.65 pH	17.85 °C	528.48 µS/cm	0.20 mg/L	69.10 NTU	-277.8 mV	5.58 ft	200.00 ml/min
3/15/2021 4:00 PM	40:00	7.66 pH	17.88 °C	530.01 µS/cm	0.19 mg/L	60.20 NTU	-276.3 mV	5.58 ft	200.00 ml/min
3/15/2021 4:05 PM	45:00	7.67 pH	17.90 °C	531.94 µS/cm	0.19 mg/L	48.00 NTU	-279.0 mV	5.58 ft	200.00 ml/min
3/15/2021 4:10 PM	50:00	7.69 pH	17.87 °C	533.15 µS/cm	0.18 mg/L	47.70 NTU	-284.4 mV	5.58 ft	200.00 ml/min
3/15/2021 4:15 PM	55:00	7.70 pH	17.87 °C	533.37 µS/cm	0.17 mg/L	41.80 NTU	-286.2 mV	5.58 ft	200.00 ml/min
3/15/2021 4:20 PM	01:00:00	7.70 pH	17.89 °C	533.82 µS/cm	0.16 mg/L	36.90 NTU	-283.8 mV	5.58 ft	200.00 ml/min

3/15/2021 4:25 PM	01:05:00	7.70 pH	17.88 °C	535.02 µS/cm	0.15 mg/L	36.40 NTU	-284.5 mV	5.59 ft	200.00 ml/min
3/15/2021 4:30 PM	01:10:00	7.69 pH	17.90 °C	535.03 µS/cm	0.15 mg/L	32.70 NTU	-282.8 mV	5.59 ft	200.00 ml/min
3/15/2021 4:35 PM	01:15:00	7.70 pH	17.90 °C	536.18 µS/cm	0.14 mg/L	26.30 NTU	-286.5 mV	5.59 ft	200.00 ml/min
3/15/2021 4:40 PM	01:20:00	7.70 pH	17.85 °C	535.76 µS/cm	0.14 mg/L	27.00 NTU	-282.5 mV	5.59 ft	200.00 ml/min
3/15/2021 4:45 PM	01:25:00	7.70 pH	17.86 °C	537.08 µS/cm	0.13 mg/L	23.80 NTU	-282.0 mV	5.59 ft	200.00 ml/min
3/15/2021 4:50 PM	01:30:00	7.70 pH	17.87 °C	537.10 µS/cm	0.13 mg/L	21.60 NTU	-281.0 mV	5.59 ft	200.00 ml/min
3/15/2021 4:55 PM	01:35:00	7.70 pH	17.85 °C	537.50 µS/cm	0.12 mg/L	21.30 NTU	-280.5 mV	5.59 ft	200.00 ml/min
3/15/2021 5:00 PM	01:40:00	7.68 pH	17.88 °C	538.35 µS/cm	0.12 mg/L	19.50 NTU	-278.8 mV	5.59 ft	200.00 ml/min
3/15/2021 5:05 PM	01:45:00	7.68 pH	17.93 °C	539.45 µS/cm	0.11 mg/L	20.60 NTU	-278.7 mV	5.59 ft	200.00 ml/min
3/15/2021 5:10 PM	01:50:00	7.67 pH	17.97 °C	539.96 µS/cm	0.11 mg/L	17.00 NTU	-277.7 mV	5.59 ft	200.00 ml/min
3/15/2021 5:15 PM	01:55:00	7.67 pH	17.99 °C	540.80 µS/cm	0.11 mg/L	15.90 NTU	-276.7 mV	5.59 ft	200.00 ml/min
3/15/2021 5:20 PM	02:00:00	7.67 pH	17.95 °C	541.98 µS/cm	0.11 mg/L	14.80 NTU	-277.3 mV	5.59 ft	200.00 ml/min
3/15/2021 5:25 PM	02:05:00	7.66 pH	17.95 °C	543.57 µS/cm	0.11 mg/L	14.40 NTU	-276.7 mV	5.59 ft	200.00 ml/min
3/15/2021 5:30 PM	02:10:00	7.65 pH	17.92 °C	544.74 µS/cm	0.10 mg/L	14.90 NTU	-276.7 mV	5.59 ft	200.00 ml/min
3/15/2021 5:35 PM	02:15:00	7.64 pH	17.94 °C	546.17 µS/cm	0.10 mg/L	14.70 NTU	-279.3 mV	5.59 ft	200.00 ml/min
3/15/2021 5:40 PM	02:20:00	7.64 pH	17.90 °C	546.03 µS/cm	0.10 mg/L	14.40 NTU	-279.2 mV	5.59 ft	200.00 ml/min
3/15/2021 5:45 PM	02:25:00	7.64 pH	17.91 °C	548.55 µS/cm	0.10 mg/L	12.30 NTU	-275.1 mV	5.59 ft	200.00 ml/min
3/15/2021 5:50 PM	02:30:00	7.63 pH	17.90 °C	549.71 µS/cm	0.10 mg/L	11.40 NTU	-274.7 mV	5.59 ft	200.00 ml/min
3/15/2021 5:55 PM	02:35:00	7.63 pH	17.91 °C	550.67 µS/cm	0.09 mg/L	11.50 NTU	-275.6 mV	5.59 ft	200.00 ml/min
3/15/2021 6:00 PM	02:40:00	7.62 pH	17.90 °C	551.55 µS/cm	0.09 mg/L	9.31 NTU	-274.9 mV	5.59 ft	200.00 ml/min
3/15/2021 6:05 PM	02:45:00	7.61 pH	17.90 °C	552.40 µS/cm	0.09 mg/L	9.75 NTU	-273.9 mV	5.59 ft	200.00 ml/min
3/15/2021 6:10 PM	02:50:00	7.61 pH	17.90 °C	554.77 µS/cm	0.09 mg/L	9.71 NTU	-273.6 mV	5.59 ft	200.00 ml/min
3/15/2021 6:15 PM	02:55:00	7.61 pH	17.90 °C	554.43 µS/cm	0.09 mg/L	9.30 NTU	-273.9 mV	5.59 ft	200.00 ml/min
3/15/2021 6:20 PM	03:00:00	7.61 pH	17.89 °C	554.99 µS/cm	0.09 mg/L	9.38 NTU	-274.2 mV	5.59 ft	200.00 ml/min

Samples

Sample ID:	Description:
MW-28D	Grab Sample.

Low-Flow Test Report:

Test Date / Time: 3/15/2021 12:17:38 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: 18.21 ft** **Total Depth: 28.26 ft** **Initial Depth to Water: 5.63 ft**	**Pump Type: Bladder** **Tubing Type: polyethylene** **Pump Intake From TOC: 23.21 ft** **Estimated Total Volume Pumped: 6 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.07 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728566**

Test Notes:
Five bottles: Metals, TDS, Inorganics, Radium.

Weather Conditions:
Cloudy, 65 degrees.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
3/15/2021 12:17 PM	00:00	7.05 pH	17.72 °C	821.21 µS/cm	4.47 mg/L	7.57 NTU	1.1 mV	5.63 ft	200.00 ml/min
3/15/2021 12:22 PM	05:00	7.06 pH	17.10 °C	833.99 µS/cm	0.40 mg/L	15.10 NTU	14.8 mV	5.70 ft	200.00 ml/min
3/15/2021 12:27 PM	10:00	7.06 pH	17.06 °C	829.36 µS/cm	0.27 mg/L	30.00 NTU	17.0 mV	5.70 ft	200.00 ml/min
3/15/2021 12:32 PM	15:00	7.05 pH	17.10 °C	826.26 µS/cm	0.20 mg/L	8.38 NTU	18.1 mV	5.70 ft	200.00 ml/min
3/15/2021 12:37 PM	20:00	7.06 pH	17.05 °C	826.59 µS/cm	0.15 mg/L	4.85 NTU	17.9 mV	5.70 ft	200.00 ml/min
3/15/2021 12:42 PM	25:00	7.06 pH	17.07 °C	825.39 µS/cm	0.11 mg/L	4.34 NTU	18.5 mV	5.70 ft	200.00 ml/min
3/15/2021 12:47 PM	30:00	7.05 pH	17.05 °C	825.41 µS/cm	0.10 mg/L	2.95 NTU	18.6 mV	5.70 ft	200.00 ml/min

Samples

Sample ID:	Description:
MW-29	Grab Sample.

CALIBRATION REPORTS

December 2020

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Thomas Wessler

Date: 12/15/20

Time (start): 826

Time (finish): 0850

smarTroll SN: 728634

Turbidity Meter Type: Lamotte 2020we

SN: 14179-4011

Weather Conditions: Sunny, cold

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)	20010028 05/21	11.26	4490	4784	4490	+/- 5 %	(Yes) No	
pH (4)			4.0	4.00	4.00	+/- 0.1 SU	(Yes) No	
pH (7)	19340057 05/21	10.6	7.00	7.13	7.00	+/- 0.1 SU	(Yes) No	
pH (10)	19320102 05/21	9.62	10.00	10.22	10.00	+/- 0.1 SU	(Yes) No	
ORP (mV)	19460167 05/21	8.44	228	246	228	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)			100%	101.5%	100	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0	0.03	0.03	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1	1.08	1.03	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			10	10.16	9.71	+/- 0.5 NTU	(Yes) No	

January 2021

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Chad Russo

Date: 1/19/2021

Time (start): 1030

Time (finish): 1105

smarTroll SN: 728134

Turbidity Meter Type: Lamotte 2020we

SN: 22589-2612

Weather Conditions: ~~40F~~ 40 F 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)	20610025 8/2021	9.22	4490	4683	4490	+/- 5 %	(Yes) No	
pH (4)			4	3.99	4	+/- 0.1 SU	(Yes) No	
Mid-Day pH (4) check	19340052 8/2021	9.28	7	7.04	7	+/- 0.1 SU	(Yes) No	
pH (7)		10.72	4	4.05	4.05	+/- 0.1 SU	(Yes) No	
Mid-Day pH (7) check		10.45	7	7.65	7.05	+/- 0.1 SU	(Yes) No	
pH (10)	19320102 8/2021	9.22	10	10.12	10	+/- 0.1 SU	(Yes) No	
Mid-Day pH (10) check		10.39	16	16.06	10.06	+/- 0.1 SU	Yes No	
ORP (mV)	19460167 8/2021	8.94	228	247	228	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	102.04	100	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0	0.45	0.45	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1	0.76	0.76	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			16	10.13	16.13	+/- 0.5 NTU	(Yes) No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Chad Russo | Date: 1/20/21 | Time (start): 0945 | Time (finish): 0910

smarTroll SN: 728634 | Turbidity Meter Type: LaMotte 2020we | SN: 2289-2612

Weather Conditions: 40°F sunny | Facility and Unit: Hammond | Project No.: 60605891

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)	2005 d 025 8/21	12.87	4496	4514.5	4496	+/- 5 %	(Yes) No	
pH (4)			4	4.05	4	+/- 0.1 SU	Yes No	
Mid-Day pH (4) check		18.28	4	4.09	4.09	+/- 0.1 SU	(Yes) No	
pH (7)	19348057 8/21	12.52	7	7.02	7	+/- 0.1 SU	(Yes) No	
Mid-Day pH (7) check		15.69	7	7.06	7.06	+/- 0.1 SU	(Yes) No	
pH (10)	19320102 8/21	12.25	10	10.08	10	+/- 0.1 SU	(Yes) No	
Mid-Day pH (10) check		13.85	~~13.85~~ 10	10.07	10.07	+/- 0.1 SU	(Yes) No	
ORP (mV)	19460167 8/21	12.2	228	243.7	226	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	99.18	100	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0	0.46	0.46	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1	0.77	0.77	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			10	9.83	9.83	+/- 0.5 NTU	(Yes) No	

February 2021

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Thomas Kessler | Date: 2/8/21 | Time (start): 1425 | Time (finish): 1500

smarTroll SN: 7285411 | Turbidity Meter Type: LaMote 2020we | SN: 2284-2612

Weather Conditions: Sunny, 55° | Facility and Unit: Plant Hammond AP-1/2 | 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)	20010025 08/21	25° 21.32	4490	4689.8	4490	+/- 5 %	Yes / No	
pH (4)			4.00	4.04	4.00	+/- 0.1 SU	Yes / No	
Mid-Day pH (4) check		22.0	4.00	4.03	—	+/- 0.1 SU	Yes / No	
pH (7)	19340057 08/21	21.10	7.00	7.44	7.00	+/- 0.1 SU	Yes / No	
Mid-Day pH (7) check	—	21.83	7.00	7.02	—	+/- 0.1 SU	Yes / No	
pH (10)	19320162 08/21	21.83	10.00	10.41	10.00	+/- 0.1 SU	Yes / No	
Mid-Day pH (10) check	—	22.0	10.00	9.96	—	+/- 0.1 SU	Yes / No	
ORP (mV)	19460167 08/21	21.52	228	221.9	228	+/- 20mV	Yes / No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	103.15	100%	+/- 6 % saturation	Yes / No	
Turbidity 0 NTU	[redacted]		0	-.27	0	+/- 0.5 NTU	Yes / No	
Turbidity 1 NTU	[redacted]		1.00	0.81	0.93	+/- 0.5 NTU	Yes / No	
Turbidity 10 NTU	[redacted]		10.00	12.3	9.64	+/- 0.5 NTU	Yes / No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Thomas Kessler | Date 2/9/21 | Time (start): 0812 | Time (finish): 0900

smarTroll SN: 728541 | Turbidity Meter Type LaMote 2020we | SN: 2289-2612

Weather Conditions: cloudy, 45° | Facility and Unit: Plant Hammond AP-1/2 | 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)	20010085 08/21	9.05	4490	45539	4490	+/- 5 %	Yes No	
pH (4)			4.00	4.01	4.00	+/- 0.1 SU	Yes No	
Mid-Day pH (4) check	✓	~~9.21~~	4.00	4.06 ~~7.02~~	✓	+/- 0.1 SU	Yes No	good temp = 12.2
pH (7)	19340057 08/21	9.71	7.00	7.02	7.00	+/- 0.1 SU	Yes No	
Mid-Day pH (7) check	✓	11.3	7.00	7.01	—	+/- 0.1 SU	Yes No	good
pH (10)	19320102 08/21	10.16	10.00	10.19	10.00	+/- 0.1 SU	Yes No	
Mid-Day pH (10) check	✓	12.8	10.00	9.96	—	+/- 0.1 SU	Yes No	good
ORP (mV)	19460167 08/21	10.24	228	251.2	228	+/- 20mV	Yes No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	96.7	100	+/- 6 % saturation	Yes No	
Turbidity 0 NTU			0	0.06 ~~.27~~	0.08 ~~.8~~	+/- 0.5 NTU	Yes No	
Turbidity 1 NTU			1.00	0.63	0.74	+/- 0.5 NTU	Yes No	
Turbidity 10 NTU			10.00	10.94	9.95	+/- 0.5 NTU	Yes No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Thomas Kressler | Date: 9/10/21 | Time (start): 0806 | Time (finish): 0900

smarTroll SN: 728541 | Turbidity Meter Type: LaMote 2020we | SN: 2289-2612

Weather Conditions: foggy, 56° | Facility and Unit: Plant Hammond AP-1/2 | 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)	19340057 08/21	8.47	4490	4500.9	4490	+/- 5 %	Yes No	
pH (4)			4.00	4.11	4.00	+/- 0.1 SU	Yes No	
Mid-Day pH (4) check	—	9.98	4.00	3.96	—	+/- 0.1 SU	Yes No	geo cond
pH (7)	20010025 08/21	8.62	7.00	7.01	7.00	+/- 0.1 SU	Yes No	
Mid-Day pH (7) check	—	10.3	7.00	7.06	—	+/- 0.1 SU	Yes No	geo cond
pH (10)	19320102 08/21	8.57	10.00	10.06	10.00	+/- 0.1 SU	Yes No	
Mid-Day pH (10) check	—	10.2	10.00	10.01	—	+/- 0.1 SU	Yes No	geo cond
ORP (mV)	14460067 04/21	8.61	228	228.5	228	+/- 20mV	Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	99.17	100	+/- 6 % saturation	Yes No	
Turbidity 0 NTU			0	0.52	0.00	+/- 0.5 NTU	Yes No	
Turbidity 1 NTU			1.00	0.45	~~0.56~~ 1.00	+/- 0.5 NTU	Yes No	
Turbidity 10 NTU			10.00	11.69	10.16	+/- 0.5 NTU	Yes No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Thomas Kessler | Date: 2/11/21 | Time (start): 0815 | Time (finish): 0840

smarTroll SN: 72541 | Turbidity Meter Type: LaMote 2020we | SN: 2289-2617

Weather Conditions: Cloudy 50° | Facility and Unit: Plant Hammond AP-1/2 | 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)	20010025 08/21	14.90	4490	45160	4490	+/- 5 %	Yes No	
pH (4)	↓		4.00	4.06	4.00	+/- 0.1 SU	Yes No	
Mid-Day pH (4) check	—	16.09	4.00	4.09	—	+/- 0.1 SU	Yes No	good
pH (7)	19340057 08/21	14.90 ~~7.86~~	7.00	7.04	7.00	+/- 0.1 SU	Yes No	
Mid-Day pH (7) check	↓	16.01	7.00	7.07	—	+/- 0.1 SU	Yes No	good
pH (10)	19320102 08/21	15.12	10.00	10.05	10.00	+/- 0.1 SU	Yes No	
Mid-Day pH (10) check	↓	16.21	10.00	9.99	—	+/- 0.1 SU	Yes No	good
ORP (mV)	19460167 08/21	15.22	228	215.9	228	+/- 20mV	Yes No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	99.67	100	+/- 6 % saturation	Yes No	
Turbidity 0 NTU	[redacted]		0	0.66	0.01	+/- 0.5 NTU	Yes No	
Turbidity 1 NTU	[redacted]		1.00	0.34	1.00	+/- 0.5 NTU	Yes No	
Turbidity 10 NTU	[redacted]		10.00	11.48	9.89	+/- 0.5 NTU	Yes No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Thomas Kessler | Date: 2/12/20 | Time (start): 0810 | Time (finish): 0830

smarTroll SN: 7 28541 | Turbidity Meter Type: LaMote 2020we | SN: 229.2612

Weather Conditions: Cloudy, 50° | Facility and Unit: Plant Hammond AP-1/2 | 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)	20010025 08/21	13.39	4490	4452.0	4490	+/- 5 %	Yes No	
pH (4)			4.00	3.92	4.00	+/- 0.1 SU	Yes No	
Mid-Day pH (4) check		14.06 ~~13.36~~	4.00	3.96 ~~3.92~~	~~4.00~~	+/- 0.1 SU	Yes No	good
pH (7)	19340057 08/12	13.13	7.00	7.01	7.00	+/- 0.1 SU	Yes No	
Mid-Day pH (7) check	—	14.12	7.00	7.06	—	+/- 0.1 SU	Yes No	good
pH (10)	19320102 08/21	13.05	10.00	10.00	10.00	+/- 0.1 SU	Yes No	
Mid-Day pH (10) check	—	14.6	10.00	10.07	—	+/- 0.1 SU	Yes No	good
ORP (mV)	19460167 08/21	12.90	228	232.4	228	+/- 20mV	Yes No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	98.96	100	+/- 6 % saturation	Yes No	
Turbidity 0 NTU			0	.86	0	+/- 0.5 NTU	Yes No	
Turbidity 1 NTU			1.00	.39	1	+/- 0.5 NTU	Yes No	
Turbidity 10 NTU			10.00	10.95	9.93	+/- 0.5 NTU	Yes No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Thomas Wessler

Date: 2/15/21

Time (start): 0835

Time (finish): 0910

smarTroll SN: 728541

Turbidity Meter Type: LaMote 2020we

SN: 2289-2612

Weather Conditions: Foggy, 38°

Facility and Unit: Plant Hammond AP-1/2

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)	20010025 08/21	5.18	4490	~~4518.7~~ 4548.7	4440	+/- 5 %	Yes No	
pH (4)	↓		4.00	4.02	4.00	+/- 0.1 SU	Yes No	
Mid-Day pH (4) check	↓	6.99	4.00	3.91	—	+/- 0.1 SU	Yes No	good
pH (7)	19340057 08/21	5.51	7.00	7.10	7.00	+/- 0.1 SU	Yes No	
Mid-Day pH (7) check	↓	7.10	7.00	6.97	—	+/- 0.1 SU	Yes No	good
pH (10)	19320102 08/21	6.03	10.00	10.16	10.00	+/- 0.1 SU	Yes No	
Mid-Day pH (10) check	↓	7.06	10.00	10.02	—	+/- 0.1 SU	Yes No	good
ORP (mV)	19460167 08/21	6.34	228	239.0	228	+/- 20mV	Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	109.43	100	+/- 6 % saturation	Yes No	
Turbidity 0 NTU			0	0.01	0.00	+/- 0.5 NTU	Yes No	
Turbidity 1 NTU			1.00	0.24	1.00	+/- 0.5 NTU	Yes No	
Turbidity 10 NTU			10.00	11.61	10.00	+/- 0.5 NTU	Yes No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Thomas Kessler | Date: 2/16/21 | Time (start): 0904 | Time (finish): 0956

smarTroll SN: 7285411 | Turbidity Meter Type: LaMote 2020we | SN: 2289-2612

Weather Conditions: Snowing, 20° | Facility and Unit: Plant Hammond AP-1/2 | 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)	20010025 08/21	5.44	4490	4177.9	4490	+/- 5 %	(Yes) No	
pH (4)			4.00	4.05	4.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (4) check	↓	2.99	4.00	4.00	—	+/- 0.1 SU	(Yes) No	good
pH (7)	19340051 08/21	3.55	7.00	7.08	7.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (7) check	↓	2.89	7.00	7.09	—	+/- 0.1 SU	(Yes) No	good
pH (10)	19320102 08/21	3.46	10.00	10.12	10.0	+/- 0.1 SU	(Yes) No	
Mid-Day pH (10) check	↓	2.70	10.00	10.01	—	+/- 0.1 SU	(Yes) No	good
ORP (mV)	19460167 08/21	3.50	228	232.1	228	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)			100	100.30	100	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0	0.00	0.00	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1.00	1.45	1.00	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			10.00	8.28	9.63	+/- 0.5 NTU	(Yes) No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Chad Russo | Date: 4/9/24 | Time (start): 1420 | Time (finish): 1450

smarTroll SN: 728639 | Turbidity Meter Type: LaMote 2020we | SN: 2283-2612

Weather Conditions: 50°F sunny | Facility and Unit: Plant Hammond AP-1/2 | 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)	20010025	19.71	4490	4693.2	4490	+/- 5 %	(Yes) No	
pH (4)	8/24		4.00	3.93	4	+/- 0.1 SU	(Yes) No	
Mid-Day pH (4) check	19340057 8/2024	19.31	4.00	~~7.38~~		+/- 0.1 SU	Yes No	
pH (7)			7.00	7.38	7	+/- 0.1 SU	(Yes) No	
Mid-Day pH (7) check			7.00			+/- 0.1 SU	Yes No	
pH (10)	19320162 8/24	19.49	10.00	10.43	10	+/- 0.1 SU	(Yes) No	
Mid-Day pH (10) check			10.00			+/- 0.1 SU	Yes No	
ORP (mV)	19460167 8/24	17.58	228	224.3	228	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)			100	99.63	100	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0	0	0	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1.00	0.92	0.82	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			10.00	9.14	9.81	+/- 0.5 NTU	(Yes) No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Chad Russo

Date: 2/9/2021

Time (start): 0835

Time (finish): 0900

smarTroll SN: 728634

Turbidity Meter Type: LaMote 2020we

SN: 2283-2612

Weather Conditions: 45°F cloudy

Facility and Unit: Plant Hammond AP-1/2

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)	2001B625 8/2024	14.09	4490	4460.1	4490	+/- 5 %	Yes No	
pH (4)			4.00	4.04	4	+/- 0.1 SU	Yes No	
Mid-Day pH (4) check	2001B625 8/2021	17.48	4.00	4.06	4.06	+/- 0.1 SU	Yes No	
pH (7)	19340057 8/2021	14.40	7.00	7.06	7	+/- 0.1 SU	Yes No	
Mid-Day pH (7) check	19340057 8/2021	18.15	7.00	7.07	7.07	+/- 0.1 SU	Yes No	
pH (10)	19320102 8/2021	14.58	10.00	10.11	10	+/- 0.1 SU	Yes No	
Mid-Day pH (10) check	19320102 5/2021	18.02	10.00	10.03	10.03	+/- 0.1 SU	Yes No	
ORP (mV)	19466167 8/2021	14.76	228	235.1	228	+/- 20mV	Yes No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	100.45	100	+/- 6 % saturation	Yes No	
Turbidity 0 NTU			0	0	0	+/- 0.5 NTU	Yes No	
Turbidity 1 NTU			1.00	1.01	1.01	+/- 0.5 NTU	Yes No	
Turbidity 10 NTU			10.00	10.05	10.05	+/- 0.5 NTU	Yes No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Chad Russo

Date: ~~2/9/21~~ 2/10/2021

Time (start): 0900

Time (finish): 0930

smarTroll SN: 728634

Turbidity Meter Type: LaMote 2020we

SN: 2283-2612

Weather Conditions: 40°F overcast

Facility and Unit: Plant Hammond AP-1/2

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)	20010025 8/2021	12.11	4490	4562	4490	+/- 5 %	Yes / No	
pH (4)			4.00	4.10	4	+/- 0.1 SU	Yes / No	
Mid-Day pH (4) check	20010025 8/2021	25.77	4.00	4.06	4.06	+/- 0.1 SU	Yes / No	
pH (7)	19340057 8/2021	12.38	7.00	7.03	7	+/- 0.1 SU	Yes / No	
Mid-Day pH (7) check	19340057 8/2021	23.32	7.00	7.02	7.02	+/- 0.1 SU	Yes / No	
pH (10)	19320102 8/2021	12.52	10.00	10.07	10	+/- 0.1 SU	Yes / No	
Mid-Day pH (10) check	19320102 8/2021	24.82	10.00	9.93	9.93	+/- 0.1 SU	Yes / No	
ORP (mV)	19460167 8/2021	12.68	228	245.3	228	+/- 20mV	Yes / No	
DO (%) (1pt, 100% water saturated air cal)			100	100.22	100	+/- 6 % saturation	Yes / No	
Turbidity 0 NTU			0	0	0	+/- 0.5 NTU	Yes / No	
Turbidity 1 NTU			1.00	1.09	1	+/- 0.5 NTU	Yes / No	
Turbidity 10 NTU			10.00	9.87	~~10~~ 9.87	+/- 0.5 NTU	Yes / No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Chad Russo

Date: 2/11/2021

Time (start): 0845

Time (finish): 0910

smarTroll SN: 728634

Turbidity Meter Type: LaMote 2020we

SN: 2203-2612

Weather Conditions: 50°F raining

Facility and Unit: Plant Hammond AP-1/2

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)	20010075 8/2021	15.74	4490	4569	4490	+/- 5 %	Yes No	
pH (4)			4.00	4	4	+/- 0.1 SU	Yes No	
Mid-Day pH (4) check	19340057 8/21		4.00			+/- 0.1 SU	Yes No	
pH (7)	19340057 8/2021	16.45	7.00	7.02	7	+/- 0.1 SU	Yes No	
Mid-Day pH (7) check			7.00			+/- 0.1 SU	Yes No	
pH (10)	19320102 8/2021	16.9	10.00	9.98	10	+/- 0.1 SU	Yes No	
Mid-Day pH (10) check			10.00			+/- 0.1 SU	Yes No	
ORP (mV)	19460161 8/2021	17.17	228	237.4	228	+/- 20mV	Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	99.26	100	+/- 6 % saturation	Yes No	
Turbidity 0 NTU			0	0	0	+/- 0.5 NTU	Yes No	
Turbidity 1 NTU			1.00	1.26	1.21	+/- 0.5 NTU	Yes No	
Turbidity 10 NTU			10.00	9.70	9.70	+/- 0.5 NTU	Yes No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Chad Russo | Date: 2/12/21 | Time (start): 0830 | Time (finish): 0900

smarTroll SN: 728634 | Turbidity Meter Type: LaMote 2020we | SN: 2283-2612

Weather Conditions: 50°F rain | Facility and Unit: Plant Hammond AP-1/2 | 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)	20916035 8/2021	14.62	4490	4472.3	4490	+/- 5 %	Yes / No	
pH (4)			4.00	4	4	+/- 0.1 SU	Yes / No	
Mid-Day pH (4) check	19340057 8/21	14.96	4.00	7.01	7	+/- 0.1 SU	Yes / No	
pH (7)	20100058 8/21	13.00	7.00	4.10	4.10	+/- 0.1 SU	Yes / No	
Mid-Day pH (7) check	19340057 8/21	12.66	7.00	7.04	7.04	+/- 0.1 SU	Yes / No	
pH (10)	19320102 8/2021	15.36	10.00	10.05	10	+/- 0.1 SU	Yes / No	
Mid-Day pH (10) check	19320102 8/2021	12.75	10.00	10.08	10.08	+/- 0.1 SU	Yes / No	
ORP (mV)	19460167 8/2021	14.89	228	242	228	+/- 20mV	Yes / No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	99.15	100	+/- 6 % saturation	Yes / No	
Turbidity 0 NTU			0	0	0	+/- 0.5 NTU	Yes / No	
Turbidity 1 NTU			1.00	1.18	1.18	+/- 0.5 NTU	Yes / No	
Turbidity 10 NTU			10.00	9.74	9.74	+/- 0.5 NTU	Yes / No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Chad Russo | Date: 2/15/2024 | Time (start): 0845 | Time (finish): 0900

smarTroll SN: 928634 | Turbidity Meter Type: LaMote 2020we | SN: 2283-2612

Weather Conditions: 45°F overcast | Facility and Unit: Plant Hammond AP-1/2 | 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)	20010025 8/2024	7.02	4490	4444.1	4490	+/- 5 %	Yes / No	
pH (4)			4.00	4.05	4	+/- 0.1 SU	Yes / No	
Mid-Day pH (4) check	19340057 8/2024	6.27	4.00	7.03	7	+/- 0.1 SU	Yes / No	
pH (7)	20010025 8/2024	9.47	7.00	4.06	4.06	+/- 0.1 SU	Yes / No	
Mid-Day pH (7) check	19340057 8/2024	9.89	7.00	7.06	7.06	+/- 0.1 SU	Yes / No	
pH (10)	19320162 8/2024	6.77	10.00	10.16	10	+/- 0.1 SU	Yes / No	
Mid-Day pH (10) check	19320162 8/2024	9.96	10.00	10.04	10.04	+/- 0.1 SU	Yes / No	
ORP (mV)	19460167 8/2024	6.82	228	255.5	228	+/- 20mV	Yes / No	
DO (%) (1pt, 100% water saturated air cal)			100	100.40	100	+/- 6 % saturation	Yes / No	
Turbidity 0 NTU			0	0.83	0	+/- 0.5 NTU	Yes / No	
Turbidity 1 NTU			1.00	1.32	1.32	+/- 0.5 NTU	Yes / No	
Turbidity 10 NTU			10.00	9.46	10	+/- 0.5 NTU	Yes / No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Chad Rosso | Date: 2/16/2021 | Time (start): 0930 | Time (finish): 1000

smarTroll SN: 728634 | Turbidity Meter Type: LaMote 2020we | SN: 2283-2612

Weather Conditions: 20 degrees, Snowing | Facility and Unit: Plant Hammond AP-1/2 | 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)	20100525 8/2021	10.06	4490	4513.4	4490	+/- 5 %	Yes / No	
pH (4)	↓		4.00	4.03	4	+/- 0.1 SU	Yes / No	
Mid-Day pH (4) check		7.62	4.00	3.99		+/- 0.1 SU	Yes / No	
pH (7)	19340857 9/2021	9.59	7.00	7.04	7	+/- 0.1 SU	Yes / No	
Mid-Day pH (7) check	↓	7.91	7.00	6.97		+/- 0.1 SU	Yes / No	
pH (10)	19320102 8/2021	9.17	10.00	10.09	10	+/- 0.1 SU	Yes / No	
Mid-Day pH (10) check	19460167 9/2021	9.02	10.00	249.2	228	+/- 0.1 SU	Yes / No	
ORP (mV)		7.0	228	10.02		+/- 20mV	Yes / No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	96.06	100	+/- 6 % saturation	Yes / No	
Turbidity 0 NTU	[redacted]		0	0	0	+/- 0.5 NTU	Yes / No	
Turbidity 1 NTU	[redacted]		1.00	1.25	1.25	+/- 0.5 NTU	Yes / No	
Turbidity 10 NTU	[redacted]		10.00	9.56	9.56	+/- 0.5 NTU	Yes / No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Aaron Reeder

Date: 2-8-2021

Time (start): 1415

Time (finish): 1453

smarTroll SN: 728623

Turbidity Meter Type: LaMotte 2020 wi

SN: 6411-1416

Weather Conditions: Sunny 59/43

Facility and Unit: Plant Hammond

Project No.: 6V6581

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)	Lot# 20010025 08/2021	22.11	4490	4912.2	4490	+/- 5 %	Yes No	
pH (4)			4.00	3.98	4.0	+/- 0.1 SU	Yes No	
Mid-Day pH (4) check	~~1934005?~~ ~~08/2021~~	~~19.54~~	~~4.00~~ ~~7.00~~	~~3.40~~ ~~7.45~~	~~7.00~~	+/- 0.1 SU	Yes No	
pH (7)	~~193[illegible]~~ 1934005? 08/2021	18.63	7.00	7.45	7.00	+/- 0.1 SU	Yes No	
Mid-Day pH (7) check	1934005? 08/21	18.50	7.00	7.03		+/- 0.1 SU	Yes No	
pH (10)	19320102 08/2021	18.63	10.00	10.40	10.00	+/- 0.1 SU	Yes No	
Mid-Day pH (10) check	19320102 08/21	18.60	10.00	10.02		+/- 0.1 SU	Yes No	
ORP (mV)	19460147 08/2021	18.70	+228	+225	+228	+/- 20mV	Yes No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100 %	113.97	100 %	+/- 6 % saturation	Yes No	
Turbidity 0 NTU			0	0.03	0	+/- 0.5 NTU	Yes No	
Turbidity 1 NTU			1	1.02	1.00	+/- 0.5 NTU	Yes No	
Turbidity 10 NTU			10	10.05	10.00	+/- 0.5 NTU	Yes No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Aaron Reeder | Date: 2-9-2021 | Time (start): 0804 | Time (finish): 0835

smarTroll SN: 728623 | Turbidity Meter Type: LaMotte 2020we | SN: 6411-1416

Weather Conditions: Cloudy Drizzle | Facility and Unit: Plant Hammond | Project No.: 6465 1

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)	20010025 8-2021	6.51	4490	4543.7	4490	+/- 5 %	Yes / No	
pH (4)	↓	6.59	4.00	3.85	4.00	+/- 0.1 SU	Yes / No	
Mid-Day pH (4) check	↓	8.70	4.00	3.96		+/- 0.1 SU	Yes / No	
pH (7)	19340057 08/2021	8.32	7.00	6.93	7.00	+/- 0.1 SU	Yes / No	
Mid-Day pH (7) check	↓	8.75	7.00	7.02		+/- 0.1 SU	Yes / No	
pH (10)	19320102 8-2021	8.78	10.00	10.11	10.00	+/- 0.1 SU	Yes / No	
Mid-Day pH (10) check	↓	8.69	10.00	10.03		+/- 0.1 SU	Yes / No	
ORP (mV)	19460167 8-2021	8.76	+228	253.0	228.0	+/- 20mV	Yes / No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]	[redacted]	100 %	97.63	100	+/- 6 % saturation	Yes / No	
Turbidity 0 NTU	[redacted]	[redacted]	0	0	0	+/- 0.5 NTU	Yes / No	
Turbidity 1 NTU	[redacted]	[redacted]	1	1.34	1.0	+/- 0.5 NTU	Yes / No	
Turbidity 10 NTU	[redacted]	[redacted]	10	9.45	10	+/- 0.5 NTU	Yes / No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Aaron Reeder | Date: 2-10-2021 | Time (start): 0820 | Time (finish): 0843

smarTroll SN: 728623 | Turbidity Meter Type: Lamotte 2020 we | SN: 6411-1416

Weather Conditions: mostly cloudy Hi 70°/Lo 38° | 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)	20010025 08/2021	13.40	4490	4454.4	4490	+/- 5 %	Yes / No	
pH (4)	↓		4.00	4.06	4.00	+/- 0.1 SU	Yes / No	
Mid-Day pH (4) check		12.5	4.00	4.00		+/- 0.1 SU	Yes / No	
pH (7)	19340057 08/2021	13.00 ~~12.76~~	7.00	7.05	7.00	+/- 0.1 SU	Yes / No	
Mid-Day pH (7) check	↓	12.6	7.00	7.06		+/- 0.1 SU	Yes / No	
pH (10)	19320102 08/2021	12.97	10.00	10.07	10.00	+/- 0.1 SU	Yes / No	
Mid-Day pH (10) check	↓	12.55	10.00	9.98		+/- 0.1 SU	Yes / No	
ORP (mV)	19460167 08/2021	11.43	+228	221.8	228.0	+/- 20mV	Yes / No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100%	104.38	100%	+/- 6 % saturation	Yes / No	
Turbidity 0 NTU	[redacted]		0	-0.02	0	+/- 0.5 NTU	Yes / No	
Turbidity 1 NTU	[redacted]		1	0.84	1	+/- 0.5 NTU	Yes / No	
Turbidity 10 NTU	[redacted]		10	8.87	10	+/- 0.5 NTU	Yes / No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Aaron Reeder | Date: 2-11-2021 | Time (start): 0831 | Time (finish): 0900

smarTroll SN: 728623 | Turbidity Meter Type: LaMote 2020we | SN: 6411-1416

Weather Conditions: Cloudy PM. Rain | Facility and Unit: Plant Hammond AP-1/2 | 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)	20010025 08/2021	10.69	4490	4454.4	4490	+/- 5 %	Yes / No	
pH (4)	↓	10.43	4.00	4.00	4.00	+/- 0.1 SU	Yes / No	
Mid-Day pH (4) check		12.6	4.00	4.08		+/- 0.1 SU	Yes / No	
pH (7)	19340057 08/2021 ↓	12.03 ~~7.01~~	7.00	7.07	7.00	+/- 0.1 SU	Yes / No	
Mid-Day pH (7) check		11.9	7.00	7.03		+/- 0.1 SU	Yes / No	
pH (10)	19320102 08/2021 ↓	12.54	10.00	10.09	10.00	+/- 0.1 SU	Yes / No	
Mid-Day pH (10) check		12.4	10.00	9.99		+/- 0.1 SU	Yes / No	
ORP (mV)	19460167 08/2021	12.50	228	226.3	228	+/- 20mV	Yes / No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	100.32	100	+/- 6 % saturation	Yes / No	
Turbidity 0 NTU			0	0.10	0.00	+/- 0.5 NTU	Yes / No	
Turbidity 1 NTU			1.00	0.67	1.00	+/- 0.5 NTU	Yes / No	
Turbidity 10 NTU			10.00	9.35	10.00	+/- 0.5 NTU	Yes / No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Aaron Reeder | Date: 2-12-2021 | Time (start): 0812 | Time (finish): 0835

smarTroll SN: 728623 | Turbidity Meter Type: LaMote 2020we | SN: 6411-1416

Weather Conditions: Rain H: 52°/Lo 40° | Facility and Unit: Plant Hammond AP-1/2 | 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)	200100 25 08/2021	10.3 ~~25.0~~	4490	4555.3	4440	+/- 5 %	Yes / No	
pH (4)	↓	9.94	4.00	4.05	4.00	+/- 0.1 SU	Yes / No	
Mid-Day pH (4) check		10.68	4.00	~~4.00~~ 4.06		+/- 0.1 SU	Yes / No	
pH (7)	1934005T 08/2021	10.23	7.00	7.10	7.00	+/- 0.1 SU	Yes / No	
Mid-Day pH (7) check	↓	10.73	7.00	~~7.00~~ 6.93		+/- 0.1 SU	Yes / No	
pH (10)	19320102 08/2021	10.36	10.00	10.20	10.00	+/- 0.1 SU	Yes / No	
Mid-Day pH (10) check	↓	10.92	10.00	10.02		+/- 0.1 SU	Yes / No	
ORP (mV)	19460167 08/2021	10.52	228	228.6	228	+/- 20mV	Yes / No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	100.44	100	+/- 6 % saturation	Yes / No	
Turbidity 0 NTU	[redacted]		0	0	0	+/- 0.5 NTU	Yes / No	
Turbidity 1 NTU	[redacted]		1.00	0.43	1.00	+/- 0.5 NTU	Yes / No	
Turbidity 10 NTU	[redacted]		10.00	10	10	+/- 0.5 NTU	Yes / No	

March 2021

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Chad Russo

Date: 3/10/2021

Time (start): 1215

Time (finish): 1240

smarTroll SN: 728550

Turbidity Meter Type: LaMote 2020we

SN: 4411-1416

Weather Conditions: 70°F Sunny

Facility and Unit: Plant Hammond AP-1/2

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)	20010025 8/2021	19.77	4490	4449.5	4490	+/- 5 %	Yes / No	
pH (4)			4.00	3.9	4	+/- 0.1 SU	Yes / No	
Mid-Day pH (4) check	20010025 8/2021	21.23	4.00	4.02	4.02	+/- 0.1 SU	Yes / No	
pH (7)	19340057 8/2021	19.11	7.00	6.92	7	+/- 0.1 SU	Yes / No	
Mid-Day pH (7) check	19340057 8/2021	22.04	7.00	7.05	7.05	+/- 0.1 SU	Yes / No	
pH (10)	19320102 8/2021	18.50	10.00	9.98	10	+/- 0.1 SU	Yes / No	
Mid-Day pH (10) check	19320102 8/2021	21.87	10.00	10.01	10.01	+/- 0.1 SU	Yes / No	
ORP (mV)	19460167 8/2021	18.15	228	221.3	225	+/- 20mV	Yes / No	
DO (%) (1pt, 100% water saturated air cal)			100	96.47	100	+/- 6 % saturation	Yes / No	
Turbidity 0 NTU			0	6.39	0.39	+/- 0.5 NTU	Yes / No	
Turbidity 1 NTU			1.00	0.52	0.52	+/- 0.5 NTU	Yes / No	
Turbidity 10 NTU			10.00	9.94	9.94	+/- 0.5 NTU	Yes / No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Chad Russo

Date: 3/11/2021

Time (start): 0730

Time (finish): 0755

smarTroll SN: 728550

Turbidity Meter Type: LaMote 2020we

SN: 6411-1416

Weather Conditions: 45°F Clear

Facility and Unit: Plant Hammond AP-1/2

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)	20010025 8/2021	14.96	4490	4582.2	4490	+/- 5 %	Yes / No	
pH (4)			4.00	4.03	4	+/- 0.1 SU	Yes / No	
~~Mid-Day pH (7)~~ 7 check	19340057 8/2024	15.69	4.00	7.03	7	+/- 0.1 SU	Yes / No	
pH (7)	20016025 8/2021	25.97	7.00	4.05	4.05	+/- 0.1 SU	Yes / No	
Mid-Day pH (7) check	19340057 8/2021	26.07	7.00	6.95	6.95	+/- 0.1 SU	Yes / No	
pH (10)	19320102 8/2024	15.96	10.00	10.04	10	+/- 0.1 SU	Yes / No	
Mid-Day pH (10) check	19320102 8/2021	25.6	10.00	9.95	9.95	+/- 0.1 SU	Yes / No	
ORP (mV)	19460167 8/2021	16.07	228	231.4	228	+/- 20mV	Yes / No	
DO (%) (1pt, 100% water saturated air cal)			100	92.09	100	+/- 6 % saturation	Yes / No	
Turbidity 0 NTU			0	0	0	+/- 0.5 NTU	Yes / No	
Turbidity 1 NTU			1.00	0.58	0.58	+/- 0.5 NTU	Yes / No	
Turbidity 10 NTU			10.00	10.68	9.75	+/- 0.5 NTU	Yes / No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Chad Russo

Date: 3/12/2021

Time (start): 0855

Time (finish): 0855

smarTroll SN: 82550

Turbidity Meter Type: LaMote 2020we

SN: 6411-1416

Weather Conditions: 50F partly cloudy

Facility and Unit: Plant Hammond AP-1/2

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)	20010025 8/2021	19.51	4490	4520	4490	+/- 5 %	Yes / No	
pH (4)			4.00	4.02	4	+/- 0.1 SU	Yes / No	
Mid-Day pH (4) check	20010025 8/2021	25.4	4.00	3.96	3.96	+/- 0.1 SU	Yes / No	
pH (7)	19340057 8/2021	19.55	7.00	6.95	7	+/- 0.1 SU	Yes / No	
Mid-Day pH (7) check	19340057 8/2021	24.87	7.00	7.02	7.02	+/- 0.1 SU	Yes / No	
pH (10)	19320102 8/2021	19.49	10.00	9.98	10	+/- 0.1 SU	Yes / No	
Mid-Day pH (10) check	19320102 8/2021	25.18	10.00	10.04	10.04	+/- 0.1 SU	Yes / No	
ORP (mV)	19460167 8/2021	19.29	228	222.3	228	+/- 20mV	Yes / No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	99.82	100	+/- 6 % saturation	Yes / No	
Turbidity 0 NTU			0	0	0	+/- 0.5 NTU	Yes / No	
Turbidity 1 NTU			1.00	1.03	1.03	+/- 0.5 NTU	Yes / No	
Turbidity 10 NTU			10.00	9.62	9.62	+/- 0.5 NTU	Yes / No	

Geosyntec consultants
engineers | scientists | innovators

EQUIPMENT CALIBRATION LOG

Field Technician: Chad Rosso
Date: 3/15/2021
Time (start): 0740
Time (finish): 0800

smarTroll SN: 728550
Turbidity Meter Type: LaMote 2020we
SN: 6411-1416

Weather Conditions: 60°F Cloudy
Facility and Unit: Plant Hammond AP-1/2
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)	20016025 8/2021	19.11	4490	4576	4490	+/- 5 %	Yes / No	
pH (4)			4.00	4.03	4	+/- 0.1 SU	Yes / No	
Mid-Day pH (4) check	20010025 8/2021	20.16	4.00	4.19	4	+/- 0.1 SU	Yes / No	
pH (7)	19340057 8/2021		7.00	7.00	7	+/- 0.1 SU	Yes / No	
Mid-Day pH (7) check	19340057 8/2021	20.37	7.00	7.11	7	+/- 0.1 SU	Yes / No	
pH (10)	19320102 8/2021	19.77	10.00	10.03	10	+/- 0.1 SU	Yes / No	
Mid-Day pH (10) check	19320102 8/2021	20.16	10.00	10.04	10	+/- 0.1 SU	Yes / No	
ORP (mV)	19460167 8/2021	19.77	228	225.2	228	+/- 20mV	Yes / No	
DO (%) (1pt, 100% water saturated air cal)			100	85.39	100	+/- 6 % saturation	Yes / No	
Turbidity 0 NTU			0	0.03	0.03	+/- 0.5 NTU	Yes / No	
Turbidity 1 NTU			1.00	0.69	0.69	+/- 0.5 NTU	Yes / No	
Turbidity 10 NTU			10.00	7.89	10.14	+/- 0.5 NTU	Yes / No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Chad Russo

Date: 3/16/2021

Time (start): 0745

Time (finish): 0815

smarTroll SN: 228550

Turbidity Meter Type: LaMote 2020we

SN: 6911-1416

Weather Conditions: 50°F raining

Facility and Unit: Plant Hammond AP-1/2

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)	20010025 8/2021	18.21	4490	4405	4490	+/- 5 %	Yes No	
pH (4)			4.00	3.92	4	+/- 0.1 SU	Yes No	
~~Mid-Day~~ pH (~~7~~) ~~check~~	19340057 8/2021	18	4.00	6.95	7	+/- 0.1 SU	Yes No	
pH (7)	20010025 8/2021	~~19.21~~ 18.5 CB	7.00	~~6.98~~ 4.02 CB	~~6.48~~ 4.02	+/- 0.1 SU	Yes No	
Mid-Day pH (7) check	19340057 8/2021	19.21	7.00	6.98	6.98	+/- 0.1 SU	Yes No	
pH (10)	19320102 8/2021	17.99	10.00	9.99	10	+/- 0.1 SU	Yes No	
Mid-Day pH (10) check	19320102 8/2021	18.34	10.00	10.03	10.03	+/- 0.1 SU	Yes No	
ORP (mV)	19460167 8/2021	17.81	228	230.8	228	+/- 20mV	Yes No	
DO (%) (1pt. 100% water saturated air cal)			100	94.10	100	+/- 6 % saturation	Yes No	
Turbidity 0 NTU			0	0	0	+/- 0.5 NTU	Yes No	
Turbidity 1 NTU			1.00	0.22	6.71	+/- 0.5 NTU	Yes No	
Turbidity 10 NTU			10.00	7.85	10.25	+/- 0.5 NTU	Yes No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Chad Russo | Date: 3/19/2021 | Time (start): 0715 | Time (finish): 0735

smarTroll SN: 728550 | Turbidity Meter Type: LaMote 2020we | SN: 6411-1412

Weather Conditions: 50°F cloudy | Facility and Unit: Plant Hammond AP-1/2 | 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)	20010025 8/2021	15.75	4490	4506.5	4490	+/- 5 %	(Yes) No	
pH (4)			4.00	4	4	+/- 0.1 SU	(Yes) No	
Mid-Day pH (4) check	20010025 8/2021	16.5	4.00	4.01	4.01	+/- 0.1 SU	(Yes) No	
pH (7)	19340057 8/2021	15.73	7.00	7	7	+/- 0.1 SU	(Yes) No	
Mid-Day pH (7) check	19340057 8/2021	16.21	7.00	6.93	6.93	+/- 0.1 SU	(Yes) No	
pH (10)	19320102 8/2021	15.69	10.00	10.02	10	+/- 0.1 SU	(Yes) No	
Mid-Day pH (10) check	19320102 8/2021	16.04	10.00	10.05	10.05	+/- 0.1 SU	(Yes) No	
ORP (mV)	19461467 8/2021	15.59	228	231.3	228	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	88.06	100	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0	0	0	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1.00	0.94	0.94	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			10.00	9.61	9.64	+/- 0.5 NTU	(Yes) No	

Geosyntec consultants
engineers | scientists | innovators

EQUIPMENT CALIBRATION LOG

Field Technician: VASHISH TAHKOOR | Date: 3-10-2021 | Time (start): 11 20 | Time (finish): 11 30

smarTroll SN: 728 563 | Turbidity Meter Type: LaMote 2020we | SN: 710-0711

Weather Conditions: SUNNY, 55°F | Facility and Unit: Plant Hammond AP-1/2 | 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)	20010025 08/21	18.38	4490	4665	4490	+/- 5 %	(Yes) No	
pH (4)			4.00	3.96	4.00	+/- 0.1 SU	(Yes) No	
~~Mid-Day pH (4) check~~	~~"~~		~~4.00~~		~~4.00~~	~~+/- 0.1 SU~~	~~Yes No~~	
pH (7)	19340057 8/21	19.08	7.00	6.99	7.00	+/- 0.1 SU	(Yes) No	
~~Mid-Day pH (7) check~~	~~"~~		~~7.00~~		~~7.00~~	~~+/- 0.1 SU~~	~~Yes No~~	
pH (10)	19320102 8/21	18.96	10.00	10.05	10.00	+/- 0.1 SU	(Yes) No	
~~Mid-Day pH (10) check~~	~~"~~		~~10.00~~		~~10.00~~	~~+/- 0.1 SU~~	~~Yes No~~	
ORP (mV)	19460167 8/21	19.08	228	234.6	228	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	105.4	100	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0	-0.06	0	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1.00	0.92	1.00	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			10.00	10.40	1.00	+/- 0.5 NTU	(Yes) No	

Geosyntec consultants
engineers | scientists | innovators

EQUIPMENT CALIBRATION LOG

Field Technician: VASHISH TAKKOOR
Date: 3-11-2021
Time (start): 08 04
Time (finish): 0819

smarTroll SN: 728563
Turbidity Meter Type: LaMote 2020we
SN: 710-0711

Weather Conditions: SUNNY, 49°F
Facility and Unit: Plant Hammond AP-1/2
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)	20610025 08/2021	14.88	4490	4437	4490	+/- 5 %	Yes No	
pH (4)			4.00	4.01	4.00	+/- 0.1 SU	Yes No	
Mid-Day pH (4) check	"	24.19	4.00	4.05	4.00	+/- 0.1 SU	Yes No	
pH (7)	19340057 08/2021	15.50	7.00	6.88	7.00	+/- 0.1 SU	Yes No	
Mid-Day pH (7) check	"	23.10	7.00	7.03	7.00	+/- 0.1 SU	Yes No	
pH (10)	19320102 08/2021	15.31	10.00	10.06	10.00	+/- 0.1 SU	Yes No	
Mid-Day pH (10) check	"	21.96	10.00	9.98	10.00	+/- 0.1 SU	Yes No	
ORP (mV)	19460167 08/2021	14.94	228	240.8	228	+/- 20mV	Yes No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	91.19	100	+/- 6 % saturation	Yes No	
Turbidity 0 NTU			0	0.00	0	+/- 0.5 NTU	Yes No	
Turbidity 1 NTU			1.00	1.17	1.00	+/- 0.5 NTU	Yes No	
Turbidity 10 NTU			10.00	10.45	10.00	+/- 0.5 NTU	Yes No	

Geosyntec consultants
engineers | scientists | innovators

EQUIPMENT CALIBRATION LOG

Field Technician: VASHISH TANKOOR | Date: 3-12-2021 | Time (start): 0823 | Time (finish): 0837

smarTroll SN: 728 563 | Turbidity Meter Type: LaMote 2020we | SN: 710-0711

Weather Conditions: SUNNY, 50°F | Facility and Unit: Plant Hammond AP-1/2 | 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)	20610025 08/2024	20.57	4490	~~4392.6~~ 4392.6 (VT)	4490	+/- 5 %	Yes / No	
pH (4)			4.00	3.97	4.00	+/- 0.1 SU	Yes / No	
Mid-Day pH (4) check	"	23.92	4.00	4.04	4.00	+/- 0.1 SU	Yes / No	
pH (7)	19340057 08/2024	19.53	7.00	7.01	7.00	+/- 0.1 SU	Yes / No	
Mid-Day pH (7) check	"	22.74	7.00	7.06	7.00	+/- 0.1 SU	Yes / No	
pH (10)	19320102 08/2024	18.78	10.00	10.05	10.00	+/- 0.1 SU	Yes / No	
Mid-Day pH (10) check	"	21.91	10.00	9.98	10.00	+/- 0.1 SU	Yes / No	
ORP (mV)	19460167 08/2024	18.26	228	238.2	228	+/- 20mV	Yes / No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	96.86	100	+/- 6 % saturation	Yes / No	
Turbidity 0 NTU			0	-0.01	0	+/- 0.5 NTU	Yes / No	
Turbidity 1 NTU			1.00	1.11	1.00	+/- 0.5 NTU	Yes / No	
Turbidity 10 NTU			10.00	10.45	10.00	+/- 0.5 NTU	Yes / No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: VASHISH THAKKAR | Date: 3-15-2024 | Time (start): 0813 | Time (finish): 0824

smarTroll SN: 728563 | Turbidity Meter Type: LaMote 2020we | SN: 710-0711

Weather Conditions: CLOUDY, 60°F | Facility and Unit: Plant Hammond AP-1/2 | 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)	2061002S 08/24	15.74	4490	4662.8	4490	+/- 5 %	Yes / No	
pH (4)			4.00	3.96	4.00	+/- 0.1 SU	Yes / No	
Mid-Day pH (4) check	"	18.52	4.00	4.05	4.00	+/- 0.1 SU	Yes / No	
pH (7)	1934057 08/2024	18.72	7.00	6.99	7.00	+/- 0.1 SU	Yes / No	
Mid-Day pH (7) check	"	18.26	7.00	7.07	7.00	+/- 0.1 SU	Yes / No	
pH (10)	193 20102 08/2024	16.87	10.00	10.08	10.00	+/- 0.1 SU	Yes / No	
Mid-Day pH (10) check	"	17.86	10.00	10.02	10.00	+/- 0.1 SU	Yes / No	
ORP (mV)	194 0167 08/2024	16.87	228	238.8	228	+/- 20mV	Yes / No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	93.38	100	+/- 6 % saturation	Yes / No	
Turbidity 0 NTU			0	-0.02	0.00	+/- 0.5 NTU	Yes / No	
Turbidity 1 NTU			1.00	1.24	1.00	+/- 0.5 NTU	Yes / No	
Turbidity 10 NTU			10.00	9.54	10.00	+/- 0.5 NTU	Yes / No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: VASHISH TAHOOR | Date: 3-16-2021 | Time (start): 0750 | Time (finish): 0810

smarTroll SN: 728 563 | Turbidity Meter Type: LaMotte 2020we | SN: 710-0711

Weather Conditions: RAIN, 50°F | Facility and Unit: Plant Hammond AP-1/2 | 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)	20610025 08/21	16.97	4490	4396.8	4490	+/- 5 %	Yes No	
pH (4)			4.00	3.99	4.00	+/- 0.1 SU	Yes No	
Mid-Day pH (4) check	"	15.21	4.00	4.08	4.00	+/- 0.1 SU	Yes No	
pH (7)	19340057 08/21	17.01	7.00	6.95	7.00	+/- 0.1 SU	Yes No	
Mid-Day pH (7) check	"	15.93	7.00	7.05	7.00	+/- 0.1 SU	Yes No	
pH (10)	19320102 08/21	17.01	10.00	9.98	10.00	+/- 0.1 SU	Yes No	
Mid-Day pH (10) check	"	16.28	10.00	10.04	10.00	+/- 0.1 SU	Yes No	
ORP (mV)	19460107 08/21	16.93	228	238.7	228	+/- 20mV	Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	99.79	100	+/- 6 % saturation	Yes No	
Turbidity 0 NTU			0	0.03	0	+/- 0.5 NTU	Yes No	
Turbidity 1 NTU			1.00	1.07	1.00	+/- 0.5 NTU	Yes No	
Turbidity 10 NTU			10.00	9.62	10.00	+/- 0.5 NTU	Yes No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: VASHISH THAKKOR | Date: 3-17-2021 | Time (start): 0730 | Time (finish): 0739

smarTroll SN: 728563 | Turbidity Meter Type: LaMotte 2020we | SN: 710-0711

Weather Conditions: SHOWERS/THUNDERSTORMS, 50°F | Facility and Unit: Plant Hammond AP-1/2 | 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)	20610025 08/21	16.07	4490	4489.2	4490	+/- 5 %	Yes / No	
pH (4)			4.00	3.95	4.00	+/- 0.1 SU	Yes / No	
Mid-Day pH (4) check	"	18.91	4.00	4.07	4.00	+/- 0.1 SU	Yes / No	
pH (7)	19340057 08/21	16.02	7.00	7.00	7.00	+/- 0.1 SU	Yes / No	
Mid-Day pH (7) check	"	19.50	7.00	6.99	7.00	+/- 0.1 SU	Yes / No	
pH (10)	19320102 08/21	15.76	10.00	10.09	10.00	+/- 0.1 SU	Yes / No	
Mid-Day pH (10) check	"	19.28	10.00	10.01	10.00	+/- 0.1 SU	Yes / No	
ORP (mV)	19460107 08/21	15.06	228	240.2	228	+/- 20mV	Yes / No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	95.73	100	+/- 6 % saturation	Yes / No	
Turbidity 0 NTU			0	<0.01	0	+/- 0.5 NTU	Yes / No	
Turbidity 1 NTU			1.00	1.10	1.00	+/- 0.5 NTU	Yes / No	
Turbidity 10 NTU			10.00	10.87	10.00	+/- 0.5 NTU	Yes / No	

Geosyntec consultants
engineers | scientists | innovators

EQUIPMENT CALIBRATION LOG

Field Technician: Thomas Kessler ✓ | Date: 3/10/21 | Time (start): 1130 | Time (finish): ~~10~~ 1240

smarTroll SN: 728566 | Turbidity Meter Type: LaMote 2020we | SN: 12289-2617

Weather Conditions: Sunny 70 | Facility and Unit: Plant Hammond AP-1/2 | 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)	2001CC-28 08/21	15.96	4490	4368.3	4490	+/- 5 %	(Yes) No	
pH (4)			4.00	4.08	4.0	+/- 0.1 SU	(Yes) No	
Mid-Day pH (4) check			4.00			+/- 0.1 SU	Yes No	
pH (7)	1934 0C57 8/21	15.43	7.00	7.04	~~7.00~~	+/- 0.1 SU	(Yes) No	
Mid-Day pH (7) check			7.00			+/- 0.1 SU	Yes No	
pH (10)	193 2902 08/21	14.89	10.00	9.99	10.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (10) check			10.00			+/- 0.1 SU	Yes No	
ORP (mV)	194160167 08/21	14.39	228	214	228	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)			100	101.73	100	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0	1.07	0.00	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1.00	1.03	1.03	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			10.00	8.23	10.03	+/- 0.5 NTU	(Yes) No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Thomas Kessler | Date: 3/11/21 | Time (start): 0740 | Time (finish): 0810

smarTroll SN: 228566 | Turbidity Meter Type: LaMote 2020we | SN: 2289-2812

Weather Conditions: Sunny, 70° | Facility and Unit: Plant Hammond AP-1/2 | 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)	20010025 08/21	15	4490	4332.5	4490	+/- 5 %	(Yes) No	
pH (4)			4.00	3.98	4.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (4) check			4.00	~~4.10~~ 3.98 4.09	—	+/- 0.1 SU	(Yes) No	within range
pH (7)	19340057	15	7.00	7.04	7.04	+/- 0.1 SU	(Yes) No	
Mid-Day pH (7) check			7.00	6.98	—	+/- 0.1 SU	Yes No	within Range
pH (10)	19329027 08/21	15	10.00	10.17	10.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (10) check			10.00	9.92	—	+/- 0.1 SU	Yes No	within Range
ORP (mV)	19460167 08/21	15	228	237.6	228	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)			100	93.07	100	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0	0.19	0.00	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1.00	0.93	1.00	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			10.00	10.45	10.00	+/- 0.5 NTU	(Yes) No	

Geosyntec consultants
engineers | scientists | innovators

EQUIPMENT CALIBRATION LOG

Field Technician: Thomas Kessler | Date: 3/12/21 | Time (start): 0715 | Time (finish): 0900

smarTroll SN: 728566 | Turbidity Meter Type: LaMote 2020we | SN: 12289-262

Weather Conditions: Sunny, 70° | Facility and Unit: Plant Hammond AP-1/2 | 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)	20610078 08/21	13.18	4490	4471.9	4490	+/- 5 %	(Yes) No	
pH (4)			4.00	4.05	4.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (4) check	~	~	4.00	4.07	~	+/- 0.1 SU	Yes No	within Range
pH (7)	08/21 19340057	13.10	7.00	6.99	7.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (7) check	~	~	7.00	7.02	~	+/- 0.1 SU	Yes No	within Range
pH (10)	19329021 08/21	13.09	10.00	9.98	10.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (10) check	~	~	10.00	10.01	~	+/- 0.1 SU	Yes No	within Range
ORP (mV)	19460167 08/21	13.33	228	243.5	228	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)			100	96.39		+/- 6 % saturation	Yes No	
Turbidity 0 NTU			0	0.89	0.00	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1.00	1.31	1.05	+/- 0.5 NTU	(Yes) No	
Turbidity 10 NTU			10.00	7.99	10.00	+/- 0.5 NTU	(Yes) No	

Geosyntec consultants
engineers | scientists | innovators

EQUIPMENT CALIBRATION LOG

Field Technician: Thomas Kessler

Date: 3/15/21

Time (start): 7:15

Time (finish): 745

smarTroll SN: 728562

Turbidity Meter Type: LaMote 2020we

SN: 122892612

Weather Conditions:

Facility and Unit: Plant Hammond AP-1/2

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)	20010025 08/21	15.35	4490	4530.3	4490	+/- 5 %	Yes No	
pH (4)			4.00	3.99	4.00	+/- 0.1 SU	Yes No	
Mid-Day pH (4) check			4.00	4.02		+/- 0.1 SU	Yes No	within range
pH (7)	19340057 08/21	15.71	7.00	7.04	7.00	+/- 0.1 SU	Yes No	
Mid-Day pH (7) check			7.00	6.99		+/- 0.1 SU	Yes No	within range
pH (10)	1932902 08/21	15.84	10.00	10.01	10.00	+/- 0.1 SU	Yes No	
Mid-Day pH (10) check			10.00	10.00		+/- 0.1 SU	Yes No	within range
ORP (mV)	19460167 08/21	15.80	228	227.22	228	+/- 20mV	Yes No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	95.71	100	+/- 6 % saturation	Yes No	
Turbidity 0 NTU			0	0.00	0.00	+/- 0.5 NTU	Yes No	
Turbidity 1 NTU			1.00	0.17	1.05	+/- 0.5 NTU	Yes No	
Turbidity 10 NTU			10.00	10.34	10.00	+/- 0.5 NTU	Yes No	

Geosyntec consultants

EQUIPMENT CALIBRATION LOG

Field Technician: Thomas Wheeler | Date: 3/6/21 | Time (start): 0730 | Time (finish): 0810

smarTroll SN: 728562 | Turbidity Meter Type: LaMotte 2020we | SN: 12789-2612

Weather Conditions: cloudy/~~foggy~~ Rainy | Facility and Unit: Plant Hammond AP-1/2 | 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)	2301005 08/21	12.94	4490	4523.2	4490	+/- 5 %	Yes No	
pH (4)			4.00	3.99		+/- 0.1 SU	Yes No	
Mid-Day pH (4) check		~~12.94~~	4.00	4.07	4.00	+/- 0.1 SU	Yes No	
pH (7)	19310057 08/21	13.23	7.00	7.04	7.00	+/- 0.1 SU	Yes No	
Mid-Day pH (7) check			7.00	7.01		+/- 0.1 SU	Yes No	
pH (10)	19329002 08/21	13.46	10.00	10.06	10.00	+/- 0.1 SU	Yes No	
Mid-Day pH (10) check			10.00	9.97		+/- 0.1 SU	Yes No	
ORP (mV)	19460167 08/21	13.35	228	230.9	228	+/- 20mV	Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	95.73	100	+/- 6 % saturation	Yes No	
Turbidity 0 NTU			0	0.00	0.00	+/- 0.5 NTU	Yes No	
Turbidity 1 NTU			1.00	0.27	1.00	+/- 0.5 NTU	Yes No	
Turbidity 10 NTU			10.00	11.29	10.00	+/- 0.5 NTU	Yes No	

Geosyntec consultants
engineers | scientists | innovators

EQUIPMENT CALIBRATION LOG

Field Technician: Thomas Thompson | Date: 3/17 | Time (start): 7:20 | Time (finish): 0850

smarTroll SN: 728566 | Turbidity Meter Type: LaMote 2020we | SN: 12289-2612

Weather Conditions: cloudy/rainy 50° | Facility and Unit: Plant Hammond AP-1/2 | 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)	2601005 08/21	11.21	4490	4435.6	4490	+/- 5 %	(Yes) No	
pH (4)			4.00	3.99	4.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (4) check			4.00	4.00		+/- 0.1 SU	(Yes) No	within Range
pH (7)	1937100587 08/21	11.23	7.00	7.05	7.00	+/- 0.1 SU	(Yes) No	
Mid-Day pH (7) check			7.00	7.02		+/- 0.1 SU	(Yes) No	
pH (10)	1937902 08/21	[illegible]	10.00	10.02		+/- 0.1 SU	(Yes) No	
Mid-Day pH (10) check		11.29	10.00	10.06	10.00	+/- 0.1 SU	(Yes) No	
ORP (mV)	RU460161 08/21	11.34	228	247.8	228	+/- 20mV	(Yes) No	
DO (%) (1pt, 100% water saturated air cal)	[redacted]		100	95.72	100	+/- 6 % saturation	(Yes) No	
Turbidity 0 NTU			0	1.10	0.00	+/- 0.5 NTU	(Yes) No	
Turbidity 1 NTU			1.00	0.27	1.01	+/- 0.5 NTU	Yes No	
Turbidity 10 NTU			10.00	9.02	10	+/- 0.5 NTU	Yes No	

APPENDIX D

Statistical Analysis Report

GROUNDWATER STATS CONSULTING

August 24, 2021

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 – March 2021 Sample Event

Dear Ms. Jurinko,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the March 2021 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 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
- **Delineation wells:** MW-5, MW-6, MW-7, MW-19, MW-20, MW24D, MW-25D, MW-26D, MW-27D, MW-28D, and MW-29

Wells HGWA-43D and HGWA-44D are new upgradient wells that currently have a maximum of six sampling events. These wells were sampled in September, November, and December 2020, and January, February, and March 2021. The February 2021 sampling event was a Scan event during which only Appendix IV constituents were sampled.

Delineation wells are included on time series and box plots for all parameters. When a minimum of 4 samples is available, these wells are evaluated using confidence intervals for the Appendix IV constituents. For the delineation wells previously identified, sampling began in March 2019. Wells MW-30D and MW-40D were included as delineation wells during previous reporting periods, but each were 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, Groundwater Statistician and Founder of Groundwater Stats Consulting. The statistical analysis was performed according to the groundwater screening that was performed in April 2018 by GSC and approved by Dr. Cameron, PhD Statistician with MacStat Consulting and primary author of the USEPA Unified Guidance (2009).

The CCR program consists of the constituents listed below. The terms “parameters” and “constituents” are used interchangeably.

- **Appendix III** (Detection Monitoring) **-** boron, calcium, chloride, fluoride, pH, sulfate, and TDS
- **Appendix IV** (Assessment Monitoring) **–** antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A summary of Appendix IV downgradient and delineation well/constituent pairs with 100% non-detects follows this letter. Additionally, annual Scan events are conducted to determine which Appendix IV constituents are detected in downgradient wells and, therefore, require statistical analysis. Any constituents that are not detected do not require statistical analysis. During the annual Scan event conducted in February 2021, mercury was not detected and was not required to be sampled during the subsequent event.

For all constituents, a substitution of the most recent reporting limit is used for non-detect data. In the case of lithium, a reporting limit of 0.03 mg/L was substituted across all wells which is the most recent reporting limit by the laboratory.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. 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 in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Note that values shown on data pages reflect raw data and any non-detects that have been substituted with one-half of the reporting limit 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 – March 2021

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed for Appendix III parameters using all historical upgradient well data through March 2021 (Figure D). Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The most recent sample from each downgradient well is compared to the background limit to determine whether there are statistically significant increases (SSIs).

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When 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 March 2021 compliance data from downgradient wells were compared to interwell prediction limits, several exceedances were identified. A summary table of these findings is provided along with the prediction limits (Figure D).

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (Figure E). Upgradient well data are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. Upgradient trends are an indication of natural 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), HGWC-7, and HGWC-9
- Sulfate: HGWA-2 (upgradient) and HGWA-3 (upgradient)

Decreasing trends:

- Boron: HGWC-13
- Calcium: HGWC-12
- Chloride: HGWC-9 and HGWC-12
- Sulfate: HGWC-12
- TDS: HGWC-12

Statistical Methods – Appendix IV Parameters

Appendix IV parameters are evaluated by statistically comparing the mean or median of each downgradient well/constituent pair against corresponding Groundwater Protection Standards (GWPS). The GWPS may be either regulatory (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 – March 2021

Site specific background limits were calculated as upper one-sided tolerance limits (UTLs) on pooled upgradient well data all historical upgradient well data through March 2021 (Figure F). When varying detection limits were present in upgradient wells, all non-detects were substituted with the most recent reporting limit. As mentioned above, an alternate reporting limit of 0.03 mg/L was substituted across all wells for lithium. Parametric tolerance limits were used when data follow a normal or transformed-normal distribution. When data contained greater than 50% non-detects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used. The background limits were then used when determining the groundwater protection standard (GWPS) under 40 CFR §257.95(h) and Georgia EPD Rule 391-3-4-.10(6)(a).

As described in 40 CFR §257.95(h) (1-3), the GWPS is:

- The maximum contaminant level (MCL) established under §141.62 and §141.66 of this title
- Where an MCL has not been established for a constituent, CCR-rule specified levels have been specified for cobalt (0.006 mg/L), lead (0.015 mg/L), lithium (0.040 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

On July 30, 2018, USEPA revised the Federal CCR Rule updating GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR §257.95(h)(2). Georgia EPD has not incorporated the updated GWPS into the current Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a); therefore, for sites regulated under Georgia EPD Rules, the GWPS is:

- The MCL or
- The background concentration when an MCL is not established or when the background concentration is higher than the MCL.

Following the above Georgia EPD Rule requirements and the CCR Rule, State and Federal GWPS were established for statistical comparison of Appendix IV constituents for the March 2021 sample event (Figure G). Delineation wells were included when a minimum of 4 samples were available. Note that a GWPS is established for mercury; however, since it was not sampled during the March 2021 sampling event, no statistical comparison with confidence intervals is required.

To complete the statistical comparison to GWPS, confidence intervals were constructed for each of the Appendix IV constituents in each downgradient well and delineation wells with 4 or more samples. The Sanitas software was used to calculate the tolerance limits and the confidence intervals, either parametric or nonparametric, as appropriate. For the State requirements, confidence intervals were compared to the GWPS established using the Georgia EPD Rules 391-3-4-.10(6)(a). For Federal requirements, confidence intervals were compared to the GWPS prepared according to the CCR Rule. 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. Note that reporting limits decreased for the following constituents during this analysis:

- Beryllium from <0.003 mg/L to <0.0005 mg/L
- Cadmium from <0.0025 mg/L to <0.0005 mg/L
- Chromium from <0.01 mg/L to <0.005 mg/L
- Lead from <0.005 mg/L to <0.001 mg/L
- Selenium from <0.01 mg/L to <0.005 mg/L

As a result, background limits were lower for these constituents. However, in all cases, except for lead which uses the background limit as the GWPS, the established MCL was higher than the background limits. Therefore, the GWPS were not affected. Additionally, some of the confidence intervals constructed on downgradient wells resulted in decreased upper and lower confidence limits since all historical non-detects within a given well are replaced with the most recent reporting limit.

Summaries of the confidence interval results, along with graphical comparison against GWPS for both State and Federal requirements follow this letter (Figures H and I, respectively). Exceedances were noted for the following well/constituent pairs:

State:

- Arsenic: HGWC-13
- Lithium: MW-25D
- Molybdenum: HGWC-7, HGWC-8, HGWC-9, HGWC-11, HGWC-12, HGWC-13, and MW-19

Federal:

- Arsenic: HGWC-13
- Lithium: MW-25D
- Molybdenum: HGWC-8

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 T. Collins
Project Manager

Kristina L. Rayner
Groundwater Statistician

100% Non-Detects: Appendix IV Downgradient & Delineation

Analysis Run 5/4/2021 7:29 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, HGWC-8, MW-24D, MW-5, MW-6, MW-7

Beryllium (mg/L)
HGWC-10, HGWC-12, HGWC-9, MW-19, 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

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 5/4/2021, 7:20 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	0.4	n/a	3/12/2021	0.64	Yes	60	n/a	n/a	3.333	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-11	0.4	n/a	3/16/2021	0.53	Yes	60	n/a	n/a	3.333	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-12	0.4	n/a	3/16/2021	1.9	Yes	60	n/a	n/a	3.333	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-13	0.4	n/a	3/17/2021	0.89	Yes	60	n/a	n/a	3.333	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-7	0.4	n/a	3/15/2021	1.1	Yes	60	n/a	n/a	3.333	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-8	0.4	n/a	3/15/2021	1.7	Yes	60	n/a	n/a	3.333	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-9	0.4	n/a	3/16/2021	2.2	Yes	60	n/a	n/a	3.333	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-10	137.2	n/a	3/12/2021	146	Yes	60	66.19	37	0	None	No	0.001075	Param Inter 1 of 2
Calcium (mg/L)	HGWC-12	137.2	n/a	3/16/2021	166	Yes	60	66.19	37	0	None	No	0.001075	Param Inter 1 of 2
Calcium (mg/L)	HGWC-13	137.2	n/a	3/17/2021	184	Yes	60	66.19	37	0	None	No	0.001075	Param Inter 1 of 2
Calcium (mg/L)	HGWC-8	137.2	n/a	3/15/2021	156	Yes	60	66.19	37	0	None	No	0.001075	Param Inter 1 of 2
Calcium (mg/L)	HGWC-9	137.2	n/a	3/16/2021	182	Yes	60	66.19	37	0	None	No	0.001075	Param Inter 1 of 2
Chloride (mg/L)	HGWC-12	41.1	n/a	3/16/2021	56.8	Yes	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-7	41.1	n/a	3/15/2021	44.5	Yes	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-8	41.1	n/a	3/15/2021	72.4	Yes	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-9	41.1	n/a	3/16/2021	94.7	Yes	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-10	88.2	n/a	3/12/2021	120	Yes	60	n/a	n/a	1.667	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-11	88.2	n/a	3/16/2021	291	Yes	60	n/a	n/a	1.667	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-12	88.2	n/a	3/16/2021	248	Yes	60	n/a	n/a	1.667	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-13	88.2	n/a	3/17/2021	384	Yes	60	n/a	n/a	1.667	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-7	88.2	n/a	3/15/2021	107	Yes	60	n/a	n/a	1.667	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-8	88.2	n/a	3/15/2021	272	Yes	60	n/a	n/a	1.667	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-9	88.2	n/a	3/16/2021	211	Yes	60	n/a	n/a	1.667	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-13	632	n/a	3/17/2021	716	Yes	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-9	632	n/a	3/16/2021	672	Yes	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2

Appendix III Interwell Prediction Limits - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 5/4/2021, 7:20 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**	**0.4**	**n/a**	**3/12/2021**	**0.64**	**Yes**	**60**	**n/a**	**n/a**	**3.333**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-11**	**0.4**	**n/a**	**3/16/2021**	**0.53**	**Yes**	**60**	**n/a**	**n/a**	**3.333**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-12**	**0.4**	**n/a**	**3/16/2021**	**1.9**	**Yes**	**60**	**n/a**	**n/a**	**3.333**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-13**	**0.4**	**n/a**	**3/17/2021**	**0.89**	**Yes**	**60**	**n/a**	**n/a**	**3.333**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-7**	**0.4**	**n/a**	**3/15/2021**	**1.1**	**Yes**	**60**	**n/a**	**n/a**	**3.333**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-8**	**0.4**	**n/a**	**3/15/2021**	**1.7**	**Yes**	**60**	**n/a**	**n/a**	**3.333**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-9**	**0.4**	**n/a**	**3/16/2021**	**2.2**	**Yes**	**60**	**n/a**	**n/a**	**3.333**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-10**	**137.2**	**n/a**	**3/12/2021**	**146**	**Yes**	**60**	**66.19**	**37**	**0**	**None**	**No**	**0.001075**	**Param Inter 1 of 2**
Calcium (mg/L)	HGWC-11	137.2	n/a	3/16/2021	132	No	60	66.19	37	0	None	No	0.001075	Param Inter 1 of 2
Calcium (mg/L)	**HGWC-12**	**137.2**	**n/a**	**3/16/2021**	**166**	**Yes**	**60**	**66.19**	**37**	**0**	**None**	**No**	**0.001075**	**Param Inter 1 of 2**
Calcium (mg/L)	**HGWC-13**	**137.2**	**n/a**	**3/17/2021**	**184**	**Yes**	**60**	**66.19**	**37**	**0**	**None**	**No**	**0.001075**	**Param Inter 1 of 2**
Calcium (mg/L)	HGWC-7	137.2	n/a	3/15/2021	113	No	60	66.19	37	0	None	No	0.001075	Param Inter 1 of 2
Calcium (mg/L)	**HGWC-8**	**137.2**	**n/a**	**3/15/2021**	**156**	**Yes**	**60**	**66.19**	**37**	**0**	**None**	**No**	**0.001075**	**Param Inter 1 of 2**
Calcium (mg/L)	**HGWC-9**	**137.2**	**n/a**	**3/16/2021**	**182**	**Yes**	**60**	**66.19**	**37**	**0**	**None**	**No**	**0.001075**	**Param Inter 1 of 2**
Chloride (mg/L)	HGWC-10	41.1	n/a	3/12/2021	35	No	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-11	41.1	n/a	3/16/2021	11.5	No	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Chloride (mg/L)	**HGWC-12**	**41.1**	**n/a**	**3/16/2021**	**56.8**	**Yes**	**60**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	HGWC-13	41.1	n/a	3/17/2021	31.4	No	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Chloride (mg/L)	**HGWC-7**	**41.1**	**n/a**	**3/15/2021**	**44.5**	**Yes**	**60**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**HGWC-8**	**41.1**	**n/a**	**3/15/2021**	**72.4**	**Yes**	**60**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**HGWC-9**	**41.1**	**n/a**	**3/16/2021**	**94.7**	**Yes**	**60**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Fluoride (mg/L)	HGWC-10	0.74	n/a	3/12/2021	0.054J	No	74	n/a	n/a	31.08	n/a	n/a	0.0003513	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-11	0.74	n/a	3/16/2021	0.21	No	74	n/a	n/a	31.08	n/a	n/a	0.0003513	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-12	0.74	n/a	3/16/2021	0.2	No	74	n/a	n/a	31.08	n/a	n/a	0.0003513	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-13	0.74	n/a	3/17/2021	0.65	No	74	n/a	n/a	31.08	n/a	n/a	0.0003513	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-7	0.74	n/a	3/15/2021	0.086J	No	74	n/a	n/a	31.08	n/a	n/a	0.0003513	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-8	0.74	n/a	3/15/2021	0.51	No	74	n/a	n/a	31.08	n/a	n/a	0.0003513	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-9	0.74	n/a	3/16/2021	0.098J	No	74	n/a	n/a	31.08	n/a	n/a	0.0003513	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-10	7.92	4.9	3/12/2021	6.76	No	74	n/a	n/a	0	n/a	n/a	0.0007026	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-11	7.92	4.9	3/16/2021	5.95	No	74	n/a	n/a	0	n/a	n/a	0.0007026	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-12	7.92	4.9	3/16/2021	7.15	No	74	n/a	n/a	0	n/a	n/a	0.0007026	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-13	7.92	4.9	3/17/2021	7.33	No	74	n/a	n/a	0	n/a	n/a	0.0007026	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-7	7.92	4.9	3/15/2021	7.19	No	74	n/a	n/a	0	n/a	n/a	0.0007026	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-8	7.92	4.9	3/15/2021	7.09	No	74	n/a	n/a	0	n/a	n/a	0.0007026	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-9	7.92	4.9	3/16/2021	7.1	No	74	n/a	n/a	0	n/a	n/a	0.0007026	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**HGWC-10**	**88.2**	**n/a**	**3/12/2021**	**120**	**Yes**	**60**	**n/a**	**n/a**	**1.667**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-11**	**88.2**	**n/a**	**3/16/2021**	**291**	**Yes**	**60**	**n/a**	**n/a**	**1.667**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-12**	**88.2**	**n/a**	**3/16/2021**	**248**	**Yes**	**60**	**n/a**	**n/a**	**1.667**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-13**	**88.2**	**n/a**	**3/17/2021**	**384**	**Yes**	**60**	**n/a**	**n/a**	**1.667**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-7**	**88.2**	**n/a**	**3/15/2021**	**107**	**Yes**	**60**	**n/a**	**n/a**	**1.667**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-8**	**88.2**	**n/a**	**3/15/2021**	**272**	**Yes**	**60**	**n/a**	**n/a**	**1.667**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-9**	**88.2**	**n/a**	**3/16/2021**	**211**	**Yes**	**60**	**n/a**	**n/a**	**1.667**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	HGWC-10	632	n/a	3/12/2021	490	No	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-11	632	n/a	3/16/2021	558	No	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-12	632	n/a	3/16/2021	614	No	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**HGWC-13**	**632**	**n/a**	**3/17/2021**	**716**	**Yes**	**60**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	HGWC-7	632	n/a	3/15/2021	370	No	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-8	632	n/a	3/15/2021	614	No	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**HGWC-9**	**632**	**n/a**	**3/16/2021**	**672**	**Yes**	**60**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**

Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 5/5/2021, 11:47 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**HGWA-2 (bg)**	**0.00257**	**72**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-13**	**-0.2856**	**-63**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-7**	**0.04974**	**80**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-9**	**0.1581**	**61**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**HGWC-12**	**-13.85**	**-59**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**HGWC-12**	**-27.06**	**-82**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**HGWC-9**	**-11.82**	**-70**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWA-2 (bg)**	**1.382**	**64**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWA-3 (bg)**	**1.515**	**77**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWC-12**	**-29.88**	**-62**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Trend Tests - Prediction Limit Exceedances - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 5/5/2021, 11:47 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	HGWA-1 (bg)	-0.00003204	-3	-63	No	17	0	n/a	n/a	0.01	NP
Boron (mg/L)	**HGWA-2 (bg)**	**0.00257**	**72**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	HGWA-3 (bg)	-0.0002616	-15	-63	No	17	11.76	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-10	0.03846	10	58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-11	-0.2774	-48	-58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-12	-0.2012	-47	-58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	**HGWC-13**	**-0.2856**	**-63**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-7**	**0.04974**	**80**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	HGWC-8	0.1969	43	63	No	17	0	n/a	n/a	0.01	NP
Boron (mg/L)	**HGWC-9**	**0.1581**	**61**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	HGWA-43D (bg)	-0.02892	-4	-12	No	5	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-44D (bg)	0.3386	8	12	No	5	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-1 (bg)	4.579	52	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-2 (bg)	0.3424	16	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-3 (bg)	2.895	58	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-10	-4.329	-28	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**HGWC-12**	**-13.85**	**-59**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	HGWC-13	9.634	7	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-8	-3.956	-40	-63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-9	0.3307	12	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-43D (bg)	-5.439	-2	-12	No	5	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-44D (bg)	-27.77	-4	-12	No	5	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-1 (bg)	1.507	45	63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-2 (bg)	-0.2299	-53	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-3 (bg)	-0.1011	-40	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**HGWC-12**	**-27.06**	**-82**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	HGWC-7	-0.8457	-32	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-8	-8.438	-55	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**HGWC-9**	**-11.82**	**-70**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	HGWA-43D (bg)	0.5656	3	12	No	5	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-44D (bg)	9.78	10	12	No	5	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-1 (bg)	4.851	51	63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**HGWA-2 (bg)**	**1.382**	**64**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWA-3 (bg)**	**1.515**	**77**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	HGWC-10	-5.5	-31	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-11	-14.95	-18	-58	No	16	6.25	n/a	n/a	0.01	NP
Sulfate (mg/L)	**HGWC-12**	**-29.88**	**-62**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	HGWC-13	10.64	6	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-7	0.9989	19	63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-8	-13.34	-29	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-9	-5.2	-42	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-43D (bg)	-8.995	-8	-12	No	5	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-44D (bg)	-2.396	-2	-12	No	5	20	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-1 (bg)	10.91	22	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-2 (bg)	-1.42	-11	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-3 (bg)	0.6748	7	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-13	-7.676	0	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-9	-50.47	-36	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-43D (bg)	-24.14	-2	-12	No	5	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-44D (bg)	31.49	4	12	No	5	0	n/a	n/a	0.01	NP

Upper Tolerance Limits Summary Table

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 5/4/2021, 7:25 PM

Constituent	Upper Lim.	Lower Lim.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.003	n/a	n/a	63	n/a	n/a	76.19	n/a	n/a	0.0395	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	n/a	69	n/a	n/a	66.67	n/a	n/a	0.02904	NP Inter(NDs)
Barium (mg/L)	0.46	n/a	n/a	69	n/a	n/a	0	n/a	n/a	0.02904	NP Inter(normality)
Beryllium (mg/L)	0.0005	n/a	n/a	63	n/a	n/a	77.78	n/a	n/a	0.0395	NP Inter(NDs)
Cadmium (mg/L)	0.0005	n/a	n/a	63	n/a	n/a	87.3	n/a	n/a	0.0395	NP Inter(NDs)
Chromium (mg/L)	0.0079	n/a	n/a	63	n/a	n/a	80.95	n/a	n/a	0.0395	NP Inter(NDs)
Cobalt (mg/L)	0.038	n/a	n/a	63	n/a	n/a	71.43	n/a	n/a	0.0395	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	4.36	n/a	n/a	69	n/a	n/a	0	n/a	n/a	0.02904	NP Inter(normality)
Fluoride (mg/L)	0.74	n/a	n/a	74	n/a	n/a	31.08	n/a	n/a	0.02247	NP Inter(normality)
Lead (mg/L)	0.001	n/a	n/a	60	n/a	n/a	58.33	n/a	n/a	0.04607	NP Inter(NDs)
Lithium (mg/L)	0.034	n/a	n/a	69	n/a	n/a	23.19	n/a	n/a	0.02904	NP Inter(normality)
Mercury (mg/L)	0.0005	n/a	n/a	46	n/a	n/a	95.65	n/a	n/a	0.09447	NP Inter(NDs)
Molybdenum (mg/L)	0.01	n/a	n/a	71	n/a	n/a	83.1	n/a	n/a	0.0262	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	n/a	69	n/a	n/a	98.55	n/a	n/a	0.02904	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	69	n/a	n/a	98.55	n/a	n/a	0.02904	NP Inter(NDs)

PLANT HAMMOND AP-1 GWPS (State)				
Constituent Name	**MCL**	**CCR-Rule Specified**	**Background Limit**	**State 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		0.74	4
Lead, Total (mg/L)	n/a	0.015	0.001	0.001
Lithium, Total (mg/L)	n/a	0.04	0.034	0.034
Mercury, Total (mg/L)	0.002		0.0005	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.01	0.01
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

**Grey cell indidcates background is higher than MCL or CCR-Rule*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residuals*

**GWPS = Groundwater Protection Statard*

PLANT HAMMOND AP-1 GWPS (Federal)				
Constituent Name	**MCL**	**CCR-Rule Specified**	**Background Limit**	**Federal 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		0.74	4
Lead, Total (mg/L)	n/a	0.015	0.001	0.015
Lithium, Total (mg/L)	n/a	0.04	0.034	0.04
Mercury, Total (mg/L)	0.002		0.0005	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*

State Confidence Intervals - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 5/4/2021, 7:37 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**HGWC-13**	**0.4313**	**0.3592**	**0.01**	**Yes**	**19**	**0.3953**	**0.06154**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**MW-25D**	**0.05155**	**0.04545**	**0.034**	**Yes**	**8**	**0.0485**	**0.002878**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**HGWC-11**	**0.02514**	**0.01508**	**0.01**	**Yes**	**19**	**0.02011**	**0.00859**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**HGWC-12**	**0.04978**	**0.0457**	**0.01**	**Yes**	**19**	**0.04774**	**0.003483**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**HGWC-13**	**0.03593**	**0.0301**	**0.01**	**Yes**	**19**	**0.03302**	**0.004974**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**HGWC-7**	**0.04274**	**0.03437**	**0.01**	**Yes**	**20**	**0.03856**	**0.007368**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**HGWC-8**	**0.4928**	**0.4503**	**0.01**	**Yes**	**20**	**0.4716**	**0.03743**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**HGWC-9**	**0.033**	**0.0234**	**0.01**	**Yes**	**19**	**0.05098**	**0.1033**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Molybdenum (mg/L)	**MW-19**	**0.06073**	**0.03377**	**0.01**	**Yes**	**8**	**0.04725**	**0.01271**	**0**	**None**	**No**	**0.01**	**Param.**

State Confidence Intervals - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 5/4/2021, 7:37 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	0.00065	0.006	No	17	0.002862	0.00057	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-11	0.003	0.00038	0.006	No	17	0.002846	0.0006354	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-13	0.003	0.00036	0.006	No	17	0.001925	0.001327	58.82	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-7	0.003	0.00034	0.006	No	17	0.002844	0.0006451	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-8	0.003	0.00064	0.006	No	17	0.002861	0.0005724	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-9	0.003	0.00043	0.006	No	17	0.002539	0.001026	82.35	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-24D	0.003	0.0017	0.006	No	8	0.002838	0.0004596	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	MW-26D	0.003	0.0013	0.006	No	8	0.002663	0.0006523	75	None	No	0.004	NP (NDs)
Antimony (mg/L)	MW-27D	0.003	0.00016	0.006	No	8	0.0009775	0.00125	25	None	No	0.004	NP (normality)
Antimony (mg/L)	MW-28D	0.003	0.0019	0.006	No	8	0.002863	0.0003889	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	MW-29	0.003	0.00094	0.006	No	8	0.002743	0.0007283	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	MW-6	0.003	0.0014	0.006	No	8	0.0028	0.0005657	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	MW-7	0.003	0.00051	0.006	No	8	0.002096	0.001065	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	HGWC-11	0.005	0.0015	0.01	No	19	0.003266	0.001768	42.11	None	No	0.01	NP (normality)
Arsenic (mg/L)	HGWC-12	0.004589	0.003137	0.01	No	19	0.003863	0.00124	10.53	None	No	0.01	Param.
Arsenic (mg/L)	**HGWC-13**	**0.4313**	**0.3592**	**0.01**	**Yes**	**19**	**0.3953**	**0.06154**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	HGWC-7	0.005	0.0019	0.01	No	19	0.004837	0.0007112	94.74	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-9	0.005	0.0008	0.01	No	19	0.004312	0.001635	84.21	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-19	0.005	0.00045	0.01	No	8	0.004431	0.001609	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-20	0.005	0.00038	0.01	No	8	0.003577	0.002033	62.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-25D	0.005	0.00075	0.01	No	8	0.003094	0.002064	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	MW-26D	0.005	0.0006	0.01	No	8	0.003925	0.001991	75	None	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-27D	0.005	0.0002	0.01	No	8	0.003361	0.002272	62.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-28D	0.005	0.0011	0.01	No	8	0.004512	0.001379	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-29	0.005	0.00037	0.01	No	8	0.004421	0.001637	87.5	None	No	0.004	NP (NDs)
Barium (mg/L)	HGWC-10	0.08901	0.06608	2	No	19	0.07754	0.01958	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-11	0.05343	0.03154	2	No	19	0.04375	0.02072	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	HGWC-12	0.13	0.084	2	No	19	0.1029	0.02097	0	None	No	0.01	NP (normality)
Barium (mg/L)	HGWC-13	0.09256	0.06961	2	No	19	0.08108	0.0196	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-7	0.07536	0.06864	2	No	19	0.072	0.005743	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-8	0.0829	0.06	2	No	19	0.06984	0.01122	0	None	No	0.01	NP (normality)
Barium (mg/L)	HGWC-9	0.1226	0.1065	2	No	19	0.1146	0.01374	0	None	No	0.01	Param.
Barium (mg/L)	MW-19	0.0677	0.0498	2	No	8	0.05875	0.008447	0	None	No	0.01	Param.
Barium (mg/L)	MW-20	0.098	0.08425	2	No	8	0.09113	0.00649	0	None	No	0.01	Param.
Barium (mg/L)	MW-24D	0.08729	0.04433	2	No	8	0.06538	0.02462	0	None	ln(x)	0.01	Param.
Barium (mg/L)	MW-25D	0.4797	0.3928	2	No	8	0.4363	0.04104	0	None	No	0.01	Param.
Barium (mg/L)	MW-26D	0.17	0.093	2	No	8	0.1131	0.02538	0	None	No	0.004	NP (normality)
Barium (mg/L)	MW-27D	1.5	0.95	2	No	8	1.088	0.1866	0	None	No	0.004	NP (normality)
Barium (mg/L)	MW-28D	0.7327	0.1773	2	No	8	0.455	0.262	0	None	No	0.01	Param.
Barium (mg/L)	MW-29	0.08638	0.07637	2	No	8	0.08138	0.004719	0	None	No	0.01	Param.
Barium (mg/L)	MW-5	0.05227	0.04398	2	No	8	0.04813	0.003907	0	None	No	0.01	Param.
Barium (mg/L)	MW-6	0.09421	0.08179	2	No	8	0.088	0.005855	0	None	No	0.01	Param.
Barium (mg/L)	MW-7	0.06481	0.04669	2	No	8	0.05575	0.008548	0	None	No	0.01	Param.
Beryllium (mg/L)	HGWC-11	0.0005	0.0001	0.004	No	17	0.000341	0.000197	58.82	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-13	0.0005	0.000097	0.004	No	17	0.000333	0.000206	58.82	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-7	0.0005	0.00019	0.004	No	17	0.0004322	0.0001526	82.35	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-8	0.0005	0.0001	0.004	No	17	0.0004014	0.0001834	76.47	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-28D	0.0005	0.000048	0.004	No	8	0.0003428	0.0002188	62.5	None	No	0.004	NP (NDs)
Beryllium (mg/L)	MW-7	0.0005	0.000051	0.004	No	8	0.0004439	0.0001587	87.5	None	No	0.004	NP (NDs)
Cadmium (mg/L)	HGWC-10	0.0005	0.0001	0.005	No	17	0.0003421	0.0001959	58.82	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-11	0.0005	0.0001	0.005	No	17	0.0004292	0.0001577	82.35	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-12	0.0005	0.0003	0.005	No	17	0.0004259	0.000143	76.47	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-7	0.0005	0.0002	0.005	No	17	0.0004235	0.0001437	76.47	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-8	0.00032	0.00014	0.005	No	17	0.0003141	0.0003708	5.882	None	No	0.01	NP (normality)
Cadmium (mg/L)	HGWC-9	0.0005	0.0002	0.005	No	17	0.0004335	0.00015	82.35	None	No	0.01	NP (NDs)

State Confidence Intervals - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 5/4/2021, 7:37 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cadmium (mg/L)	MW-19	0.0002284	0.0001459	0.005	No	8	0.000265	0.0001497	25	Kaplan-Meier	ln(x)	0.01	Param.
Chromium (mg/L)	HGWC-10	0.02	0.005	0.1	No	17	0.005882	0.003638	94.12	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-11	0.005	0.00061	0.1	No	17	0.004465	0.00151	88.24	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-12	0.005	0.0025	0.1	No	17	0.004342	0.001516	82.35	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-13	0.005	0.00059	0.1	No	17	0.004209	0.001762	82.35	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-7	0.071	0.0016	0.1	No	17	0.007779	0.01639	64.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-8	0.005	0.0015	0.1	No	17	0.004031	0.001811	76.47	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-9	0.005	0.00067	0.1	No	17	0.004482	0.001463	88.24	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-19	0.005	0.00047	0.1	No	8	0.00254	0.002111	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	MW-20	0.005	0.00051	0.1	No	8	0.003362	0.002261	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-24D	0.005	0.00042	0.1	No	8	0.004015	0.001856	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-25D	0.005	0.00061	0.1	No	8	0.004451	0.001552	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-26D	0.005	0.00076	0.1	No	8	0.002757	0.001958	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	MW-27D	0.005	0.0007	0.1	No	8	0.00394	0.001963	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-28D	0.005	0.00078	0.1	No	8	0.002692	0.002009	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	MW-29	0.005	0.001	0.1	No	8	0.0045	0.001414	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-5	0.004565	0.00231	0.1	No	8	0.003438	0.001064	0	None	No	0.01	Param.
Chromium (mg/L)	MW-6	0.005	0.00044	0.1	No	8	0.003879	0.002077	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-7	0.005	0.0013	0.1	No	8	0.00215	0.001198	12.5	None	No	0.004	NP (normality)
Cobalt (mg/L)	HGWC-10	0.005	0.0007	0.038	No	17	0.003506	0.00209	64.71	None	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-11	0.00192	0.0009744	0.038	No	17	0.002656	0.001712	29.41	Kaplan-Meier	ln(x)	0.01	Param.
Cobalt (mg/L)	HGWC-12	0.0021	0.0012	0.038	No	17	0.001871	0.001212	11.76	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-13	0.004247	0.002671	0.038	No	17	0.003459	0.001258	5.882	None	No	0.01	Param.
Cobalt (mg/L)	HGWC-7	0.0026	0.0005	0.038	No	17	0.001598	0.001703	17.65	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-8	0.0023	0.0019	0.038	No	17	0.002204	0.0007606	5.882	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-9	0.0011	0.00057	0.038	No	17	0.001238	0.001459	11.76	None	No	0.01	NP (normality)
Cobalt (mg/L)	MW-19	0.04433	0.02892	0.038	No	8	0.03663	0.007269	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-20	0.005	0.0011	0.038	No	8	0.004512	0.001379	87.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	MW-24D	0.005	0.00025	0.038	No	8	0.003364	0.00227	62.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	MW-26D	0.005	0.0003	0.038	No	8	0.002715	0.002444	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	MW-27D	0.005	0.000091	0.038	No	8	0.003243	0.002428	62.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	MW-28D	0.005	0.00093	0.038	No	8	0.004491	0.001439	87.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	MW-29	0.001302	0.0005925	0.038	No	8	0.0009475	0.0003349	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-6	0.005	0.00036	0.038	No	8	0.00109	0.00159	12.5	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	HGWC-10	1.137	0.597	5	No	19	0.8671	0.4612	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-11	1.226	0.6603	5	No	19	0.9432	0.4832	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-12	1.1	0.548	5	No	19	0.8239	0.4713	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-13	1.052	0.5958	5	No	19	0.824	0.3897	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-7	0.9855	0.4718	5	No	19	0.7699	0.4916	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-8	0.9892	0.6793	5	No	19	0.8343	0.2646	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-9	0.959	0.541	5	No	19	0.75	0.3569	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-19	1.183	0.4412	5	No	8	0.8119	0.3497	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-20	1.185	0.2405	5	No	8	0.713	0.4458	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-24D	0.8936	0.0469	5	No	8	0.4703	0.3994	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-25D	1.296	0.7346	5	No	8	1.015	0.2647	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-26D	1.275	0.1638	5	No	8	0.7193	0.524	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-27D	1.938	0.7381	5	No	8	1.338	0.5659	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-28D	1.449	0.4152	5	No	8	0.9321	0.4877	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-29	1.144	0.2969	5	No	8	0.7203	0.3994	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-5	1.116	0.5638	5	No	8	0.8399	0.2604	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-6	2.07	0.198	5	No	8	0.8654	0.5289	0	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	MW-7	1.363	0.6459	5	No	8	1.004	0.3382	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-10	0.2311	0.08652	4	No	20	0.1758	0.1484	15	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	HGWC-11	0.4538	0.2685	4	No	20	0.3612	0.1632	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-12	0.4227	0.1819	4	No	20	0.3266	0.2544	5	None	sqrt(x)	0.01	Param.

State Confidence Intervals - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 5/4/2021, 7:37 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	HGWC-13	0.7221	0.5018	4	No	20	0.6119	0.194	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-7	0.1671	0.08288	4	No	21	0.1468	0.1188	9.524	None	ln(x)	0.01	Param.
Fluoride (mg/L)	HGWC-8	0.6486	0.4876	4	No	21	0.5823	0.1742	0	None	ln(x)	0.01	Param.
Fluoride (mg/L)	HGWC-9	0.2594	0.08768	4	No	20	0.1957	0.1662	10	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	MW-19	0.3621	0.09633	4	No	8	0.2245	0.1448	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	MW-20	0.072	0.05	4	No	8	0.05275	0.007778	87.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	MW-24D	0.18	0.048	4	No	8	0.07088	0.04503	37.5	None	No	0.004	NP (normality)
Fluoride (mg/L)	MW-25D	2.2	1.4	4	No	8	1.65	0.239	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	MW-26D	0.19	0.044	4	No	8	0.075	0.0477	12.5	None	No	0.004	NP (normality)
Fluoride (mg/L)	MW-27D	0.42	0.22	4	No	8	0.27	0.06302	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	MW-28D	0.2674	0.1476	4	No	8	0.2075	0.05651	0	None	No	0.01	Param.
Fluoride (mg/L)	MW-29	0.18	0.045	4	No	8	0.06813	0.04582	62.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	MW-5	0.09236	0.04939	4	No	8	0.07088	0.02027	12.5	None	No	0.01	Param.
Fluoride (mg/L)	MW-6	0.19	0.05	4	No	8	0.1014	0.06371	25	None	No	0.004	NP (normality)
Fluoride (mg/L)	MW-7	0.17	0.05	4	No	8	0.06738	0.042	75	None	No	0.004	NP (NDs)
Lead (mg/L)	HGWC-10	0.001	0.00005	0.001	No	15	0.0009367	0.0002453	93.33	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-11	0.001	0.000099	0.001	No	15	0.0006706	0.0004226	60	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-12	0.001	0.000089	0.001	No	15	0.0007159	0.0004245	66.67	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-13	0.001	0.00014	0.001	No	15	0.0006527	0.000441	60	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-7	0.001	0.00009	0.001	No	15	0.0005996	0.0004589	40	None	No	0.01	NP (normality)
Lead (mg/L)	HGWC-8	0.001	0.00013	0.001	No	15	0.0007684	0.0003982	73.33	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-9	0.001	0.0001	0.001	No	15	0.0005543	0.0004342	46.67	None	No	0.01	NP (normality)
Lead (mg/L)	MW-19	0.0001214	0.00004136	0.001	No	6	0.000384	0.0004777	33.33	Kaplan-Meier	ln(x)	0.01	Param.
Lead (mg/L)	MW-20	0.0001907	0.00004523	0.001	No	6	0.0004065	0.0004617	33.33	Kaplan-Meier	x^(1/3)	0.01	Param.
Lead (mg/L)	MW-24D	0.0001737	0.0000328	0.001	No	6	0.0002427	0.0003754	16.67	Kaplan-Meier	ln(x)	0.01	Param.
Lead (mg/L)	MW-26D	0.001	0.00008	0.001	No	6	0.0006967	0.00047	66.67	Kaplan-Meier	No	0.0155	NP (NDs)
Lead (mg/L)	MW-27D	0.001	0.00013	0.001	No	6	0.00076	0.0003837	66.67	Kaplan-Meier	No	0.0155	NP (NDs)
Lead (mg/L)	MW-28D	0.0008507	-0.0000419	0.001	No	6	0.0005037	0.0004058	16.67	Kaplan-Meier	No	0.01	Param.
Lead (mg/L)	MW-29	0.001	0.000052	0.001	No	6	0.000542	0.0005021	50	None	No	0.0155	NP (normality)
Lead (mg/L)	MW-5	0.001	0.000047	0.001	No	6	0.0008412	0.0003891	83.33	None	No	0.0155	NP (NDs)
Lead (mg/L)	MW-6	0.0002477	0.00003146	0.001	No	6	0.0004183	0.0004567	33.33	Kaplan-Meier	sqrt(x)	0.01	Param.
Lead (mg/L)	MW-7	0.001	0.000062	0.001	No	6	0.0008437	0.0003829	83.33	Kaplan-Meier	No	0.0155	NP (NDs)
Lithium (mg/L)	HGWC-12	0.01088	0.008093	0.034	No	19	0.009484	0.002375	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-13	0.03828	0.0309	0.034	No	19	0.03459	0.006309	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-7	0.0032	0.0021	0.034	No	19	0.003195	0.002903	5.263	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-8	0.0029	0.0025	0.034	No	19	0.003342	0.002837	5.263	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-9	0.0046	0.004	0.034	No	19	0.004779	0.002518	5.263	None	No	0.01	NP (normality)
Lithium (mg/L)	MW-19	0.01336	0.008619	0.034	No	8	0.011	0.002491	0	None	x^2	0.01	Param.
Lithium (mg/L)	MW-20	0.015	0.00082	0.034	No	8	0.004652	0.006392	25	None	No	0.004	NP (normality)
Lithium (mg/L)	MW-24D	0.002919	0.002531	0.034	No	8	0.002725	0.0001832	0	None	No	0.01	Param.
Lithium (mg/L)	**MW-25D**	**0.05155**	**0.04545**	**0.034**	**Yes**	**8**	**0.0485**	**0.002878**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	MW-26D	0.03	0.0032	0.034	No	8	0.006925	0.009329	0	None	No	0.004	NP (normality)
Lithium (mg/L)	MW-27D	0.009164	0.005536	0.034	No	8	0.00735	0.001711	0	None	No	0.01	Param.
Lithium (mg/L)	MW-28D	0.0141	0.005449	0.034	No	8	0.009775	0.004082	0	None	No	0.01	Param.
Lithium (mg/L)	MW-29	0.002433	0.002117	0.034	No	8	0.002275	0.0001488	0	None	No	0.01	Param.
Molybdenum (mg/L)	HGWC-10	0.005	0.0014	0.01	No	19	0.003663	0.001814	63.16	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	**HGWC-11**	**0.02514**	**0.01508**	**0.01**	**Yes**	**19**	**0.02011**	**0.00859**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**HGWC-12**	**0.04978**	**0.0457**	**0.01**	**Yes**	**19**	**0.04774**	**0.003483**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**HGWC-13**	**0.03593**	**0.0301**	**0.01**	**Yes**	**19**	**0.03302**	**0.004974**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**HGWC-7**	**0.04274**	**0.03437**	**0.01**	**Yes**	**20**	**0.03856**	**0.007368**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**HGWC-8**	**0.4928**	**0.4503**	**0.01**	**Yes**	**20**	**0.4716**	**0.03743**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**HGWC-9**	**0.033**	**0.0234**	**0.01**	**Yes**	**19**	**0.05098**	**0.1033**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Molybdenum (mg/L)	**MW-19**	**0.06073**	**0.03377**	**0.01**	**Yes**	**8**	**0.04725**	**0.01271**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	MW-24D	0.005	0.00027	0.01	No	8	0.002902	0.002254	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	MW-25D	0.005	0.00094	0.01	No	8	0.004142	0.001623	75	None	No	0.004	NP (NDs)

State Confidence Intervals - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 5/4/2021, 7:37 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Molybdenum (mg/L)	MW-26D	0.02056	0.007442	0.01	No	9	0.014	0.006793	11.11	None	No	0.01	Param.
Molybdenum (mg/L)	MW-27D	0.004925	0.00115	0.01	No	8	0.003037	0.001781	12.5	None	No	0.01	Param.
Molybdenum (mg/L)	MW-28D	0.02271	0.008486	0.01	No	8	0.0156	0.006712	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-29	0.003366	0.002184	0.01	No	8	0.002775	0.0005574	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-6	0.002589	0.002136	0.01	No	8	0.002363	0.0002134	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-7	0.005	0.0015	0.01	No	8	0.003475	0.001733	50	None	No	0.004	NP (normality)
Selenium (mg/L)	HGWC-10	0.005	0.0028	0.05	No	19	0.004353	0.001207	73.68	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-11	0.01552	0.006815	0.05	No	19	0.01117	0.007435	0	None	No	0.01	Param.
Selenium (mg/L)	HGWC-12	0.005	0.0011	0.05	No	19	0.004795	0.0008947	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-13	0.005	0.0016	0.05	No	19	0.004567	0.001317	89.47	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-8	0.005	0.0024	0.05	No	19	0.004863	0.0005965	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-9	0.005	0.0037	0.05	No	19	0.004932	0.0002982	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	MW-19	0.005561	0.001677	0.05	No	8	0.004175	0.001851	25	Kaplan-Meier	No	0.01	Param.
Selenium (mg/L)	MW-27D	0.005	0.00012	0.05	No	8	0.00439	0.001725	87.5	Kaplan-Meier	No	0.004	NP (NDs)
Selenium (mg/L)	MW-5	0.003857	0.002393	0.05	No	8	0.003125	0.0006902	0	None	No	0.01	Param.
Selenium (mg/L)	MW-7	0.005	0.0014	0.05	No	8	0.003012	0.001692	37.5	None	No	0.004	NP (normality)
Thallium (mg/L)	HGWC-11	0.001	0.00008	0.002	No	19	0.0009032	0.0002901	89.47	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-12	0.001	0.00009	0.002	No	19	0.0007171	0.0004287	68.42	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-13	0.0004261	0.000341	0.002	No	19	0.0003836	0.00007267	0	None	No	0.01	Param.
Thallium (mg/L)	HGWC-8	0.001	0.00008	0.002	No	19	0.0007099	0.0004388	68.42	None	No	0.01	NP (NDs)
Thallium (mg/L)	MW-19	0.001	0.00019	0.002	No	8	0.0004425	0.0003455	25	None	No	0.004	NP (normality)
Thallium (mg/L)	MW-28D	0.001	0.000092	0.002	No	8	0.0008865	0.000321	87.5	None	No	0.004	NP (NDs)
Thallium (mg/L)	MW-29	0.001	0.000064	0.002	No	8	0.000883	0.0003309	87.5	None	No	0.004	NP (NDs)
Thallium (mg/L)	MW-6	0.001	0.000082	0.002	No	8	0.0008853	0.0003246	87.5	None	No	0.004	NP (NDs)

Federal Confidence Intervals - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 5/4/2021, 7:34 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**HGWC-13**	**0.4313**	**0.3592**	**0.01**	**Yes**	**19**	**0.3953**	**0.06154**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**MW-25D**	**0.05155**	**0.04545**	**0.04**	**Yes**	**8**	**0.0485**	**0.002878**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**HGWC-8**	**0.4928**	**0.4503**	**0.1**	**Yes**	**20**	**0.4716**	**0.03743**	**0**	**None**	**No**	**0.01**	**Param.**

Federal Confidence Intervals - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 5/4/2021, 7:34 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	0.00065	0.006	No	17	0.002862	0.00057	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-11	0.003	0.00038	0.006	No	17	0.002846	0.0006354	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-13	0.003	0.00036	0.006	No	17	0.001925	0.001327	58.82	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-7	0.003	0.00034	0.006	No	17	0.002844	0.0006451	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-8	0.003	0.00064	0.006	No	17	0.002861	0.0005724	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-9	0.003	0.00043	0.006	No	17	0.002539	0.001026	82.35	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-24D	0.003	0.0017	0.006	No	8	0.002838	0.0004596	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	MW-26D	0.003	0.0013	0.006	No	8	0.002663	0.0006523	75	None	No	0.004	NP (NDs)
Antimony (mg/L)	MW-27D	0.003	0.00016	0.006	No	8	0.0009775	0.00125	25	None	No	0.004	NP (normality)
Antimony (mg/L)	MW-28D	0.003	0.0019	0.006	No	8	0.002863	0.0003889	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	MW-29	0.003	0.00094	0.006	No	8	0.002743	0.0007283	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	MW-6	0.003	0.0014	0.006	No	8	0.0028	0.0005657	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	MW-7	0.003	0.00051	0.006	No	8	0.002096	0.001065	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	HGWC-11	0.005	0.0015	0.01	No	19	0.003266	0.001768	42.11	None	No	0.01	NP (normality)
Arsenic (mg/L)	HGWC-12	0.004589	0.003137	0.01	No	19	0.003863	0.00124	10.53	None	No	0.01	Param.
Arsenic (mg/L)	**HGWC-13**	**0.4313**	**0.3592**	**0.01**	**Yes**	**19**	**0.3953**	**0.06154**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	HGWC-7	0.005	0.0019	0.01	No	19	0.004837	0.0007112	94.74	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-9	0.005	0.0008	0.01	No	19	0.004312	0.001635	84.21	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-19	0.005	0.00045	0.01	No	8	0.004431	0.001609	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-20	0.005	0.00038	0.01	No	8	0.003577	0.002033	62.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-25D	0.005	0.00075	0.01	No	8	0.003094	0.002064	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	MW-26D	0.005	0.0006	0.01	No	8	0.003925	0.001991	75	None	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-27D	0.005	0.0002	0.01	No	8	0.003361	0.002272	62.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-28D	0.005	0.0011	0.01	No	8	0.004512	0.001379	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-29	0.005	0.00037	0.01	No	8	0.004421	0.001637	87.5	None	No	0.004	NP (NDs)
Barium (mg/L)	HGWC-10	0.08901	0.06608	2	No	19	0.07754	0.01958	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-11	0.05343	0.03154	2	No	19	0.04375	0.02072	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	HGWC-12	0.13	0.084	2	No	19	0.1029	0.02097	0	None	No	0.01	NP (normality)
Barium (mg/L)	HGWC-13	0.09256	0.06961	2	No	19	0.08108	0.0196	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-7	0.07536	0.06864	2	No	19	0.072	0.005743	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-8	0.0829	0.06	2	No	19	0.06984	0.01122	0	None	No	0.01	NP (normality)
Barium (mg/L)	HGWC-9	0.1226	0.1065	2	No	19	0.1146	0.01374	0	None	No	0.01	Param.
Barium (mg/L)	MW-19	0.0677	0.0498	2	No	8	0.05875	0.008447	0	None	No	0.01	Param.
Barium (mg/L)	MW-20	0.098	0.08425	2	No	8	0.09113	0.00649	0	None	No	0.01	Param.
Barium (mg/L)	MW-24D	0.08729	0.04433	2	No	8	0.06538	0.02462	0	None	ln(x)	0.01	Param.
Barium (mg/L)	MW-25D	0.4797	0.3928	2	No	8	0.4363	0.04104	0	None	No	0.01	Param.
Barium (mg/L)	MW-26D	0.17	0.093	2	No	8	0.1131	0.02538	0	None	No	0.004	NP (normality)
Barium (mg/L)	MW-27D	1.5	0.95	2	No	8	1.088	0.1866	0	None	No	0.004	NP (normality)
Barium (mg/L)	MW-28D	0.7327	0.1773	2	No	8	0.455	0.262	0	None	No	0.01	Param.
Barium (mg/L)	MW-29	0.08638	0.07637	2	No	8	0.08138	0.004719	0	None	No	0.01	Param.
Barium (mg/L)	MW-5	0.05227	0.04398	2	No	8	0.04813	0.003907	0	None	No	0.01	Param.
Barium (mg/L)	MW-6	0.09421	0.08179	2	No	8	0.088	0.005855	0	None	No	0.01	Param.
Barium (mg/L)	MW-7	0.06481	0.04669	2	No	8	0.05575	0.008548	0	None	No	0.01	Param.
Beryllium (mg/L)	HGWC-11	0.0005	0.0001	0.004	No	17	0.000341	0.000197	58.82	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-13	0.0005	0.000097	0.004	No	17	0.000333	0.000206	58.82	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-7	0.0005	0.00019	0.004	No	17	0.0004322	0.0001526	82.35	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-8	0.0005	0.0001	0.004	No	17	0.0004014	0.0001834	76.47	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-28D	0.0005	0.000048	0.004	No	8	0.0003428	0.0002188	62.5	None	No	0.004	NP (NDs)
Beryllium (mg/L)	MW-7	0.0005	0.000051	0.004	No	8	0.0004439	0.0001587	87.5	None	No	0.004	NP (NDs)
Cadmium (mg/L)	HGWC-10	0.0005	0.0001	0.005	No	17	0.0003421	0.0001959	58.82	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-11	0.0005	0.0001	0.005	No	17	0.0004292	0.0001577	82.35	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-12	0.0005	0.0003	0.005	No	17	0.0004259	0.000143	76.47	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-7	0.0005	0.0002	0.005	No	17	0.0004235	0.0001437	76.47	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-8	0.00032	0.00014	0.005	No	17	0.0003141	0.0003708	5.882	None	No	0.01	NP (normality)
Cadmium (mg/L)	HGWC-9	0.0005	0.0002	0.005	No	17	0.0004335	0.00015	82.35	None	No	0.01	NP (NDs)

Federal Confidence Intervals - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 5/4/2021, 7:34 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cadmium (mg/L)	MW-19	0.0002284	0.0001459	0.005	No	8	0.000265	0.0001497	25	Kaplan-Meier	ln(x)	0.01	Param.
Chromium (mg/L)	HGWC-10	0.02	0.005	0.1	No	17	0.005882	0.003638	94.12	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-11	0.005	0.00061	0.1	No	17	0.004465	0.00151	88.24	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-12	0.005	0.0025	0.1	No	17	0.004342	0.001516	82.35	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-13	0.005	0.00059	0.1	No	17	0.004209	0.001762	82.35	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-7	0.071	0.0016	0.1	No	17	0.007779	0.01639	64.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-8	0.005	0.0015	0.1	No	17	0.004031	0.001811	76.47	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-9	0.005	0.00067	0.1	No	17	0.004482	0.001463	88.24	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-19	0.005	0.00047	0.1	No	8	0.00254	0.002111	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	MW-20	0.005	0.00051	0.1	No	8	0.003362	0.002261	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-24D	0.005	0.00042	0.1	No	8	0.004015	0.001856	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-25D	0.005	0.00061	0.1	No	8	0.004451	0.001552	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-26D	0.005	0.00076	0.1	No	8	0.002757	0.001958	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	MW-27D	0.005	0.0007	0.1	No	8	0.00394	0.001963	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-28D	0.005	0.00078	0.1	No	8	0.002692	0.002009	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	MW-29	0.005	0.001	0.1	No	8	0.0045	0.001414	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-5	0.004565	0.00231	0.1	No	8	0.003438	0.001064	0	None	No	0.01	Param.
Chromium (mg/L)	MW-6	0.005	0.00044	0.1	No	8	0.003879	0.002077	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-7	0.005	0.0013	0.1	No	8	0.00215	0.001198	12.5	None	No	0.004	NP (normality)
Cobalt (mg/L)	HGWC-10	0.005	0.0007	0.038	No	17	0.003506	0.00209	64.71	None	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-11	0.00192	0.0009744	0.038	No	17	0.002656	0.001712	29.41	Kaplan-Meier	ln(x)	0.01	Param.
Cobalt (mg/L)	HGWC-12	0.0021	0.0012	0.038	No	17	0.001871	0.001212	11.76	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-13	0.004247	0.002671	0.038	No	17	0.003459	0.001258	5.882	None	No	0.01	Param.
Cobalt (mg/L)	HGWC-7	0.0026	0.0005	0.038	No	17	0.001598	0.001703	17.65	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-8	0.0023	0.0019	0.038	No	17	0.002204	0.0007606	5.882	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-9	0.0011	0.00057	0.038	No	17	0.001238	0.001459	11.76	None	No	0.01	NP (normality)
Cobalt (mg/L)	MW-19	0.04433	0.02892	0.038	No	8	0.03663	0.007269	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-20	0.005	0.0011	0.038	No	8	0.004512	0.001379	87.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	MW-24D	0.005	0.00025	0.038	No	8	0.003364	0.00227	62.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	MW-26D	0.005	0.0003	0.038	No	8	0.002715	0.002444	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	MW-27D	0.005	0.000091	0.038	No	8	0.003243	0.002428	62.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	MW-28D	0.005	0.00093	0.038	No	8	0.004491	0.001439	87.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	MW-29	0.001302	0.0005925	0.038	No	8	0.0009475	0.0003349	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-6	0.005	0.00036	0.038	No	8	0.00109	0.00159	12.5	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	HGWC-10	1.137	0.597	5	No	19	0.8671	0.4612	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-11	1.226	0.6603	5	No	19	0.9432	0.4832	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-12	1.1	0.548	5	No	19	0.8239	0.4713	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-13	1.052	0.5958	5	No	19	0.824	0.3897	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-7	0.9855	0.4718	5	No	19	0.7699	0.4916	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-8	0.9892	0.6793	5	No	19	0.8343	0.2646	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-9	0.959	0.541	5	No	19	0.75	0.3569	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-19	1.183	0.4412	5	No	8	0.8119	0.3497	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-20	1.185	0.2405	5	No	8	0.713	0.4458	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-24D	0.8936	0.0469	5	No	8	0.4703	0.3994	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-25D	1.296	0.7346	5	No	8	1.015	0.2647	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-26D	1.275	0.1638	5	No	8	0.7193	0.524	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-27D	1.938	0.7381	5	No	8	1.338	0.5659	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-28D	1.449	0.4152	5	No	8	0.9321	0.4877	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-29	1.144	0.2969	5	No	8	0.7203	0.3994	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-5	1.116	0.5638	5	No	8	0.8399	0.2604	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-6	2.07	0.198	5	No	8	0.8654	0.5289	0	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	MW-7	1.363	0.6459	5	No	8	1.004	0.3382	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-10	0.2311	0.08652	4	No	20	0.1758	0.1484	15	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	HGWC-11	0.4538	0.2685	4	No	20	0.3612	0.1632	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-12	0.4227	0.1819	4	No	20	0.3266	0.2544	5	None	sqrt(x)	0.01	Param.

Federal Confidence Intervals - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 5/4/2021, 7:34 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	HGWC-13	0.7221	0.5018	4	No	20	0.6119	0.194	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-7	0.1671	0.08288	4	No	21	0.1468	0.1188	9.524	None	ln(x)	0.01	Param.
Fluoride (mg/L)	HGWC-8	0.6486	0.4876	4	No	21	0.5823	0.1742	0	None	ln(x)	0.01	Param.
Fluoride (mg/L)	HGWC-9	0.2594	0.08768	4	No	20	0.1957	0.1662	10	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	MW-19	0.3621	0.09633	4	No	8	0.2245	0.1448	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	MW-20	0.072	0.05	4	No	8	0.05275	0.007778	87.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	MW-24D	0.18	0.048	4	No	8	0.07088	0.04503	37.5	None	No	0.004	NP (normality)
Fluoride (mg/L)	MW-25D	2.2	1.4	4	No	8	1.65	0.239	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	MW-26D	0.19	0.044	4	No	8	0.075	0.0477	12.5	None	No	0.004	NP (normality)
Fluoride (mg/L)	MW-27D	0.42	0.22	4	No	8	0.27	0.06302	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	MW-28D	0.2674	0.1476	4	No	8	0.2075	0.05651	0	None	No	0.01	Param.
Fluoride (mg/L)	MW-29	0.18	0.045	4	No	8	0.06813	0.04582	62.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	MW-5	0.09236	0.04939	4	No	8	0.07088	0.02027	12.5	None	No	0.01	Param.
Fluoride (mg/L)	MW-6	0.19	0.05	4	No	8	0.1014	0.06371	25	None	No	0.004	NP (normality)
Fluoride (mg/L)	MW-7	0.17	0.05	4	No	8	0.06738	0.042	75	None	No	0.004	NP (NDs)
Lead (mg/L)	HGWC-10	0.001	0.00005	0.015	No	15	0.0009367	0.0002453	93.33	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-11	0.001	0.000099	0.015	No	15	0.0006706	0.0004226	60	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-12	0.001	0.000089	0.015	No	15	0.0007159	0.0004245	66.67	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-13	0.001	0.00014	0.015	No	15	0.0006527	0.000441	60	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-7	0.001	0.00009	0.015	No	15	0.0005996	0.0004589	40	None	No	0.01	NP (normality)
Lead (mg/L)	HGWC-8	0.001	0.00013	0.015	No	15	0.0007684	0.0003982	73.33	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-9	0.001	0.0001	0.015	No	15	0.0005543	0.0004342	46.67	None	No	0.01	NP (normality)
Lead (mg/L)	MW-19	0.0001214	0.00004136	0.015	No	6	0.000384	0.0004777	33.33	Kaplan-Meier	ln(x)	0.01	Param.
Lead (mg/L)	MW-20	0.0001907	0.00004523	0.015	No	6	0.0004065	0.0004617	33.33	Kaplan-Meier	x^(1/3)	0.01	Param.
Lead (mg/L)	MW-24D	0.0001737	0.0000328	0.015	No	6	0.0002427	0.0003754	16.67	Kaplan-Meier	ln(x)	0.01	Param.
Lead (mg/L)	MW-26D	0.001	0.00008	0.015	No	6	0.0006967	0.00047	66.67	Kaplan-Meier	No	0.0155	NP (NDs)
Lead (mg/L)	MW-27D	0.001	0.00013	0.015	No	6	0.00076	0.0003837	66.67	Kaplan-Meier	No	0.0155	NP (NDs)
Lead (mg/L)	MW-28D	0.0008507	-0.0000419	0.015	No	6	0.0005037	0.0004058	16.67	Kaplan-Meier	No	0.01	Param.
Lead (mg/L)	MW-29	0.001	0.000052	0.015	No	6	0.000542	0.0005021	50	None	No	0.0155	NP (normality)
Lead (mg/L)	MW-5	0.001	0.000047	0.015	No	6	0.0008412	0.0003891	83.33	None	No	0.0155	NP (NDs)
Lead (mg/L)	MW-6	0.0002477	0.00003146	0.015	No	6	0.0004183	0.0004567	33.33	Kaplan-Meier	sqrt(x)	0.01	Param.
Lead (mg/L)	MW-7	0.001	0.000062	0.015	No	6	0.0008437	0.0003829	83.33	Kaplan-Meier	No	0.0155	NP (NDs)
Lithium (mg/L)	HGWC-12	0.01088	0.008093	0.04	No	19	0.009484	0.002375	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-13	0.03828	0.0309	0.04	No	19	0.03459	0.006309	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-7	0.0032	0.0021	0.04	No	19	0.003195	0.002903	5.263	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-8	0.0029	0.0025	0.04	No	19	0.003342	0.002837	5.263	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-9	0.0046	0.004	0.04	No	19	0.004779	0.002518	5.263	None	No	0.01	NP (normality)
Lithium (mg/L)	MW-19	0.01336	0.008619	0.04	No	8	0.011	0.002491	0	None	x^2	0.01	Param.
Lithium (mg/L)	MW-20	0.015	0.00082	0.04	No	8	0.004652	0.006392	25	None	No	0.004	NP (normality)
Lithium (mg/L)	MW-24D	0.002919	0.002531	0.04	No	8	0.002725	0.0001832	0	None	No	0.01	Param.
Lithium (mg/L)	**MW-25D**	**0.05155**	**0.04545**	**0.04**	**Yes**	**8**	**0.0485**	**0.002878**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	MW-26D	0.03	0.0032	0.04	No	8	0.006925	0.009329	0	None	No	0.004	NP (normality)
Lithium (mg/L)	MW-27D	0.009164	0.005536	0.04	No	8	0.00735	0.001711	0	None	No	0.01	Param.
Lithium (mg/L)	MW-28D	0.0141	0.005449	0.04	No	8	0.009775	0.004082	0	None	No	0.01	Param.
Lithium (mg/L)	MW-29	0.002433	0.002117	0.04	No	8	0.002275	0.0001488	0	None	No	0.01	Param.
Molybdenum (mg/L)	HGWC-10	0.005	0.0014	0.1	No	19	0.003663	0.001814	63.16	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	HGWC-11	0.02514	0.01508	0.1	No	19	0.02011	0.00859	0	None	No	0.01	Param.
Molybdenum (mg/L)	HGWC-12	0.04978	0.0457	0.1	No	19	0.04774	0.003483	0	None	No	0.01	Param.
Molybdenum (mg/L)	HGWC-13	0.03593	0.0301	0.1	No	19	0.03302	0.004974	0	None	No	0.01	Param.
Molybdenum (mg/L)	HGWC-7	0.04274	0.03437	0.1	No	20	0.03856	0.007368	0	None	No	0.01	Param.
Molybdenum (mg/L)	**HGWC-8**	**0.4928**	**0.4503**	**0.1**	**Yes**	**20**	**0.4716**	**0.03743**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	HGWC-9	0.033	0.0234	0.1	No	19	0.05098	0.1033	0	None	No	0.01	NP (normality)
Molybdenum (mg/L)	MW-19	0.06073	0.03377	0.1	No	8	0.04725	0.01271	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-24D	0.005	0.00027	0.1	No	8	0.002902	0.002254	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	MW-25D	0.005	0.00094	0.1	No	8	0.004142	0.001623	75	None	No	0.004	NP (NDs)

Federal Confidence Intervals - All Results

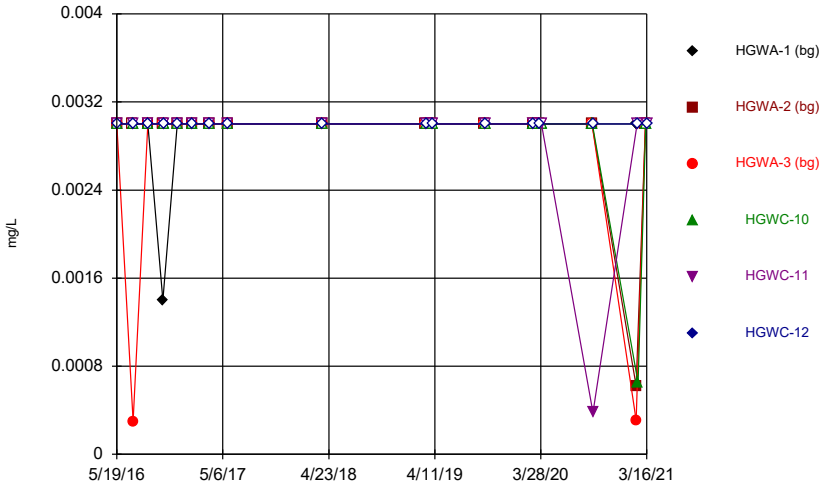
Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 5/4/2021, 7:34 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Molybdenum (mg/L)	MW-26D	0.02056	0.007442	0.1	No	9	0.014	0.006793	11.11	None	No	0.01	Param.
Molybdenum (mg/L)	MW-27D	0.004925	0.00115	0.1	No	8	0.003037	0.001781	12.5	None	No	0.01	Param.
Molybdenum (mg/L)	MW-28D	0.02271	0.008486	0.1	No	8	0.0156	0.006712	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-29	0.003366	0.002184	0.1	No	8	0.002775	0.0005574	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-6	0.002589	0.002136	0.1	No	8	0.002363	0.0002134	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-7	0.005	0.0015	0.1	No	8	0.003475	0.001733	50	None	No	0.004	NP (normality)
Selenium (mg/L)	HGWC-10	0.005	0.0028	0.05	No	19	0.004353	0.001207	73.68	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-11	0.01552	0.006815	0.05	No	19	0.01117	0.007435	0	None	No	0.01	Param.
Selenium (mg/L)	HGWC-12	0.005	0.0011	0.05	No	19	0.004795	0.0008947	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-13	0.005	0.0016	0.05	No	19	0.004567	0.001317	89.47	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-8	0.005	0.0024	0.05	No	19	0.004863	0.0005965	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-9	0.005	0.0037	0.05	No	19	0.004932	0.0002982	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	MW-19	0.005561	0.001677	0.05	No	8	0.004175	0.001851	25	Kaplan-Meier	No	0.01	Param.
Selenium (mg/L)	MW-27D	0.005	0.00012	0.05	No	8	0.00439	0.001725	87.5	Kaplan-Meier	No	0.004	NP (NDs)
Selenium (mg/L)	MW-5	0.003857	0.002393	0.05	No	8	0.003125	0.0006902	0	None	No	0.01	Param.
Selenium (mg/L)	MW-7	0.005	0.0014	0.05	No	8	0.003012	0.001692	37.5	None	No	0.004	NP (normality)
Thallium (mg/L)	HGWC-11	0.001	0.00008	0.002	No	19	0.0009032	0.0002901	89.47	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-12	0.001	0.00009	0.002	No	19	0.0007171	0.0004287	68.42	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-13	0.0004261	0.000341	0.002	No	19	0.0003836	0.00007267	0	None	No	0.01	Param.
Thallium (mg/L)	HGWC-8	0.001	0.00008	0.002	No	19	0.0007099	0.0004388	68.42	None	No	0.01	NP (NDs)
Thallium (mg/L)	MW-19	0.001	0.00019	0.002	No	8	0.0004425	0.0003455	25	None	No	0.004	NP (normality)
Thallium (mg/L)	MW-28D	0.001	0.000092	0.002	No	8	0.0008865	0.000321	87.5	None	No	0.004	NP (NDs)
Thallium (mg/L)	MW-29	0.001	0.000064	0.002	No	8	0.000883	0.0003309	87.5	None	No	0.004	NP (NDs)
Thallium (mg/L)	MW-6	0.001	0.000082	0.002	No	8	0.0008853	0.0003246	87.5	None	No	0.004	NP (NDs)

FIGURE A.

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

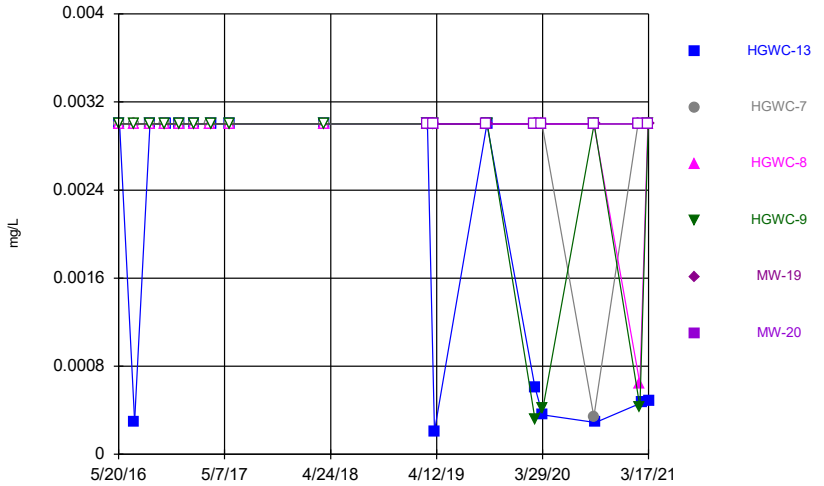
Time Series



Constituent: Antimony Analysis Run 5/4/2021 6:53 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

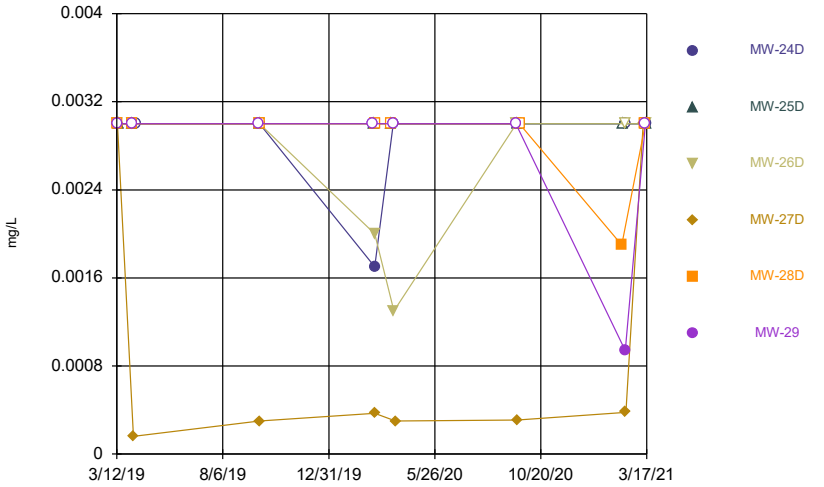
Time Series



Constituent: Antimony Analysis Run 5/4/2021 6:53 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

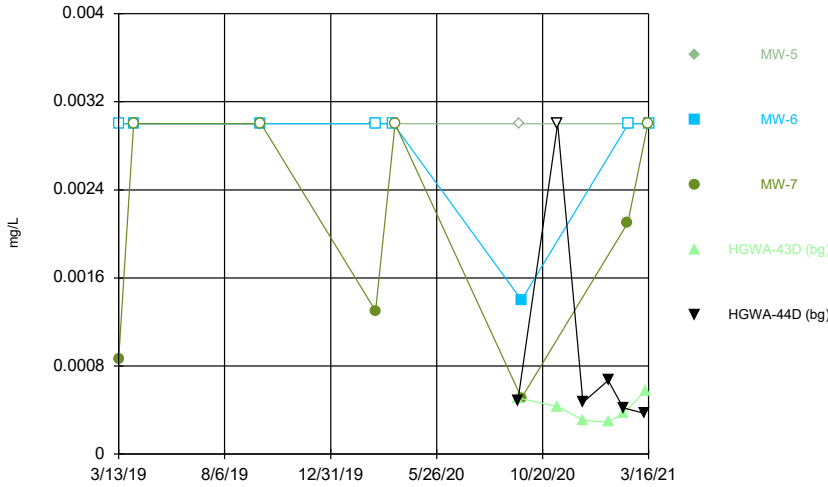
Time Series



Constituent: Antimony Analysis Run 5/4/2021 6:53 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

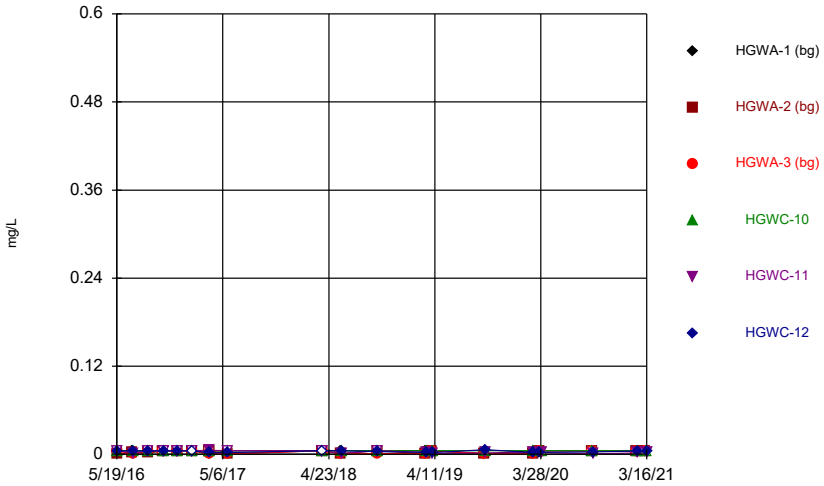
Time Series



Constituent: Antimony Analysis Run 5/4/2021 6:53 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

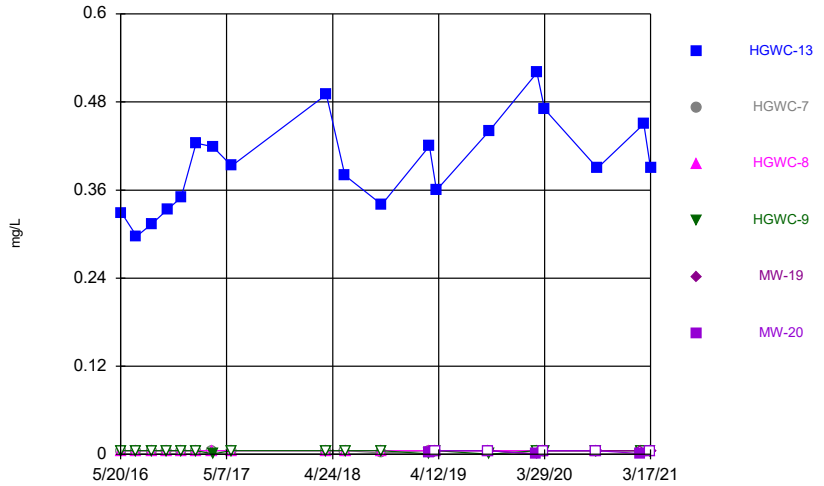
Time Series



Constituent: Arsenic Analysis Run 5/4/2021 6:53 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

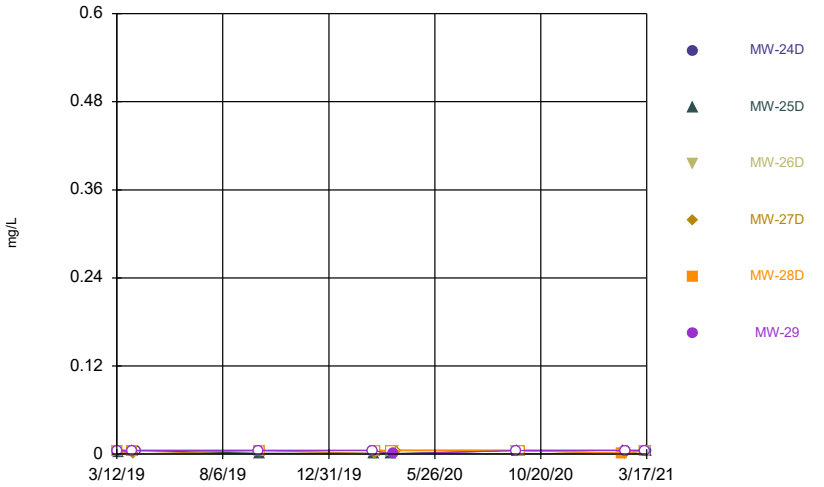
Time Series



Constituent: Arsenic Analysis Run 5/4/2021 6:53 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

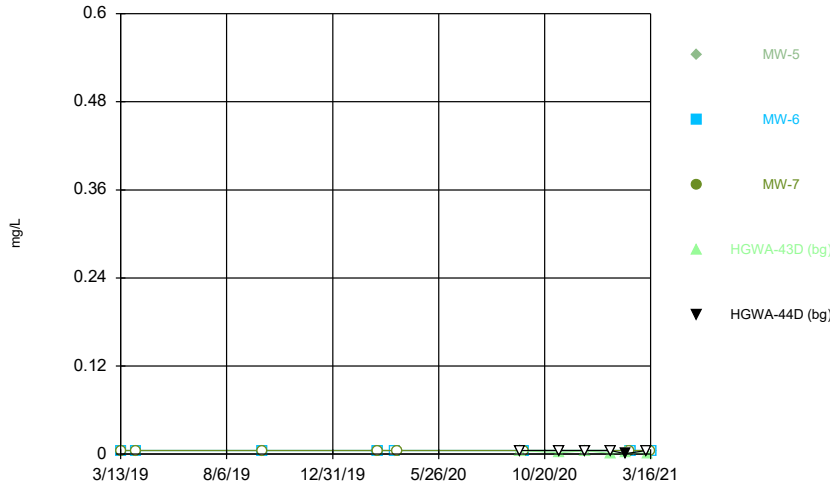
Time Series



Constituent: Arsenic Analysis Run 5/4/2021 6:53 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

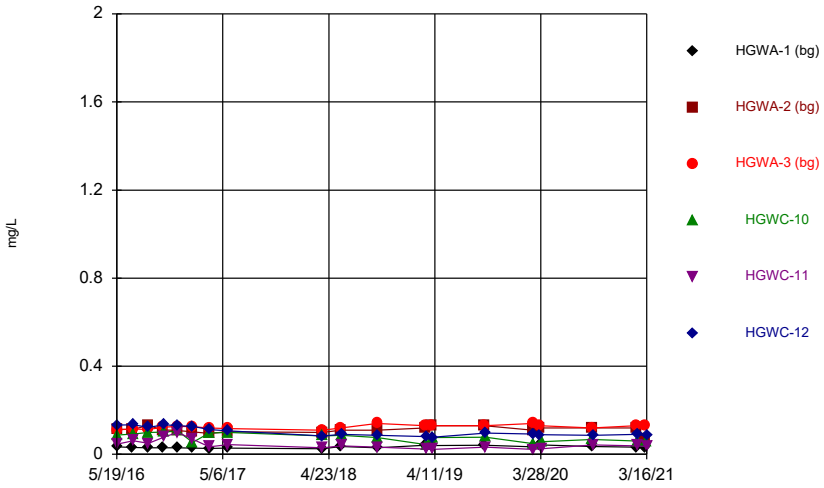
Time Series



Constituent: Arsenic Analysis Run 5/4/2021 6:53 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

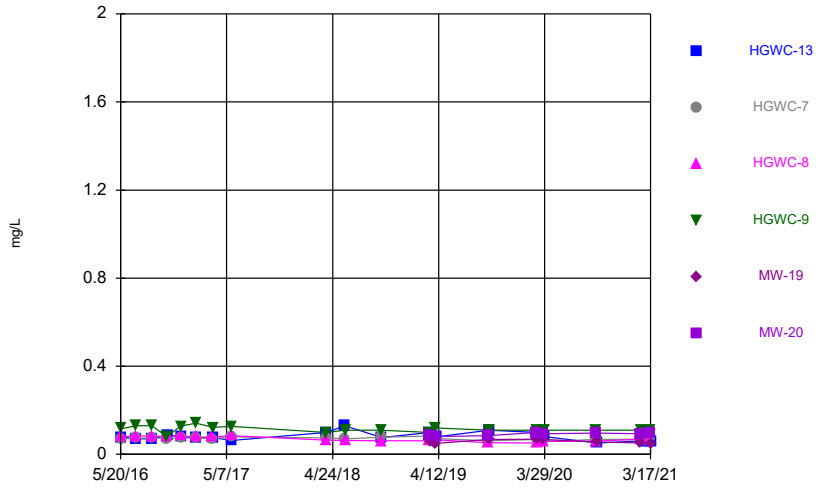


Constituent: Barium Analysis Run 5/4/2021 6:53 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

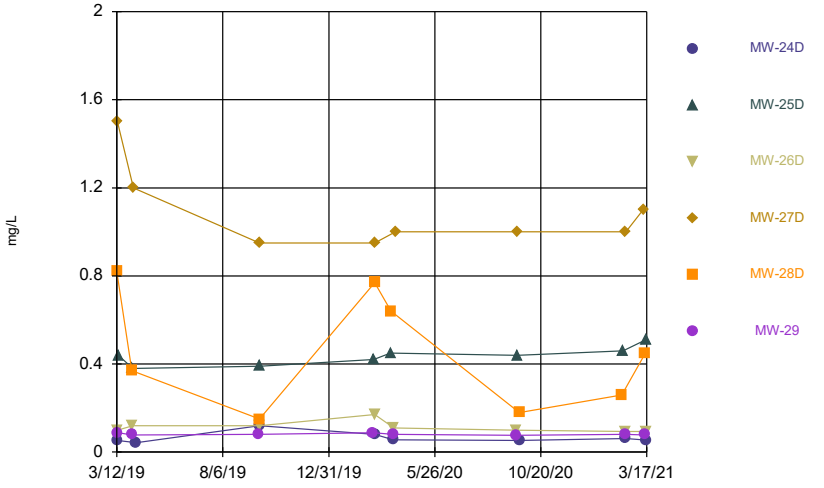


Constituent: Barium Analysis Run 5/4/2021 6:53 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

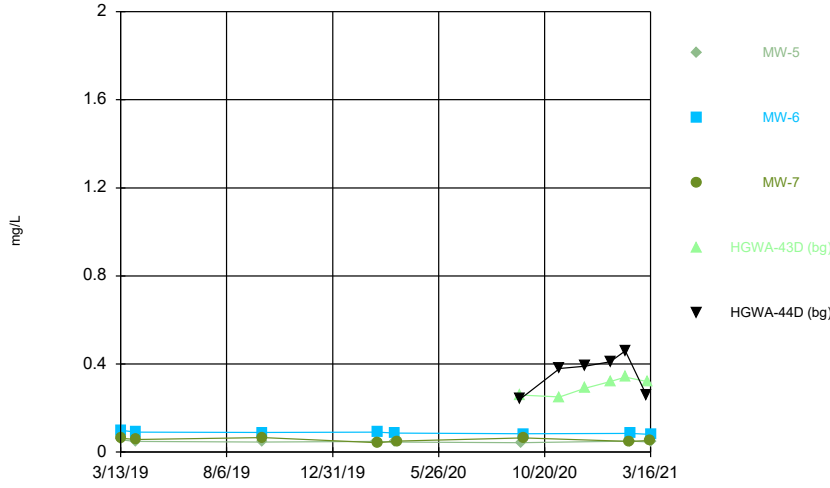


Constituent: Barium Analysis Run 5/4/2021 6:53 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

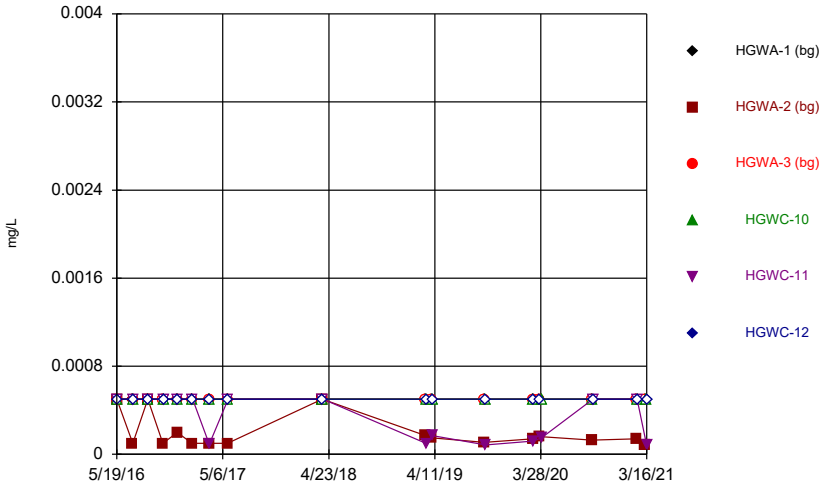


Constituent: Barium Analysis Run 5/4/2021 6:53 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

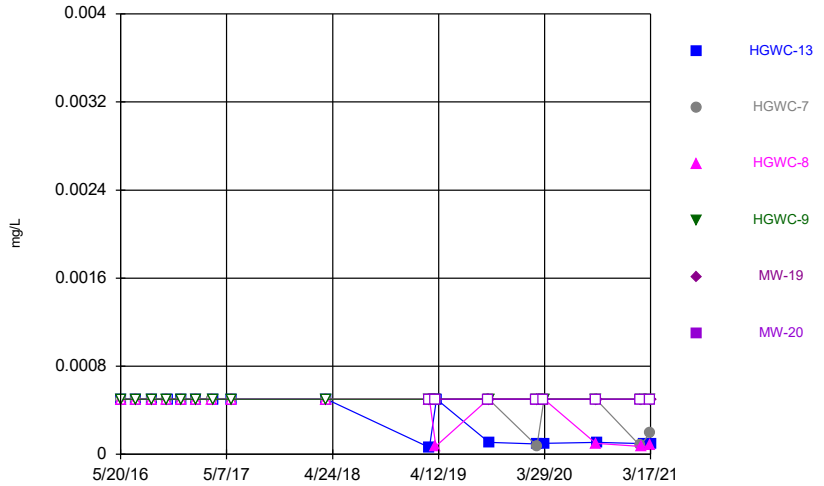
Time Series



Constituent: Beryllium Analysis Run 5/4/2021 6:53 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

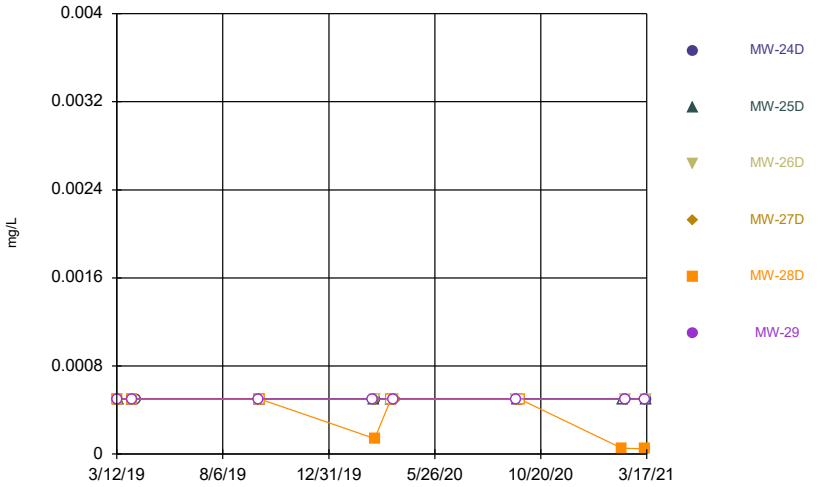
Time Series



Constituent: Beryllium Analysis Run 5/4/2021 6:53 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

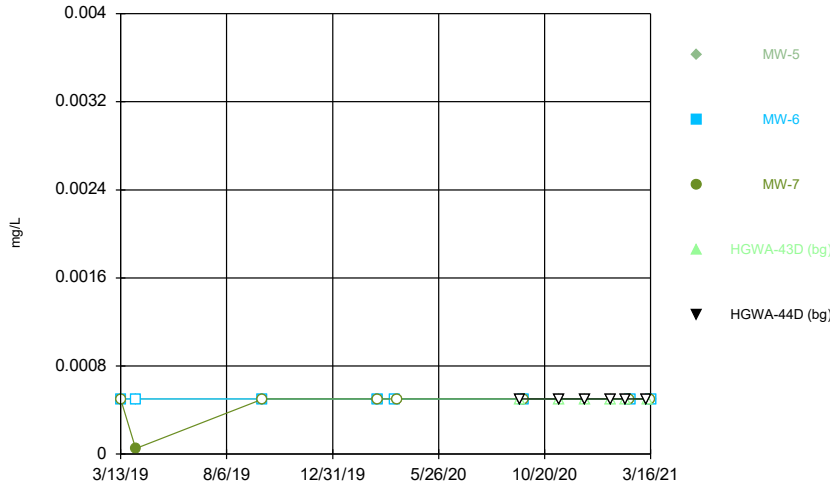
Time Series



Constituent: Beryllium Analysis Run 5/4/2021 6:53 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

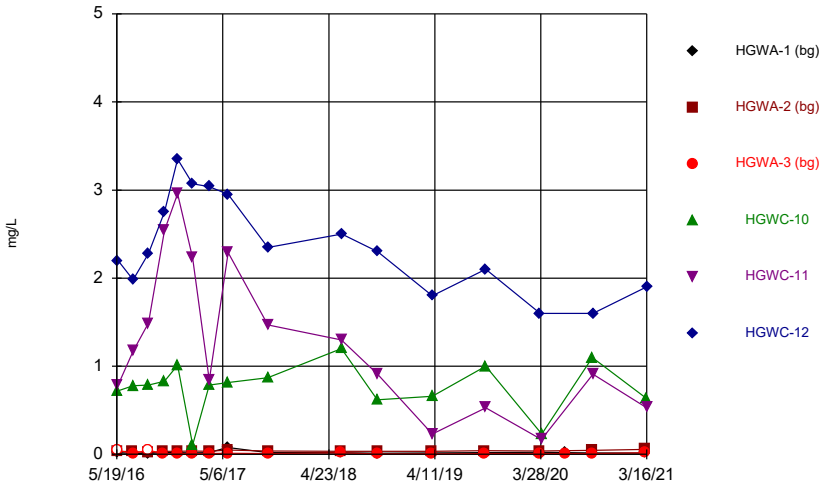
Time Series



Constituent: Beryllium Analysis Run 5/4/2021 6:53 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

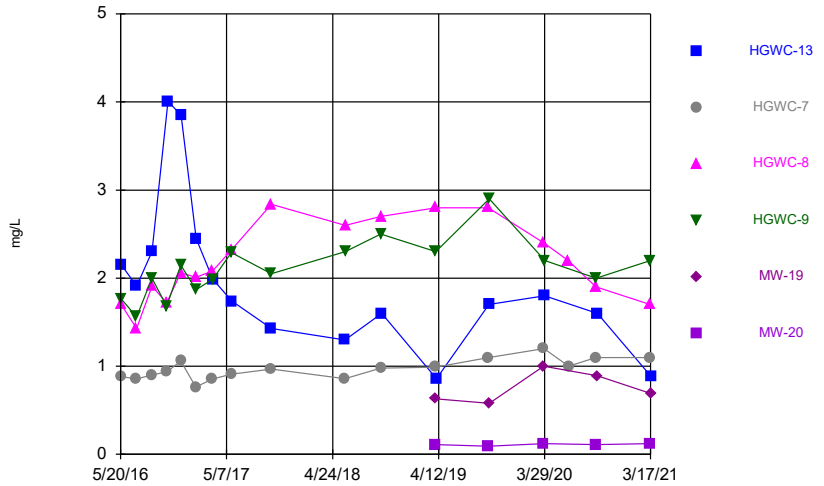
Time Series



Constituent: Boron Analysis Run 5/4/2021 6:53 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

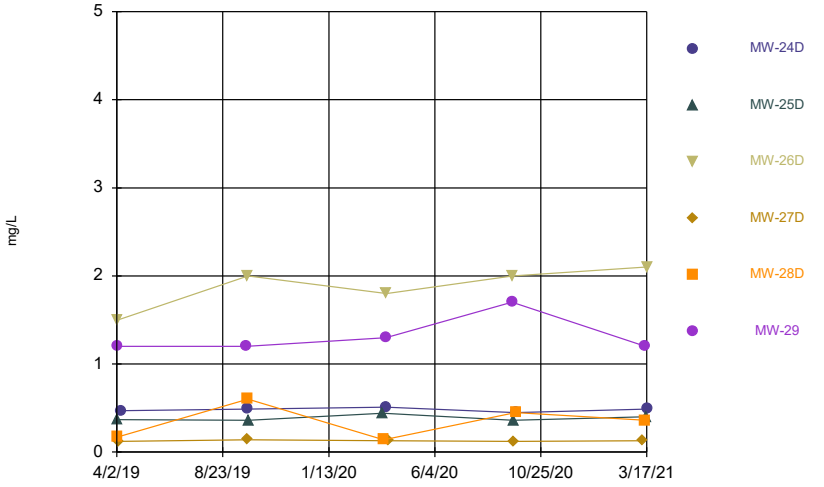
Time Series



Constituent: Boron Analysis Run 5/4/2021 6:53 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

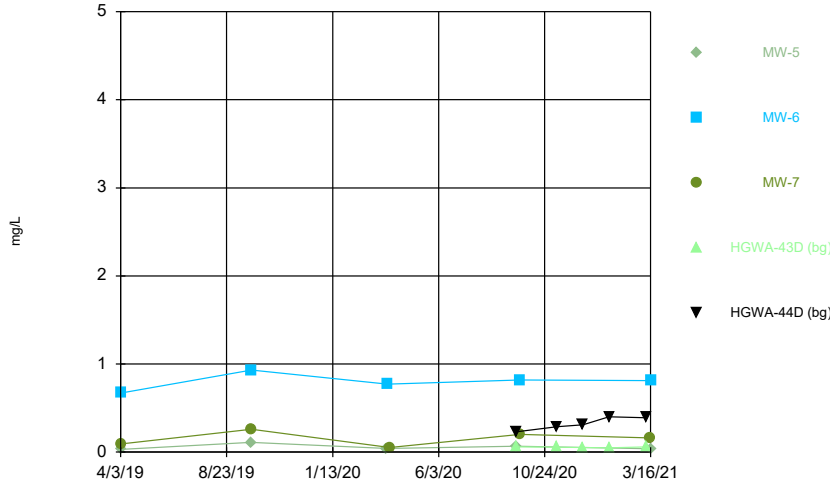
Time Series



Constituent: Boron Analysis Run 5/4/2021 6:53 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

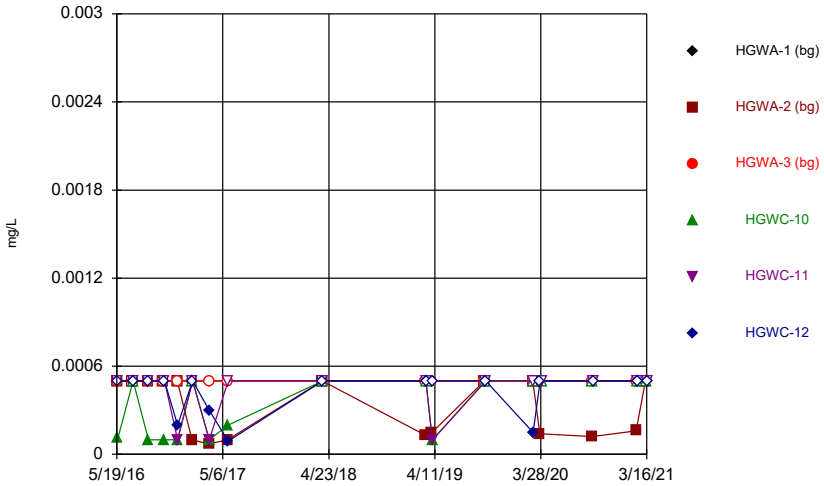
Time Series



Constituent: Boron Analysis Run 5/4/2021 6:53 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

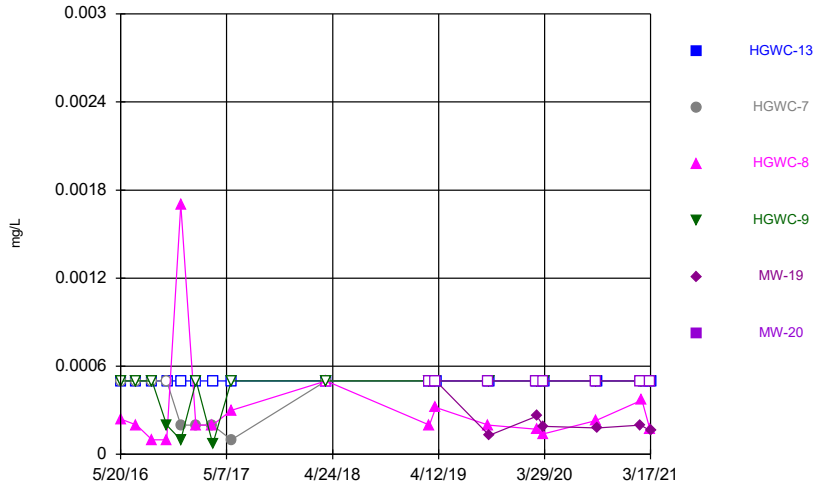
Time Series



Constituent: Cadmium Analysis Run 5/4/2021 6:53 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

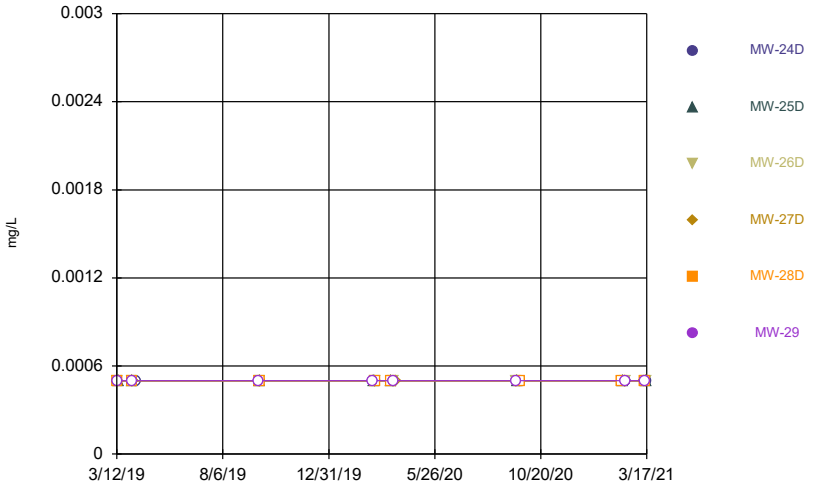
Time Series



Constituent: Cadmium Analysis Run 5/4/2021 6:53 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

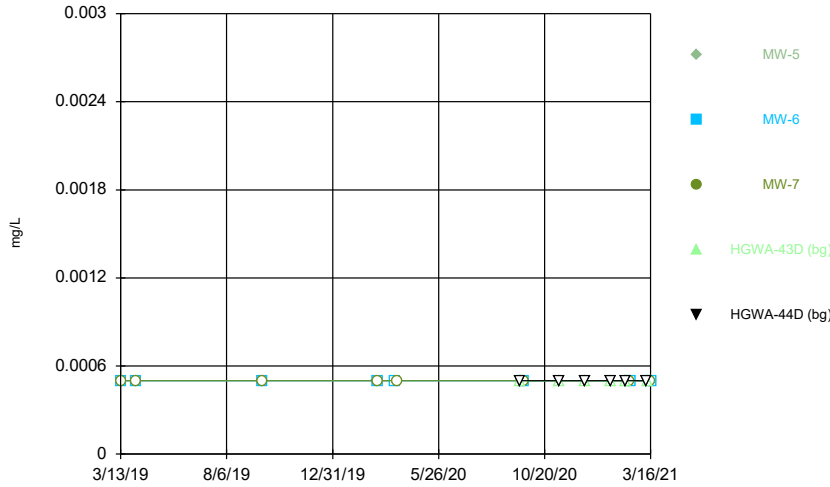
Time Series



Constituent: Cadmium Analysis Run 5/4/2021 6:53 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

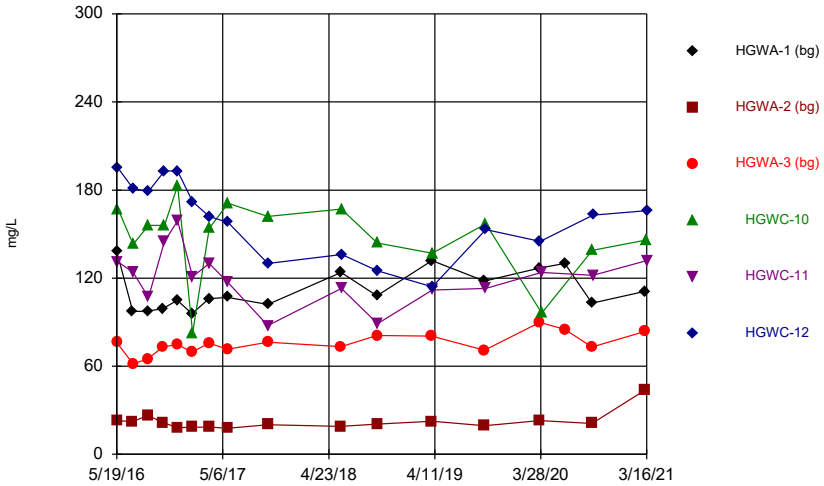
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Cadmium Analysis Run 5/4/2021 6:53 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Time Series

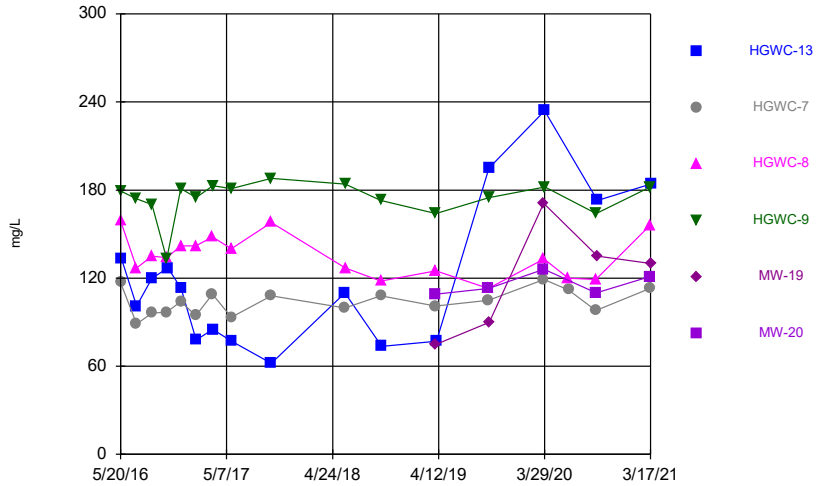


Constituent: Calcium Analysis Run 5/4/2021 6:53 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

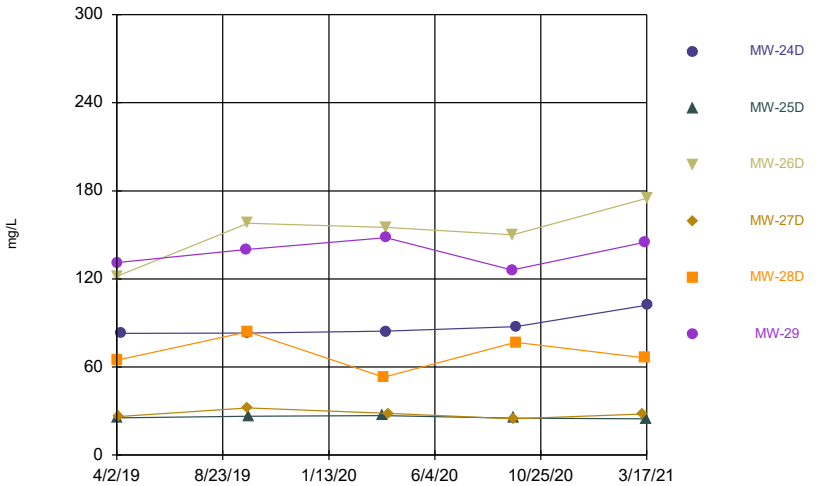


Constituent: Calcium Analysis Run 5/4/2021 6:53 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

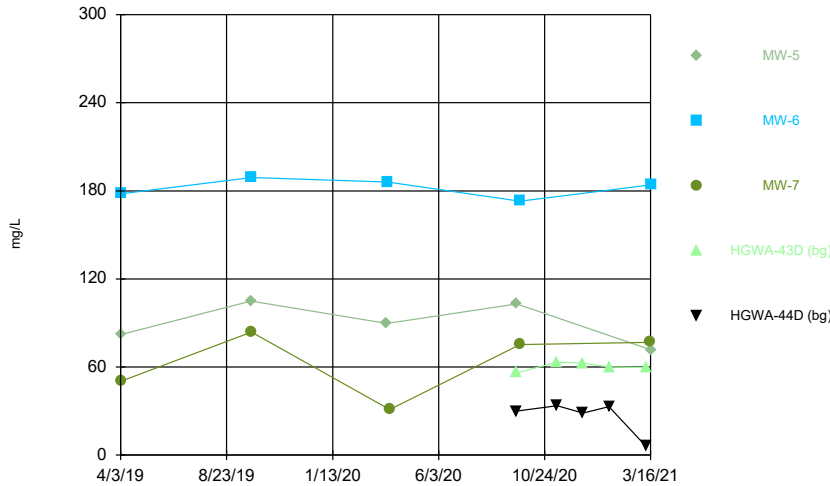


Constituent: Calcium Analysis Run 5/4/2021 6:53 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

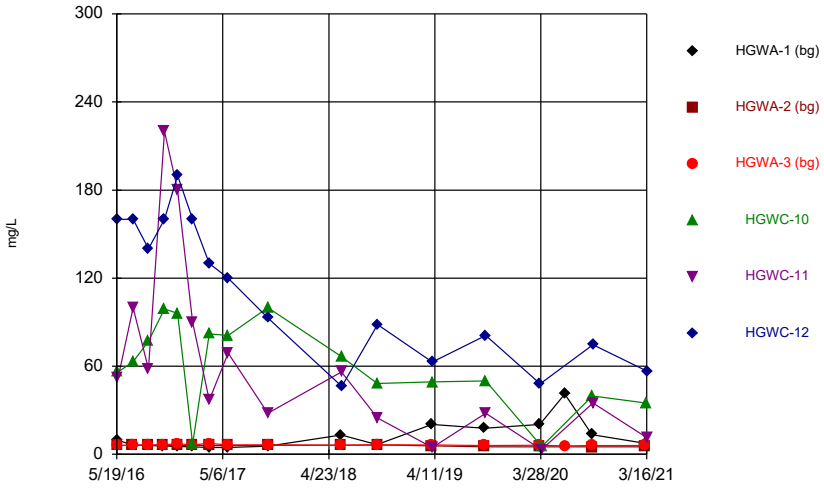


Constituent: Calcium Analysis Run 5/4/2021 6:53 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

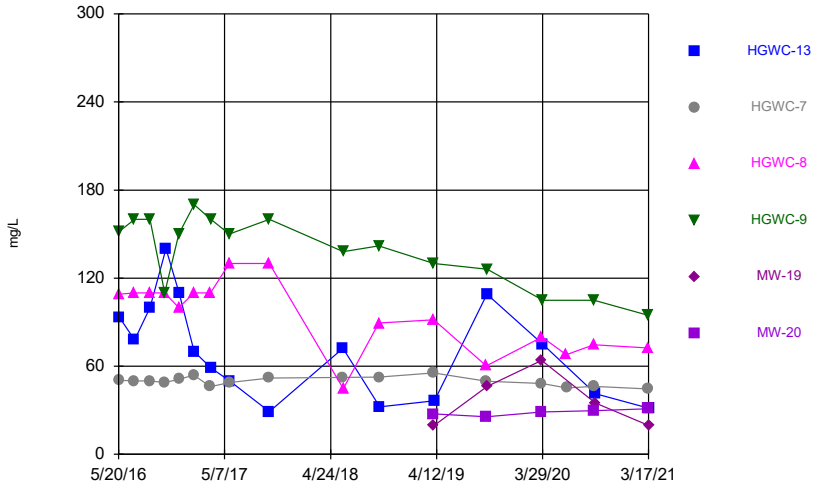


Constituent: Chloride Analysis Run 5/4/2021 6:53 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

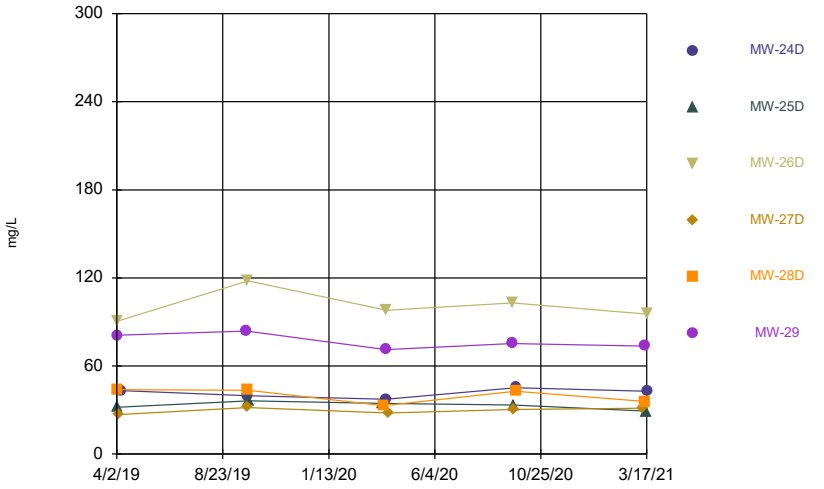


Constituent: Chloride Analysis Run 5/4/2021 6:53 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

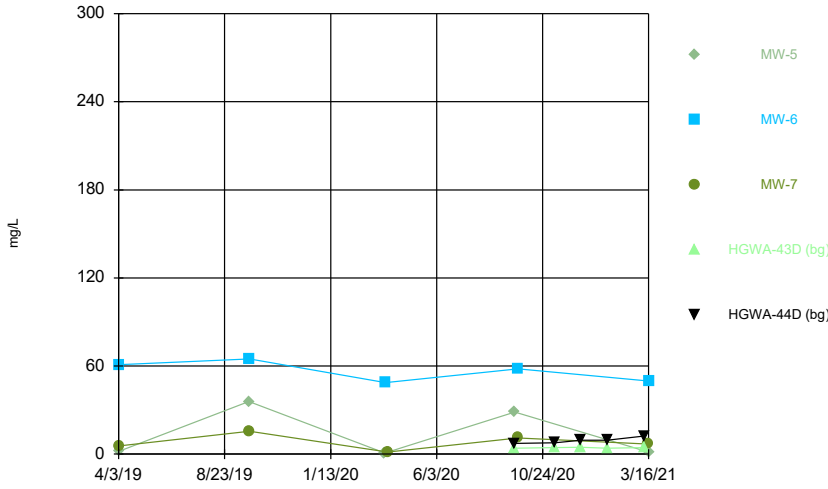


Constituent: Chloride Analysis Run 5/4/2021 6:53 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

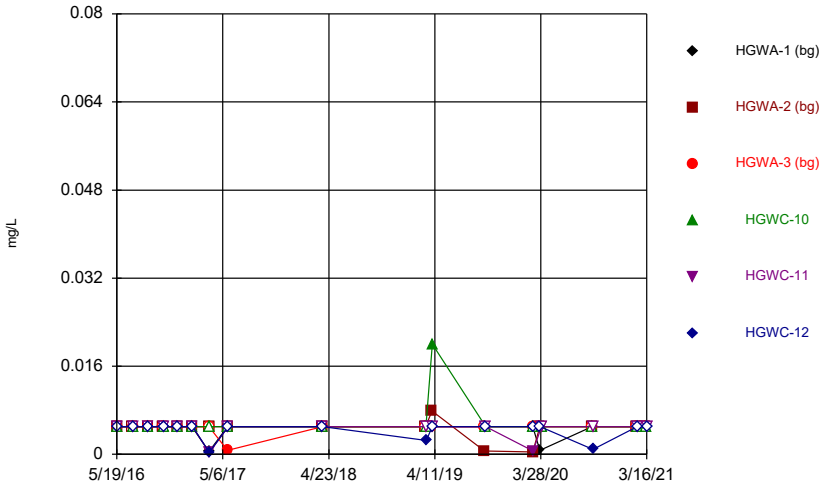


Constituent: Chloride Analysis Run 5/4/2021 6:53 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

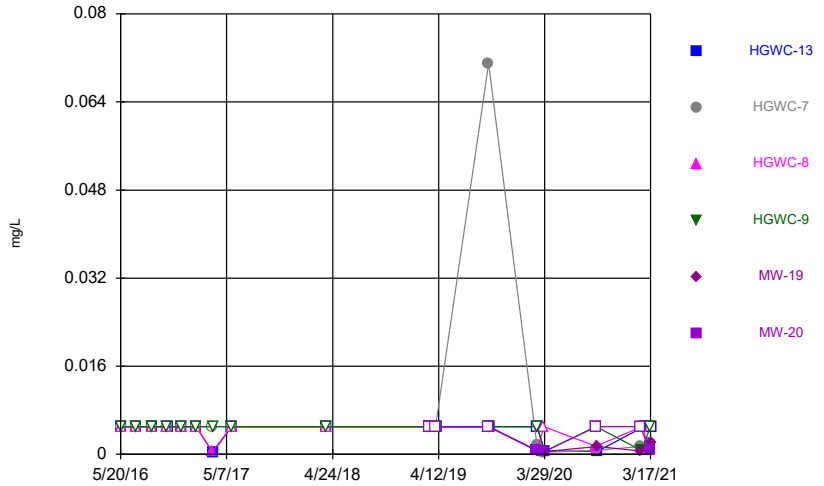
Time Series



Constituent: Chromium Analysis Run 5/4/2021 6:53 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

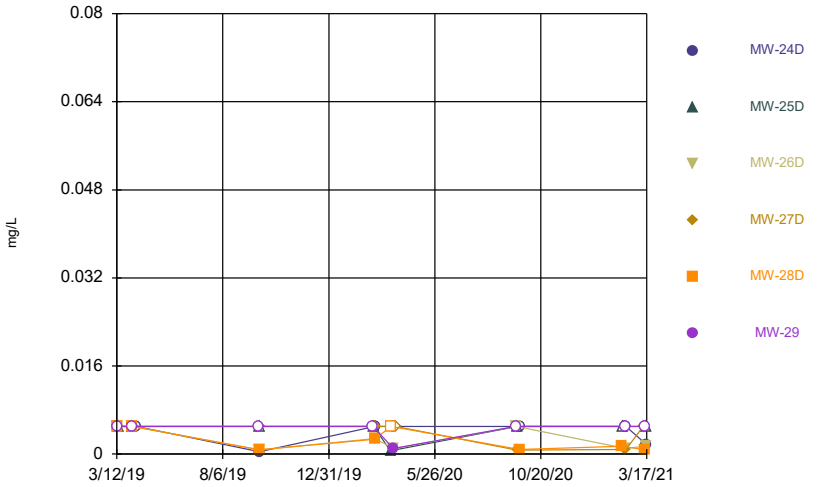
Time Series



Constituent: Chromium Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

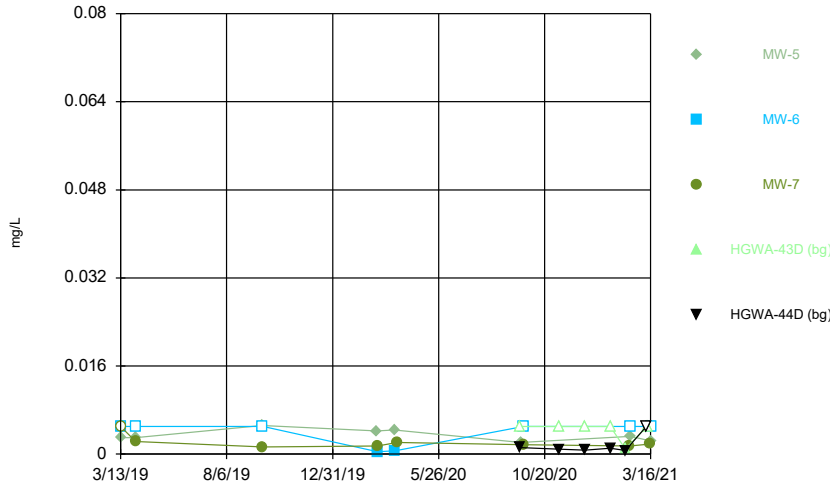
Time Series



Constituent: Chromium Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

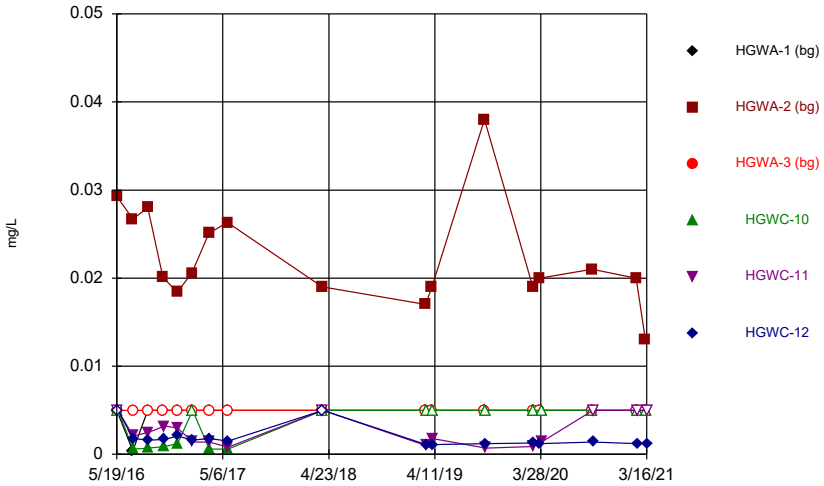
Time Series



Constituent: Chromium Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

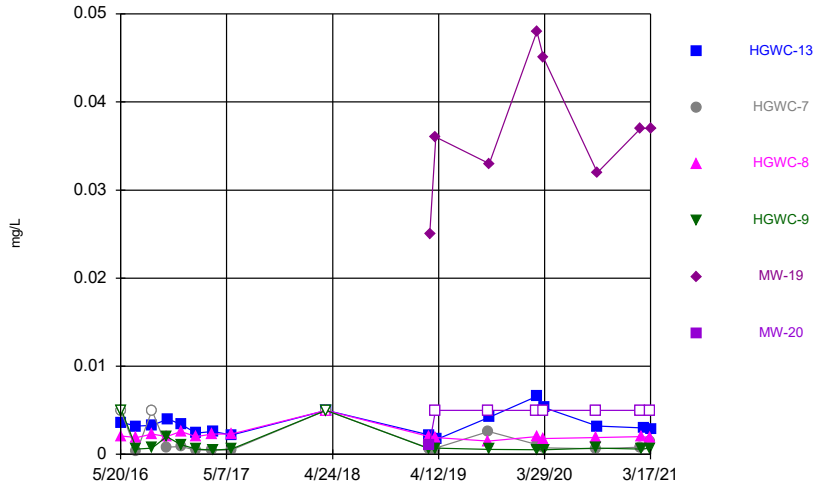
Time Series



Constituent: Cobalt Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

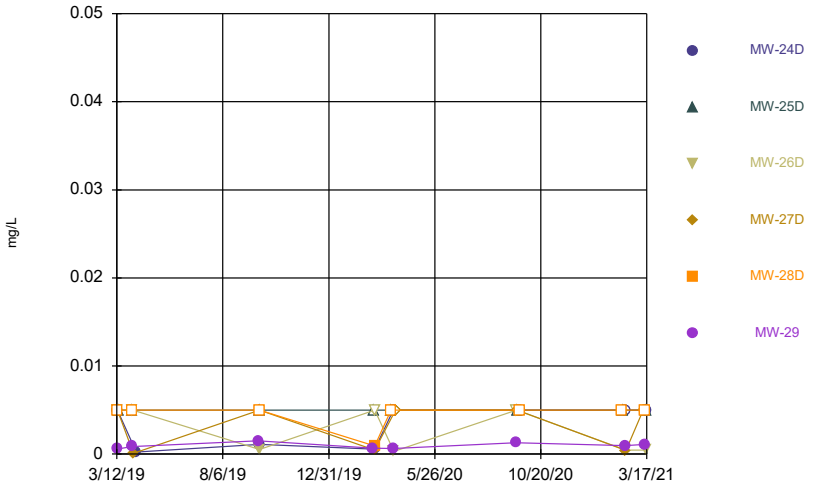
Time Series



Constituent: Cobalt Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

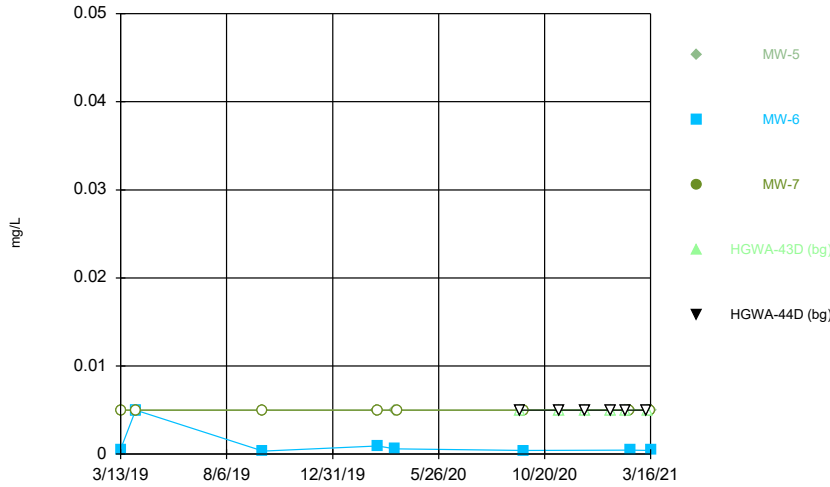
Time Series



Constituent: Cobalt Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

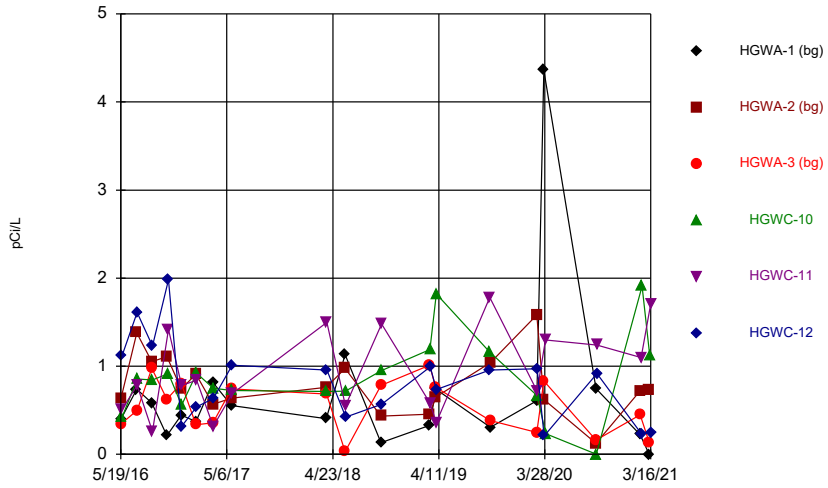
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Cobalt Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

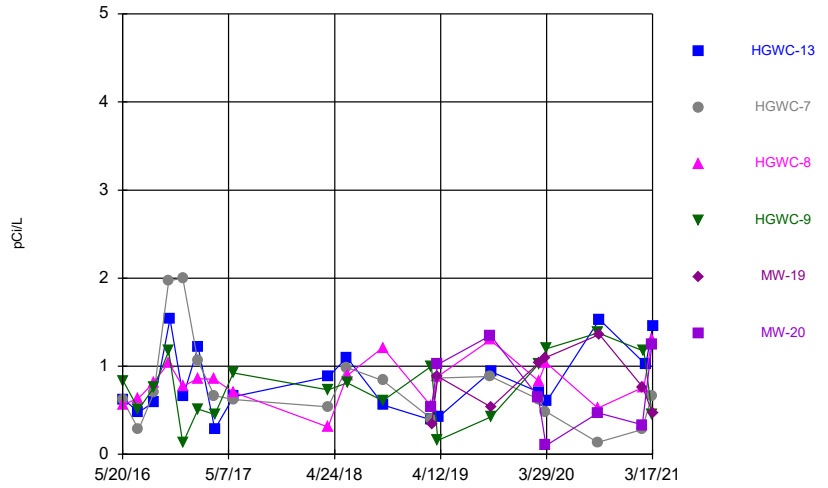
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

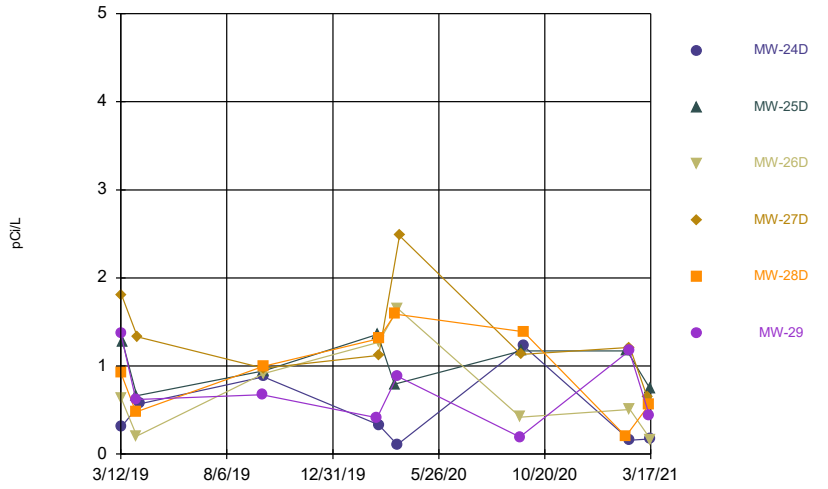
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

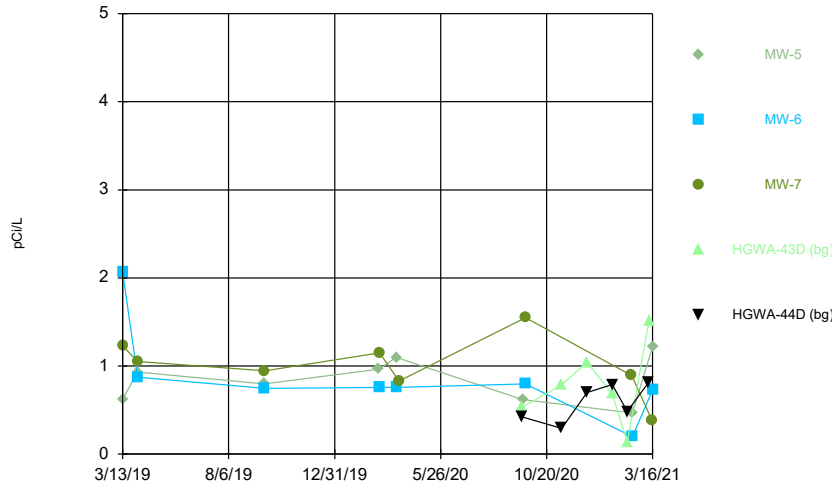
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

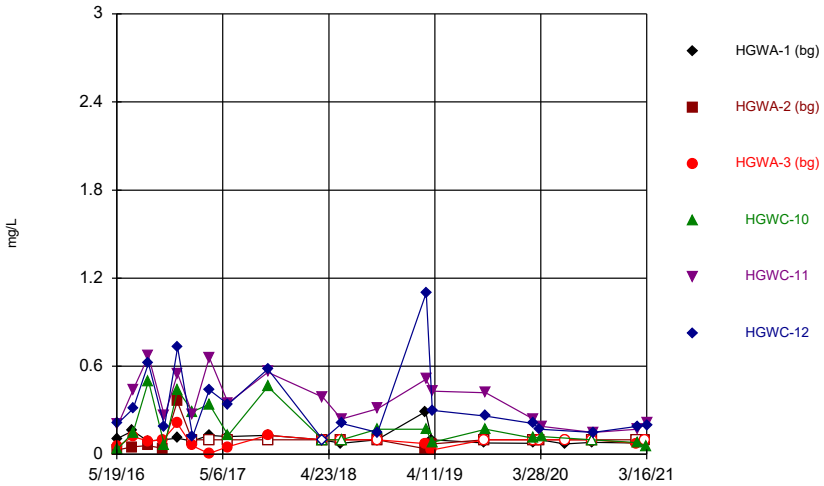
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

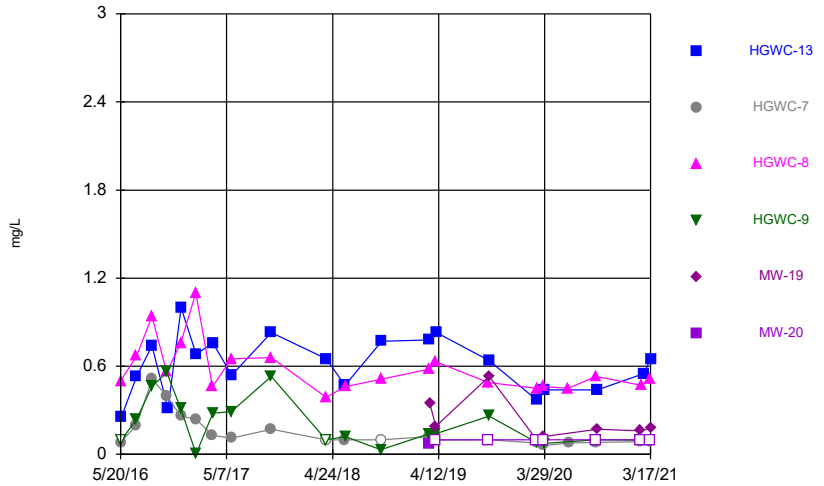
Time Series



Constituent: Fluoride Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

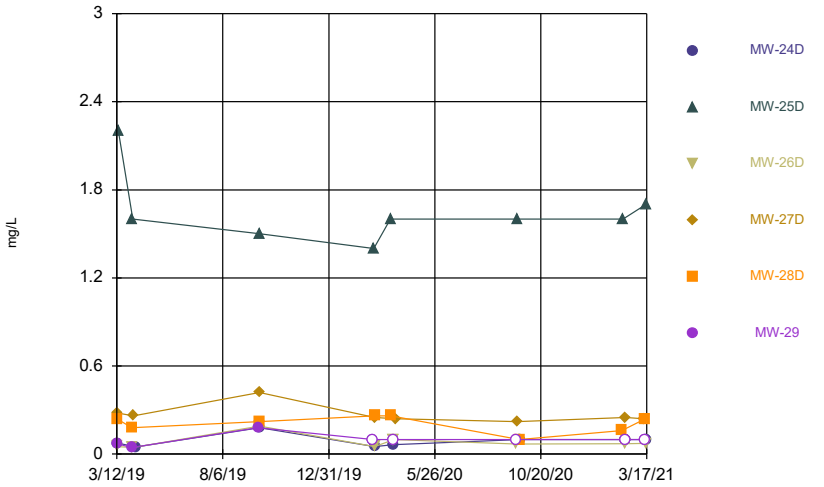
Time Series



Constituent: Fluoride Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

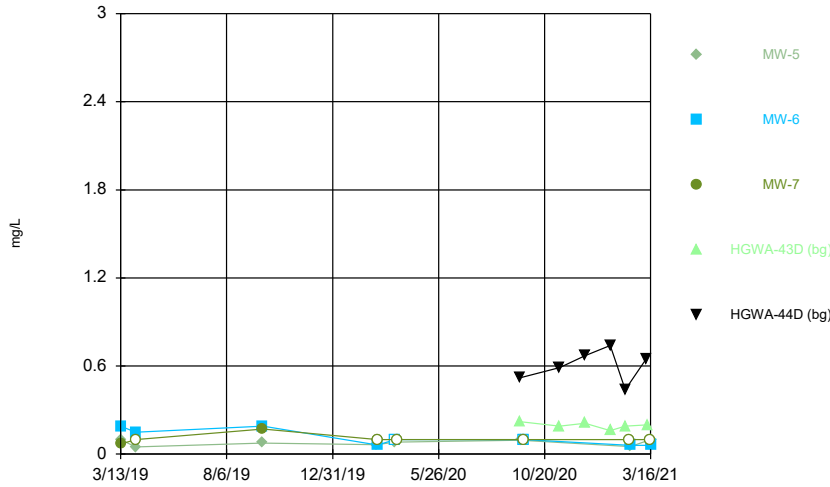
Time Series



Constituent: Fluoride Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

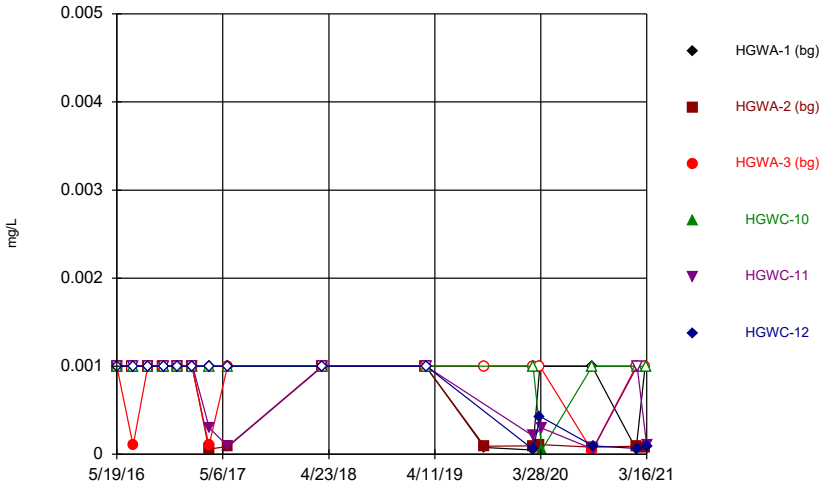
Time Series



Constituent: Fluoride Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

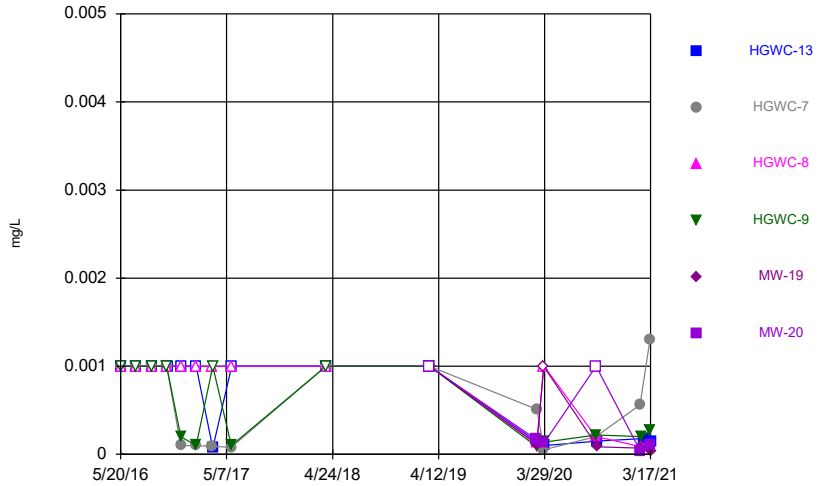
Time Series



Constituent: Lead Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

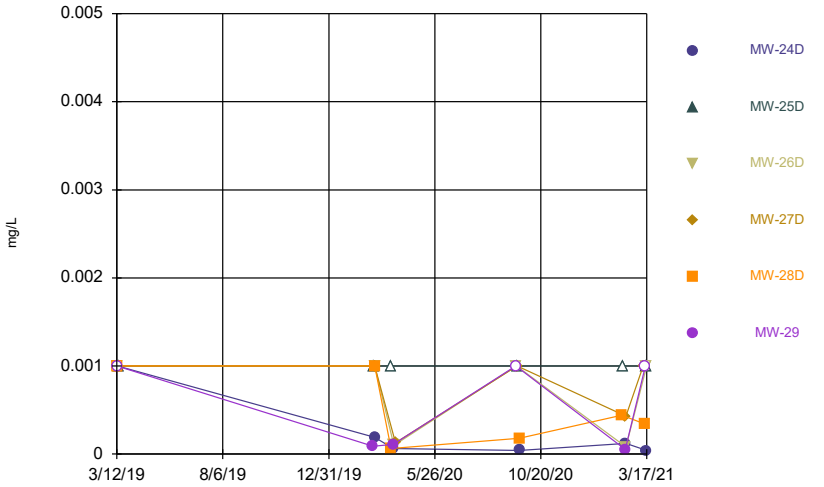
Time Series



Constituent: Lead Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

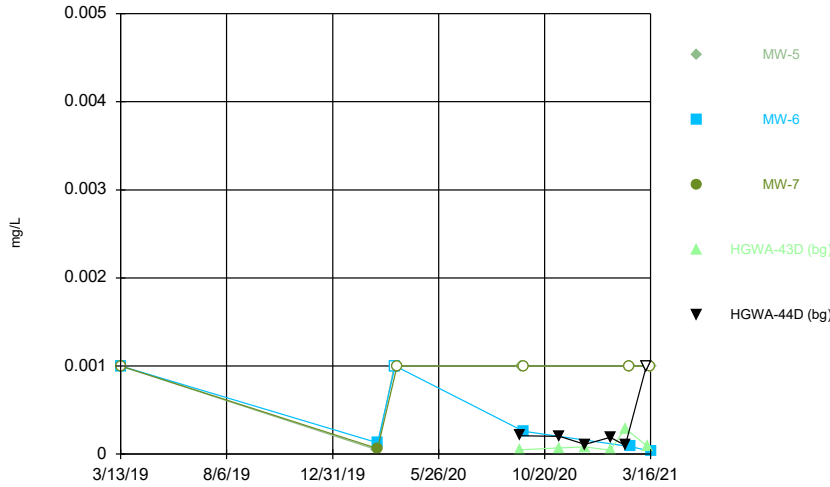
Time Series



Constituent: Lead Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

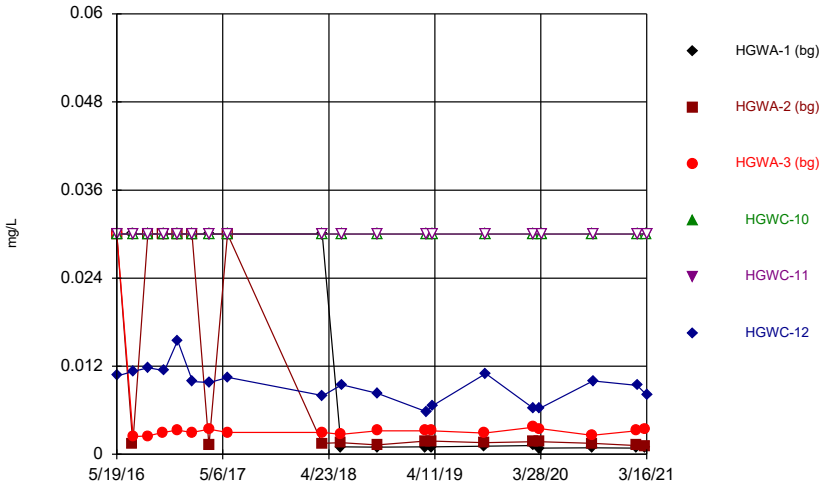
Time Series



Constituent: Lead Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

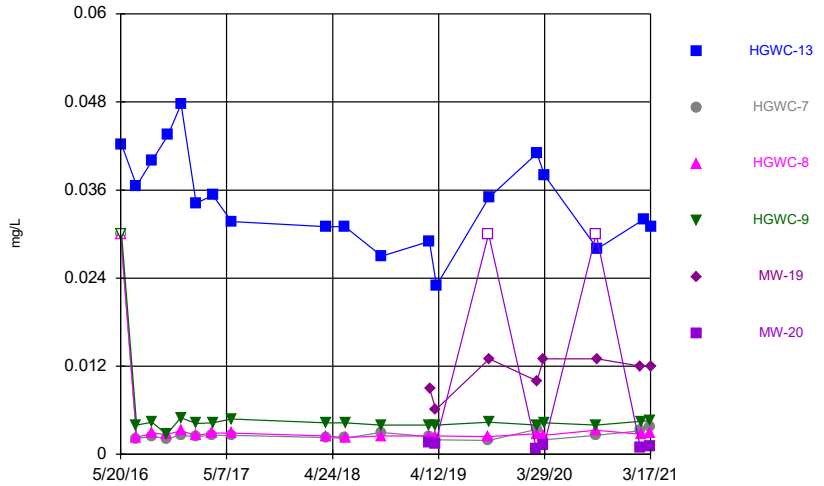
Time Series



Constituent: Lithium Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

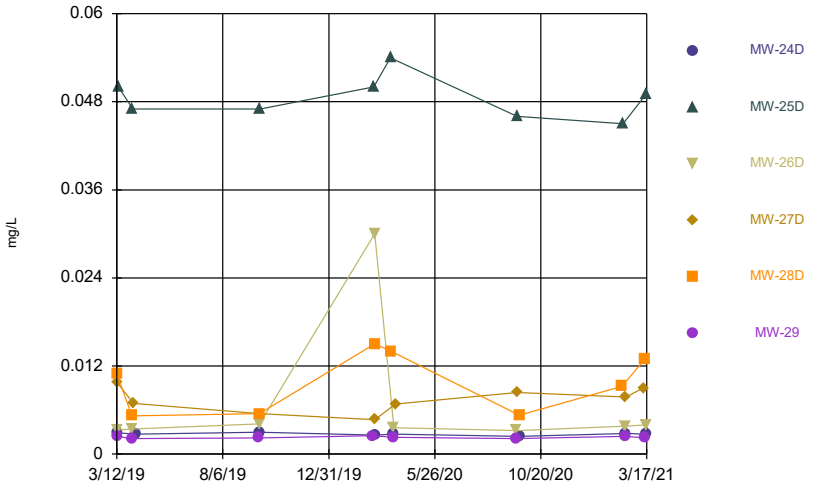
Time Series



Constituent: Lithium Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

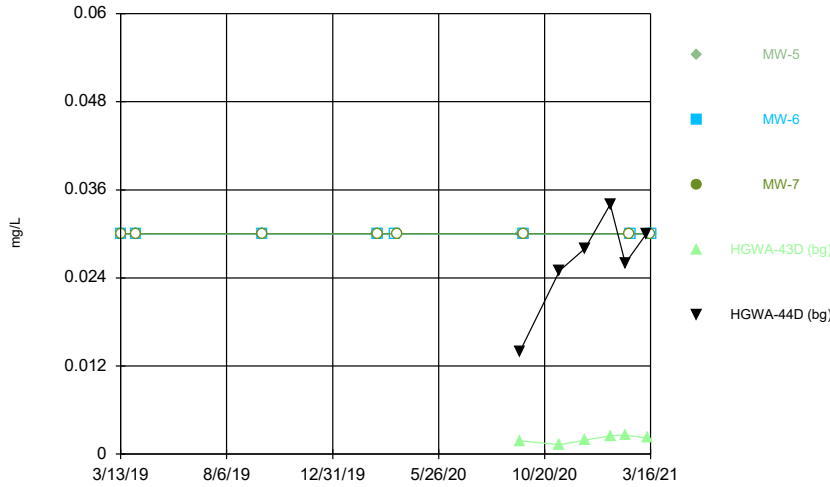
Time Series



Constituent: Lithium Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

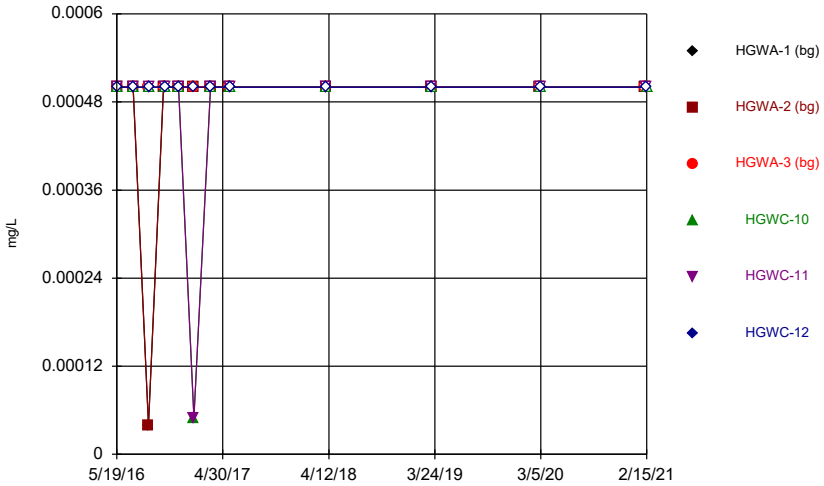
Time Series



Constituent: Lithium Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

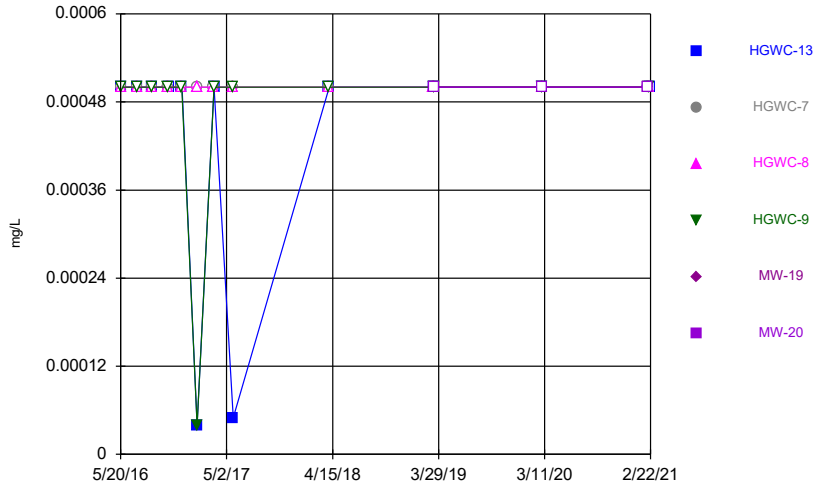
Time Series



Constituent: Mercury Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

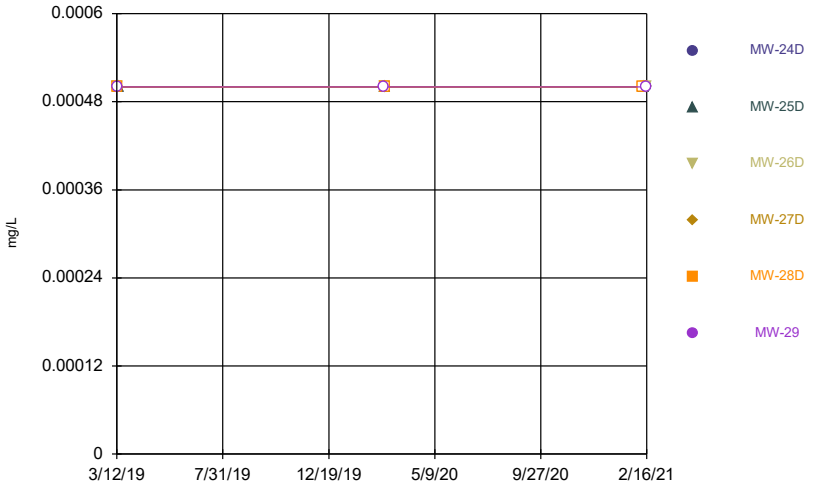
Time Series



Constituent: Mercury Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

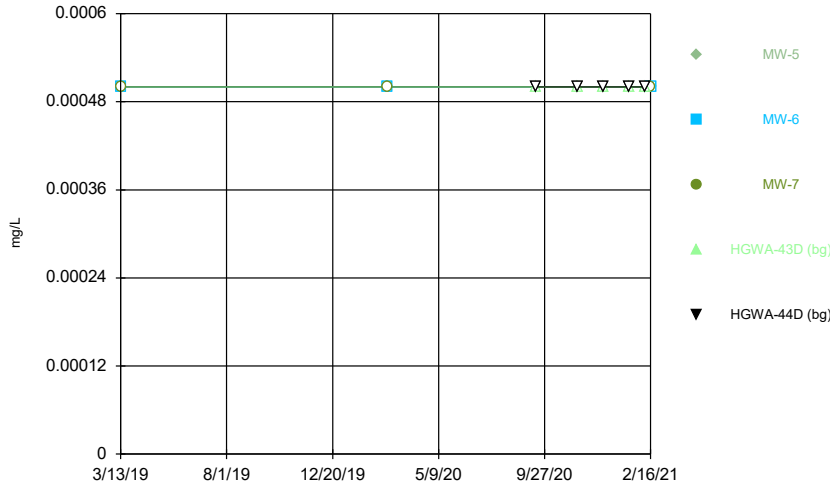
Time Series



Constituent: Mercury Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

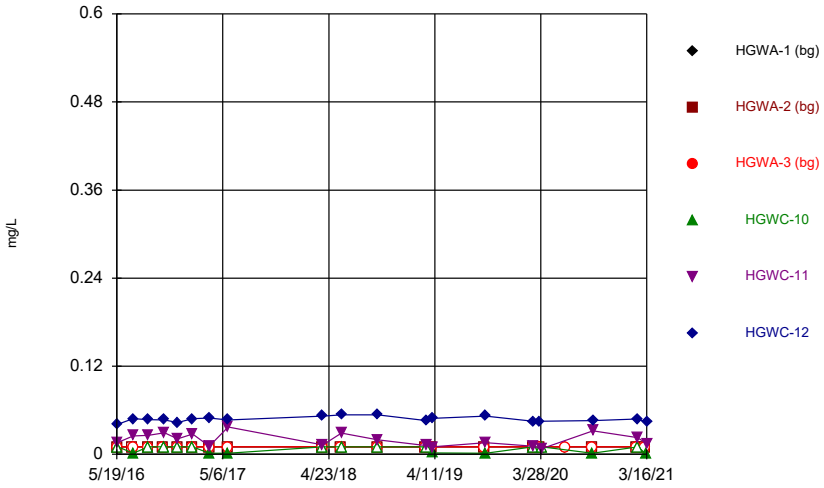
Time Series



Constituent: Mercury Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

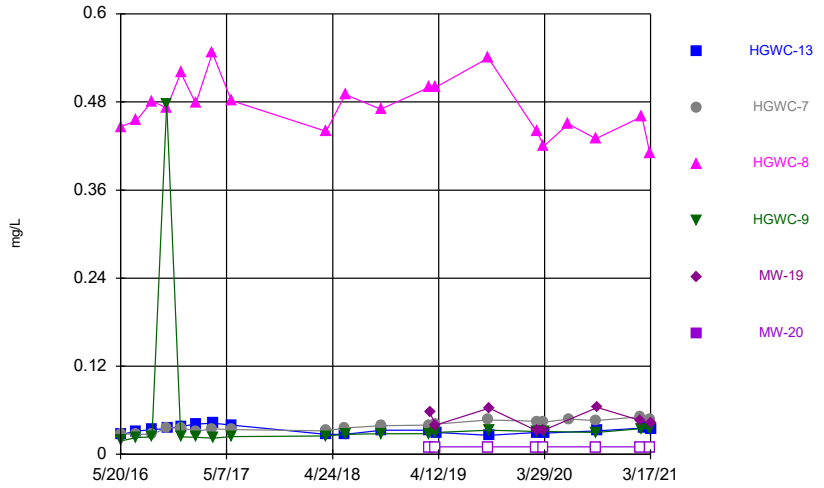
Time Series



Constituent: Molybdenum Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

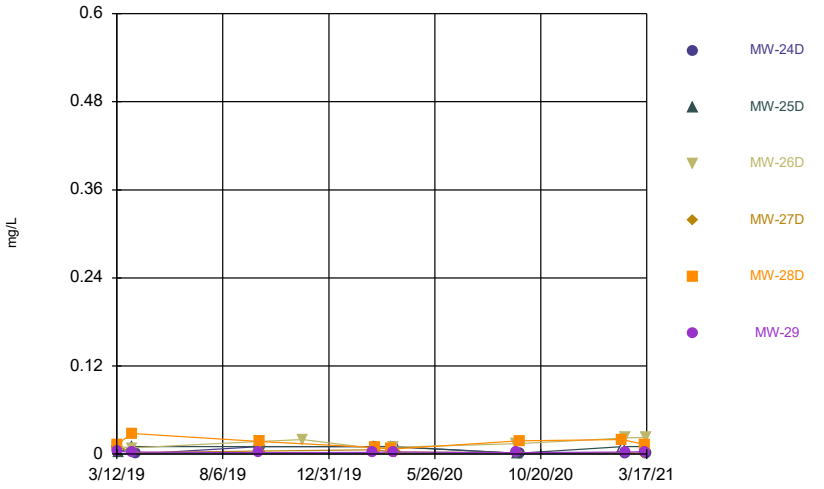
Time Series



Constituent: Molybdenum Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

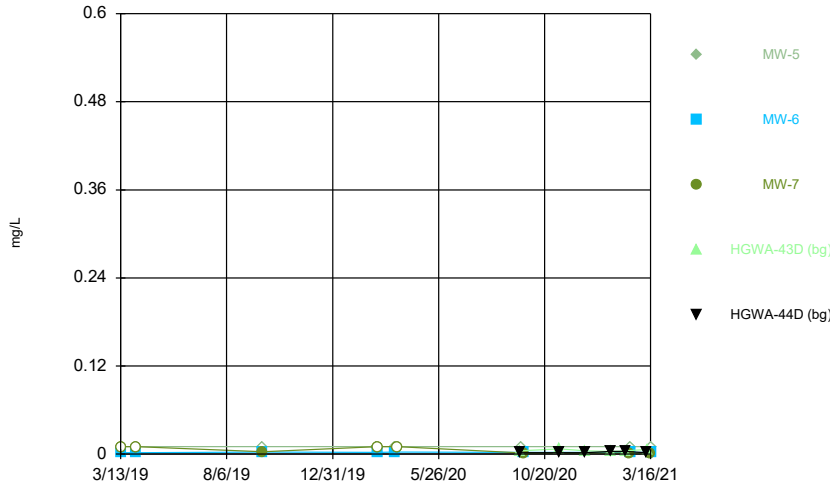
Time Series



Constituent: Molybdenum Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

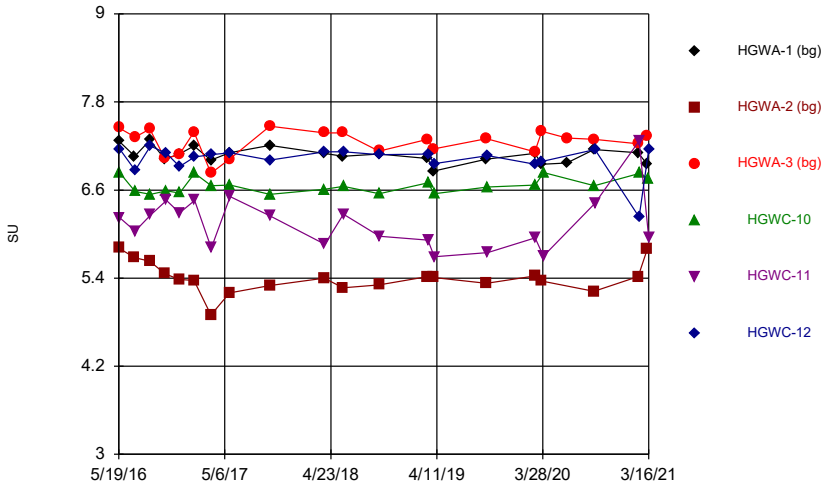
Time Series



Constituent: Molybdenum Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

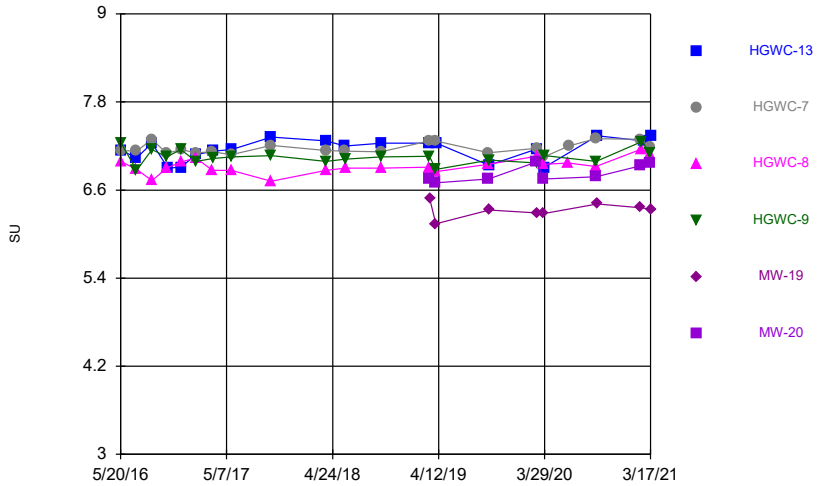


Constituent: pH, Field Analysis Run 5/4/2021 6:54 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

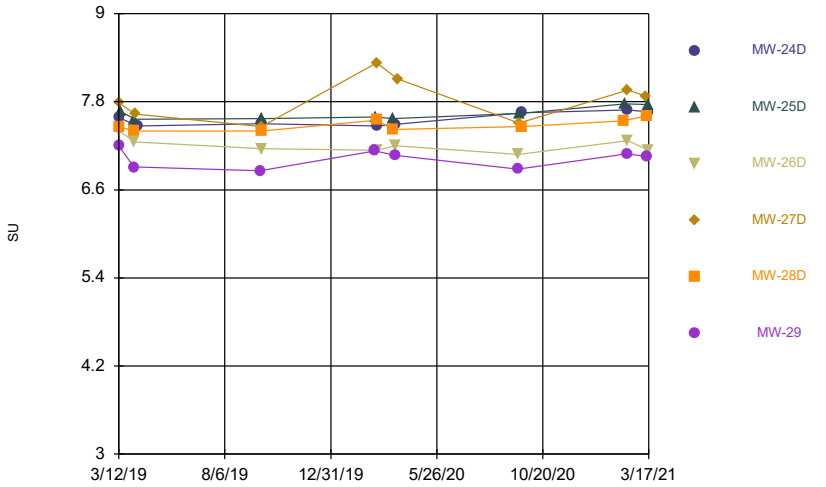


Constituent: pH, Field Analysis Run 5/4/2021 6:54 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

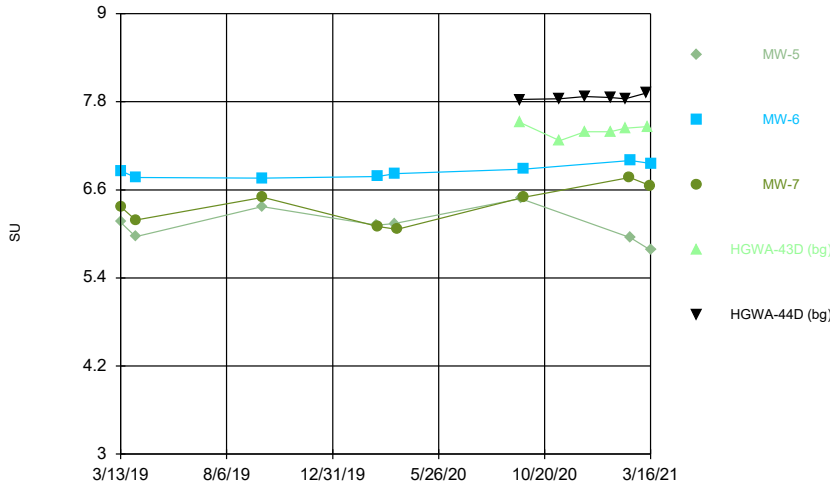


Constituent: pH, Field Analysis Run 5/4/2021 6:54 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

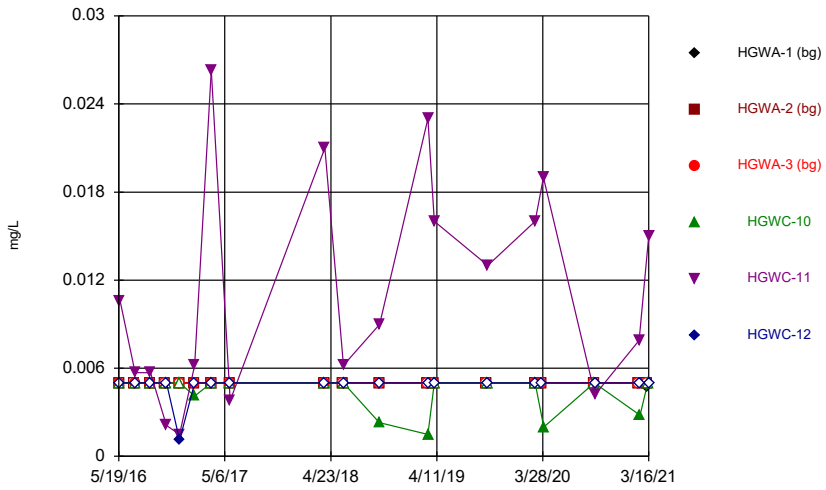


Constituent: pH, Field Analysis Run 5/4/2021 6:54 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

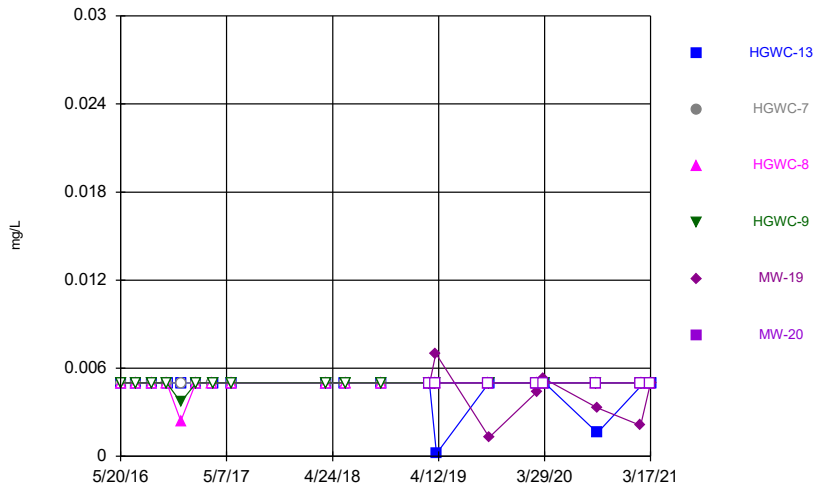
Time Series



Constituent: Selenium Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

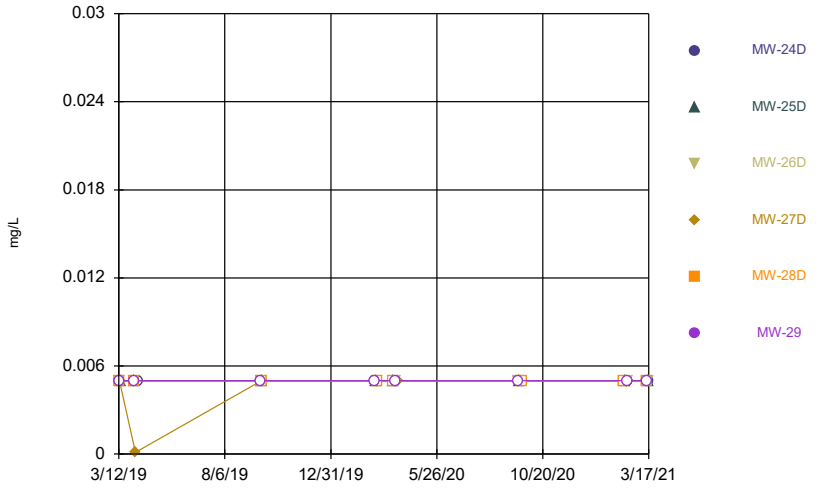
Time Series



Constituent: Selenium Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

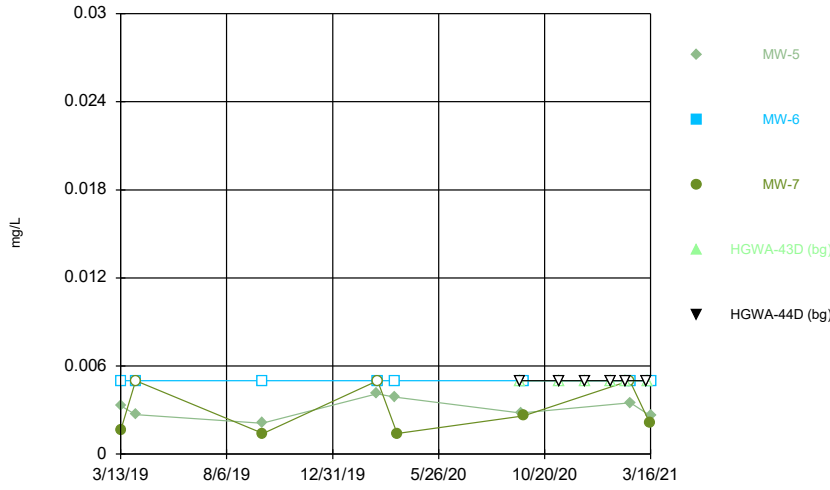
Time Series



Constituent: Selenium Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

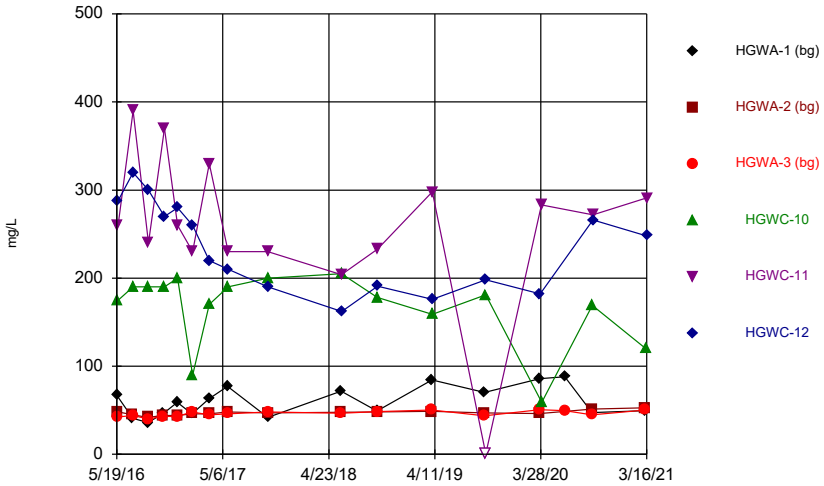
Time Series



Constituent: Selenium Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

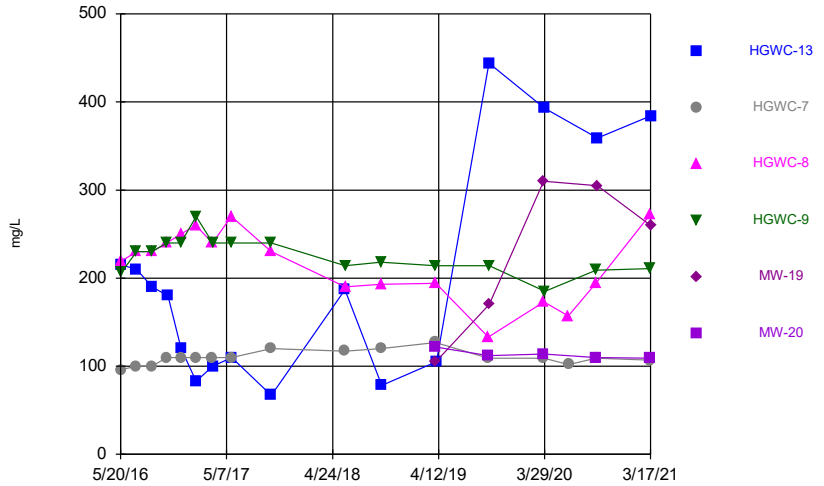
Time Series



Constituent: Sulfate Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

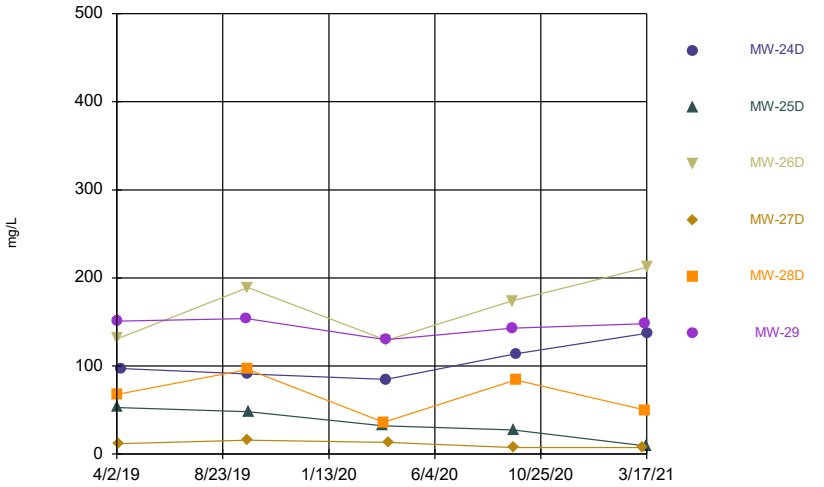
Time Series



Constituent: Sulfate Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

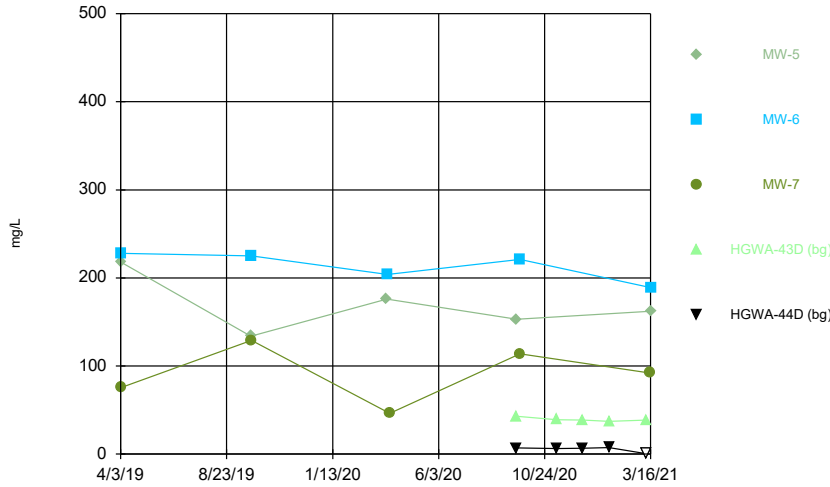
Time Series



Constituent: Sulfate Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

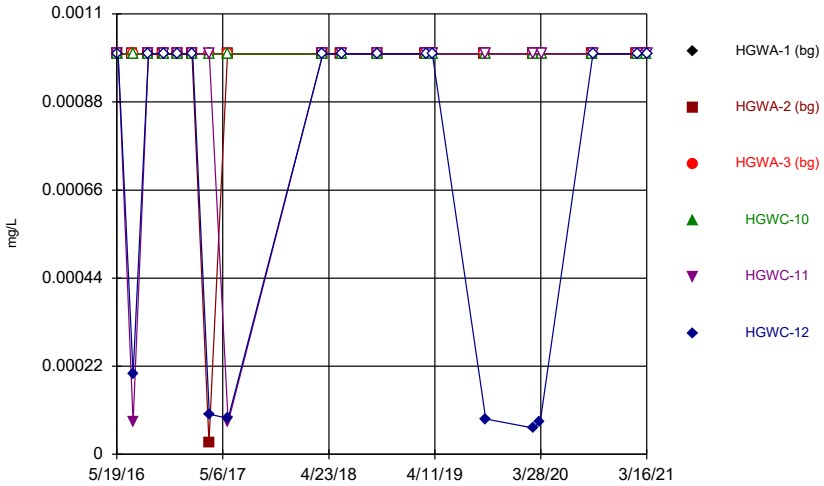
Time Series



Constituent: Sulfate Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

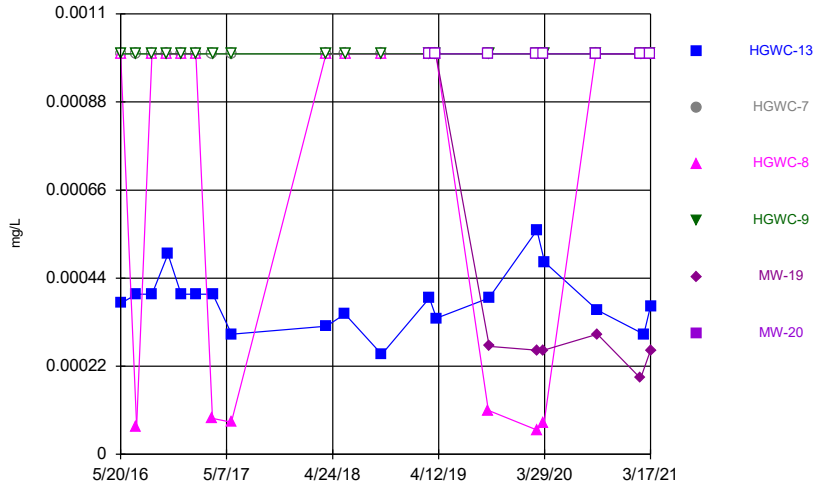
Time Series



Constituent: Thallium Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

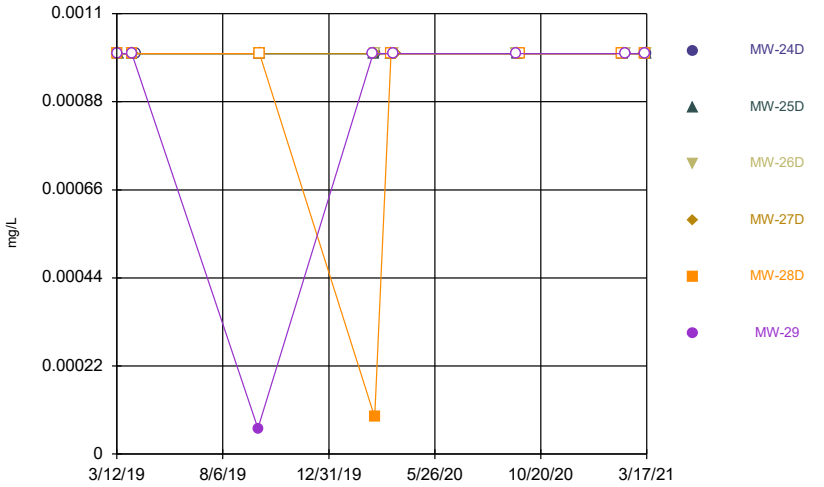
Time Series



Constituent: Thallium Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

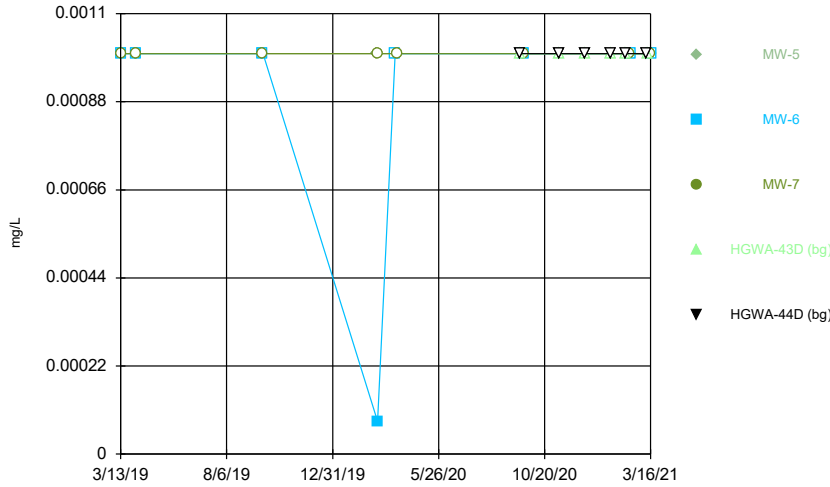
Time Series



Constituent: Thallium Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

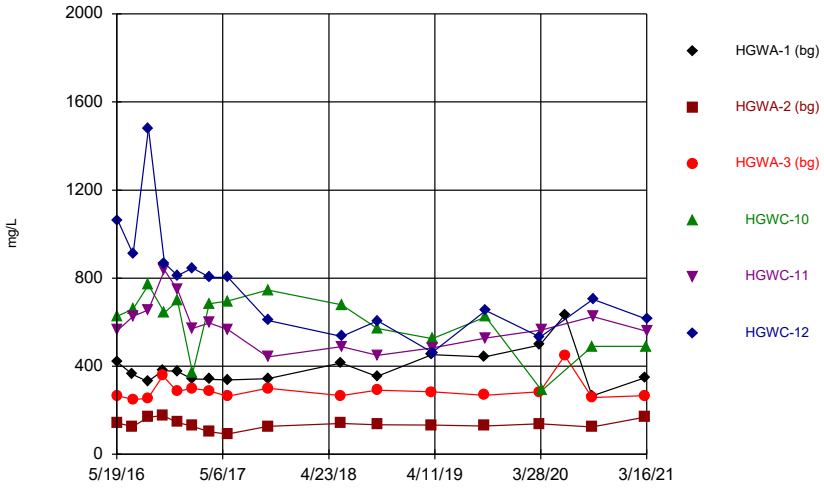
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

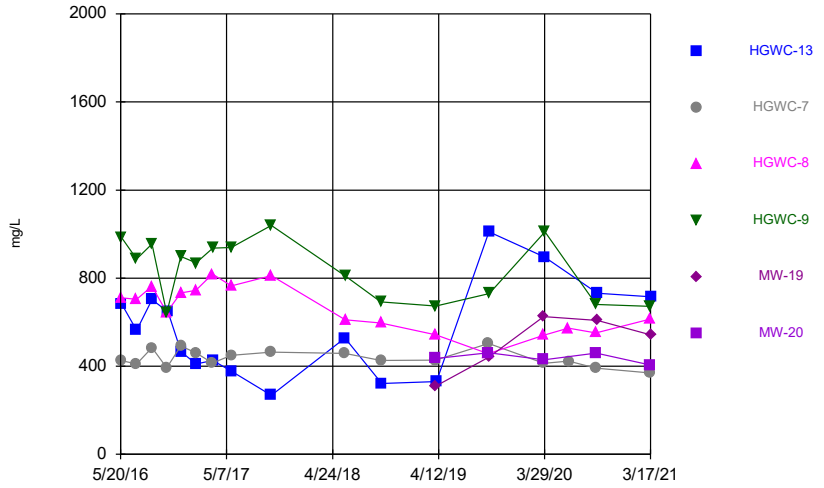
Time Series



Constituent: Total Dissolved Solids Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

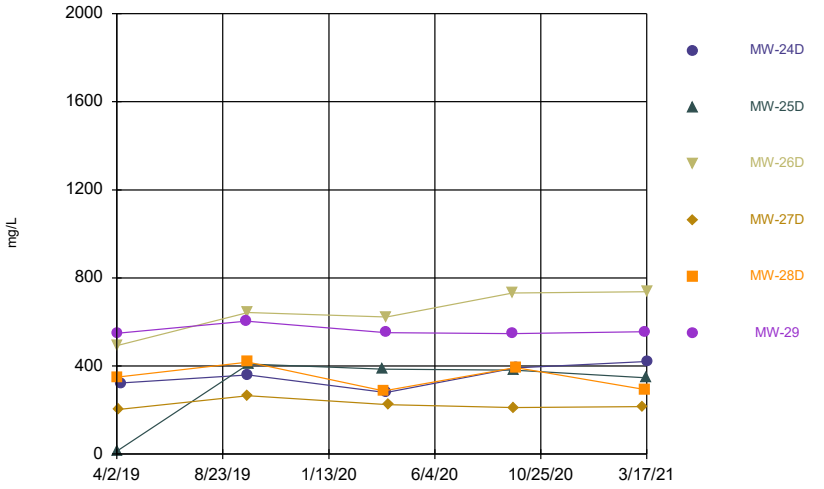
Time Series



Constituent: Total Dissolved Solids Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

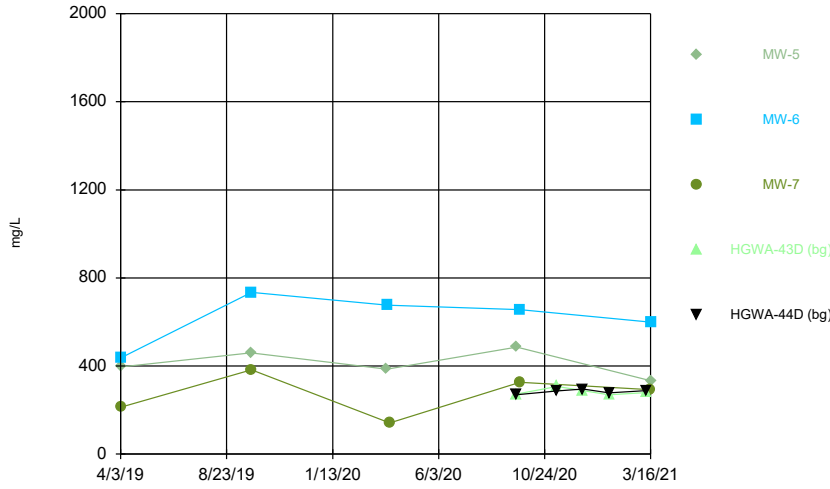
Time Series



Constituent: Total Dissolved Solids Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series



Constituent: Total Dissolved Solids Analysis Run 5/4/2021 6:54 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/4/2021 7:00 PM

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

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWC-10	HGWC-11	HGWC-12
5/19/2016	<0.003	<0.003	<0.003			
5/23/2016				<0.003	<0.003	<0.003
7/11/2016	<0.003	<0.003				
7/12/2016			0.0003 (J)	<0.003	<0.003	<0.003
8/30/2016	<0.003	<0.003	<0.003			
9/1/2016				<0.003	<0.003	<0.003
10/19/2016	0.0014 (J)	<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
1/24/2017	<0.003	<0.003	<0.003			
1/26/2017				<0.003	<0.003	<0.003
3/21/2017	<0.003	<0.003	<0.003			
3/22/2017				<0.003	<0.003	<0.003
5/22/2017	<0.003	<0.003	<0.003			
5/24/2017				<0.003	<0.003	<0.003
4/2/2018	<0.003	<0.003				
4/3/2018			<0.003			
4/4/2018				<0.003	<0.003	<0.003
3/12/2019	<0.003	<0.003	<0.003			
3/13/2019				<0.003	<0.003	
3/14/2019						<0.003
4/1/2019			<0.003			
4/2/2019	<0.003	<0.003				
4/3/2019				<0.003	<0.003	<0.003
9/23/2019	<0.003	<0.003	<0.003			
9/27/2019				<0.003	<0.003	<0.003
3/2/2020	<0.003	<0.003	<0.003			
3/3/2020				<0.003	<0.003	<0.003
3/25/2020	<0.003	<0.003	<0.003			
3/26/2020						<0.003
3/31/2020					<0.003	
4/1/2020				<0.003		
9/15/2020	<0.003	<0.003	<0.003			
9/16/2020				<0.003		
9/18/2020					0.00038 (J)	<0.003
2/8/2021	<0.003					
2/9/2021		0.00062 (JB)	0.00031 (JB)			
2/12/2021					<0.003	<0.003
2/15/2021				0.00065 (J)		
3/10/2021	<0.003					
3/11/2021		<0.003	<0.003			
3/12/2021				<0.003		
3/16/2021					<0.003	<0.003

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/4/2021 7:00 PM

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

	HGWC-13	HGWC-7	HGWC-8	HGWC-9	MW-19	MW-20
5/20/2016		<0.003	<0.003			
5/23/2016	<0.003			<0.003		
7/12/2016	0.0003 (J)	<0.003	<0.003	<0.003		
9/1/2016	<0.003	<0.003	<0.003	<0.003		
10/20/2016		<0.003	<0.003	<0.003		
10/24/2016	<0.003					
12/6/2016		<0.003	<0.003	<0.003		
12/7/2016	<0.003					
1/25/2017		<0.003	<0.003			
1/26/2017	<0.003			<0.003		
3/21/2017		<0.003	<0.003			
3/22/2017	<0.003			<0.003		
5/23/2017		<0.003	<0.003	<0.003		
5/24/2017	<0.003					
4/3/2018		<0.003	<0.003	<0.003		
4/4/2018	<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				<0.003
4/3/2019			<0.003	<0.003	<0.003	
4/5/2019	0.00021 (J)					
9/24/2019			<0.003			
9/25/2019		<0.003				<0.003
9/26/2019	<0.003					
9/27/2019				<0.003	<0.003	
3/2/2020						<0.003
3/3/2020			<0.003			
3/4/2020	0.00061 (J)	<0.003		0.00032 (J)	<0.003	
3/26/2020					<0.003	
3/27/2020		<0.003	<0.003			<0.003
3/30/2020	0.00036 (J)					
3/31/2020				0.00042 (J)		
9/16/2020		0.00034 (J)	<0.003			
9/17/2020				<0.003		<0.003
9/21/2020	0.00029 (J)				<0.003	
2/10/2021		<0.003				
2/11/2021						<0.003
2/12/2021					<0.003	
2/16/2021			0.00064 (J)	0.00043 (J)		
2/22/2021	0.00047 (J)					
3/15/2021		<0.003	<0.003			<0.003
3/16/2021				<0.003		
3/17/2021	0.00049 (J)				<0.003	

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/4/2021 7:00 PM

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

	MW-24D	MW-25D	MW-26D	MW-27D	MW-28D	MW-29
3/12/2019					<0.003	<0.003
3/13/2019	<0.003		<0.003	<0.003		
3/14/2019		<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	
9/27/2019		<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	
3/26/2020		<0.003				
3/27/2020					<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		<0.003		0.00031 (J)		
9/21/2020	<0.003				<0.003	
2/10/2021					0.0019 (J)	
2/12/2021		<0.003				
2/15/2021						0.00094 (J)
2/16/2021	<0.003		<0.003	0.00038 (J)		
3/12/2021				<0.003		
3/15/2021					<0.003	<0.003
3/16/2021		<0.003				
3/17/2021	<0.003		<0.003			

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/4/2021 7:00 PM

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

	MW-5	MW-6	MW-7	HGWA-43D (bg)	HGWA-44D (bg)
3/13/2019	<0.003	<0.003	0.00086 (J)		
4/3/2019	<0.003	<0.003	<0.003		
9/25/2019	<0.003				
9/26/2019		<0.003	<0.003		
3/2/2020	<0.003				
3/3/2020		<0.003	0.0013 (J)		
3/26/2020	<0.003				
3/27/2020		<0.003			
3/30/2020			<0.003		
9/16/2020				0.00051 (J)	0.00049 (J)
9/17/2020	<0.003				
9/21/2020		0.0014 (J)	0.00051 (J)		
11/10/2020				0.00043 (J)	<0.003
12/15/2020				0.00031 (J)	0.00047 (J)
1/19/2021				0.00029 (J)	0.00067 (JB)
2/9/2021				0.00037 (JB)	0.00042 (J)
2/15/2021			0.0021 (J)		
2/16/2021	<0.003	<0.003			
3/10/2021					0.00037 (J)
3/11/2021				0.00057 (J)	
3/15/2021			<0.003		
3/16/2021	<0.003	<0.003			

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/4/2021 7:00 PM

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

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWC-10	HGWC-11	HGWC-12
5/19/2016	<0.005	0.00127 (J)	<0.005			
5/23/2016				<0.005	<0.005	0.0046 (J)
7/11/2016	<0.005	0.002 (J)				
7/12/2016			0.0008 (J)	<0.005	0.0015 (J)	0.005
8/30/2016	<0.005	0.0017 (J)	<0.005			
9/1/2016				<0.005	<0.005	0.0043 (J)
10/19/2016	<0.005	<0.005	<0.005			
10/24/2016				<0.005	<0.005	0.0049 (J)
12/6/2016	<0.005	<0.005	<0.005			
12/7/2016				<0.005	<0.005	0.0046 (J)
1/24/2017	<0.005	<0.005	<0.005			
1/26/2017				<0.005	<0.005	<0.005
3/21/2017	0.0005 (J)	<0.005	0.0007 (J)			
3/22/2017				<0.005	0.0053	0.0019 (J)
5/22/2017	<0.005	0.0006 (J)	0.0006 (J)			
5/24/2017				<0.005	<0.005	0.0022 (J)
4/2/2018	<0.005	<0.005				
4/3/2018			<0.005			
4/4/2018				<0.005	<0.005	<0.005
6/4/2018	<0.005	0.00088 (J)	0.0008 (J)			
6/5/2018				<0.005	0.0012 (J)	
6/6/2018						0.0048 (J)
10/1/2018	<0.005	<0.005	0.0011 (J)			
10/2/2018				<0.005		
10/3/2018					<0.005	0.0037 (J)
3/12/2019	<0.005	0.00069 (J)	0.00063 (J)			
3/13/2019				<0.005	0.0024 (J)	
3/14/2019						0.0026 (J)
4/1/2019			<0.005			
4/2/2019	<0.005	<0.005				
4/3/2019				<0.005	0.00094 (J)	0.0022 (J)
9/23/2019	0.00046 (J)	0.00067 (J)	0.0011 (J)			
9/27/2019				<0.005	0.0018 (J)	0.0061
3/2/2020	<0.005	0.00043 (J)	0.0004 (J)			
3/3/2020				<0.005	0.0022 (J)	0.0023 (J)
3/25/2020	<0.005	<0.005	<0.005			
3/26/2020						0.0028 (J)
3/31/2020					0.0022 (J)	
4/1/2020				<0.005		
9/15/2020	<0.005	<0.005	<0.005			
9/16/2020				<0.005		
9/18/2020					0.00081 (J)	0.0031 (J)
2/8/2021	<0.005					
2/9/2021		<0.005	<0.005			
2/12/2021					0.002 (J)	0.0045 (J)
2/15/2021				<0.005		
3/10/2021	<0.005					
3/11/2021		<0.005	<0.005			
3/12/2021				<0.005		
3/16/2021					0.0017 (J)	0.0038 (J)

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/4/2021 7:00 PM

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

	HGWC-13	HGWC-7	HGWC-8	HGWC-9	MW-19	MW-20
5/20/2016		<0.005	<0.005			
5/23/2016	0.329			<0.005		
7/12/2016	0.297	<0.005	<0.005	<0.005		
9/1/2016	0.314	<0.005	<0.005	<0.005		
10/20/2016		<0.005	<0.005	<0.005		
10/24/2016	0.334					
12/6/2016		<0.005	<0.005	<0.005		
12/7/2016	0.35					
1/25/2017		<0.005	<0.005			
1/26/2017	0.424			<0.005		
3/21/2017		<0.005	<0.005			
3/22/2017	0.419			0.0008 (J)		
5/23/2017		<0.005	<0.005	<0.005		
5/24/2017	0.393					
4/3/2018		<0.005	<0.005	<0.005		
4/4/2018	0.49					
6/5/2018	0.38	<0.005				
6/6/2018			<0.005	<0.005		
10/2/2018		0.0019 (J)	<0.005	<0.005		
10/5/2018	0.34					
3/12/2019			<0.005			
3/13/2019	0.42	<0.005		0.00075 (J)		0.0023 (J)
3/14/2019					<0.005	
4/2/2019		<0.005				<0.005
4/3/2019			<0.005	<0.005	<0.005	
4/5/2019	0.36					
9/24/2019			<0.005			
9/25/2019		<0.005				<0.005
9/26/2019	0.44					
9/27/2019				0.00037 (J)	<0.005	
3/2/2020						0.00038 (J)
3/3/2020			<0.005			
3/4/2020	0.52	<0.005		<0.005	0.00045 (J)	
3/26/2020					<0.005	
3/27/2020		<0.005	<0.005			<0.005
3/30/2020	0.47					
3/31/2020				<0.005		
9/16/2020		<0.005	<0.005			
9/17/2020				<0.005		<0.005
9/21/2020	0.39				<0.005	
2/10/2021		<0.005				
2/11/2021						0.00094 (J)
2/12/2021					<0.005	
2/16/2021			<0.005	<0.005		
2/22/2021	0.45					
3/15/2021		<0.005	<0.005			<0.005
3/16/2021				<0.005		
3/17/2021	0.39				<0.005	

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/4/2021 7:00 PM

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

	MW-24D	MW-25D	MW-26D	MW-27D	MW-28D	MW-29
3/12/2019					<0.005	<0.005
3/13/2019	<0.005		<0.005	<0.005		
3/14/2019		0.0019 (J)				
4/2/2019					<0.005	<0.005
4/3/2019		<0.005	<0.005			
4/4/2019				0.0002 (J)		
4/8/2019	<0.005					
9/24/2019						<0.005
9/26/2019	<0.005		<0.005	<0.005	<0.005	
9/27/2019		0.0011 (J)				
3/2/2020						<0.005
3/3/2020		0.001 (J)				
3/4/2020	<0.005		0.0006 (J)	0.00069 (J)	<0.005	
3/26/2020		0.00075 (J)				
3/27/2020					<0.005	
3/30/2020	<0.005					0.00037 (J)
3/31/2020			<0.005			
4/2/2020				<0.005		
9/16/2020						<0.005
9/17/2020			<0.005			
9/18/2020		<0.005		<0.005		
9/21/2020	<0.005				<0.005	
2/10/2021					0.0011 (J)	
2/12/2021		<0.005				
2/15/2021						<0.005
2/16/2021	<0.005		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			

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/4/2021 7:00 PM

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

	MW-5	MW-6	MW-7	HGWA-43D (bg)	HGWA-44D (bg)
3/13/2019	<0.005	<0.005	<0.005		
4/3/2019	<0.005	<0.005	<0.005		
9/25/2019	<0.005				
9/26/2019		<0.005	<0.005		
3/2/2020	<0.005				
3/3/2020		<0.005	<0.005		
3/26/2020	<0.005				
3/27/2020		<0.005			
3/30/2020			<0.005		
9/16/2020				<0.005	<0.005
9/17/2020	<0.005				
9/21/2020		<0.005	<0.005		
11/10/2020				0.0021 (J)	<0.005
12/15/2020				<0.005	<0.005
1/19/2021				0.0011 (J)	<0.005
2/9/2021				0.0017 (JB)	0.00083 (J)
2/15/2021			<0.005		
2/16/2021	<0.005	<0.005			
3/10/2021					<0.005
3/11/2021				0.0013 (J)	
3/15/2021			<0.005		
3/16/2021	<0.005	<0.005			

Time Series

Constituent: Barium (mg/L) Analysis Run 5/4/2021 7:00 PM

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

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWC-10	HGWC-11	HGWC-12
5/19/2016	0.0346	0.114	0.111			
5/23/2016				0.0877	0.0466	0.133
7/11/2016	0.0311	0.112				
7/12/2016			0.115	0.0926	0.0616	0.135
8/30/2016	0.0293	0.131	0.113			
9/1/2016				0.0994	0.0497	0.123
10/19/2016	0.0293	0.111	0.123			
10/24/2016				0.101	0.0794	0.135
12/6/2016	0.0304	0.108	0.127			
12/7/2016				0.107	0.1	0.13
1/24/2017	0.028	0.102	0.126			
1/26/2017				0.0538	0.0696	0.127
3/21/2017	0.0275	0.095	0.12			
3/22/2017				0.0962	0.0346	0.112
5/22/2017	0.0281	0.103	0.117			
5/24/2017				0.0996	0.0437	0.106
4/2/2018	0.026	0.099				
4/3/2018			0.11			
4/4/2018				0.084	0.029	0.083
6/4/2018	0.035	0.11	0.12			
6/5/2018				0.086	0.039	
6/6/2018						0.09
10/1/2018	0.029	0.11	0.14			
10/2/2018				0.076		
10/3/2018					0.033	0.087
3/12/2019	0.042	0.12	0.13			
3/13/2019				0.044	0.024	
3/14/2019						0.081
4/1/2019			0.13			
4/2/2019	0.04	0.13				
4/3/2019				0.076	0.023	0.077
9/23/2019	0.042	0.13	0.13			
9/27/2019				0.078	0.033	0.096
3/2/2020	0.034	0.11	0.14			
3/3/2020				0.048	0.022	0.092
3/25/2020	0.043	0.12	0.13			
3/26/2020						0.089
3/31/2020					0.026	
4/1/2020				0.058		
9/15/2020	0.035	0.12	0.12			
9/16/2020				0.068		
9/18/2020					0.043	0.086
2/8/2021	0.032					
2/9/2021		0.12	0.13			
2/12/2021					0.039	0.09
2/15/2021				0.06		
3/10/2021	0.03					
3/11/2021		0.07	0.13			
3/12/2021				0.058		
3/16/2021					0.035	0.084

Time Series

Constituent: Barium (mg/L) Analysis Run 5/4/2021 7:00 PM

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

	HGWC-13	HGWC-7	HGWC-8	HGWC-9	MW-19	MW-20
5/20/2016		0.0687	0.0808			
5/23/2016	0.0779			0.117		
7/12/2016	0.0697	0.0731	0.083	0.13		
9/1/2016	0.07	0.0747	0.0829	0.13		
10/20/2016		0.072	0.0811	0.0806		
10/24/2016	0.0882					
12/6/2016		0.0752	0.0845	0.128		
12/7/2016	0.0798					
1/25/2017		0.0747	0.078			
1/26/2017	0.0738			0.142		
3/21/2017		0.0722	0.0791			
3/22/2017	0.0755			0.122		
5/23/2017		0.0794	0.0846	0.127		
5/24/2017	0.0627					
4/3/2018		0.075	0.065	0.1		
4/4/2018	0.099					
6/5/2018	0.13	0.071				
6/6/2018			0.063	0.11		
10/2/2018		0.078	0.061	0.11		
10/5/2018	0.076					
3/12/2019			0.062			
3/13/2019	0.1	0.083		0.1		0.087
3/14/2019					0.06	
4/2/2019		0.072				0.08
4/3/2019			0.066	0.12	0.05	
4/5/2019	0.079					
9/24/2019			0.053			
9/25/2019		0.061				0.085
9/26/2019	0.11					
9/27/2019				0.11	0.068	
3/2/2020						0.099
3/3/2020			0.052			
3/4/2020	0.1	0.068		0.11	0.069	
3/26/2020					0.067	
3/27/2020		0.059	0.059			0.093
3/30/2020	0.08					
3/31/2020				0.11		
9/16/2020		0.068	0.06			
9/17/2020				0.11		0.096
9/21/2020	0.052				0.056	
2/10/2021		0.069				
2/11/2021						0.093
2/12/2021					0.051	
2/16/2021			0.069	0.11		
2/22/2021	0.061					
3/15/2021		0.074	0.063			0.096
3/16/2021				0.11		
3/17/2021	0.056				0.049	

Time Series

Constituent: Barium (mg/L) Analysis Run 5/4/2021 7:00 PM

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

	MW-24D	MW-25D	MW-26D	MW-27D	MW-28D	MW-29
3/12/2019					0.82	0.089
3/13/2019	0.053		0.099	1.5		
3/14/2019		0.44				
4/2/2019					0.37	0.078
4/3/2019		0.38	0.12			
4/4/2019				1.2		
4/8/2019	0.043					
9/24/2019						0.081
9/26/2019	0.12		0.12	0.95	0.15	
9/27/2019		0.39				
3/2/2020						0.088
3/3/2020		0.42				
3/4/2020	0.081		0.17	0.95	0.77	
3/26/2020		0.45				
3/27/2020					0.64	
3/30/2020	0.056					0.08
3/31/2020			0.11			
4/2/2020				1		
9/16/2020						0.076
9/17/2020			0.099			
9/18/2020		0.44		1		
9/21/2020	0.053				0.18	
2/10/2021					0.26	
2/12/2021		0.46				
2/15/2021						0.081
2/16/2021	0.062		0.093	1		
3/12/2021				1.1		
3/15/2021					0.45	0.078
3/16/2021		0.51				
3/17/2021	0.055		0.094			

Time Series

Constituent: Barium (mg/L) Analysis Run 5/4/2021 7:00 PM

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

	MW-5	MW-6	MW-7	HGWA-43D (bg)	HGWA-44D (bg)
3/13/2019	0.056	0.1	0.063		
4/3/2019	0.049	0.09	0.058		
9/25/2019	0.046				
9/26/2019		0.089	0.066		
3/2/2020	0.049				
3/3/2020		0.09	0.043		
3/26/2020	0.046				
3/27/2020		0.086			
3/30/2020			0.05		
9/16/2020				0.26	0.24
9/17/2020	0.043				
9/21/2020		0.083	0.065		
11/10/2020				0.25	0.38
12/15/2020				0.29	0.39
1/19/2021				0.32	0.41
2/9/2021				0.34	0.46
2/15/2021			0.048		
2/16/2021	0.05	0.085			
3/10/2021					0.26
3/11/2021				0.32	
3/15/2021			0.053		
3/16/2021	0.046	0.081			

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/4/2021 7:00 PM

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

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWC-10	HGWC-11	HGWC-12
5/19/2016	<0.0005	<0.0005	<0.0005			
5/23/2016				<0.0005	<0.0005	<0.0005
7/11/2016	<0.0005	0.0001 (J)				
7/12/2016			<0.0005	<0.0005	<0.0005	<0.0005
8/30/2016	<0.0005	<0.0005	<0.0005			
9/1/2016				<0.0005	<0.0005	<0.0005
10/19/2016	<0.0005	0.0001 (J)	<0.0005			
10/24/2016				<0.0005	<0.0005	<0.0005
12/6/2016	<0.0005	0.0002 (J)	<0.0005			
12/7/2016				<0.0005	<0.0005	<0.0005
1/24/2017	<0.0005	0.0001 (J)	<0.0005			
1/26/2017				<0.0005	<0.0005	<0.0005
3/21/2017	<0.0005	0.0001 (J)	<0.0005			
3/22/2017				<0.0005	9E-05 (J)	<0.0005
5/22/2017	<0.0005	0.0001 (J)	<0.0005			
5/24/2017				<0.0005	<0.0005	<0.0005
4/2/2018	<0.0005	<0.0005				
4/3/2018			<0.0005			
4/4/2018				<0.0005	<0.0005	<0.0005
3/12/2019	<0.0005	0.00017 (J)	<0.0005			
3/13/2019				<0.0005	0.0001 (J)	
3/14/2019						<0.0005
4/1/2019			<0.0005			
4/2/2019	<0.0005	0.00015 (J)				
4/3/2019				<0.0005	0.00017 (J)	<0.0005
9/23/2019	<0.0005	0.00011 (J)	<0.0005			
9/27/2019				<0.0005	8.6E-05 (J)	<0.0005
3/2/2020	<0.0005	0.00014 (J)	<0.0005			
3/3/2020				<0.0005	0.00012 (J)	<0.0005
3/25/2020	<0.0005	0.00016 (J)	<0.0005			
3/26/2020						<0.0005
3/31/2020					0.00015 (J)	
4/1/2020				<0.0005		
9/15/2020	<0.0005	0.00013 (J)	<0.0005			
9/16/2020				<0.0005		
9/18/2020					<0.0005	<0.0005
2/8/2021	<0.0005					
2/9/2021		0.00014 (J)	<0.0005			
2/12/2021					<0.0005	<0.0005
2/15/2021				<0.0005		
3/10/2021	<0.0005					
3/11/2021		8.6E-05 (J)	<0.0005			
3/12/2021				<0.0005		
3/16/2021					8.1E-05 (J)	<0.0005

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/4/2021 7:00 PM

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

	HGWC-13	HGWC-7	HGWC-8	HGWC-9	MW-19	MW-20
5/20/2016		<0.0005	<0.0005			
5/23/2016	<0.0005			<0.0005		
7/12/2016	<0.0005	<0.0005	<0.0005	<0.0005		
9/1/2016	<0.0005	<0.0005	<0.0005	<0.0005		
10/20/2016		<0.0005	<0.0005	<0.0005		
10/24/2016	<0.0005					
12/6/2016		<0.0005	<0.0005	<0.0005		
12/7/2016	<0.0005					
1/25/2017		<0.0005	<0.0005			
1/26/2017	<0.0005			<0.0005		
3/21/2017		<0.0005	<0.0005			
3/22/2017	<0.0005			<0.0005		
5/23/2017		<0.0005	<0.0005	<0.0005		
5/24/2017	<0.0005					
4/3/2018		<0.0005	<0.0005	<0.0005		
4/4/2018	<0.0005					
3/12/2019			<0.0005			
3/13/2019	6.2E-05 (J)	<0.0005		<0.0005		<0.0005
3/14/2019					<0.0005	
4/2/2019		<0.0005				<0.0005
4/3/2019			7.4E-05 (J)	<0.0005	<0.0005	
4/5/2019	<0.0005					
9/24/2019			<0.0005			
9/25/2019		<0.0005				<0.0005
9/26/2019	0.00011 (J)					
9/27/2019				<0.0005	<0.0005	
3/2/2020						<0.0005
3/3/2020			<0.0005			
3/4/2020	9.3E-05 (J)	7.7E-05 (J)		<0.0005	<0.0005	
3/26/2020					<0.0005	
3/27/2020		<0.0005	<0.0005			<0.0005
3/30/2020	9.9E-05 (J)					
3/31/2020				<0.0005		
9/16/2020		<0.0005	0.0001 (J)			
9/17/2020				<0.0005		<0.0005
9/21/2020	0.00011 (J)				<0.0005	
2/10/2021		8.1E-05 (J)				
2/11/2021						<0.0005
2/12/2021					<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)			<0.0005
3/16/2021				<0.0005		
3/17/2021	9E-05 (J)				<0.0005	

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/4/2021 7:00 PM

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

	MW-24D	MW-25D	MW-26D	MW-27D	MW-28D	MW-29
3/12/2019					<0.0005	<0.0005
3/13/2019	<0.0005		<0.0005	<0.0005		
3/14/2019		<0.0005				
4/2/2019					<0.0005	<0.0005
4/3/2019		<0.0005	<0.0005			
4/4/2019				<0.0005		
4/8/2019	<0.0005					
9/24/2019						<0.0005
9/26/2019	<0.0005		<0.0005	<0.0005	<0.0005	
9/27/2019		<0.0005				
3/2/2020						<0.0005
3/3/2020		<0.0005				
3/4/2020	<0.0005		<0.0005	<0.0005	0.00014 (J)	
3/26/2020		<0.0005				
3/27/2020					<0.0005	
3/30/2020	<0.0005					<0.0005
3/31/2020			<0.0005			
4/2/2020				<0.0005		
9/16/2020						<0.0005
9/17/2020			<0.0005			
9/18/2020		<0.0005		<0.0005		
9/21/2020	<0.0005				<0.0005	
2/10/2021					5.4E-05 (J)	
2/12/2021		<0.0005				
2/15/2021						<0.0005
2/16/2021	<0.0005		<0.0005	<0.0005		
3/12/2021				<0.0005		
3/15/2021					4.8E-05 (J)	<0.0005
3/16/2021		<0.0005				
3/17/2021	<0.0005		<0.0005			

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/4/2021 7:00 PM

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

	MW-5	MW-6	MW-7	HGWA-43D (bg)	HGWA-44D (bg)
3/13/2019	<0.0005	<0.0005	<0.0005		
4/3/2019	<0.0005	<0.0005	5.1E-05 (J)		
9/25/2019	<0.0005				
9/26/2019		<0.0005	<0.0005		
3/2/2020	<0.0005				
3/3/2020		<0.0005	<0.0005		
3/26/2020	<0.0005				
3/27/2020		<0.0005			
3/30/2020			<0.0005		
9/16/2020				<0.0005	<0.0005
9/17/2020	<0.0005				
9/21/2020		<0.0005	<0.0005		
11/10/2020				<0.0005	<0.0005
12/15/2020				<0.0005	<0.0005
1/19/2021				<0.0005	<0.0005
2/9/2021				<0.0005	<0.0005
2/15/2021			<0.0005		
2/16/2021	<0.0005	<0.0005			
3/10/2021					<0.0005
3/11/2021				<0.0005	
3/15/2021			<0.0005		
3/16/2021	<0.0005	<0.0005			

Time Series

Constituent: Boron (mg/L) Analysis Run 5/4/2021 7:00 PM

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

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWC-10	HGWC-11	HGWC-12
5/19/2016	0.0214 (J)	0.0321 (J)	<0.1			
5/23/2016				0.72	0.787	2.2
7/11/2016	0.0142 (J)	0.0337 (J)				
7/12/2016			0.0074 (J)	0.778	1.17	1.98
8/30/2016	0.0074 (J)	0.0173 (J)	<0.1			
9/1/2016				0.786	1.49	2.28
10/19/2016	0.0224 (J)	0.0341 (J)	0.0085 (J)			
10/24/2016				0.831	2.54	2.75
12/6/2016	0.0211 (J)	0.0326 (J)	0.0085 (J)			
12/7/2016				1.01	2.96	3.35
1/24/2017	0.0165 (J)	0.0365 (J)	0.01 (J)			
1/26/2017				0.108	2.23	3.07
3/21/2017	0.0187 (J)	0.0349 (J)	0.0079 (J)			
3/22/2017				0.788	0.84	3.04
5/22/2017	0.0782	0.0475	0.0131 (J)			
5/24/2017				0.814	2.29	2.95
10/3/2017	0.0198 (J)	0.0386 (J)	0.0097 (J)	0.871	1.47	2.35
6/4/2018	0.02 (J)	0.036 (J)	0.017 (J)			
6/5/2018				1.2	1.3	
6/6/2018						2.5
10/1/2018	0.013 (J)	0.035 (J)	0.0061 (J)			
10/2/2018				0.62		
10/3/2018					0.91	2.3
4/1/2019			0.0066 (J)			
4/2/2019	0.016 (J)	0.034 (J)				
4/3/2019				0.66	0.23	1.8
9/23/2019	0.021 (J)	0.04 (J)	0.0081 (J)			
9/27/2019				1	0.53	2.1
3/25/2020	0.025 (J)	0.039 (J)	0.0096 (J)			
3/26/2020						1.6
3/31/2020					0.17	
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				1.1		
9/18/2020					0.91	1.6
3/10/2021	0.015 (J)					
3/11/2021		0.056	0.015 (J)			
3/12/2021				0.64		
3/16/2021					0.53	1.9

Time Series

Constituent: Boron (mg/L) Analysis Run 5/4/2021 7:00 PM

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

	HGWC-13	HGWC-7	HGWC-8	HGWC-9	MW-19	MW-20
5/20/2016		0.885	1.71			
5/23/2016	2.15			1.76		
7/12/2016	1.91	0.857	1.43	1.56		
9/1/2016	2.3	0.904	1.91	2		
10/20/2016		0.936	1.72	1.68		
10/24/2016	4.01					
12/6/2016		1.06	2.06	2.15		
12/7/2016	3.85					
1/25/2017		0.764	2.01			
1/26/2017	2.45			1.87		
3/21/2017		0.857	2.08			
3/22/2017	1.99			1.99		
5/23/2017		0.91	2.32	2.29		
5/24/2017	1.74					
10/3/2017	1.43	0.967	2.84	2.05		
6/5/2018	1.3	0.86				
6/6/2018			2.6	2.3		
10/2/2018		0.98	2.7	2.5		
10/5/2018	1.6					
4/2/2019		0.99				0.11
4/3/2019			2.8	2.3	0.63	
4/5/2019	0.86 (J)					
9/24/2019			2.8			
9/25/2019		1.1				0.091
9/26/2019	1.7					
9/27/2019				2.9	0.58	
3/26/2020					1	
3/27/2020		1.2	2.4			0.12
3/30/2020	1.8					
3/31/2020				2.2		
6/16/2020			2.2			
6/17/2020		1				
9/16/2020		1.1	1.9			
9/17/2020				2		0.11
9/21/2020	1.6				0.89	
3/15/2021		1.1	1.7			0.12
3/16/2021				2.2		
3/17/2021	0.89				0.69	

Time Series

Constituent: Boron (mg/L) Analysis Run 5/4/2021 7:00 PM

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

	MW-24D	MW-25D	MW-26D	MW-27D	MW-28D	MW-29
4/2/2019					0.17	1.2
4/3/2019		0.37	1.5			
4/4/2019				0.12 (J)		
4/8/2019	0.47 (J)					
9/24/2019						1.2
9/26/2019	0.49		2	0.14	0.6	
9/27/2019		0.36				
3/26/2020		0.44				
3/27/2020					0.14	
3/30/2020	0.51					1.3
3/31/2020			1.8			
4/2/2020				0.13		
9/16/2020						1.7
9/17/2020			2			
9/18/2020		0.36		0.12		
9/21/2020	0.45				0.45	
3/12/2021				0.13		
3/15/2021					0.36	1.2
3/16/2021		0.4				
3/17/2021	0.49		2.1			

Time Series

Constituent: Boron (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-5	MW-6	MW-7	HGWA-43D (bg)	HGWA-44D (bg)
4/3/2019	0.03 (J)	0.67	0.094		
9/25/2019	0.11				
9/26/2019		0.93	0.26		
3/26/2020	0.041 (J)				
3/27/2020		0.77			
3/30/2020			0.051 (J)		
9/16/2020				0.061 (J)	0.23
9/17/2020	0.067 (J)				
9/21/2020		0.82	0.2		
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					0.39
3/11/2021				0.06	
3/15/2021			0.16		
3/16/2021	0.037 (J)	0.81			

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWC-10	HGWC-11	HGWC-12
5/19/2016	<0.0005	<0.0005	<0.0005			
5/23/2016				0.000115 (J)	<0.0005	<0.0005
7/11/2016	<0.0005	<0.0005				
7/12/2016			<0.0005	<0.0005	<0.0005	<0.0005
8/30/2016	<0.0005	<0.0005	<0.0005			
9/1/2016				0.0001 (J)	<0.0005	<0.0005
10/19/2016	<0.0005	<0.0005	<0.0005			
10/24/2016				0.0001 (J)	<0.0005	<0.0005
12/6/2016	<0.0005	<0.0005	<0.0005			
12/7/2016				0.0001 (J)	0.0001 (J)	0.0002 (J)
1/24/2017	<0.0005	0.0001 (J)	<0.0005			
1/26/2017				<0.0005	<0.0005	<0.0005
3/21/2017	<0.0005	7E-05 (J)	<0.0005			
3/22/2017				0.0001 (J)	0.0001 (J)	0.0003 (J)
5/22/2017	<0.0005	0.0001 (J)	<0.0005			
5/24/2017				0.0002 (J)	<0.0005	9E-05 (J)
4/2/2018	<0.0005	<0.0005				
4/3/2018			<0.0005			
4/4/2018				<0.0005	<0.0005	<0.0005
3/12/2019	<0.0005	0.00013 (J)	<0.0005			
3/13/2019				<0.0005	<0.0005	
3/14/2019						<0.0005
4/1/2019			<0.0005			
4/2/2019	<0.0005	0.00015 (J)				
4/3/2019				0.0001 (J)	9.6E-05 (J)	<0.0005
9/23/2019	<0.0005	<0.0005	<0.0005			
9/27/2019				<0.0005	<0.0005	<0.0005
3/2/2020	<0.0005	<0.0005	<0.0005			
3/3/2020				<0.0005	<0.0005	0.00015 (J)
3/25/2020	<0.0005	0.00014 (J)	<0.0005			
3/26/2020						<0.0005
3/31/2020					<0.0005	
4/1/2020				<0.0005		
9/15/2020	<0.0005	0.00012 (J)	<0.0005			
9/16/2020				<0.0005		
9/18/2020					<0.0005	<0.0005
2/8/2021	<0.0005					
2/9/2021		0.00016 (J)	<0.0005			
2/12/2021					<0.0005	<0.0005
2/15/2021				<0.0005		
3/10/2021	<0.0005					
3/11/2021		<0.0005	<0.0005			
3/12/2021				<0.0005		
3/16/2021					<0.0005	<0.0005

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWC-13	HGWC-7	HGWC-8	HGWC-9	MW-19	MW-20
5/20/2016		<0.0005	0.00024 (J)			
5/23/2016	<0.0005			<0.0005		
7/12/2016	<0.0005	<0.0005	0.0002 (J)	<0.0005		
9/1/2016	<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					
12/6/2016		0.0002 (J)	0.0017	0.0001 (J)		
12/7/2016	<0.0005					
1/25/2017		0.0002 (J)	0.0002 (J)			
1/26/2017	<0.0005			<0.0005		
3/21/2017		0.0002 (J)	0.0002 (J)			
3/22/2017	<0.0005			7E-05 (J)		
5/23/2017		0.0001 (J)	0.0003 (J)	<0.0005		
5/24/2017	<0.0005					
4/3/2018		<0.0005	<0.0005	<0.0005		
4/4/2018	<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				<0.0005
4/3/2019			0.00032 (J)	<0.0005	<0.0005	
4/5/2019	<0.0005					
9/24/2019			0.0002 (J)			
9/25/2019		<0.0005				<0.0005
9/26/2019	<0.0005					
9/27/2019				<0.0005	0.00013 (J)	
3/2/2020						<0.0005
3/3/2020			0.00017 (J)			
3/4/2020	<0.0005	<0.0005		<0.0005	0.00026 (J)	
3/26/2020					0.00019 (J)	
3/27/2020		<0.0005	0.00014 (J)			<0.0005
3/30/2020	<0.0005					
3/31/2020				<0.0005		
9/16/2020		<0.0005	0.00023 (J)			
9/17/2020				<0.0005		<0.0005
9/21/2020	<0.0005				0.00018 (J)	
2/10/2021		<0.0005				
2/11/2021						<0.0005
2/12/2021					0.0002 (J)	
2/16/2021			0.00037 (J)	<0.0005		
2/22/2021	<0.0005					
3/15/2021		<0.0005	0.00017 (J)			<0.0005
3/16/2021				<0.0005		
3/17/2021	<0.0005				0.00016 (J)	

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-24D	MW-25D	MW-26D	MW-27D	MW-28D	MW-29
3/12/2019					<0.0005	<0.0005
3/13/2019	<0.0005		<0.0005	<0.0005		
3/14/2019		<0.0005				
4/2/2019					<0.0005	<0.0005
4/3/2019		<0.0005	<0.0005			
4/4/2019				<0.0005		
4/8/2019	<0.0005					
9/24/2019						<0.0005
9/26/2019	<0.0005		<0.0005	<0.0005	<0.0005	
9/27/2019		<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				
3/27/2020					<0.0005	
3/30/2020	<0.0005					<0.0005
3/31/2020			<0.0005			
4/2/2020				<0.0005		
9/16/2020						<0.0005
9/17/2020			<0.0005			
9/18/2020		<0.0005		<0.0005		
9/21/2020	<0.0005				<0.0005	
2/10/2021					<0.0005	
2/12/2021		<0.0005				
2/15/2021						<0.0005
2/16/2021	<0.0005		<0.0005	<0.0005		
3/12/2021				<0.0005		
3/15/2021					<0.0005	<0.0005
3/16/2021		<0.0005				
3/17/2021	<0.0005		<0.0005			

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-5	MW-6	MW-7	HGWA-43D (bg)	HGWA-44D (bg)
3/13/2019	<0.0005	<0.0005	<0.0005		
4/3/2019	<0.0005	<0.0005	<0.0005		
9/25/2019	<0.0005				
9/26/2019		<0.0005	<0.0005		
3/2/2020	<0.0005				
3/3/2020		<0.0005	<0.0005		
3/26/2020	<0.0005				
3/27/2020		<0.0005			
3/30/2020			<0.0005		
9/16/2020				<0.0005	<0.0005
9/17/2020	<0.0005				
9/21/2020		<0.0005	<0.0005		
11/10/2020				<0.0005	<0.0005
12/15/2020				<0.0005	<0.0005
1/19/2021				<0.0005	<0.0005
2/9/2021				<0.0005	<0.0005
2/15/2021			<0.0005		
2/16/2021	<0.0005	<0.0005			
3/10/2021					<0.0005
3/11/2021				<0.0005	
3/15/2021			<0.0005		
3/16/2021	<0.0005	<0.0005			

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWC-10	HGWC-11	HGWC-12
5/19/2016	138	22.9	76.2			
5/23/2016				167	131	195
7/11/2016	97.2	22.3				
7/12/2016			61.5	143	124	181
8/30/2016	97.5	26.4	65.1			
9/1/2016				156	107	179
10/19/2016	99.2	21.7	73.2			
10/24/2016				156	145	193
12/6/2016	105	18.2	74.9			
12/7/2016				183	159	193
1/24/2017	95.7	18.5	69.6			
1/26/2017				82.6	121	172
3/21/2017	106	18.6	75.7			
3/22/2017				154	130	162
5/22/2017	107	17.8	71.5			
5/24/2017				171	117	158
10/3/2017	102	20.2	76.3	162	87.7	130
6/4/2018	124	19.1	73.4			
6/5/2018				167	113	
6/6/2018						136
10/1/2018	108	20.5 (J)	80.9			
10/2/2018				144		
10/3/2018					89	125
4/1/2019			80.5			
4/2/2019	132	22.5 (J)				
4/3/2019				137	112	114
9/23/2019	118	19.5	71			
9/27/2019				157	113	153
3/25/2020	127	23	89.8			
3/26/2020						145
3/31/2020					124	
4/1/2020				96.2		
6/16/2020	130		85.1			
9/15/2020	103	21.1	73.1			
9/16/2020				139		
9/18/2020					122	163
3/10/2021	111					
3/11/2021		43.8	83.8			
3/12/2021				146 (M1)		
3/16/2021					132	166

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWC-13	HGWC-7	HGWC-8	HGWC-9	MW-19	MW-20
5/20/2016		117	159			
5/23/2016	133			179		
7/12/2016	101	88.8	127	174		
9/1/2016	120	96.3	135	170		
10/20/2016		96.9	134	133		
10/24/2016	127					
12/6/2016		104	142	181		
12/7/2016	113					
1/25/2017		94.5	142			
1/26/2017	77.9			175		
3/21/2017		109	148			
3/22/2017	85.1			183		
5/23/2017		93.3	140	181		
5/24/2017	77.1					
10/3/2017	62	108	158	188		
6/5/2018	110	99.8				
6/6/2018			127	184		
10/2/2018		108	118	173		
10/5/2018	73.6					
4/2/2019		101				109
4/3/2019			125	164	74.9	
4/5/2019	77.1					
9/24/2019			113			
9/25/2019		105				113
9/26/2019	195					
9/27/2019				175	90	
3/26/2020					171	
3/27/2020		119	133			126
3/30/2020	234					
3/31/2020				182		
6/16/2020			120			
6/17/2020		112				
9/16/2020		98	119			
9/17/2020				164		110
9/21/2020	173				135	
3/15/2021		113	156			121
3/16/2021				182		
3/17/2021	184				130	

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-24D	MW-25D	MW-26D	MW-27D	MW-28D	MW-29
4/2/2019					64.6	131
4/3/2019		25.4	122			
4/4/2019				26.3		
4/8/2019	83					
9/24/2019						140
9/26/2019	83.1		158	32.1	84	
9/27/2019		26.4				
3/26/2020		27				
3/27/2020					53	
3/30/2020	84.4					148
3/31/2020			155			
4/2/2020				28.4		
9/16/2020						126
9/17/2020			150			
9/18/2020		25.1		24.8		
9/21/2020	87.6				76.8	
3/12/2021				28		
3/15/2021					66.1	145
3/16/2021		24.8				
3/17/2021	102		175			

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-5	MW-6	MW-7	HGWA-43D (bg)	HGWA-44D (bg)
4/3/2019	82	178	50.2		
9/25/2019	105				
9/26/2019		189	83.9		
3/26/2020	89.6				
3/27/2020		186			
3/30/2020			31.1		
9/16/2020				56	30
9/17/2020	103				
9/21/2020		173	75.3		
11/10/2020				63.3	33.6
12/15/2020				62.6	28.7
1/19/2021				60.1	33
3/10/2021					5.9
3/11/2021				59.6	
3/15/2021			76.9		
3/16/2021	71.8	184			

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWC-10	HGWC-11	HGWC-12
5/19/2016	9.94	6.14	5.93			
5/23/2016				56.1	51.9	160
7/11/2016	6.3	5.9				
7/12/2016			6.2	63	100	160
8/30/2016	6	6.2	6.4			
9/1/2016				77	58	140
10/19/2016	5.8	6.1	6.5			
10/24/2016				99	220	160
12/6/2016	5.4	6	7.2			
12/7/2016				96	180	190
1/24/2017	5.2	6.1	6.4			
1/26/2017				7	90	160
3/21/2017	4.6	5.9	7.5			
3/22/2017				82	37	130
5/22/2017	4.6	5.9	6.5			
5/24/2017				81	69	120
10/3/2017	5.6	6.3	6.5	100	28	93
6/4/2018	13.1	6.1	6.3			
6/5/2018				66.6	56.1	
6/6/2018						46.4
10/1/2018	6.6	6.4	6.4			
10/2/2018				48.3		
10/3/2018					24.8	88.4
4/1/2019			6.5			
4/2/2019	20.3	5.8				
4/3/2019				49.3	4.6	62.8
9/23/2019	17.7	5.1	5.9			
9/27/2019				49.9	27.9	81
3/25/2020	20.4	5.2	6.1			
3/26/2020						48
3/31/2020					3.2	
4/1/2020				5.4		
6/16/2020	41.1		5.8			
9/15/2020	13.4	5	6			
9/16/2020				39.7		
9/18/2020					34.9	74.6
3/10/2021	7.4					
3/11/2021		5.1	5.9			
3/12/2021				35		
3/16/2021					11.5	56.8

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWC-13	HGWC-7	HGWC-8	HGWC-9	MW-19	MW-20
5/20/2016		50.4	109			
5/23/2016	93.2			152		
7/12/2016	78	50	110	160		
9/1/2016	100	50	110	160		
10/20/2016		49	110	110		
10/24/2016	140					
12/6/2016		51	100	150		
12/7/2016	110					
1/25/2017		54	110			
1/26/2017	70			170		
3/21/2017		46	110			
3/22/2017	59			160		
5/23/2017		49	130	150		
5/24/2017	50					
10/3/2017	29	52	130	160		
6/5/2018	72.3	52.3				
6/6/2018			44.8	138		
10/2/2018		52.6	89.4	142		
10/5/2018	32.3					
4/2/2019		55.5				27.5
4/3/2019			91.6	130	19.5	
4/5/2019	36.4					
9/24/2019			60.2			
9/25/2019		49.8				25.7
9/26/2019	109					
9/27/2019				126	46.2	
3/26/2020					64	
3/27/2020		48.3	79.8			28.8
3/30/2020	75.1					
3/31/2020				105		
6/16/2020			67.9			
6/17/2020		45.2				
9/16/2020		46.4	74.6			
9/17/2020				105		29.7
9/21/2020	41.2				35	
3/15/2021		44.5	72.4			31.1
3/16/2021				94.7		
3/17/2021	31.4				19.8	

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-24D	MW-25D	MW-26D	MW-27D	MW-28D	MW-29
4/2/2019					44	80.9
4/3/2019		32	90.6			
4/4/2019				26.9		
4/8/2019	43.3					
9/24/2019						83.8
9/26/2019	39.7		118	31.8	43.5	
9/27/2019		36.2				
3/26/2020		34.6				
3/27/2020					33	
3/30/2020	37.4					71.2
3/31/2020			98			
4/2/2020				27.9		
9/16/2020						75.3
9/17/2020			103			
9/18/2020		33.4		30.4		
9/21/2020	45.2				42.9	
3/12/2021				31.3		
3/15/2021					35.8	73.6
3/16/2021		29.2				
3/17/2021	42.9		95.3			

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-5	MW-6	MW-7	HGWA-43D (bg)	HGWA-44D (bg)
4/3/2019	1.8	60.9	5.6		
9/25/2019	35.9				
9/26/2019		64.9	15.6		
3/26/2020	0.73 (J)				
3/27/2020		48.6			
3/30/2020			1.5		
9/16/2020				4.1	7.2
9/17/2020	28.7				
9/21/2020		58.1	11.1		
11/10/2020				4.4	7.8
12/15/2020				4.7	9.4
1/19/2021				4.1	9.5
3/10/2021					12.3
3/11/2021				4.5	
3/15/2021			6.8		
3/16/2021	1.4	49.8			

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWC-10	HGWC-11	HGWC-12
5/19/2016	<0.005	<0.005	<0.005			
5/23/2016				<0.005	<0.005	<0.005
7/11/2016	<0.005	<0.005				
7/12/2016			<0.005	<0.005	<0.005	<0.005
8/30/2016	<0.005	<0.005	<0.005			
9/1/2016				<0.005	<0.005	<0.005
10/19/2016	<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
1/24/2017	<0.005	<0.005	<0.005			
1/26/2017				<0.005	<0.005	<0.005
3/21/2017	0.0005 (J)	<0.005	<0.005			
3/22/2017				<0.005	0.0003 (J)	0.0004 (J)
5/22/2017	<0.005	<0.005	0.0007 (J)			
5/24/2017				<0.005	<0.005	<0.005
4/2/2018	<0.005	<0.005				
4/3/2018			<0.005			
4/4/2018				<0.005	<0.005	<0.005
3/12/2019	<0.005	<0.005	<0.005			
3/13/2019				<0.005	<0.005	
3/14/2019						0.0025 (J)
4/1/2019			<0.005			
4/2/2019	<0.005	0.0079 (J)				
4/3/2019				0.02	<0.005	<0.005
9/23/2019	<0.005	0.00058 (J)	<0.005			
9/27/2019				<0.005	<0.005	<0.005
3/2/2020	<0.005	0.00041 (J)	<0.005			
3/3/2020				<0.005	0.00061 (J)	<0.005
3/25/2020	0.00072 (J)	<0.005	<0.005			
3/26/2020						<0.005
3/31/2020					<0.005	
4/1/2020				<0.005		
9/15/2020	<0.005	<0.005	<0.005			
9/16/2020				<0.005		
9/18/2020					<0.005	0.00091 (J)
2/8/2021	<0.005					
2/9/2021		<0.005	<0.005			
2/12/2021					<0.005	<0.005
2/15/2021				<0.005		
3/10/2021	<0.005					
3/11/2021		<0.005	<0.005			
3/12/2021				<0.005		
3/16/2021					<0.005	<0.005

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWC-13	HGWC-7	HGWC-8	HGWC-9	MW-19	MW-20
5/20/2016		<0.005	<0.005			
5/23/2016	<0.005			<0.005		
7/12/2016	<0.005	<0.005	<0.005	<0.005		
9/1/2016	<0.005	<0.005	<0.005	<0.005		
10/20/2016		<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					
1/25/2017		<0.005	<0.005			
1/26/2017	<0.005			<0.005		
3/21/2017		<0.005	0.0005 (J)			
3/22/2017	0.0004 (J)			<0.005		
5/23/2017		<0.005	<0.005	<0.005		
5/24/2017	<0.005					
4/3/2018		<0.005	<0.005	<0.005		
4/4/2018	<0.005					
3/12/2019			<0.005			
3/13/2019	<0.005	<0.005		<0.005		<0.005
3/14/2019					<0.005	
4/2/2019		<0.005				<0.005
4/3/2019			<0.005	<0.005	<0.005	
4/5/2019	<0.005					
9/24/2019			<0.005			
9/25/2019		0.071				<0.005
9/26/2019	<0.005					
9/27/2019				<0.005	<0.005	
3/2/2020						0.00071 (J)
3/3/2020			0.0007 (J)			
3/4/2020	<0.005	0.0016 (J)		<0.005	0.00066 (J)	
3/26/2020					0.00047 (J)	
3/27/2020		0.0004 (J)	<0.005			0.00051 (J)
3/30/2020	0.00059 (J)					
3/31/2020				0.00052 (J)		
9/16/2020		0.00074 (J)	0.0015 (J)			
9/17/2020				<0.005		<0.005
9/21/2020	0.00056 (J)				0.0014 (J)	
2/10/2021		0.0014 (J)				
2/11/2021						<0.005
2/12/2021					0.00059 (J)	
2/16/2021			<0.005	0.00067 (J)		
2/22/2021	<0.005					
3/15/2021		0.0021 (J)	0.00082 (J)			0.00068 (J)
3/16/2021				<0.005		
3/17/2021	<0.005				0.0022 (J)	

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-24D	MW-25D	MW-26D	MW-27D	MW-28D	MW-29
3/12/2019					<0.005	<0.005
3/13/2019	<0.005		<0.005	<0.005		
3/14/2019		<0.005				
4/2/2019					<0.005	<0.005
4/3/2019		<0.005	<0.005			
4/4/2019				<0.005		
4/8/2019	<0.005					
9/24/2019						<0.005
9/26/2019	0.00042 (J)		0.00076 (J)	<0.005	0.00081 (J)	
9/27/2019		<0.005				
3/2/2020						<0.005
3/3/2020		<0.005				
3/4/2020	<0.005		0.0028 (J)	<0.005	0.0027 (J)	
3/26/2020		0.00061 (J)				
3/27/2020					<0.005	
3/30/2020	<0.005					0.001 (J)
3/31/2020			0.001 (J)			
4/2/2020				<0.005		
9/16/2020						<0.005
9/17/2020			<0.005			
9/18/2020		<0.005		0.0007 (J)		
9/21/2020	<0.005				0.00085 (J)	
2/10/2021					0.0014 (J)	
2/12/2021		<0.005				
2/15/2021						<0.005
2/16/2021	<0.005		0.001 (J)	0.00082 (J)		
3/12/2021				<0.005		
3/15/2021					0.00078 (J)	<0.005
3/16/2021		<0.005				
3/17/2021	0.0017 (J)		0.0015 (J)			

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-5	MW-6	MW-7	HGWA-43D (bg)	HGWA-44D (bg)
3/13/2019	0.003 (J)	<0.005	<0.005		
4/3/2019	0.003 (J)	<0.005	0.0023 (J)		
9/25/2019	0.0052 (J)				
9/26/2019		<0.005	0.0013 (J)		
3/2/2020	0.0042 (J)				
3/3/2020		0.00044 (J)	0.0015 (J)		
3/26/2020	0.0044 (J)				
3/27/2020		0.00059 (J)			
3/30/2020			0.0021 (J)		
9/16/2020				<0.005	0.0012 (J)
9/17/2020	0.0021 (J)				
9/21/2020		<0.005	0.0017 (J)		
11/10/2020				<0.005	0.00089 (J)
12/15/2020				<0.005	0.00072 (J)
1/19/2021				<0.005	0.0011 (J)
2/9/2021				0.00095 (J)	0.00066 (J)
2/15/2021			0.0015 (J)		
2/16/2021	0.0032 (J)	<0.005			
3/10/2021					<0.005
3/11/2021				<0.005	
3/15/2021			0.0018 (J)		
3/16/2021	0.0024 (J)	<0.005			

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWC-10	HGWC-11	HGWC-12
5/19/2016	<0.005	0.0293	<0.005			
5/23/2016				<0.005	<0.005	<0.005
7/11/2016	0.0004 (J)	0.0267				
7/12/2016			<0.005	0.0006 (J)	0.0021 (J)	0.0018 (J)
8/30/2016	<0.005	0.028	<0.005			
9/1/2016				0.0007 (J)	0.0025 (J)	0.0016 (J)
10/19/2016	<0.005	0.0201	<0.005			
10/24/2016				0.0009 (J)	0.0032 (J)	0.0017 (J)
12/6/2016	<0.005	0.0184	<0.005			
12/7/2016				0.0012 (J)	0.003 (J)	0.0021 (J)
1/24/2017	<0.005	0.0206	<0.005			
1/26/2017				<0.005	0.0014 (J)	0.0016 (J)
3/21/2017	<0.005	0.0251	<0.005			
3/22/2017				0.0006 (J)	0.0014 (J)	0.0018 (J)
5/22/2017	<0.005	0.0263	<0.005			
5/24/2017				0.0006 (J)	0.0008 (J)	0.0015 (J)
4/2/2018	<0.005	0.019				
4/3/2018			<0.005			
4/4/2018				<0.005	<0.005	<0.005
3/12/2019	<0.005	0.017	<0.005			
3/13/2019				<0.005	0.00098 (J)	
3/14/2019						0.0011 (J)
4/1/2019			<0.005			
4/2/2019	<0.005	0.019				
4/3/2019				<0.005	0.0018 (J)	0.0011 (J)
9/23/2019	<0.005	0.038	<0.005			
9/27/2019				<0.005	0.00071 (J)	0.0012 (J)
3/2/2020	<0.005	0.019	<0.005			
3/3/2020				<0.005	0.00087 (J)	0.0013 (J)
3/25/2020	<0.005	0.02	<0.005			
3/26/2020						0.0012 (J)
3/31/2020					0.0014 (J)	
4/1/2020				<0.005		
9/15/2020	<0.005	0.021	<0.005			
9/16/2020				<0.005		
9/18/2020					<0.005	0.0014 (J)
2/8/2021	<0.005					
2/9/2021		0.02	<0.005			
2/12/2021					<0.005	0.0012 (J)
2/15/2021				<0.005		
3/10/2021	<0.005					
3/11/2021		0.013	<0.005			
3/12/2021				<0.005		
3/16/2021					<0.005	0.0012 (J)

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWC-13	HGWC-7	HGWC-8	HGWC-9	MW-19	MW-20
5/20/2016		<0.005	0.00207 (J)			
5/23/2016	0.00361 (J)			<0.005		
7/12/2016	0.0032 (J)	0.0003 (J)	0.0019 (J)	0.0006 (J)		
9/1/2016	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	0.004 (J)					
12/6/2016		0.0009 (J)	0.0026 (J)	0.0011 (J)		
12/7/2016	0.0034 (J)					
1/25/2017		0.0005 (J)	0.002 (J)			
1/26/2017	0.0024 (J)			0.0006 (J)		
3/21/2017		0.0005 (J)	0.0023 (J)			
3/22/2017	0.0026 (J)			0.0005 (J)		
5/23/2017		0.0005 (J)	0.0023 (J)	0.0006 (J)		
5/24/2017	0.0022 (J)					
4/3/2018		<0.005	<0.005	<0.005		
4/4/2018	<0.005					
3/12/2019			0.002 (J)			
3/13/2019	0.0022 (J)	0.00067 (J)		0.00065 (J)		0.0011 (J)
3/14/2019					0.025	
4/2/2019		0.00069 (J)				<0.005
4/3/2019			0.0019 (J)	0.00069 (J)	0.036	
4/5/2019	0.0017 (J)					
9/24/2019			0.0015 (J)			
9/25/2019		0.0026 (J)				<0.005
9/26/2019	0.0042 (J)					
9/27/2019				0.00057 (J)	0.033	
3/2/2020						<0.005
3/3/2020			0.002 (J)			
3/4/2020	0.0066	0.0011 (J)		0.00053 (J)	0.048	
3/26/2020					0.045	
3/27/2020		0.00074 (J)	0.0018 (J)			<0.005
3/30/2020	0.0053					
3/31/2020				0.00051 (J)		
9/16/2020		0.00065 (J)	0.0019 (J)			
9/17/2020				0.0007 (J)		<0.005
9/21/2020	0.0032 (J)				0.032	
2/10/2021		0.00081 (J)				
2/11/2021						<0.005
2/12/2021					0.037	
2/16/2021			0.002 (J)	0.00061 (J)		
2/22/2021	0.003 (J)					
3/15/2021		0.0014 (J)	0.0019 (J)			<0.005
3/16/2021				0.00069 (J)		
3/17/2021	0.0029 (J)				0.037	

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-24D	MW-25D	MW-26D	MW-27D	MW-28D	MW-29
3/12/2019					<0.005	0.00057 (J)
3/13/2019	<0.005		<0.005	<0.005		
3/14/2019		<0.005				
4/2/2019					<0.005	0.00084 (J)
4/3/2019		<0.005	<0.005			
4/4/2019				9.1E-05 (J)		
4/8/2019	0.00025 (J)					
9/24/2019						0.0015 (J)
9/26/2019	0.0011 (J)		0.00053 (J)	<0.005	<0.005	
9/27/2019		<0.005				
3/2/2020						0.00067 (J)
3/3/2020		<0.005				
3/4/2020	0.00056 (J)		<0.005	0.00045 (J)	0.00093 (J)	
3/26/2020		<0.005				
3/27/2020					<0.005	
3/30/2020	<0.005					0.00063 (J)
3/31/2020			0.0003 (J)			
4/2/2020				<0.005		
9/16/2020						0.0013 (J)
9/17/2020			<0.005			
9/18/2020		<0.005		<0.005		
9/21/2020	<0.005				<0.005	
2/10/2021					<0.005	
2/12/2021		<0.005				
2/15/2021						0.00097 (J)
2/16/2021	<0.005		0.00045 (J)	0.0004 (J)		
3/12/2021				<0.005		
3/15/2021					<0.005	0.0011 (J)
3/16/2021		<0.005				
3/17/2021	<0.005		0.00044 (J)			

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-5	MW-6	MW-7	HGWA-43D (bg)	HGWA-44D (bg)
3/13/2019	<0.005	0.00055 (J)	<0.005		
4/3/2019	<0.005	<0.005	<0.005		
9/25/2019	<0.005				
9/26/2019		0.00036 (J)	<0.005		
3/2/2020	<0.005				
3/3/2020		0.00094 (J)	<0.005		
3/26/2020	<0.005				
3/27/2020		0.00059 (J)			
3/30/2020			<0.005		
9/16/2020				<0.005	<0.005
9/17/2020	<0.005				
9/21/2020		0.00041 (J)	<0.005		
11/10/2020				<0.005	<0.005
12/15/2020				<0.005	<0.005
1/19/2021				<0.005	<0.005
2/9/2021				<0.005	<0.005
2/15/2021			<0.005		
2/16/2021	<0.005	0.00045 (J)			
3/10/2021					<0.005
3/11/2021				<0.005	
3/15/2021			<0.005		
3/16/2021	<0.005	0.00042 (J)			

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWC-10	HGWC-11	HGWC-12
5/19/2016	0.397 (U)	0.627 (U)	0.342 (U)			
5/23/2016				0.419 (U)	0.509 (U)	1.12
7/11/2016	0.738 (U)	1.38				
7/12/2016			0.499 (U)	0.855	0.784 (U)	1.61
8/30/2016	0.581 (U)	1.05 (U)	0.976 (U)			
9/1/2016				0.844 (U)	0.261 (U)	1.23
10/19/2016	0.213 (U)	1.11 (U)	0.626 (U)			
10/24/2016				0.917 (U)	1.42	1.98
12/6/2016	0.444 (U)	0.741 (U)	0.805 (U)			
12/7/2016				0.558 (U)	0.781 (U)	0.319 (U)
1/24/2017	0.373 (U)	0.908 (U)	0.336 (U)			
1/26/2017				0.922 (U)	0.842 (U)	0.54 (U)
3/21/2017	0.816 (U)	0.567 (U)	0.358 (U)			
3/22/2017				0.751 (U)	0.318 (U)	0.635 (U)
5/22/2017	0.554 (U)	0.638 (U)	0.744 (U)			
5/24/2017				0.725 (U)	0.687 (U)	1.01
4/2/2018	0.405 (U)	0.761 (U)				
4/3/2018			0.684 (U)			
4/4/2018				0.715 (U)	1.5	0.956
6/4/2018	1.13 (U)	0.975 (U)	0.0291 (U)			
6/5/2018				0.718 (U)	0.549 (U)	
6/6/2018						0.424 (U)
10/1/2018	0.132 (U)	0.434 (U)	0.781 (U)			
10/2/2018				0.948		
10/3/2018					1.48	0.57 (U)
3/12/2019	0.327 (U)	0.454 (U)	1.01 (U)			
3/13/2019				1.19 (U)	0.584 (U)	
3/14/2019						0.992 (U)
4/1/2019			0.76 (U)			
4/2/2019	0.739 (U)	0.651 (U)				
4/3/2019				1.82 (U)	0.36 (U)	0.734 (U)
9/27/2019				1.16 (U)	1.78	0.958 (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)	0.716 (U)	0.971 (U)
3/25/2020	4.36	0.621 (U)	0.833 (U)			
3/26/2020						0.209 (U)
3/31/2020					1.3 (U)	
4/1/2020				0.235 (U)		
9/15/2020	0.748 (U)	0.124 (U)	0.161 (U)			
9/16/2020				0 (U)		
9/18/2020					1.24 (U)	0.916 (U)
2/8/2021	0.223 (U)					
2/9/2021		0.721 (U)	0.447 (U)			
2/12/2021					1.1	0.236 (U)
2/15/2021				1.91		
3/10/2021	0 (U)					
3/11/2021		0.737 (U)	0.128 (U)			
3/12/2021				1.12 (U)		
3/16/2021					1.71	0.245 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWC-13	HGWC-7	HGWC-8	HGWC-9	MW-19	MW-20
5/20/2016		0.62 (U)	0.56 (U)			
5/23/2016	0.625 (U)			0.826 (U)		
7/12/2016	0.478 (U)	0.283 (U)	0.636 (U)	0.511 (U)		
9/1/2016	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	1.54					
12/6/2016		2	0.771 (U)	0.126 (U)		
12/7/2016	0.657 (U)					
1/25/2017		1.06 (U)	0.859 (U)			
1/26/2017	1.22			0.515 (U)		
3/21/2017		0.668 (U)	0.851 (U)			
3/22/2017	0.285 (U)			0.451 (U)		
5/23/2017		0.621 (U)	0.705 (U)	0.924 (U)		
5/24/2017	0.655 (U)					
4/3/2018		0.538 (U)	0.311 (U)	0.732 (U)		
4/4/2018	0.882 (U)					
6/5/2018	1.1 (U)	0.985 (U)				
6/6/2018			0.896 (U)	0.813 (U)		
10/2/2018		0.837 (U)	1.21	0.61 (U)		
10/5/2018	0.558 (U)					
3/12/2019			0.544 (U)			
3/13/2019	0.39 (U)	0.403 (U)		1 (U)		0.538 (U)
3/14/2019					0.347 (U)	
4/2/2019		0.865 (U)				1.02 (U)
4/3/2019			0.885 (U)	0.156 (U)	0.884 (U)	
4/5/2019	0.422 (U)					
9/24/2019			1.3			
9/25/2019		0.884 (U)				1.35 (U)
9/26/2019	0.939 (U)					
9/27/2019				0.428 (U)	0.534 (U)	
3/2/2020						0.653 (U)
3/3/2020			0.835 (U)			
3/4/2020	0.708 (U)	0.624 (U)		1.03	1.04	
3/26/2020					1.1 (U)	
3/27/2020		0.485 (U)	1.04 (U)			0.1 (U)
3/30/2020	0.602 (U)					
3/31/2020				1.2 (U)		
9/16/2020		0.135 (U)	0.526 (U)			
9/17/2020				1.38 (U)		0.469 (U)
9/21/2020	1.53				1.36 (U)	
2/10/2021		0.281 (U)				
2/11/2021						0.334 (U)
2/12/2021					0.764 (U)	
2/16/2021			0.764 (U)	1.17 (U)		
2/22/2021	1.02					
3/15/2021		0.666 (U)	1.3 (U)			1.24 (U)
3/16/2021				0.446 (U)		
3/17/2021	1.45 (U)				0.466 (U)	

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-24D	MW-25D	MW-26D	MW-27D	MW-28D	MW-29
3/12/2019					0.926 (U)	1.37
3/13/2019	0.311 (U)		0.627 (U)	1.81		
3/14/2019		1.28 (U)				
4/2/2019					0.479 (U)	0.62 (U)
4/3/2019		0.662 (U)	0.205 (U)			
4/4/2019				1.33		
4/8/2019	0.573 (U)					
9/24/2019						0.675 (U)
9/26/2019	0.878 (U)		0.912 (U)	0.974 (U)	0.997 (U)	
9/27/2019		0.945 (U)				
3/2/2020						0.413 (U)
3/3/2020		1.36				
3/4/2020	0.333 (U)		1.27 (U)	1.12	1.31	
3/26/2020		0.793 (U)				
3/27/2020					1.59	
3/30/2020	0.107 (U)					0.885 (U)
3/31/2020			1.65			
4/2/2020				2.48		
9/16/2020						0.193 (U)
9/17/2020			0.42 (U)			
9/18/2020		1.17 (U)		1.13 (U)		
9/21/2020	1.23 (U)				1.39 (U)	
2/10/2021					0.201 (U)	
2/12/2021		1.17				
2/15/2021						1.17 (U)
2/16/2021	0.156 (U)		0.505 (U)	1.21		
3/12/2021				0.649 (U)		
3/15/2021					0.564 (U)	0.436 (U)
3/16/2021		0.742 (U)				
3/17/2021	0.174 (U)		0.165 (U)			

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-5	MW-6	MW-7	HGWA-43D (bg)	HGWA-44D (bg)
3/13/2019	0.621 (U)	2.07	1.23		
4/3/2019	0.932 (U)	0.872 (U)	1.05 (U)		
9/25/2019	0.798 (U)				
9/26/2019		0.745 (U)	0.947 (U)		
3/2/2020	0.964 (U)				
3/3/2020		0.757 (U)	1.15		
3/26/2020	1.1				
3/27/2020		0.758 (U)			
3/30/2020			0.83 (U)		
9/16/2020				0.531 (U)	0.422 (U)
9/17/2020	0.618 (U)				
9/21/2020		0.796 (U)	1.55 (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)
2/9/2021				0.138 (U)	0.486 (U)
2/15/2021			0.892 (U)		
2/16/2021	0.466 (U)	0.198 (U)			
3/10/2021					0.811 (U)
3/11/2021				1.51 (U)	
3/15/2021			0.386 (U)		
3/16/2021	1.22	0.727 (U)			

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWC-10	HGWC-11	HGWC-12
5/19/2016	0.105 (J)	0.0303 (J)	0.0513 (J)			
5/23/2016				0.0394 (J)	0.203 (J)	0.212 (J)
7/11/2016	0.16 (J)	0.05 (J)				
7/12/2016			0.12 (J)	0.15 (J)	0.44	0.31
8/30/2016	0.09 (J)	0.06 (J)	0.09 (J)			
9/1/2016				0.5	0.67	0.62
10/19/2016	0.1 (J)	0.04 (J)	0.1 (J)			
10/24/2016				0.06 (J)	0.26 (J)	0.19 (J)
12/6/2016	0.11 (J)	0.36	0.21 (J)			
12/7/2016				0.44	0.55	0.73
1/24/2017	0.09 (J)	<0.1	0.06 (J)			
1/26/2017				0.29 (J)	0.27 (J)	0.12 (J)
3/21/2017	0.13 (J)	<0.1	0.005 (J)			
3/22/2017				0.34	0.66	0.44
5/22/2017	0.12 (J)	<0.1	0.05 (J)			
5/24/2017				0.13 (J)	0.35	0.34
10/3/2017	0.13 (J)	<0.1	0.13 (J)	0.46	0.56	0.58
4/2/2018	<0.1	<0.1				
4/3/2018			<0.1			
4/4/2018				<0.1	0.39	<0.1
6/4/2018	0.074 (J)	<0.1	<0.1			
6/5/2018				<0.1	0.24 (J)	
6/6/2018						0.21 (J)
10/1/2018	<0.1	<0.1	<0.1			
10/2/2018				0.17 (J)		
10/3/2018					0.31	0.15 (J)
3/12/2019	0.29 (J)	0.038 (J)	0.072 (J)			
3/13/2019				0.17 (J)	0.51	
3/14/2019						1.1
4/1/2019			0.029 (J)			
4/2/2019	0.1 (J)	0.071 (J)				
4/3/2019				0.082 (J)	0.43	0.3 (J)
9/23/2019	0.078 (J)	<0.1	<0.1			
9/27/2019				0.17 (J)	0.42	0.26 (J)
3/2/2020	0.076 (J)	<0.1	<0.1			
3/3/2020				0.11 (J)	0.24 (J)	0.21 (J)
3/25/2020	0.098 (J)	<0.1	<0.1			
3/26/2020						0.17 (J)
3/31/2020					0.19 (J)	
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				<0.1		
9/18/2020					0.15	0.15
2/8/2021	0.078 (J)					
2/9/2021		<0.1	0.074 (J)			
2/12/2021					0.17	0.19
2/15/2021				0.08 (J)		
3/10/2021	0.079 (J)					
3/11/2021		0.1	<0.1			
3/12/2021				0.054 (J)		
3/16/2021					0.21	0.2

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWC-13	HGWC-7	HGWC-8	HGWC-9	MW-19	MW-20
5/20/2016		0.0828 (J)	0.499			
5/23/2016	0.2587 (J)			<0.1		
7/12/2016	0.53	0.2 (J)	0.67	0.24 (J)		
9/1/2016	0.74	0.51	0.94	0.46		
10/20/2016		0.4	0.56	0.56		
10/24/2016	0.31					
12/6/2016		0.26 (J)	0.76	0.31		
12/7/2016	1					
1/25/2017		0.24 (J)	1.1			
1/26/2017	0.68			0.004 (J)		
3/21/2017		0.13 (J)	0.46			
3/22/2017	0.76			0.28 (J)		
5/23/2017		0.11 (J)	0.65	0.29 (J)		
5/24/2017	0.54					
10/3/2017	0.83	0.17 (J)	0.66	0.53		
4/3/2018		<0.1	0.39	<0.1		
4/4/2018	0.65					
6/5/2018	0.47	0.099 (J)				
6/6/2018			0.46	0.12 (J)		
10/2/2018		<0.1	0.51	0.031 (J)		
10/5/2018	0.77					
3/12/2019			0.58			
3/13/2019	0.78	0.12 (J)		0.14 (J)		0.072 (J)
3/14/2019					0.35	
4/2/2019		0.097 (J)				<0.1
4/3/2019			0.63	0.14 (J)	0.19 (J)	
4/5/2019	0.83					
9/24/2019			0.49			
9/25/2019		0.1 (J)				<0.1
9/26/2019	0.64					
9/27/2019				0.26 (J)	0.53	
3/2/2020						<0.1
3/3/2020			0.45			
3/4/2020	0.37	0.077 (J)		0.08 (J)	0.096 (J)	
3/26/2020					0.12 (J)	
3/27/2020		0.059 (J)	0.46			<0.1
3/30/2020	0.44					
3/31/2020				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		<0.1
9/21/2020	0.44				0.17	
2/10/2021		0.085 (J)				
2/11/2021						<0.1
2/12/2021					0.16	
2/16/2021			0.47	0.096 (J)		
2/22/2021	0.55					
3/15/2021		0.086 (J)	0.51			<0.1
3/16/2021				0.098 (J)		
3/17/2021	0.65				0.18	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-24D	MW-25D	MW-26D	MW-27D	MW-28D	MW-29
3/12/2019					0.24 (J)	0.07 (J)
3/13/2019	0.074 (J)		0.052 (J)	0.28 (J)		
3/14/2019		2.2				
4/2/2019					0.18 (J)	0.045 (J)
4/3/2019		1.6	0.044 (J)			
4/4/2019				0.26 (J)		
4/8/2019	0.048 (J)					
9/24/2019						0.18 (J)
9/26/2019	0.18 (J)		0.19 (J)	0.42	0.22 (J)	
9/27/2019		1.5				
3/2/2020						<0.1
3/3/2020		1.4				
3/4/2020	0.051 (J)		0.052 (J)	0.25 (J)	0.26 (J)	
3/26/2020		1.6				
3/27/2020					0.26 (J)	
3/30/2020	0.064 (J)					<0.1
3/31/2020			<0.1			
4/2/2020				0.24 (J)		
9/16/2020						<0.1
9/17/2020			0.069 (J)			
9/18/2020		1.6		0.22		
9/21/2020	<0.1				0.1	
2/10/2021					0.16	
2/12/2021		1.6				
2/15/2021						<0.1
2/16/2021	<0.1		0.071 (J)	0.25		
3/12/2021				0.24		
3/15/2021					0.24	<0.1
3/16/2021		1.7				
3/17/2021	<0.1		0.072 (J)			

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-5	MW-6	MW-7	HGWA-43D (bg)	HGWA-44D (bg)
3/13/2019	0.1 (J)	0.19 (J)	0.069 (J)		
4/3/2019	0.049 (J)	0.15 (J)	<0.1		
9/25/2019	0.076 (J)				
9/26/2019		0.19 (J)	0.17 (J)		
3/2/2020	0.065 (J)				
3/3/2020		0.062 (J)	<0.1		
3/26/2020	0.082 (J)				
3/27/2020		<0.1			
3/30/2020			<0.1		
9/16/2020				0.22	0.52
9/17/2020	0.094 (J)				
9/21/2020		<0.1	<0.1		
11/10/2020				0.19	0.59
12/15/2020				0.21	0.67
1/19/2021				0.16	0.74
2/9/2021				0.19	0.44
2/15/2021			<0.1		
2/16/2021	0.051 (J)	0.059 (J)			
3/10/2021					0.65
3/11/2021				0.2	
3/15/2021			<0.1		
3/16/2021	<0.1	0.06 (J)			

Time Series

Constituent: Lead (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWC-10	HGWC-11	HGWC-12
5/19/2016	<0.001	<0.001	<0.001			
5/23/2016				<0.001	<0.001	<0.001
7/11/2016	<0.001	<0.001				
7/12/2016			0.0001 (J)	<0.001	<0.001	<0.001
8/30/2016	<0.001	<0.001	<0.001			
9/1/2016				<0.001	<0.001	<0.001
10/19/2016	<0.001	<0.001	<0.001			
10/24/2016				<0.001	<0.001	<0.001
12/6/2016	<0.001	<0.001	<0.001			
12/7/2016				<0.001	<0.001	<0.001
1/24/2017	<0.001	<0.001	<0.001			
1/26/2017				<0.001	<0.001	<0.001
3/21/2017	<0.001	6E-05 (J)	0.0001 (J)			
3/22/2017				<0.001	0.0003 (J)	<0.001
5/22/2017	<0.001	9E-05 (J)	<0.001			
5/24/2017				<0.001	9E-05 (J)	<0.001
4/2/2018	<0.001	<0.001				
4/3/2018			<0.001			
4/4/2018				<0.001	<0.001	<0.001
3/12/2019	<0.001	<0.001	<0.001			
3/13/2019				<0.001	<0.001	
3/14/2019						<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	0.00021 (J)	5.6E-05 (J)
3/25/2020	<0.001	0.00011 (J)	<0.001			
3/26/2020						0.00043 (J)
3/31/2020					0.0003 (J)	
4/1/2020				5E-05 (J)		
9/15/2020	<0.001	8E-05 (J)	4.2E-05 (J)			
9/16/2020				<0.001		
9/18/2020					6E-05 (J)	9.6E-05 (J)
2/8/2021	5.8E-05 (J)					
2/9/2021		9.4E-05 (J)	<0.001			
2/12/2021					<0.001	6.7E-05 (J)
2/15/2021				<0.001		
3/10/2021	<0.001					
3/11/2021		7.6E-05 (J)	<0.001			
3/12/2021				<0.001		
3/16/2021					9.9E-05 (J)	8.9E-05 (J)

Time Series

Constituent: Lead (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWC-13	HGWC-7	HGWC-8	HGWC-9	MW-19	MW-20
5/20/2016		<0.001	<0.001			
5/23/2016	<0.001			<0.001		
7/12/2016	<0.001	<0.001	<0.001	<0.001		
9/1/2016	<0.001	<0.001	<0.001	<0.001		
10/20/2016		<0.001	<0.001	<0.001		
10/24/2016	<0.001					
12/6/2016		0.0001 (J)	<0.001	0.0002 (J)		
12/7/2016	<0.001					
1/25/2017		0.0001 (J)	<0.001			
1/26/2017	<0.001			0.0001 (J)		
3/21/2017		9E-05 (J)	<0.001			
3/22/2017	7E-05 (J)			<0.001		
5/23/2017		8E-05 (J)	<0.001	0.0001 (J)		
5/24/2017	<0.001					
4/3/2018		<0.001	<0.001	<0.001		
4/4/2018	<0.001					
3/12/2019			<0.001			
3/13/2019	<0.001	<0.001		<0.001		<0.001
3/14/2019					<0.001	
3/2/2020						0.00017 (J)
3/3/2020			0.00013 (J)			
3/4/2020	0.00014 (J)	0.00051 (J)		8.4E-05 (J)	0.00011 (J)	
3/26/2020					<0.001	
3/27/2020		5.4E-05 (J)	<0.001			0.00013 (J)
3/30/2020	0.0001 (J)					
3/31/2020				0.00014 (J)		
9/16/2020		0.0002 (J)	0.0002 (J)			
9/17/2020				0.00022 (J)		<0.001
9/21/2020	0.00015 (J)				8.5E-05 (J)	
2/10/2021		0.00056 (J)				
2/11/2021						3.9E-05 (J)
2/12/2021					7.1E-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)			0.0001 (J)
3/16/2021				0.00027 (J)		
3/17/2021	0.00015 (J)				3.8E-05 (J)	

Time Series

Constituent: Lead (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-24D	MW-25D	MW-26D	MW-27D	MW-28D	MW-29
3/12/2019					<0.001	<0.001
3/13/2019	<0.001		<0.001	<0.001		
3/14/2019		<0.001				
3/2/2020						9E-05 (J)
3/3/2020		<0.001				
3/4/2020	0.00019 (J)		<0.001	<0.001	0.001 (J)	
3/26/2020		<0.001				
3/27/2020					6.2E-05 (J)	
3/30/2020	6.4E-05 (J)					0.00011 (J)
3/31/2020			0.0001 (J)			
4/2/2020				0.00013 (J)		
9/16/2020						<0.001
9/17/2020			<0.001			
9/18/2020		<0.001		<0.001		
9/21/2020	4.2E-05 (J)				0.00018 (J)	
2/10/2021					0.00044 (J)	
2/12/2021		<0.001				
2/15/2021						5.2E-05 (J)
2/16/2021	0.00012 (J)		8E-05 (J)	0.00043 (J)		
3/12/2021				<0.001		
3/15/2021					0.00034 (J)	<0.001
3/16/2021		<0.001				
3/17/2021	4E-05 (J)		<0.001			

Time Series

Constituent: Lead (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-5	MW-6	MW-7	HGWA-43D (bg)	HGWA-44D (bg)
3/13/2019	<0.001	<0.001	<0.001		
3/2/2020	4.7E-05 (J)				
3/3/2020		0.00013 (J)	6.2E-05 (J)		
3/26/2020	<0.001				
3/27/2020		<0.001			
3/30/2020			<0.001		
9/16/2020				5E-05 (J)	0.00021 (J)
9/17/2020	<0.001				
9/21/2020		0.00026 (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)
2/9/2021				0.00029 (J)	0.0001 (J)
2/15/2021			<0.001		
2/16/2021	<0.001	8.4E-05 (J)			
3/10/2021					<0.001
3/11/2021				9.4E-05 (J)	
3/15/2021			<0.001		
3/16/2021	<0.001	3.6E-05 (J)			

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWC-10	HGWC-11	HGWC-12
5/19/2016	<0.03	<0.03	<0.03			
5/23/2016				<0.03	<0.03	0.0107 (J)
7/11/2016	<0.03	0.0014 (J)				
7/12/2016			0.0024 (J)	<0.03	<0.03	0.0113 (J)
8/30/2016	<0.03	<0.03	0.0025 (J)			
9/1/2016				<0.03	<0.03	0.0118 (J)
10/19/2016	<0.03	<0.03	0.003 (J)			
10/24/2016				<0.03	<0.03	0.0114 (J)
12/6/2016	<0.03	<0.03	0.0033 (J)			
12/7/2016				<0.03	<0.03	0.0155 (J)
1/24/2017	<0.03	<0.03	0.003 (J)			
1/26/2017				<0.03	<0.03	0.0099 (J)
3/21/2017	<0.03	0.0012 (J)	0.0034 (J)			
3/22/2017				<0.03	<0.03	0.0098 (J)
5/22/2017	<0.03	<0.03	0.003 (J)			
5/24/2017				<0.03	<0.03	0.0105 (J)
4/2/2018	<0.03	0.0015 (J)				
4/3/2018			0.003 (J)			
4/4/2018				<0.03	<0.03	0.008 (J)
6/4/2018	0.001 (J)	0.0016 (J)	0.0027 (J)			
6/5/2018				<0.03	<0.03	
6/6/2018						0.0095 (J)
10/1/2018	0.00099 (J)	0.0013 (J)	0.0032 (J)			
10/2/2018				<0.03		
10/3/2018					<0.03	0.0083 (J)
3/12/2019	0.001 (J)	0.0018 (J)	0.0032 (J)			
3/13/2019				<0.03	<0.03	
3/14/2019						0.0058 (J)
4/1/2019			0.0032 (J)			
4/2/2019	0.001 (J)	0.0018 (J)				
4/3/2019				<0.03	<0.03	0.0066 (J)
9/23/2019	0.0011 (J)	0.0016 (J)	0.0029 (J)			
9/27/2019				<0.03	<0.03	0.011 (J)
3/2/2020	0.0012 (J)	0.0017 (J)	0.0037 (J)			
3/3/2020				<0.03	<0.03	0.0063 (J)
3/25/2020	0.00083 (J)	0.0017 (J)	0.0035 (J)			
3/26/2020						0.0063 (J)
3/31/2020					<0.03	
4/1/2020				<0.03		
9/15/2020	0.00087 (J)	0.0015 (J)	0.0026 (J)			
9/16/2020				<0.03		
9/18/2020					<0.03	0.01 (J)
2/8/2021	0.00086 (J)					
2/9/2021		0.0012 (J)	0.0032 (J)			
2/12/2021					<0.03	0.0094 (J)
2/15/2021				<0.03		
3/10/2021	0.0009 (J)					
3/11/2021		0.0011 (J)	0.0035 (J)			
3/12/2021				<0.03		
3/16/2021					<0.03	0.0081 (J)

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWC-13	HGWC-7	HGWC-8	HGWC-9	MW-19	MW-20
5/20/2016		<0.03	<0.03			
5/23/2016	0.0422 (J)			<0.03		
7/12/2016	0.0366 (J)	0.0021 (J)	0.0023 (J)	0.004 (J)		
9/1/2016	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	0.0435 (J)					
12/6/2016		0.0026 (J)	0.0032 (J)	0.005 (J)		
12/7/2016	0.0477 (J)					
1/25/2017		0.0024 (J)	0.0026 (J)			
1/26/2017	0.0342 (J)			0.0042 (J)		
3/21/2017		0.0026 (J)	0.0029 (J)			
3/22/2017	0.0353 (J)			0.0043 (J)		
5/23/2017		0.0026 (J)	0.0029 (J)	0.0048 (J)		
5/24/2017	0.0317 (J)					
4/3/2018		0.0023 (J)	0.0025 (J)	0.0043 (J)		
4/4/2018	0.031 (J)					
6/5/2018	0.031 (J)	0.0022 (J)				
6/6/2018			0.0023 (J)	0.0043 (J)		
10/2/2018		0.003 (J)	0.0025 (J)	0.004 (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)		0.0016 (J)
3/14/2019					0.0089 (J)	
4/2/2019		0.002 (J)				0.0015 (J)
4/3/2019			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)				<0.03
9/26/2019	0.035					
9/27/2019				0.0044 (J)	0.013 (J)	
3/2/2020						0.00082 (J)
3/3/2020			0.0028 (J)			
3/4/2020	0.041	0.0034 (J)		0.004 (J)	0.01 (J)	
3/26/2020					0.013 (J)	
3/27/2020		0.002 (J)	0.0026 (J)			0.0012 (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)		<0.03
9/21/2020	0.028 (J)				0.013 (J)	
2/10/2021		0.0032 (J)				
2/11/2021						0.001 (J)
2/12/2021					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)			0.0011 (J)
3/16/2021				0.0046 (J)		
3/17/2021	0.031				0.012 (J)	

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-24D	MW-25D	MW-26D	MW-27D	MW-28D	MW-29
3/12/2019					0.011 (J)	0.0024 (J)
3/13/2019	0.0029 (J)		0.0033 (J)	0.0097 (J)		
3/14/2019		0.05				
4/2/2019					0.0052 (J)	0.0021 (J)
4/3/2019		0.047 (J)	0.0034 (J)			
4/4/2019				0.0069 (J)		
4/8/2019	0.0027 (J)					
9/24/2019						0.0022 (J)
9/26/2019	0.003 (J)		0.0041 (J)	0.0055 (J)	0.0055 (J)	
9/27/2019		0.047				
3/2/2020						0.0025 (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					0.014 (J)	
3/30/2020	0.0027 (J)					0.0023 (J)
3/31/2020			0.0036 (J)			
4/2/2020				0.0068 (J)		
9/16/2020						0.0021 (J)
9/17/2020			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)	
2/12/2021		0.045				
2/15/2021						0.0024 (J)
2/16/2021	0.0028 (J)		0.0038 (J)	0.0078 (J)		
3/12/2021				0.009 (J)		
3/15/2021					0.013 (J)	0.0022 (J)
3/16/2021		0.049				
3/17/2021	0.0027 (J)		0.004 (J)			

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-5	MW-6	MW-7	HGWA-43D (bg)	HGWA-44D (bg)
3/13/2019	<0.03	<0.03	<0.03		
4/3/2019	<0.03	<0.03	<0.03		
9/25/2019	<0.03				
9/26/2019		<0.03	<0.03		
3/2/2020	<0.03				
3/3/2020		<0.03	<0.03		
3/26/2020	<0.03				
3/27/2020		<0.03			
3/30/2020			<0.03		
9/16/2020				0.0018 (J)	0.014 (J)
9/17/2020	<0.03				
9/21/2020		<0.03	<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
2/9/2021				0.0026 (J)	0.026 (J)
2/15/2021			<0.03		
2/16/2021	<0.03	<0.03			
3/10/2021					0.03
3/11/2021				0.0022 (J)	
3/15/2021			<0.03		
3/16/2021	<0.03	<0.03			

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWC-10	HGWC-11	HGWC-12
5/19/2016	<0.0005	<0.0005	<0.0005			
5/23/2016				<0.0005	<0.0005	<0.0005
7/11/2016	<0.0005	<0.0005				
7/12/2016			<0.0005	<0.0005	<0.0005	<0.0005
8/30/2016	4E-05 (J)	4E-05 (J)	<0.0005			
9/1/2016				<0.0005	<0.0005	<0.0005
10/19/2016	<0.0005	<0.0005	<0.0005			
10/24/2016				<0.0005	<0.0005	<0.0005
12/6/2016	<0.0005	<0.0005	<0.0005			
12/7/2016				<0.0005	<0.0005	<0.0005
1/24/2017	<0.0005	<0.0005	<0.0005			
1/26/2017				5E-05 (J)	5E-05 (J)	<0.0005
3/21/2017	<0.0005	<0.0005	<0.0005			
3/22/2017				<0.0005	<0.0005	<0.0005
5/22/2017	<0.0005	<0.0005	<0.0005			
5/24/2017				<0.0005	<0.0005	<0.0005
4/2/2018	<0.0005	<0.0005				
4/3/2018			<0.0005			
4/4/2018				<0.0005	<0.0005	<0.0005
3/12/2019	<0.0005	<0.0005	<0.0005			
3/13/2019				<0.0005	<0.0005	
3/14/2019						<0.0005
3/2/2020	<0.0005	<0.0005	<0.0005			
3/3/2020				<0.0005	<0.0005	<0.0005
2/8/2021	<0.0005					
2/9/2021		<0.0005	<0.0005			
2/12/2021					<0.0005	<0.0005
2/15/2021				<0.0005		

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWC-13	HGWC-7	HGWC-8	HGWC-9	MW-19	MW-20
5/20/2016		<0.0005	<0.0005			
5/23/2016	<0.0005			<0.0005		
7/12/2016	<0.0005	<0.0005	<0.0005	<0.0005		
9/1/2016	<0.0005	<0.0005	<0.0005	<0.0005		
10/20/2016		<0.0005	<0.0005	<0.0005		
10/24/2016	<0.0005					
12/6/2016		<0.0005	<0.0005	<0.0005		
12/7/2016	<0.0005					
1/25/2017		<0.0005	<0.0005			
1/26/2017	4E-05 (J)			4E-05 (J)		
3/21/2017		<0.0005	<0.0005			
3/22/2017	<0.0005			<0.0005		
5/23/2017		<0.0005	<0.0005	<0.0005		
5/24/2017	5E-05 (J)					
4/3/2018		<0.0005	<0.0005	<0.0005		
4/4/2018	<0.0005					
3/12/2019			<0.0005			
3/13/2019	<0.0005	<0.0005		<0.0005		<0.0005
3/14/2019					<0.0005	
3/2/2020						<0.0005
3/3/2020			<0.0005			
3/4/2020	<0.0005	<0.0005		<0.0005	<0.0005	
2/10/2021		<0.0005				
2/11/2021						<0.0005
2/12/2021					<0.0005	
2/16/2021			<0.0005	<0.0005		
2/22/2021	<0.0005					

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-24D	MW-25D	MW-26D	MW-27D	MW-28D	MW-29
3/12/2019					<0.0005	<0.0005
3/13/2019	<0.0005		<0.0005	<0.0005		
3/14/2019		<0.0005				
3/2/2020						<0.0005
3/3/2020		<0.0005				
3/4/2020	<0.0005		<0.0005	<0.0005	<0.0005	
2/10/2021					<0.0005	
2/12/2021		<0.0005				
2/15/2021						<0.0005
2/16/2021	<0.0005		<0.0005	<0.0005		

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-5	MW-6	MW-7	HGWA-43D (bg)	HGWA-44D (bg)
3/13/2019	<0.0005	<0.0005	<0.0005		
3/2/2020	<0.0005				
3/3/2020		<0.0005	<0.0005		
9/16/2020				<0.0005	<0.0005
11/10/2020				<0.0005	<0.0005
12/15/2020				<0.0005	<0.0005
1/19/2021				<0.0005	<0.0005
2/9/2021				<0.0005	<0.0005
2/15/2021			<0.0005		
2/16/2021	<0.0005	<0.0005			

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWC-10	HGWC-11	HGWC-12
5/19/2016	<0.01	<0.01	<0.01			
5/23/2016				<0.01	0.0164	0.0413 (J)
7/11/2016	<0.01	<0.01				
7/12/2016			<0.01	0.0013 (J)	0.0251	0.0484
8/30/2016	<0.01	<0.01	<0.01			
9/1/2016				<0.01	0.0259	0.0474
10/19/2016	<0.01	<0.01	<0.01			
10/24/2016				<0.01	0.0293	0.047
12/6/2016	<0.01	<0.01	<0.01			
12/7/2016				<0.01	0.0209	0.0432
1/24/2017	<0.01	<0.01	<0.01			
1/26/2017				<0.01	0.0277	0.0484
3/21/2017	<0.01	<0.01	<0.01			
3/22/2017				0.0013 (J)	0.011	0.0494
5/22/2017	<0.01	<0.01	<0.01			
5/24/2017				0.0014 (J)	0.0373	0.047
4/2/2018	<0.01	<0.01				
4/3/2018			<0.01			
4/4/2018				<0.01	0.013	0.052
6/4/2018	<0.01	<0.01	<0.01			
6/5/2018				<0.01	0.029	
6/6/2018						0.054
10/1/2018	<0.01	<0.01	<0.01			
10/2/2018				<0.01		
10/3/2018					0.02	0.054
3/12/2019	<0.01	<0.01	<0.01			
3/13/2019				<0.01	0.012	
3/14/2019						0.046
4/1/2019			<0.01			
4/2/2019	<0.01	<0.01				
4/3/2019				0.0021 (J)	0.01	0.049
9/23/2019	<0.01	<0.01	<0.01			
9/27/2019				0.0014 (J)	0.016	0.052
3/2/2020	<0.01	<0.01	<0.01			
3/3/2020				<0.01	0.011	0.045
3/25/2020	<0.01	<0.01	<0.01			
3/26/2020						0.045
3/31/2020					0.0074 (J)	
4/1/2020				<0.01		
6/16/2020	<0.01		<0.01			
9/15/2020	<0.01	<0.01	<0.01			
9/16/2020				0.0014 (J)		
9/18/2020					0.032	0.046
2/8/2021	<0.01					
2/9/2021		<0.01	<0.01			
2/12/2021					0.023	0.048
2/15/2021				<0.01		
3/10/2021	<0.01					
3/11/2021		<0.01	<0.01			
3/12/2021				0.0007 (J)		
3/16/2021					0.015	0.044

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWC-13	HGWC-7	HGWC-8	HGWC-9	MW-19	MW-20
5/20/2016		0.028	0.446			
5/23/2016	0.027			0.0187		
7/12/2016	0.0316	0.0273	0.455	0.0229		
9/1/2016	0.0336	0.0274	0.481	0.0239		
10/20/2016		0.036	0.472	0.477		
10/24/2016	0.0352					
12/6/2016		0.0365	0.52	0.0236		
12/7/2016	0.0383					
1/25/2017		0.0317	0.478			
1/26/2017	0.041			0.0234		
3/21/2017		0.0346	0.547			
3/22/2017	0.0426			0.0219		
5/23/2017		0.0336	0.482	0.0242		
5/24/2017	0.04					
4/3/2018		0.032	0.44	0.025		
4/4/2018	0.027					
6/5/2018	0.027	0.036				
6/6/2018			0.49	0.027		
10/2/2018		0.039	0.47	0.028		
10/5/2018	0.033					
3/12/2019			0.5			
3/13/2019	0.033	0.04		0.028		<0.01
3/14/2019					0.057	
4/2/2019		0.041				<0.01
4/3/2019			0.5	0.03	0.04	
4/5/2019	0.03					
9/24/2019			0.54			
9/25/2019		0.047				<0.01
9/26/2019	0.026					
9/27/2019				0.033	0.063	
3/2/2020						<0.01
3/3/2020			0.44			
3/4/2020	0.03	0.045		0.031	0.032	
3/26/2020					0.033	
3/27/2020		0.044	0.42			<0.01
3/30/2020	0.029					
3/31/2020				0.031		
6/16/2020			0.45			
6/17/2020		0.048				
9/16/2020		0.046	0.43			
9/17/2020				0.03		<0.01
9/21/2020	0.032				0.064	
2/10/2021		0.051				
2/11/2021						<0.01
2/12/2021					0.046	
2/16/2021			0.46	0.035		
2/22/2021	0.036					
3/15/2021		0.047	0.41			<0.01
3/16/2021				0.035		
3/17/2021	0.035				0.043	

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-24D	MW-25D	MW-26D	MW-27D	MW-28D	MW-29
3/12/2019					0.013	0.0038 (J)
3/13/2019	<0.01		<0.01	<0.01		
3/14/2019		0.0022 (J)				
4/2/2019					0.028	0.0028 (J)
4/3/2019		<0.01	0.0083 (J)			
4/4/2019				0.0018 (J)		
4/8/2019	0.00027 (J)					
9/24/2019						0.0021 (J)
9/26/2019	<0.01		0.017	0.0042 (J)	0.017	
9/27/2019		<0.01				
11/25/2019			0.02			
3/2/2020						0.0025 (J)
3/3/2020		<0.01				
3/4/2020	<0.01		0.0074 (J)	0.0058 (J)	0.009 (J)	
3/26/2020		<0.01				
3/27/2020					0.0068 (J)	
3/30/2020	<0.01					0.0029 (J)
3/31/2020			0.0093 (J)			
4/2/2020				0.003 (J)		
9/16/2020						0.0021 (J)
9/17/2020			0.014			
9/18/2020		0.00094 (J)		0.0018 (J)		
9/21/2020	0.00099 (J)				0.018	
2/10/2021					0.02	
2/12/2021		<0.01				
2/15/2021						0.0029 (J)
2/16/2021	0.00096 (J)		0.022	0.0019 (J)		
3/12/2021				0.0008 (J)		
3/15/2021					0.013	0.0031 (J)
3/16/2021		<0.01				
3/17/2021	0.001 (J)		0.023			

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-5	MW-6	MW-7	HGWA-43D (bg)	HGWA-44D (bg)
3/13/2019	<0.01	0.0021 (J)	<0.01		
4/3/2019	<0.01	0.0021 (J)	<0.01		
9/25/2019	<0.01				
9/26/2019		0.0026 (J)	0.0033 (J)		
3/2/2020	<0.01				
3/3/2020		0.0022 (J)	<0.01		
3/26/2020	<0.01				
3/27/2020		0.0026 (J)			
3/30/2020			<0.01		
9/16/2020				0.0044 (J)	0.0019 (J)
9/17/2020	<0.01				
9/21/2020		0.0025 (J)	0.0015 (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)
2/9/2021				0.0045 (J)	0.0038 (J)
2/15/2021			0.0015 (J)		
2/16/2021	<0.01	0.0025 (J)			
3/10/2021					0.0019 (J)
3/11/2021				0.0064 (J)	
3/15/2021			0.0015 (J)		
3/16/2021	<0.01	0.0023 (J)			

Time Series

Constituent: pH, Field (SU) Analysis Run 5/4/2021 7:01 PM

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

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWC-10	HGWC-11	HGWC-12
5/19/2016	7.27	5.81	7.45			
5/23/2016				6.83	6.22	7.15
7/11/2016	7.06	5.68				
7/12/2016			7.32	6.58	6.04	6.87
8/30/2016	7.28	5.63	7.43			
9/1/2016				6.54	6.26	7.2
10/19/2016	7.02	5.46	7.03			
10/24/2016				6.59	6.46	7.1
12/6/2016	7.09	5.38	7.08			
12/7/2016				6.56	6.29	6.92
1/24/2017	7.2	5.37	7.39			
1/26/2017				6.83	6.46	7.05
3/21/2017	7.01	4.9	6.83			
3/22/2017				6.66	5.81	7.08
5/22/2017	7.11	5.2	7.02			
5/24/2017				6.67	6.51	7.11
10/3/2017	7.21	5.3	7.47	6.54	6.25	7.01
4/2/2018	7.1	5.4				
4/3/2018			7.38			
4/4/2018				6.61	5.86	7.12
6/4/2018	7.06	5.27	7.38			
6/5/2018				6.65	6.27	
6/6/2018						7.12
10/1/2018	7.09	5.31	7.13			
10/2/2018				6.55		
10/3/2018					5.97	7.08
3/12/2019	7.03	5.42	7.29			
3/13/2019				6.7	5.92	
3/14/2019						7.09
4/1/2019			7.16			
4/2/2019	6.86	5.41				
4/3/2019				6.55	5.69	6.96
9/23/2019	7.02	5.33	7.3			
9/27/2019				6.64	5.75	7.07
3/2/2020	7.1	5.43	7.12			
3/3/2020				6.67	5.95	6.95
3/25/2020	6.95	5.36	7.4			
3/26/2020						6.99
3/31/2020					5.7	
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				6.66		
9/18/2020					6.42	7.15
2/8/2021	7.11					
2/9/2021		5.42	7.23			
2/12/2021					7.27	6.23
2/15/2021				6.83		
3/10/2021	6.95					
3/11/2021		5.8	7.33			
3/12/2021				6.76		
3/16/2021					5.95	7.15

Time Series

Constituent: pH, Field (SU) Analysis Run 5/4/2021 7:01 PM

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

	HGWC-13	HGWC-7	HGWC-8	HGWC-9	MW-19	MW-20
5/20/2016		7.14	6.99			
5/23/2016	7.14			7.23		
7/12/2016	7.04	7.13	6.88	6.87		
9/1/2016	7.24	7.29	6.73	7.15		
10/20/2016		7.1	6.9	7.05		
10/24/2016	6.9					
12/6/2016		7.15	6.98	7.15		
12/7/2016	6.91					
1/25/2017		7.11	7.04			
1/26/2017	7.08			6.99		
3/21/2017		7.12	6.87			
3/22/2017	7.13			7.03		
5/23/2017		7.08	6.87	7.05		
5/24/2017	7.15					
10/3/2017	7.32	7.21	6.72	7.07		
4/3/2018		7.14	6.87	6.99		
4/4/2018	7.27					
6/5/2018	7.2	7.13				
6/6/2018			6.9	7.02		
10/2/2018		7.12	6.9	7.05		
10/5/2018	7.24					
3/12/2019			6.91			
3/13/2019	7.24	7.27		7.06		6.75
3/14/2019					6.48	
4/2/2019		7.27				6.7
4/3/2019			6.85	6.88	6.14	
4/5/2019	7.24					
9/24/2019			6.95			
9/25/2019		7.11				6.75
9/26/2019	6.94					
9/27/2019				7.01	6.33	
3/2/2020						6.98
3/3/2020			7.06			
3/4/2020	7.16	7.17		6.97	6.29	
3/26/2020					6.28	
3/27/2020		7.05	6.95			6.75
3/30/2020	6.91					
3/31/2020				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		6.78
9/21/2020	7.34				6.41	
2/10/2021		7.29				
2/11/2021						6.93
2/12/2021					6.36	
2/16/2021			7.16	7.26		
2/22/2021	7.27					
3/15/2021		7.19	7.09			6.97
3/16/2021				7.1		
3/17/2021	7.33				6.34	

Time Series

Constituent: pH, Field (SU) Analysis Run 5/4/2021 7:01 PM

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

	MW-24D	MW-25D	MW-26D	MW-27D	MW-28D	MW-29
3/12/2019					7.46	7.2
3/13/2019	7.58		7.4	7.78		
3/14/2019		7.67				
4/2/2019					7.4	6.91
4/3/2019		7.56	7.25			
4/4/2019				7.63		
4/8/2019	7.47					
9/24/2019						6.86
9/26/2019	7.5		7.16	7.46	7.4	
9/27/2019		7.57				
3/2/2020						7.13
3/3/2020		7.59				
3/4/2020	7.47		7.14	8.33	7.55	
3/26/2020		7.57				
3/27/2020					7.42	
3/30/2020	7.49					7.07
3/31/2020			7.2			
4/2/2020				8.11		
9/16/2020						6.88
9/17/2020			7.08			
9/18/2020		7.64		7.51		
9/21/2020	7.65				7.46	
2/10/2021					7.54	
2/12/2021		7.77				
2/15/2021						7.09
2/16/2021	7.69		7.27	7.96		
3/12/2021				7.88		
3/15/2021					7.61	7.05
3/16/2021		7.76				
3/17/2021	7.66		7.14			

Time Series

Constituent: pH, Field (SU) Analysis Run 5/4/2021 7:01 PM

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

	MW-5	MW-6	MW-7	HGWA-43D (bg)	HGWA-44D (bg)
3/13/2019	6.16	6.86	6.37		
4/3/2019	5.96	6.77	6.19		
9/25/2019	6.37				
9/26/2019		6.76	6.5		
3/2/2020	6.12				
3/3/2020		6.78	6.1		
3/26/2020	6.14				
3/27/2020		6.82			
3/30/2020			6.06		
9/16/2020				7.52	7.83
9/17/2020	6.48				
9/21/2020		6.88	6.5		
11/10/2020				7.27	7.84
12/15/2020				7.39	7.87
1/19/2021				7.39	7.86
2/9/2021				7.44	7.84
2/15/2021			6.77		
2/16/2021	5.95	7			
3/10/2021					7.92
3/11/2021				7.46	
3/15/2021			6.66		
3/16/2021	5.78	6.96			

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWC-10	HGWC-11	HGWC-12
5/19/2016	<0.005	<0.005	<0.005			
5/23/2016				<0.005	0.0106	<0.005
7/11/2016	<0.005	<0.005				
7/12/2016			<0.005	<0.005	0.0057 (J)	<0.005
8/30/2016	<0.005	<0.005	<0.005			
9/1/2016				<0.005	0.0057 (J)	<0.005
10/19/2016	<0.005	<0.005	<0.005			
10/24/2016				<0.005	0.0021 (J)	<0.005
12/6/2016	<0.005	<0.005	<0.005			
12/7/2016				<0.005	0.0015 (J)	0.0011 (J)
1/24/2017	<0.005	<0.005	<0.005			
1/26/2017				0.0041 (J)	0.0062 (J)	<0.005
3/21/2017	<0.005	<0.005	<0.005			
3/22/2017				<0.005	0.0263	<0.005
5/22/2017	<0.005	<0.005	<0.005			
5/24/2017				<0.005	0.0038 (J)	<0.005
4/2/2018	<0.005	<0.005				
4/3/2018			<0.005			
4/4/2018				<0.005	0.021	<0.005
6/4/2018	<0.005	<0.005	<0.005			
6/5/2018				<0.005	0.0062 (J)	
6/6/2018						<0.005
10/1/2018	<0.005	<0.005	<0.005			
10/2/2018				0.0023 (J)		
10/3/2018					0.009 (J)	<0.005
3/12/2019	<0.005	<0.005	<0.005			
3/13/2019				0.0015 (J)	0.023	
3/14/2019						<0.005
4/1/2019			<0.005			
4/2/2019	<0.005	<0.005				
4/3/2019				<0.005	0.016	<0.005
9/23/2019	<0.005	<0.005	<0.005			
9/27/2019				<0.005	0.013	<0.005
3/2/2020	<0.005	<0.005	<0.005			
3/3/2020				<0.005	0.016	<0.005
3/25/2020	<0.005	<0.005	<0.005			
3/26/2020						<0.005
3/31/2020					0.019	
4/1/2020				0.002 (J)		
9/15/2020	<0.005	<0.005	<0.005			
9/16/2020				<0.005		
9/18/2020					0.0042 (J)	<0.005
2/8/2021	<0.005					
2/9/2021		<0.005	<0.005			
2/12/2021					0.0079 (J)	<0.005
2/15/2021				0.0028 (J)		
3/10/2021	0.0047 (J)					
3/11/2021		<0.005	<0.005			
3/12/2021				<0.005		
3/16/2021					0.015	<0.005

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWC-13	HGWC-7	HGWC-8	HGWC-9	MW-19	MW-20
5/20/2016		<0.005	<0.005			
5/23/2016	<0.005			<0.005		
7/12/2016	<0.005	<0.005	<0.005	<0.005		
9/1/2016	<0.005	<0.005	<0.005	<0.005		
10/20/2016		<0.005	<0.005	<0.005		
10/24/2016	<0.005					
12/6/2016		<0.005	0.0024 (J)	0.0037 (J)		
12/7/2016	<0.005					
1/25/2017		<0.005	<0.005			
1/26/2017	<0.005			<0.005		
3/21/2017		<0.005	<0.005			
3/22/2017	<0.005			<0.005		
5/23/2017		<0.005	<0.005	<0.005		
5/24/2017	<0.005					
4/3/2018		<0.005	<0.005	<0.005		
4/4/2018	<0.005					
6/5/2018	<0.005	<0.005				
6/6/2018			<0.005	<0.005		
10/2/2018		<0.005	<0.005	<0.005		
10/5/2018	<0.005					
3/12/2019			<0.005			
3/13/2019	<0.005	<0.005		<0.005		<0.005
3/14/2019					<0.005	
4/2/2019		<0.005				<0.005
4/3/2019			<0.005	<0.005	0.007 (J)	
4/5/2019	0.00018 (J)					
9/24/2019			<0.005			
9/25/2019		<0.005				<0.005
9/26/2019	<0.005					
9/27/2019				<0.005	0.0013 (J)	
3/2/2020						<0.005
3/3/2020			<0.005			
3/4/2020	<0.005	<0.005		<0.005	0.0044 (J)	
3/26/2020					0.0053 (J)	
3/27/2020		<0.005	<0.005			<0.005
3/30/2020	<0.005					
3/31/2020				<0.005		
9/16/2020		<0.005	<0.005			
9/17/2020				<0.005		<0.005
9/21/2020	0.0016 (J)				0.0033 (J)	
2/10/2021		<0.005				
2/11/2021						<0.005
2/12/2021					0.0021 (J)	
2/16/2021			<0.005	<0.005		
2/22/2021	<0.005					
3/15/2021		<0.005	<0.005			<0.005
3/16/2021				<0.005		
3/17/2021	<0.005				<0.005	

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-24D	MW-25D	MW-26D	MW-27D	MW-28D	MW-29
3/12/2019					<0.005	<0.005
3/13/2019	<0.005		<0.005	<0.005		
3/14/2019		<0.005				
4/2/2019					<0.005	<0.005
4/3/2019		<0.005	<0.005			
4/4/2019				0.00012 (J)		
4/8/2019	<0.005					
9/24/2019						<0.005
9/26/2019	<0.005		<0.005	<0.005	<0.005	
9/27/2019		<0.005				
3/2/2020						<0.005
3/3/2020		<0.005				
3/4/2020	<0.005		<0.005	<0.005	<0.005	
3/26/2020		<0.005				
3/27/2020					<0.005	
3/30/2020	<0.005					<0.005
3/31/2020			<0.005			
4/2/2020				<0.005		
9/16/2020						<0.005
9/17/2020			<0.005			
9/18/2020		<0.005		<0.005		
9/21/2020	<0.005				<0.005	
2/10/2021					<0.005	
2/12/2021		<0.005				
2/15/2021						<0.005
2/16/2021	<0.005		<0.005	<0.005		
3/12/2021				<0.005		
3/15/2021					<0.005	<0.005
3/16/2021		<0.005				
3/17/2021	<0.005		<0.005			

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-5	MW-6	MW-7	HGWA-43D (bg)	HGWA-44D (bg)
3/13/2019	0.0033 (J)	<0.005	0.0016 (J)		
4/3/2019	0.0027 (J)	<0.005	<0.005		
9/25/2019	0.0021 (J)				
9/26/2019		<0.005	0.0014 (J)		
3/2/2020	0.0041 (J)				
3/3/2020		<0.005	<0.005		
3/26/2020	0.0039 (J)				
3/27/2020		<0.005			
3/30/2020			0.0014 (J)		
9/16/2020				<0.005	<0.005
9/17/2020	0.0028 (J)				
9/21/2020		<0.005	0.0026 (J)		
11/10/2020				<0.005	<0.005
12/15/2020				<0.005	<0.005
1/19/2021				<0.005	<0.005
2/9/2021				<0.005	<0.005
2/15/2021			<0.005		
2/16/2021	0.0035 (J)	<0.005			
3/10/2021					<0.005
3/11/2021				<0.005	
3/15/2021			0.0021 (J)		
3/16/2021	0.0026 (J)	<0.005			

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWC-10	HGWC-11	HGWC-12
5/19/2016	66.9	48.6	42.3			
5/23/2016				175	260	288
7/11/2016	41	45				
7/12/2016			44	190	390	320
8/30/2016	36	42	40			
9/1/2016				190	240	300
10/19/2016	46	44	43			
10/24/2016				190	370	270
12/6/2016	59	44	43			
12/7/2016				200	260	280
1/24/2017	46	46	48			
1/26/2017				90	230	260
3/21/2017	63	46	45			
3/22/2017				170	330	220
5/22/2017	77	48	46			
5/24/2017				190	230	210
10/3/2017	42	47	48	200	230	190
6/4/2018	71.8	47.8	46.6			
6/5/2018				205	204	
6/6/2018						162
10/1/2018	49.1	48.1	48.6			
10/2/2018				178		
10/3/2018					233	191
4/1/2019			50.4			
4/2/2019	84.3	48.7				
4/3/2019				159	298	176
9/23/2019	70.2	47.2	43.9			
9/27/2019				181	<1	198
3/25/2020	85.9	46.3	50.5			
3/26/2020						182
3/31/2020					283	
4/1/2020				59		
6/16/2020	88.2		49.5			
9/15/2020	47.3	51.5	44.7			
9/16/2020				169		
9/18/2020					272	266
3/10/2021	49.6					
3/11/2021		52.9	50.4			
3/12/2021				120		
3/16/2021					291	248

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWC-13	HGWC-7	HGWC-8	HGWC-9	MW-19	MW-20
5/20/2016		96	219			
5/23/2016	215			207		
7/12/2016	210	100	230	230		
9/1/2016	190	100	230	230		
10/20/2016		110	240	240		
10/24/2016	180					
12/6/2016		110	250	240		
12/7/2016	120					
1/25/2017		110	260			
1/26/2017	83			270		
3/21/2017		110	240			
3/22/2017	100			240		
5/23/2017		110	270	240		
5/24/2017	110					
10/3/2017	67	120	230	240		
6/5/2018	187	117				
6/6/2018			190	214		
10/2/2018		120	193	218		
10/5/2018	78.3					
4/2/2019		127				122
4/3/2019			194	214	105	
4/5/2019	105					
9/24/2019			133			
9/25/2019		109				112
9/26/2019	444					
9/27/2019				214	170	
3/26/2020					310	
3/27/2020		109	173			114
3/30/2020	393					
3/31/2020				185		
6/16/2020			157			
6/17/2020		102				
9/16/2020		109	194			
9/17/2020				209		110
9/21/2020	359				305	
3/15/2021		107	272			109
3/16/2021				211		
3/17/2021	384				260	

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-24D	MW-25D	MW-26D	MW-27D	MW-28D	MW-29
4/2/2019					67.7	151
4/3/2019		53	131			
4/4/2019				11.8		
4/8/2019	97.3					
9/24/2019						154
9/26/2019	91		189	15.6	96.2	
9/27/2019		48				
3/26/2020		32.3				
3/27/2020					36	
3/30/2020	84.9					130
3/31/2020			129			
4/2/2020				13.3		
9/16/2020						143
9/17/2020			174			
9/18/2020		27.4		7.5		
9/21/2020	114				84.2	
3/12/2021				7.4		
3/15/2021					50.1	148
3/16/2021		9.4				
3/17/2021	137		212			

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-5	MW-6	MW-7	HGWA-43D (bg)	HGWA-44D (bg)
4/3/2019	218	228	75.3		
9/25/2019	134				
9/26/2019		225	129		
3/26/2020	176				
3/27/2020		204			
3/30/2020			46.2		
9/16/2020				43	6.9
9/17/2020	153				
9/21/2020		221	114		
11/10/2020				39	6.3
12/15/2020				38.8	6.7
1/19/2021				37.3	7.4
3/10/2021					<1
3/11/2021				38.6	
3/15/2021			92.1		
3/16/2021	162	189			

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWC-10	HGWC-11	HGWC-12
5/19/2016	<0.001	<0.001	<0.001			
5/23/2016				<0.001	<0.001	<0.001
7/11/2016	<0.001	<0.001				
7/12/2016			<0.001	<0.001	8E-05 (J)	0.0002 (J)
8/30/2016	<0.001	<0.001	<0.001			
9/1/2016				<0.001	<0.001	<0.001
10/19/2016	<0.001	<0.001	<0.001			
10/24/2016				<0.001	<0.001	<0.001
12/6/2016	<0.001	<0.001	<0.001			
12/7/2016				<0.001	<0.001	<0.001
1/24/2017	<0.001	<0.001	<0.001			
1/26/2017				<0.001	<0.001	<0.001
3/21/2017	<0.001	3E-05 (J)	<0.001			
3/22/2017				<0.001	<0.001	0.0001 (J)
5/22/2017	<0.001	<0.001	<0.001			
5/24/2017				<0.001	8E-05 (J)	9E-05 (J)
4/2/2018	<0.001	<0.001				
4/3/2018			<0.001			
4/4/2018				<0.001	<0.001	<0.001
6/4/2018	<0.001	<0.001	<0.001			
6/5/2018				<0.001	<0.001	
6/6/2018						<0.001
10/1/2018	<0.001	<0.001	<0.001			
10/2/2018				<0.001		
10/3/2018					<0.001	<0.001
3/12/2019	<0.001	<0.001	<0.001			
3/13/2019				<0.001	<0.001	
3/14/2019						<0.001
4/1/2019			<0.001			
4/2/2019	<0.001	<0.001				
4/3/2019				<0.001	<0.001	<0.001
9/23/2019	<0.001	<0.001	<0.001			
9/27/2019				<0.001	<0.001	8.8E-05 (J)
3/2/2020	<0.001	<0.001	<0.001			
3/3/2020				<0.001	<0.001	6.6E-05 (J)
3/25/2020	<0.001	<0.001	<0.001			
3/26/2020						8E-05 (J)
3/31/2020					<0.001	
4/1/2020				<0.001		
9/15/2020	<0.001	<0.001	<0.001			
9/16/2020				<0.001		
9/18/2020					<0.001	<0.001
2/8/2021	<0.001					
2/9/2021		<0.001	<0.001			
2/12/2021					<0.001	<0.001
2/15/2021				<0.001		
3/10/2021	<0.001					
3/11/2021		<0.001	<0.001			
3/12/2021				<0.001		
3/16/2021					<0.001	<0.001

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWC-13	HGWC-7	HGWC-8	HGWC-9	MW-19	MW-20
5/20/2016		<0.001	<0.001			
5/23/2016	0.000378 (J)			<0.001		
7/12/2016	0.0004 (J)	<0.001	7E-05 (J)	<0.001		
9/1/2016	0.0004 (J)	<0.001	<0.001	<0.001		
10/20/2016		<0.001	<0.001	<0.001		
10/24/2016	0.0005 (J)					
12/6/2016		<0.001	<0.001	<0.001		
12/7/2016	0.0004 (J)					
1/25/2017		<0.001	<0.001			
1/26/2017	0.0004 (J)			<0.001		
3/21/2017		<0.001	9E-05 (J)			
3/22/2017	0.0004 (J)			<0.001		
5/23/2017		<0.001	8E-05 (J)	<0.001		
5/24/2017	0.0003 (J)					
4/3/2018		<0.001	<0.001	<0.001		
4/4/2018	0.00032 (J)					
6/5/2018	0.00035 (J)	<0.001				
6/6/2018			<0.001	<0.001		
10/2/2018		<0.001	<0.001	<0.001		
10/5/2018	0.00025 (J)					
3/12/2019			<0.001			
3/13/2019	0.00039 (J)	<0.001		<0.001		<0.001
3/14/2019					<0.001	
4/2/2019		<0.001				<0.001
4/3/2019			<0.001	<0.001	<0.001	
4/5/2019	0.00034 (J)					
9/24/2019			0.00011 (J)			
9/25/2019		<0.001				<0.001
9/26/2019	0.00039 (J)					
9/27/2019				<0.001	0.00027 (J)	
3/2/2020						<0.001
3/3/2020			6.1E-05 (J)			
3/4/2020	0.00056 (J)	<0.001		<0.001	0.00026 (J)	
3/26/2020					0.00026 (J)	
3/27/2020		<0.001	7.7E-05 (J)			<0.001
3/30/2020	0.00048 (J)					
3/31/2020				<0.001		
9/16/2020		<0.001	<0.001			
9/17/2020				<0.001		<0.001
9/21/2020	0.00036 (J)				0.0003 (J)	
2/10/2021		<0.001				
2/11/2021						<0.001
2/12/2021					0.00019 (J)	
2/16/2021			<0.001	<0.001		
2/22/2021	0.0003 (J)					
3/15/2021		<0.001	<0.001			<0.001
3/16/2021				<0.001		
3/17/2021	0.00037 (J)				0.00026 (J)	

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-24D	MW-25D	MW-26D	MW-27D	MW-28D	MW-29
3/12/2019					<0.001	<0.001
3/13/2019	<0.001		<0.001	<0.001		
3/14/2019		<0.001				
4/2/2019					<0.001	<0.001
4/3/2019		<0.001	<0.001			
4/4/2019				<0.001		
4/8/2019	<0.001					
9/24/2019						6.4E-05 (J)
9/26/2019	<0.001		<0.001	<0.001	<0.001	
9/27/2019		<0.001				
3/2/2020						<0.001
3/3/2020		<0.001				
3/4/2020	<0.001		<0.001	<0.001	9.2E-05 (J)	
3/26/2020		<0.001				
3/27/2020					<0.001	
3/30/2020	<0.001					<0.001
3/31/2020			<0.001			
4/2/2020				<0.001		
9/16/2020						<0.001
9/17/2020			<0.001			
9/18/2020		<0.001		<0.001		
9/21/2020	<0.001				<0.001	
2/10/2021					<0.001	
2/12/2021		<0.001				
2/15/2021						<0.001
2/16/2021	<0.001		<0.001	<0.001		
3/12/2021				<0.001		
3/15/2021					<0.001	<0.001
3/16/2021		<0.001				
3/17/2021	<0.001		<0.001			

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-5	MW-6	MW-7	HGWA-43D (bg)	HGWA-44D (bg)
3/13/2019	<0.001	<0.001	<0.001		
4/3/2019	<0.001	<0.001	<0.001		
9/25/2019	<0.001				
9/26/2019		<0.001	<0.001		
3/2/2020	<0.001				
3/3/2020		8.2E-05 (J)	<0.001		
3/26/2020	<0.001				
3/27/2020		<0.001			
3/30/2020			<0.001		
9/16/2020				<0.001	<0.001
9/17/2020	<0.001				
9/21/2020		<0.001	<0.001		
11/10/2020				<0.001	<0.001
12/15/2020				<0.001	<0.001
1/19/2021				<0.001	<0.001
2/9/2021				<0.001	<0.001
2/15/2021			<0.001		
2/16/2021	<0.001	<0.001			
3/10/2021					<0.001
3/11/2021				<0.001	
3/15/2021			<0.001		
3/16/2021	<0.001	<0.001			

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWC-10	HGWC-11	HGWC-12
5/19/2016	421	143	267			
5/23/2016				629	564	1060
7/11/2016	363	125				
7/12/2016			249	661	627	909
8/30/2016	330	168	254			
9/1/2016				769	656	1480
10/19/2016	380	176	357			
10/24/2016				643	836	868
12/6/2016	377	145	285			
12/7/2016				697	748	811
1/24/2017	342	129	300			
1/26/2017				368	571	846
3/21/2017	340	103	288			
3/22/2017				683	597	804
5/22/2017	338	92	263			
5/24/2017				696	566	803
10/3/2017	343	127	300	746	443	608
6/4/2018	415	140	266			
6/5/2018				679	489	
6/6/2018						535
10/1/2018	354	135	291			
10/2/2018				572		
10/3/2018					449	607
4/1/2019			284			
4/2/2019	452	133				
4/3/2019				525	483	462
9/23/2019	442	129	268			
9/27/2019				624	528	653
3/25/2020	496	138	284			
3/26/2020						533
3/31/2020					565	
4/1/2020				290		
6/16/2020	632		448			
9/15/2020	265	124	258			
9/16/2020				490		
9/18/2020					626	704
3/10/2021	348					
3/11/2021		169	267			
3/12/2021				490 (H1)		
3/16/2021					558	614

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	HGWC-13	HGWC-7	HGWC-8	HGWC-9	MW-19	MW-20
5/20/2016		427	711			
5/23/2016	683			984		
7/12/2016	563	410	704	887		
9/1/2016	702	484	763	956		
10/20/2016		393	644	642		
10/24/2016	647					
12/6/2016		492	733	899		
12/7/2016	465					
1/25/2017		461	744			
1/26/2017	411			869		
3/21/2017		415	818			
3/22/2017	427			936		
5/23/2017		450	765	939		
5/24/2017	377					
10/3/2017	268	464	812	1040		
6/5/2018	528	459				
6/6/2018			611	810		
10/2/2018		426	597	693		
10/5/2018	322					
4/2/2019		428				435
4/3/2019			543	673	310	
4/5/2019	331					
9/24/2019			457			
9/25/2019		503				461
9/26/2019	1010					
9/27/2019				730	442	
3/26/2020					626	
3/27/2020		413	541			429
3/30/2020	895					
3/31/2020				1010		
6/16/2020			573			
6/17/2020		423				
9/16/2020		392	552			
9/17/2020				680		460
9/21/2020	732				608	
3/15/2021		370	614			406
3/16/2021				672		
3/17/2021	716				543	

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-24D	MW-25D	MW-26D	MW-27D	MW-28D	MW-29
4/2/2019					350	548
4/3/2019		15 (J)	493			
4/4/2019				203		
4/8/2019	323					
9/24/2019						603
9/26/2019	360		643	265	418	
9/27/2019		409				
3/26/2020		385				
3/27/2020					287	
3/30/2020	280					552
3/31/2020			623			
4/2/2020				224		
9/16/2020						547
9/17/2020			732			
9/18/2020		382		211		
9/21/2020	391				393	
3/12/2021				215		
3/15/2021					293	555
3/16/2021		347				
3/17/2021	420		738			

Time Series

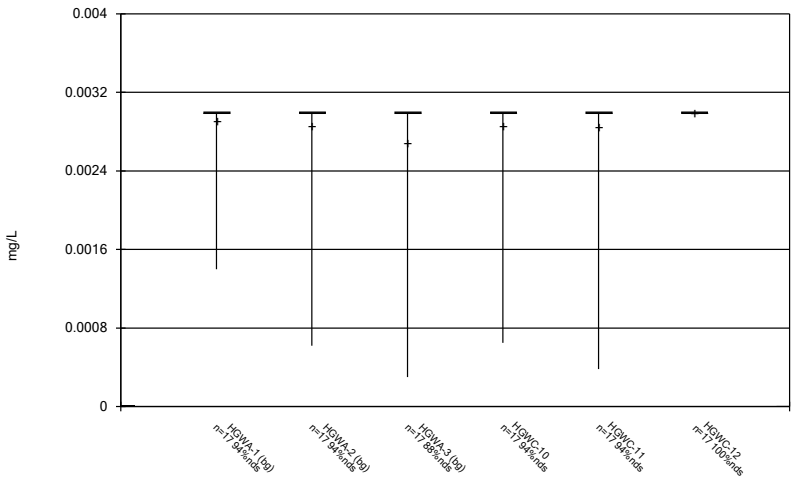
Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/4/2021 7:01 PM

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

	MW-5	MW-6	MW-7	HGWA-43D (bg)	HGWA-44D (bg)
4/3/2019	396	437	213		
9/25/2019	460				
9/26/2019		735	383		
3/26/2020	385				
3/27/2020		676			
3/30/2020			142		
9/16/2020				272	270
9/17/2020	486				
9/21/2020		656	326		
11/10/2020				307	287
12/15/2020				289	295
1/19/2021				270	278
3/10/2021					289
3/11/2021				279	
3/15/2021			293		
3/16/2021	333	600			

FIGURE B.

Box & Whiskers Plot

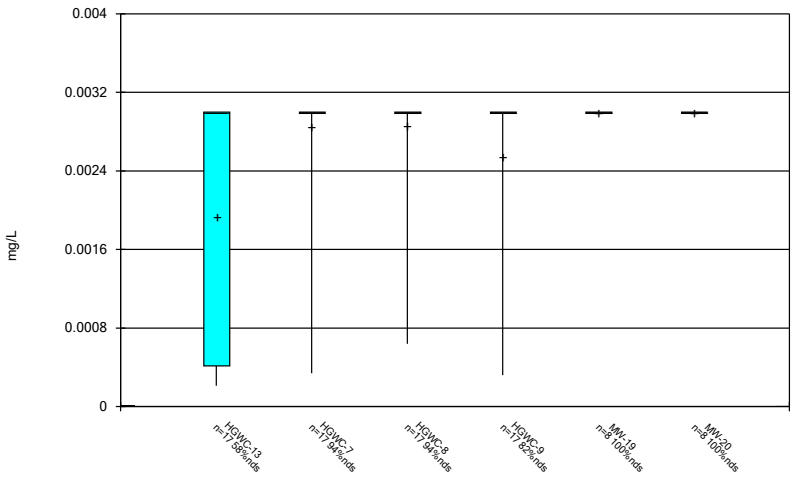


Constituent: Antimony Analysis Run 5/4/2021 7:12 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

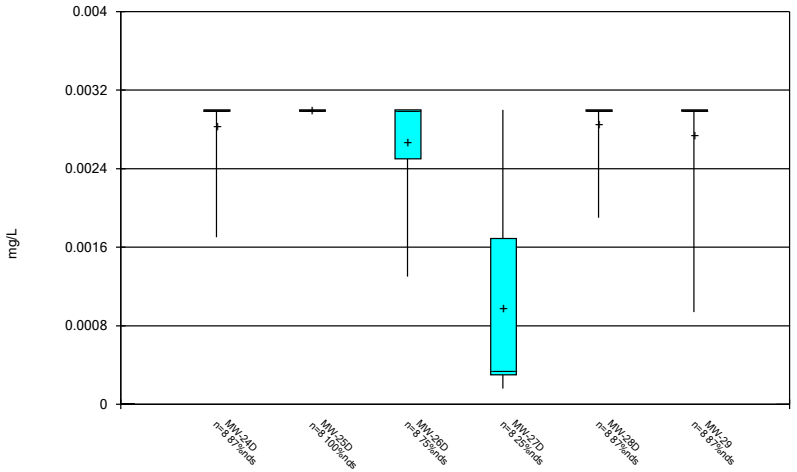


Constituent: Antimony Analysis Run 5/4/2021 7:12 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

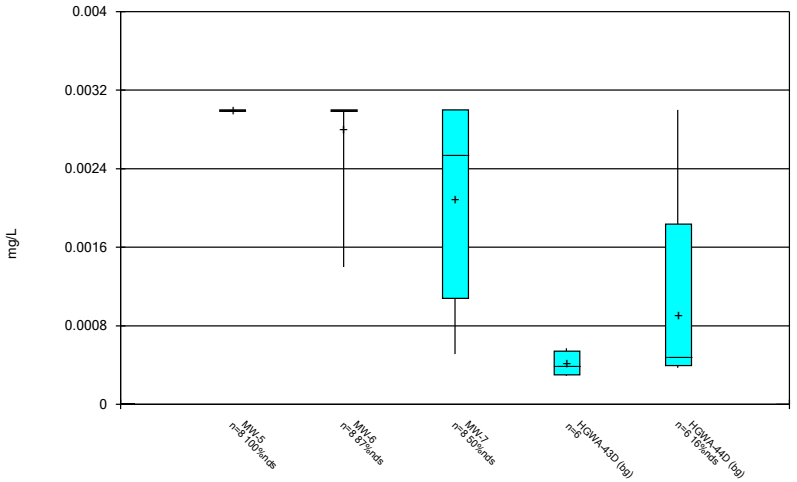


Constituent: Antimony Analysis Run 5/4/2021 7:12 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

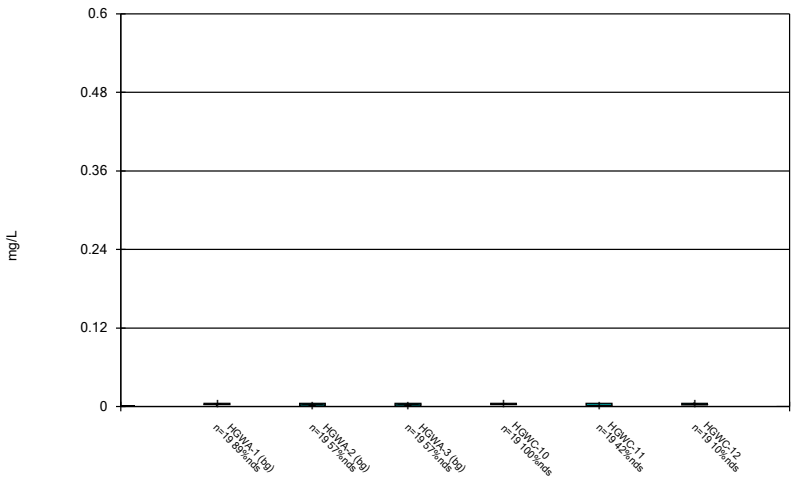
Box & Whiskers Plot



Constituent: Antimony Analysis Run 5/4/2021 7:12 PM

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

Box & Whiskers Plot

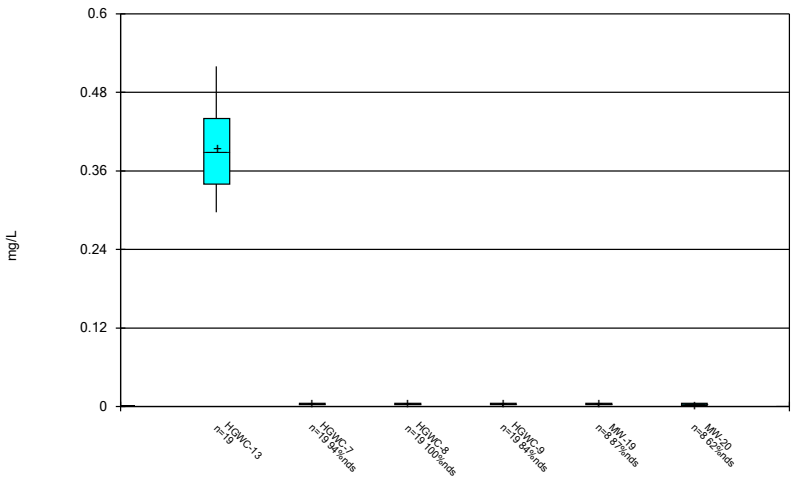


Constituent: Arsenic Analysis Run 5/4/2021 7:12 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

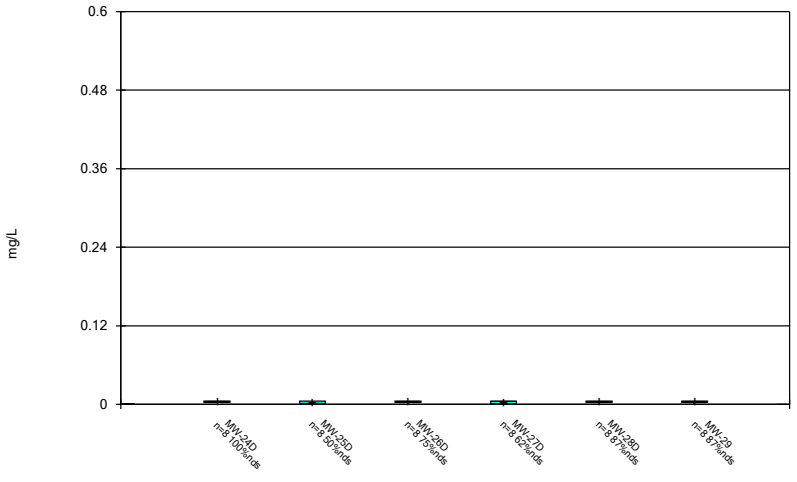


Constituent: Arsenic Analysis Run 5/4/2021 7:12 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

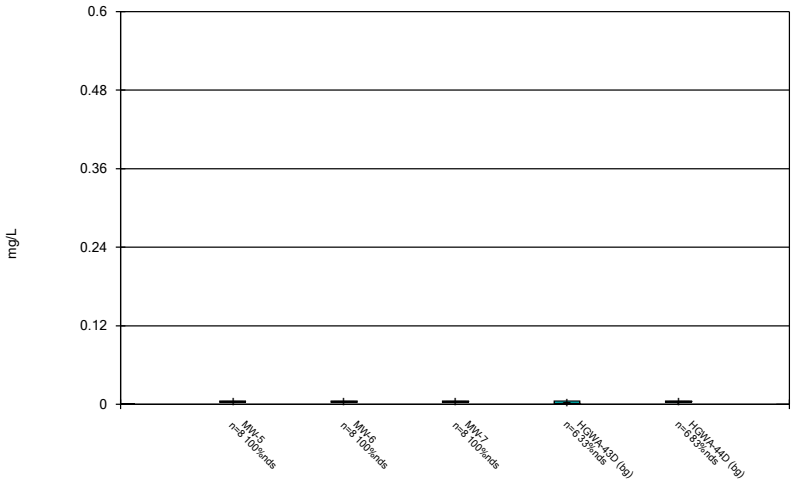


Constituent: Arsenic Analysis Run 5/4/2021 7:13 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

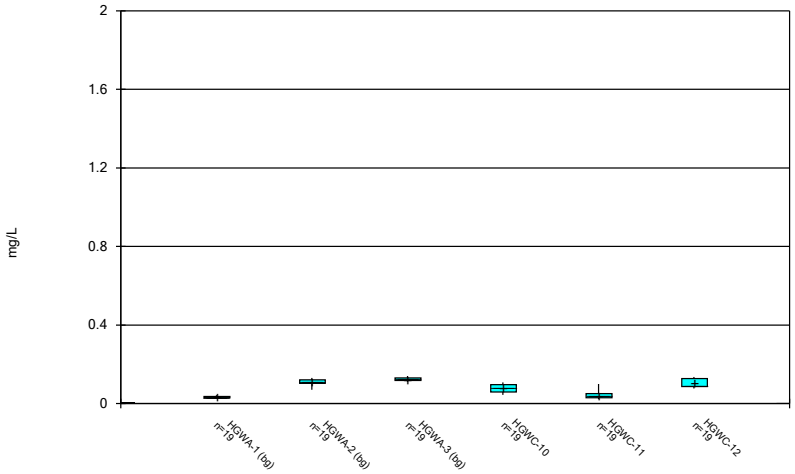
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 5/4/2021 7:13 PM

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

Box & Whiskers Plot

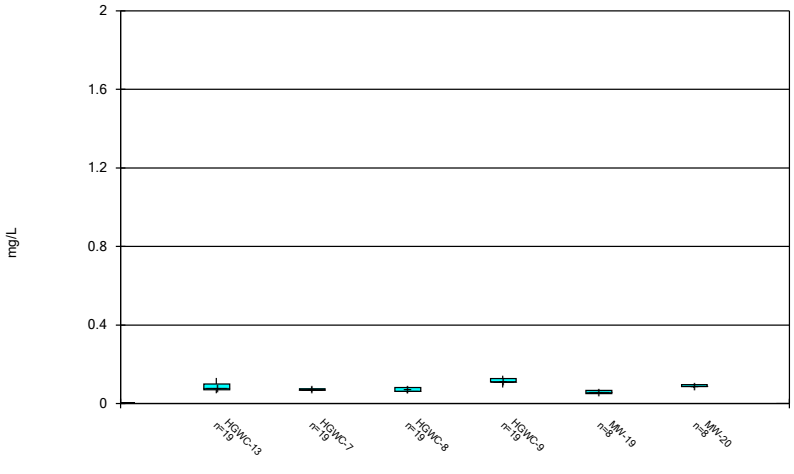


Constituent: Barium Analysis Run 5/4/2021 7:13 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

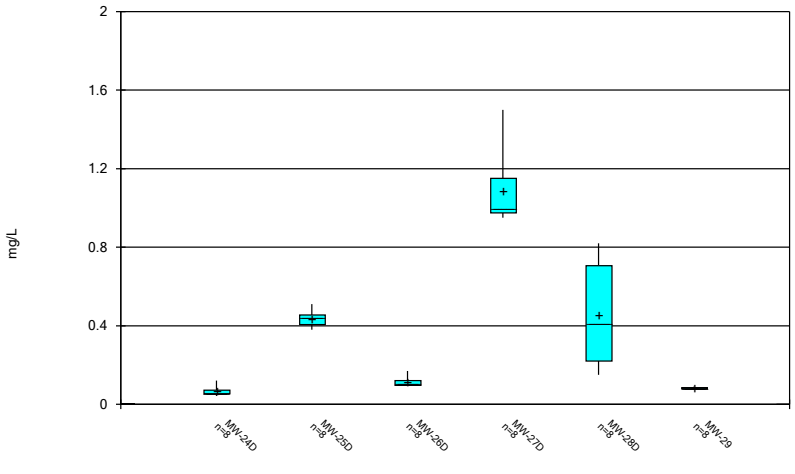


Constituent: Barium Analysis Run 5/4/2021 7:13 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

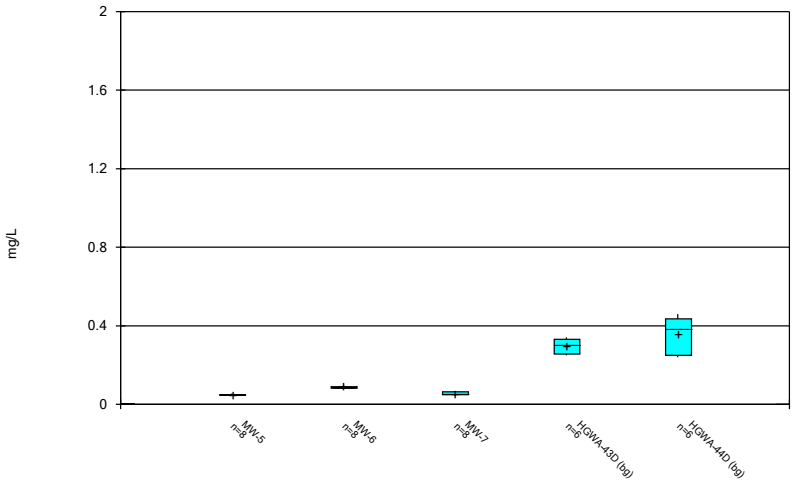


Constituent: Barium Analysis Run 5/4/2021 7:13 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

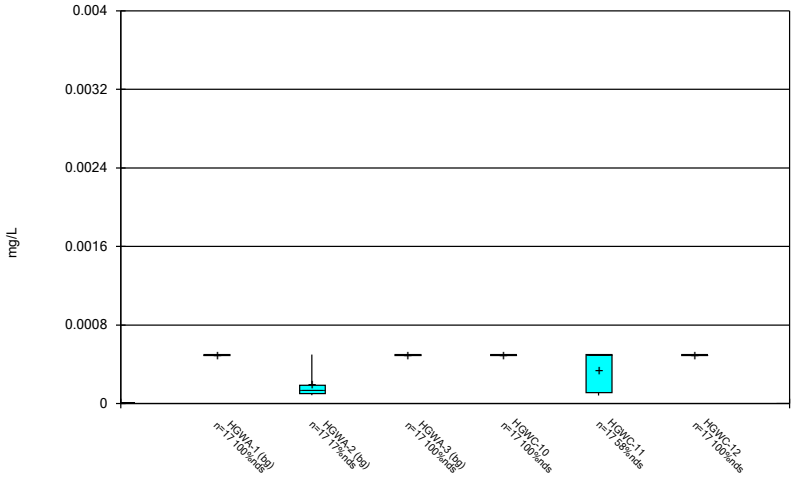
Box & Whiskers Plot



Constituent: Barium Analysis Run 5/4/2021 7:13 PM

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

Box & Whiskers Plot

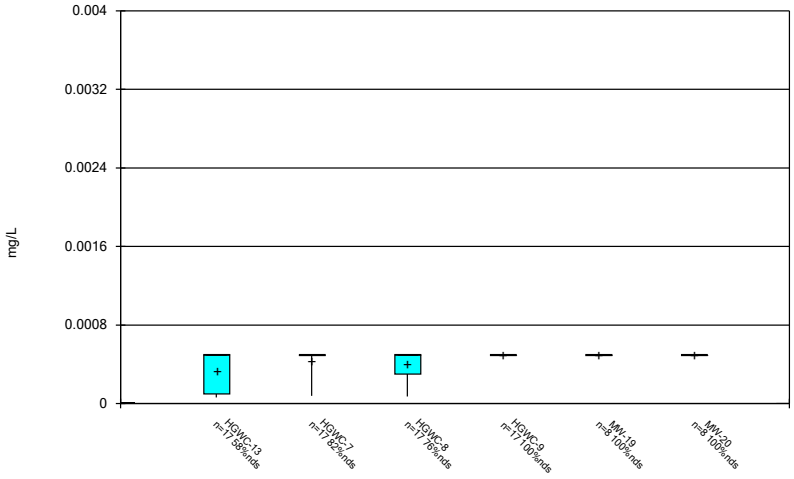


Constituent: Beryllium Analysis Run 5/4/2021 7:13 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

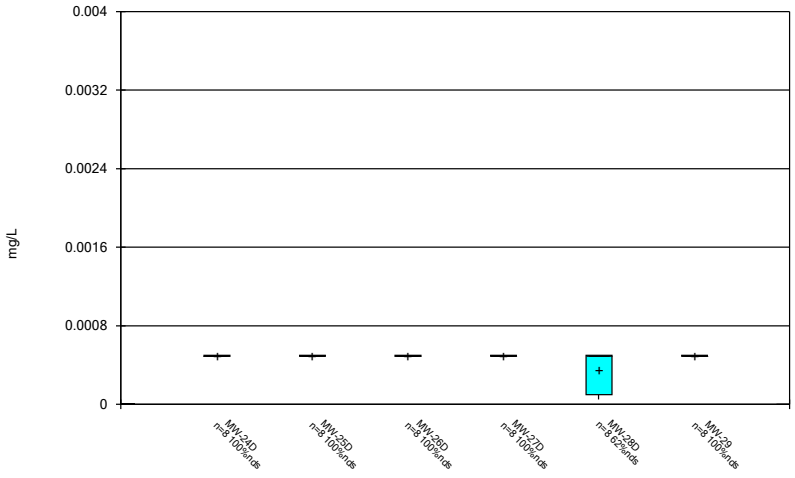


Constituent: Beryllium Analysis Run 5/4/2021 7:13 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

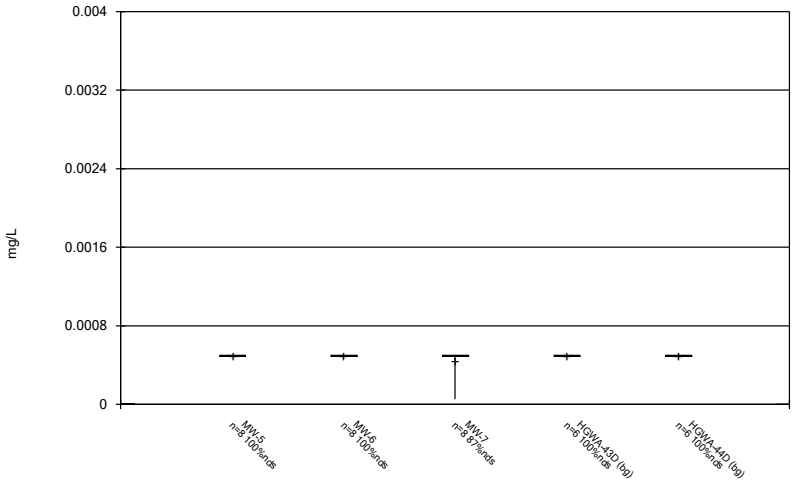


Constituent: Beryllium Analysis Run 5/4/2021 7:13 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

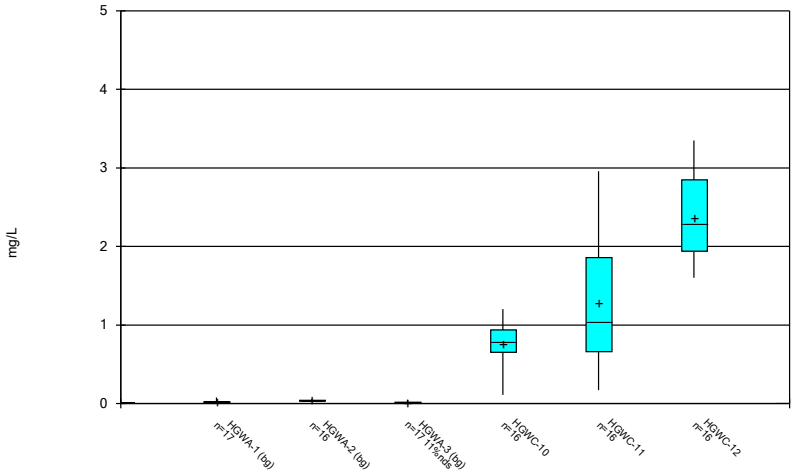
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 5/4/2021 7:13 PM

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

Box & Whiskers Plot

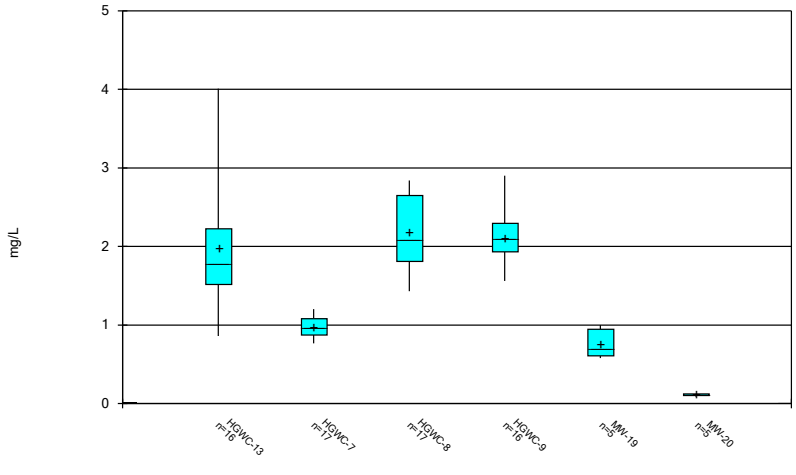


Constituent: Boron Analysis Run 5/4/2021 7:13 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

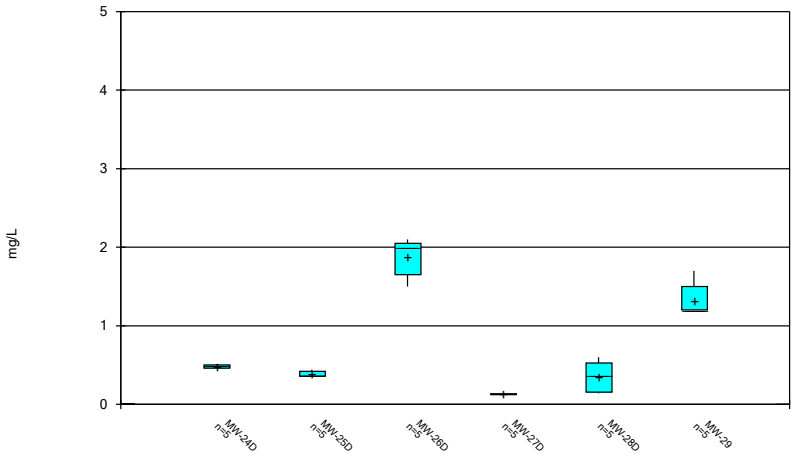


Constituent: Boron Analysis Run 5/4/2021 7:13 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

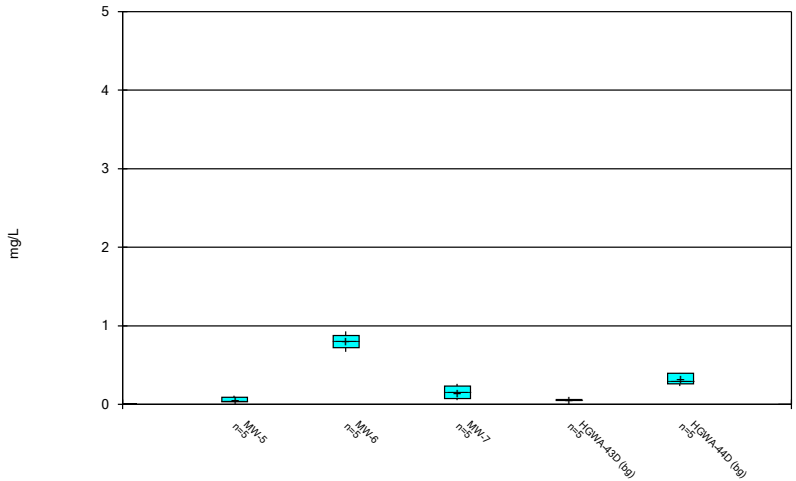


Constituent: Boron Analysis Run 5/4/2021 7:13 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

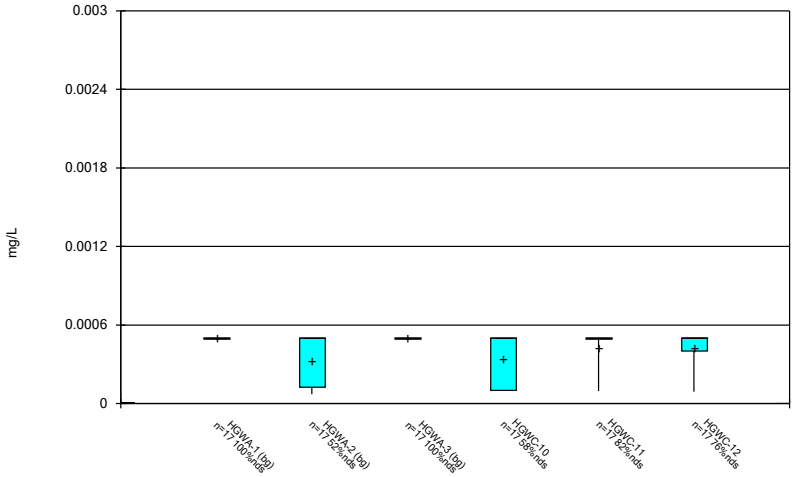
Box & Whiskers Plot



Constituent: Boron Analysis Run 5/4/2021 7:13 PM

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

Box & Whiskers Plot

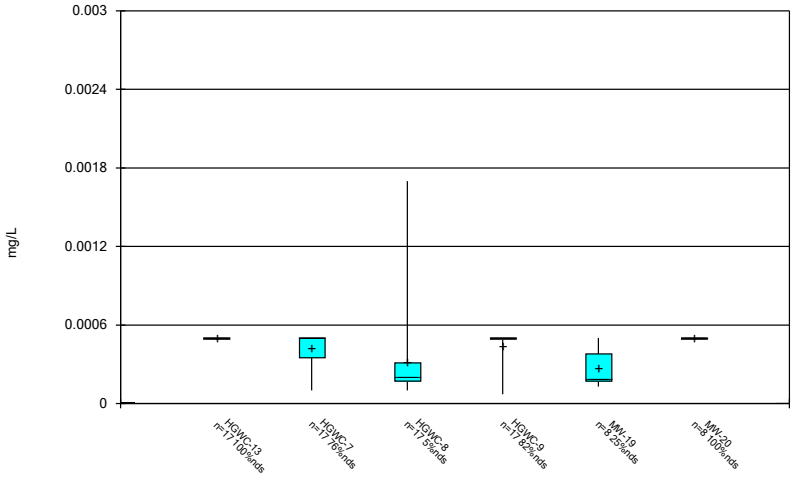


Constituent: Cadmium Analysis Run 5/4/2021 7:13 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

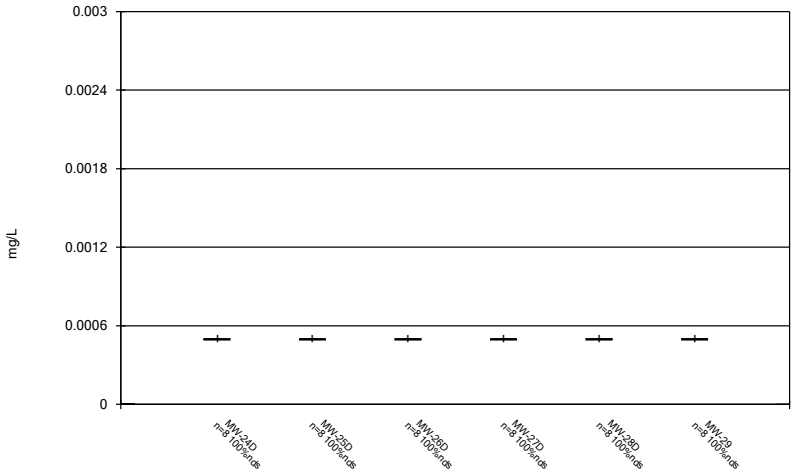


Constituent: Cadmium Analysis Run 5/4/2021 7:13 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

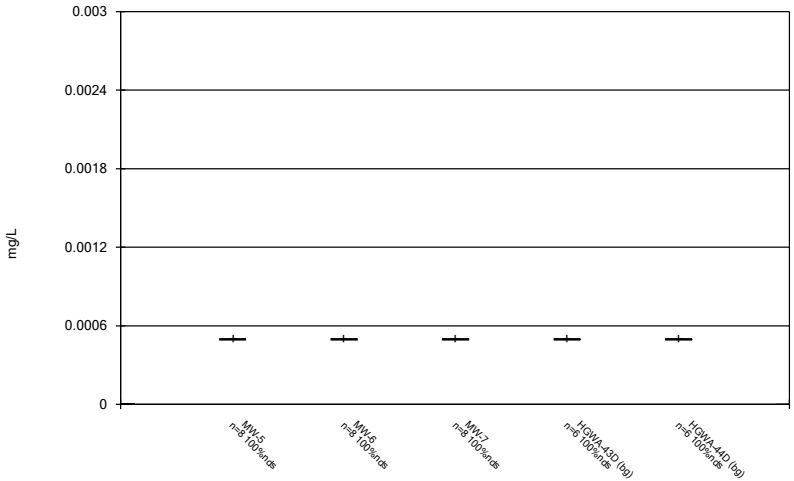


Constituent: Cadmium Analysis Run 5/4/2021 7:13 PM

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

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

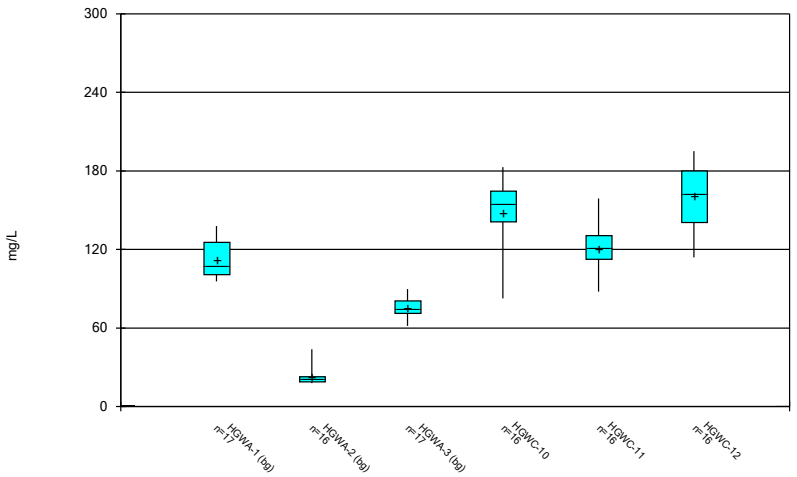
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

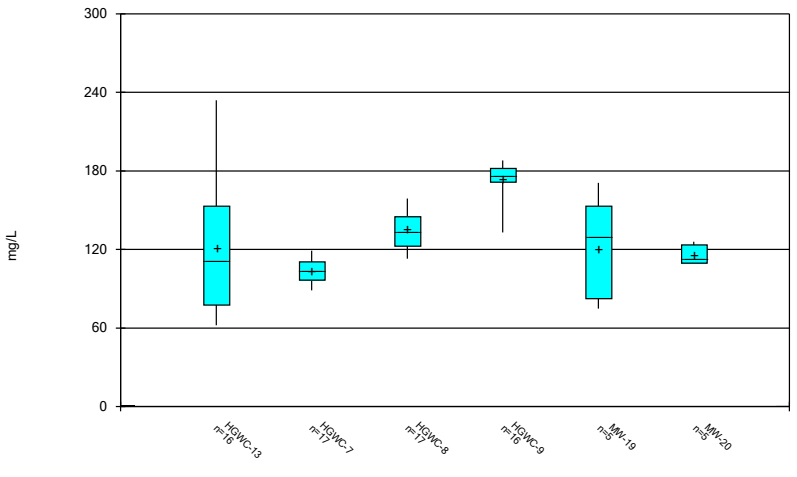


Constituent: Calcium Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

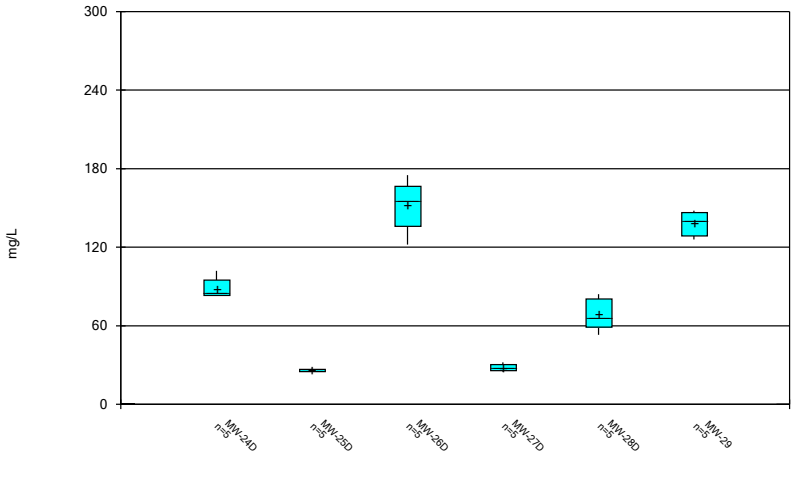


Constituent: Calcium Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

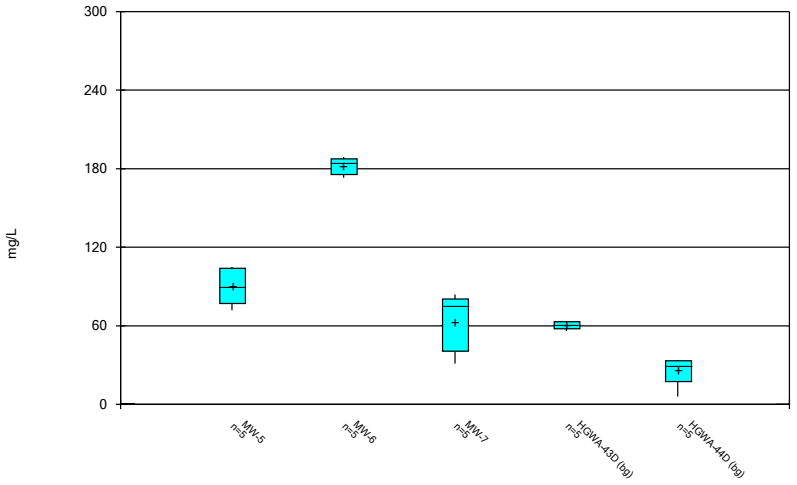


Constituent: Calcium Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

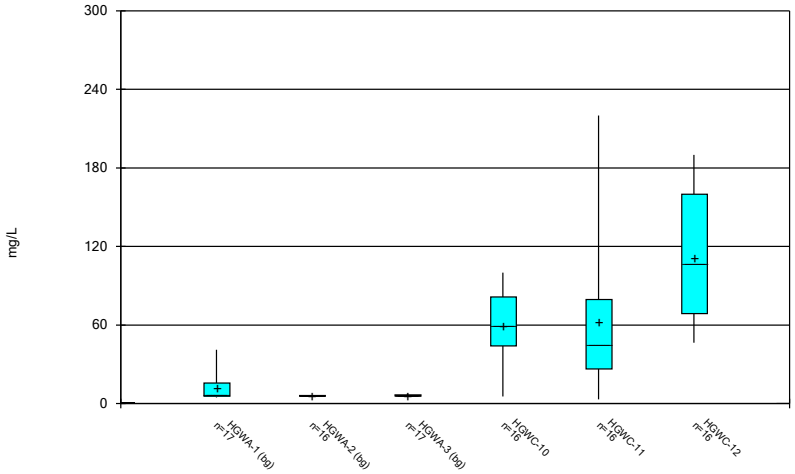
Box & Whiskers Plot



Constituent: Calcium Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

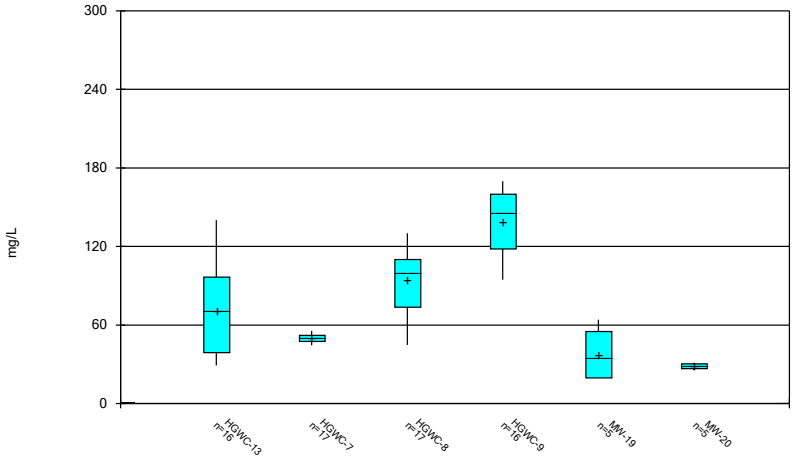
Box & Whiskers Plot



Constituent: Chloride Analysis Run 5/4/2021 7:13 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

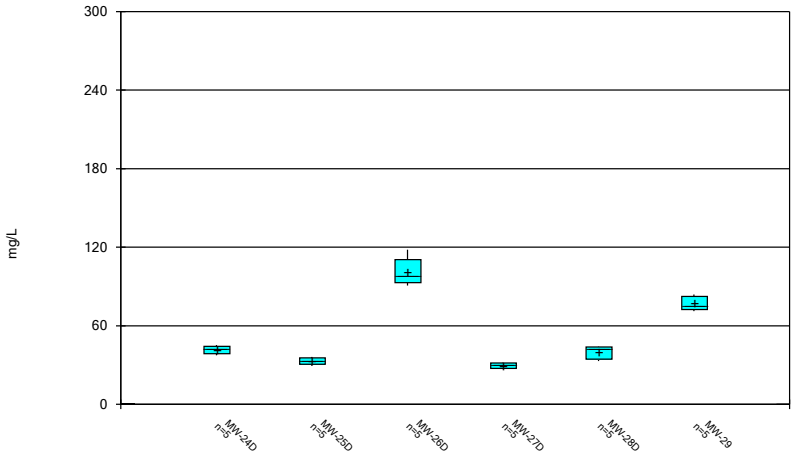
Box & Whiskers Plot



Constituent: Chloride Analysis Run 5/4/2021 7:13 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

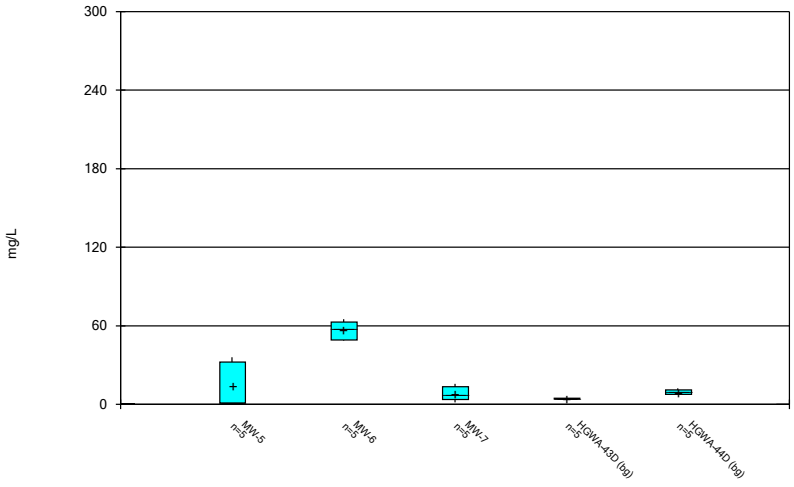
Box & Whiskers Plot



Constituent: Chloride Analysis Run 5/4/2021 7:13 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

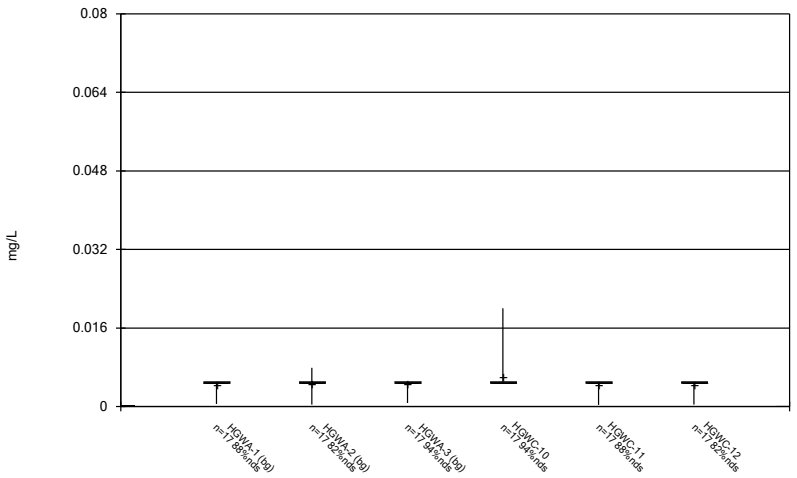
Box & Whiskers Plot



Constituent: Chloride Analysis Run 5/4/2021 7:13 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

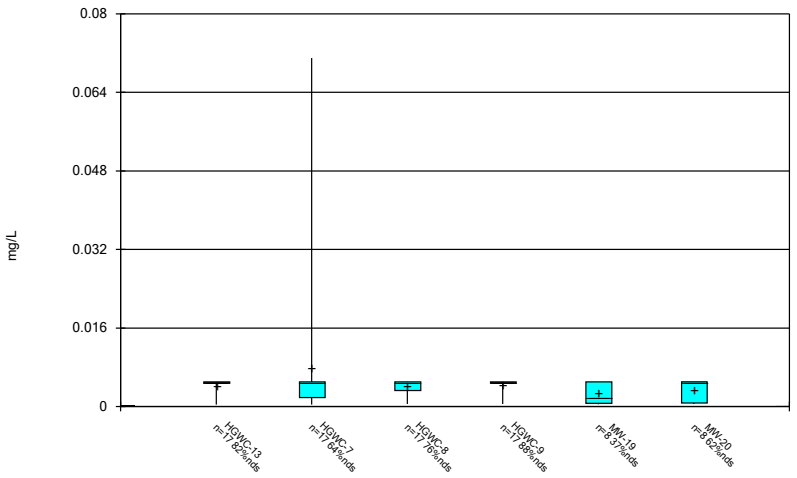


Constituent: Chromium Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

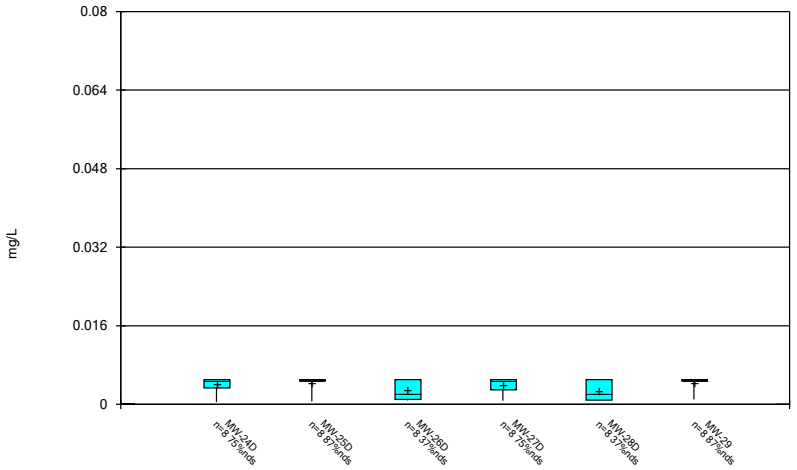


Constituent: Chromium Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

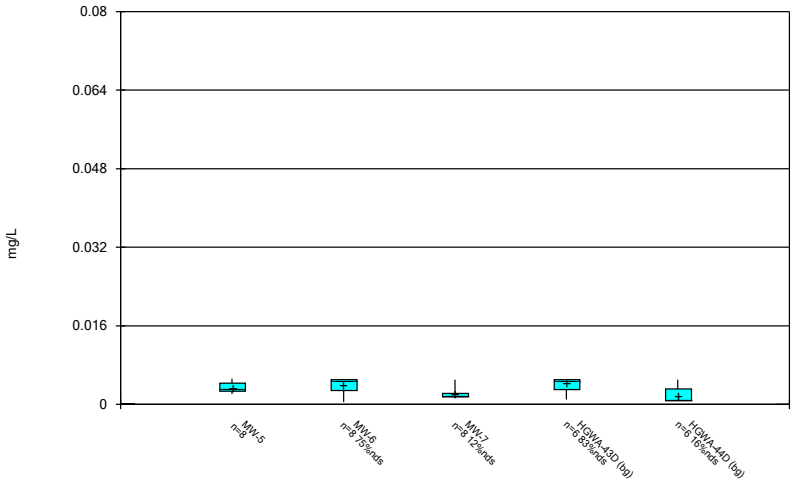


Constituent: Chromium Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

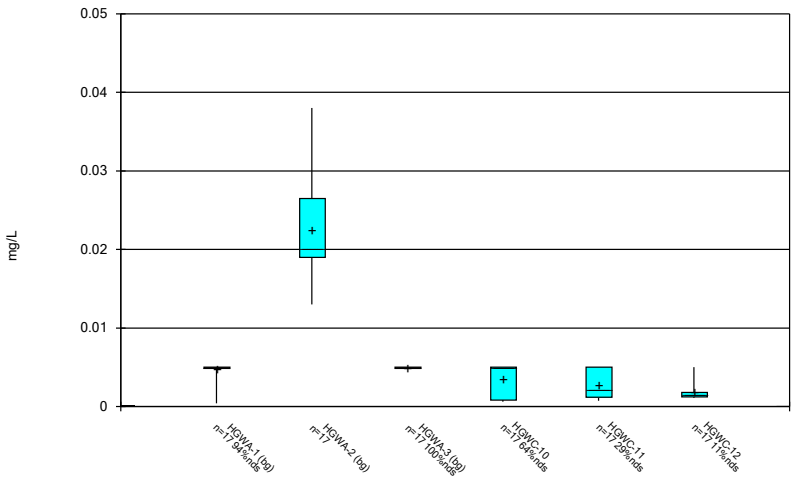
Box & Whiskers Plot



Constituent: Chromium Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

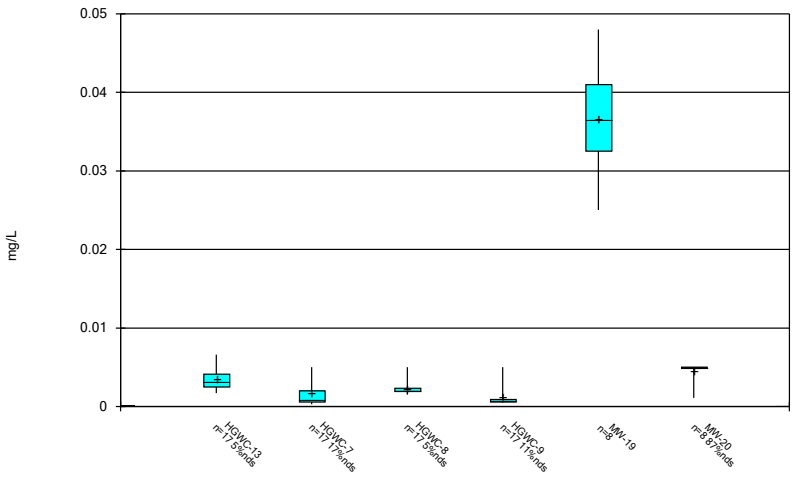


Constituent: Cobalt Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

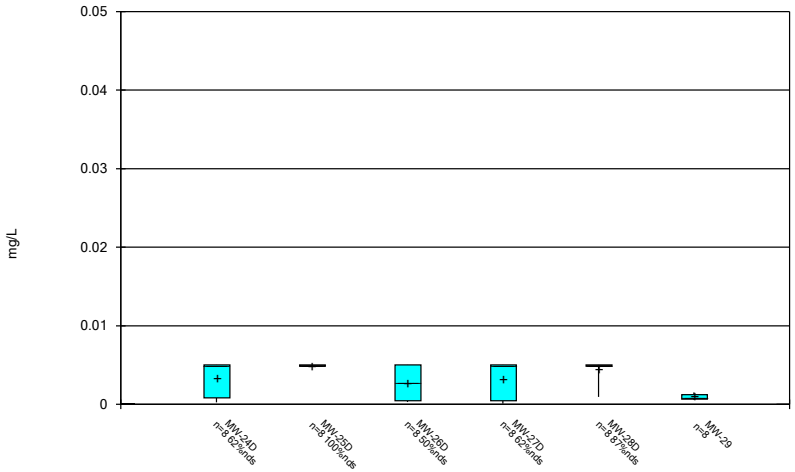


Constituent: Cobalt Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

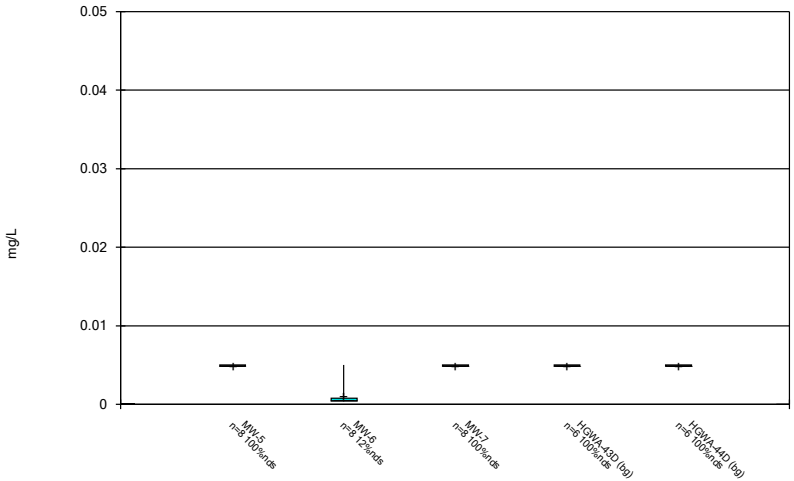


Constituent: Cobalt Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

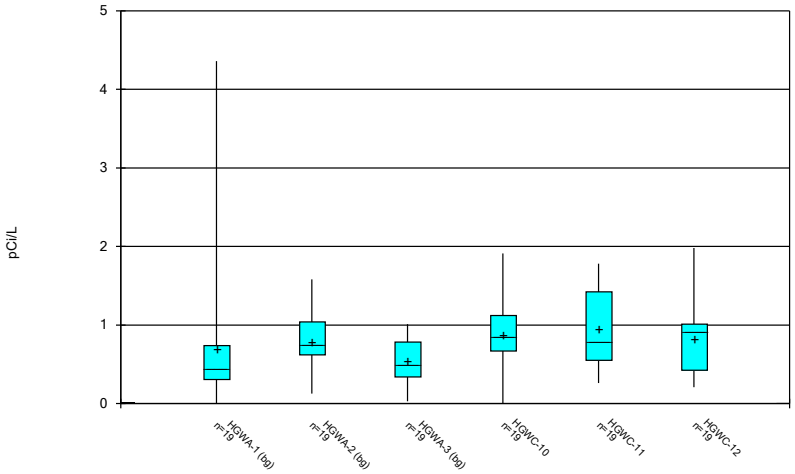
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

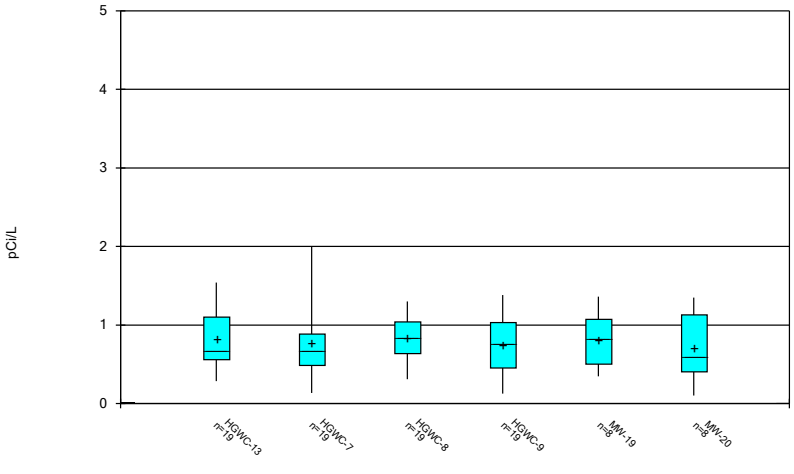
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 5/4/2021 7:13 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

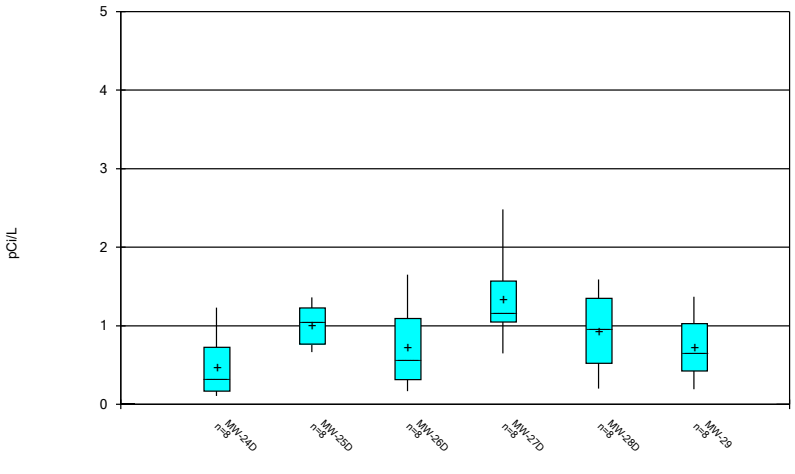
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 5/4/2021 7:13 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

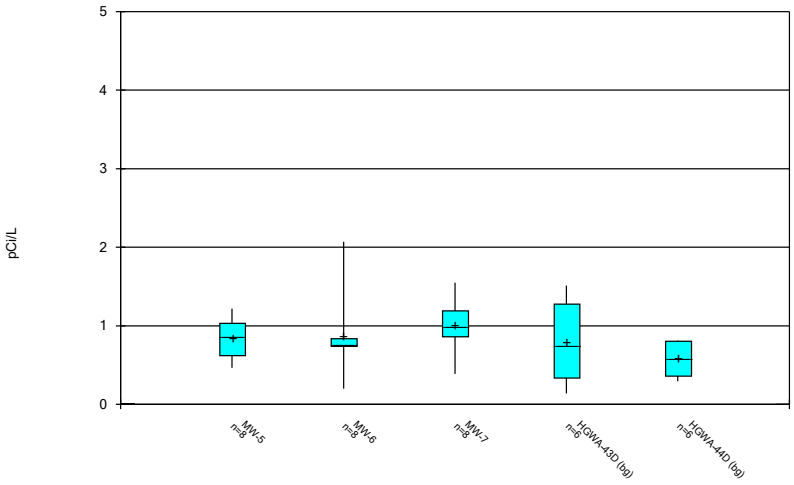
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 5/4/2021 7:13 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

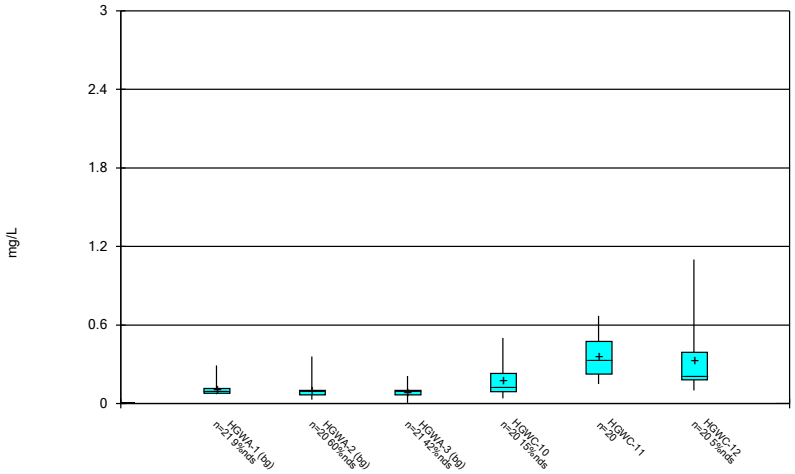
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 5/4/2021 7:13 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

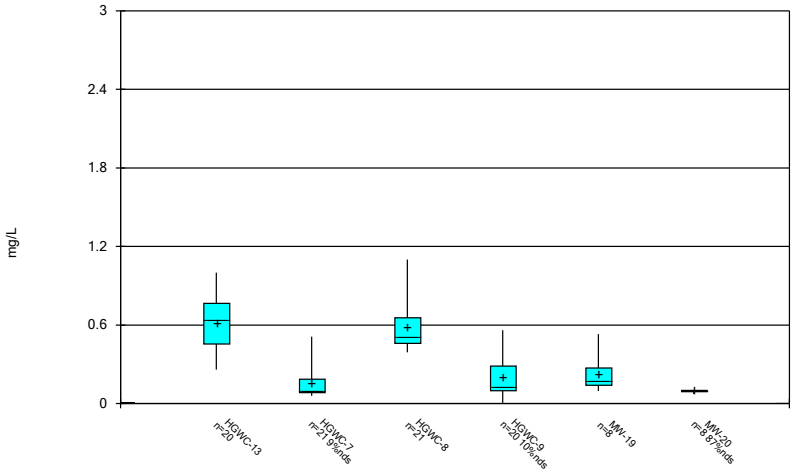


Constituent: Fluoride Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

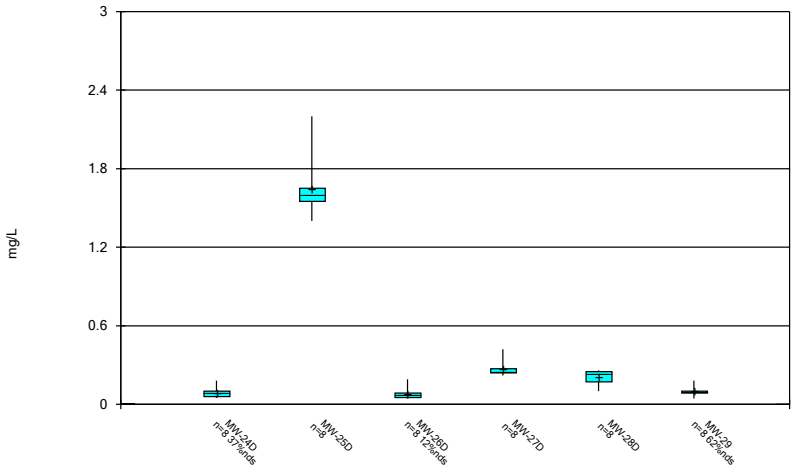


Constituent: Fluoride Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

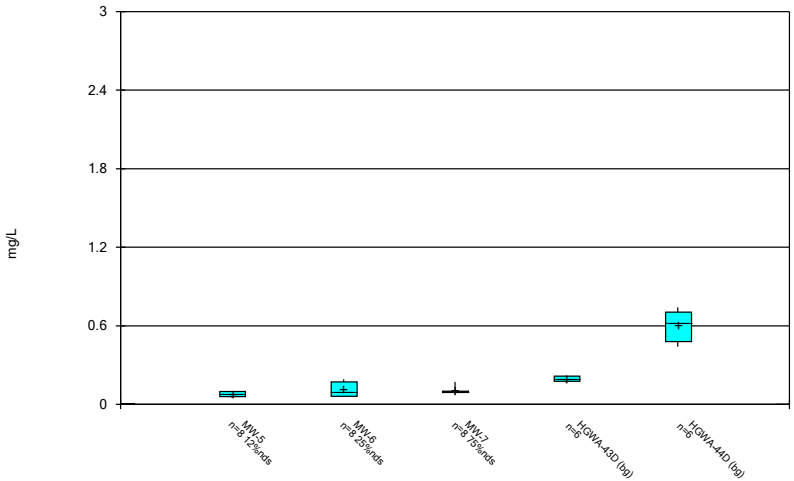


Constituent: Fluoride Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

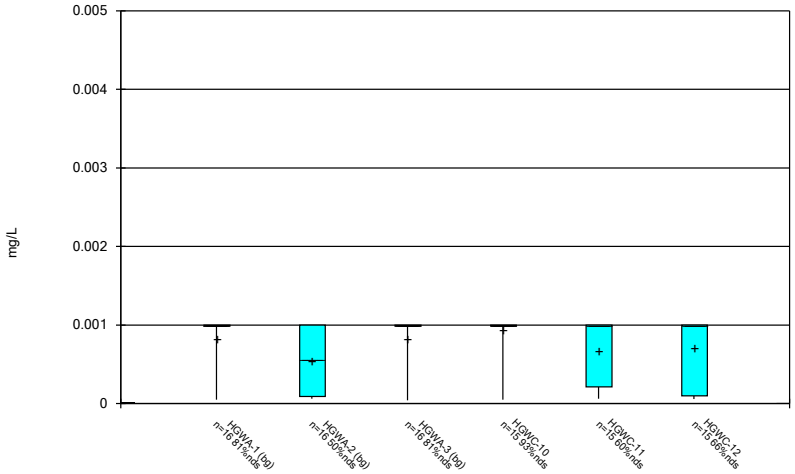
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

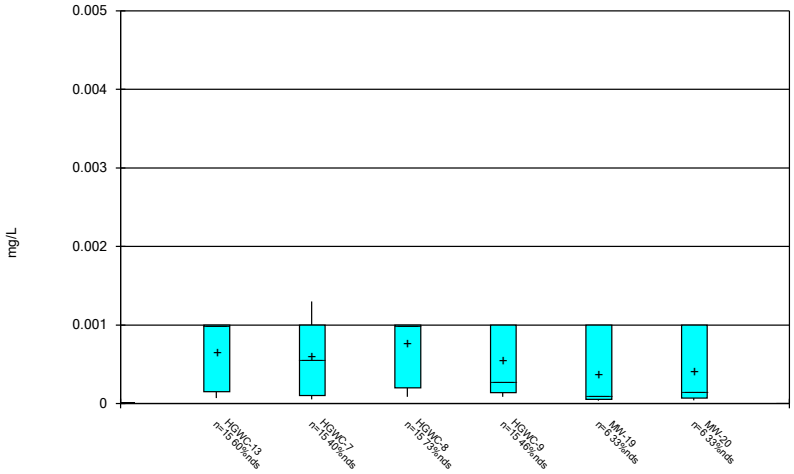


Constituent: Lead Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

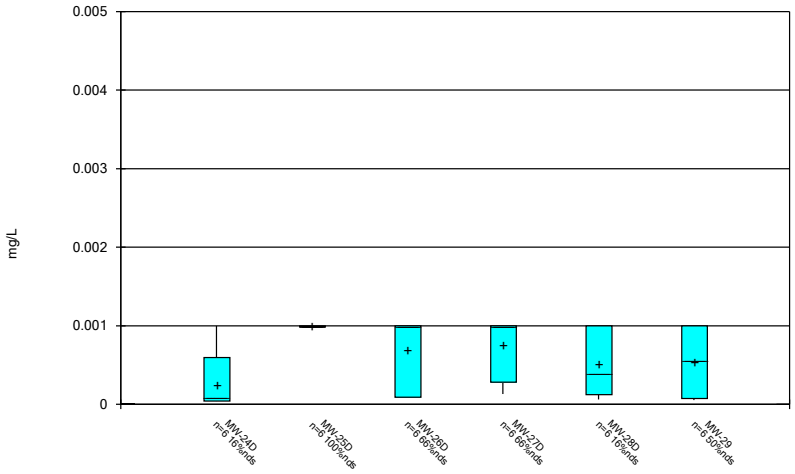


Constituent: Lead Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

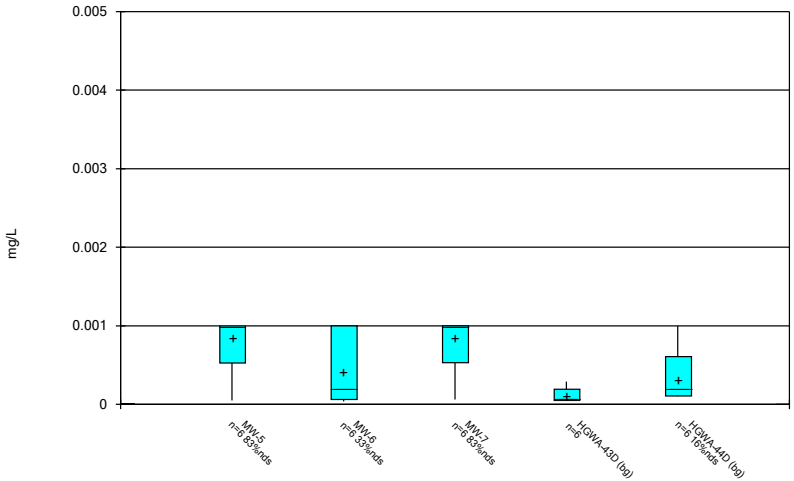


Constituent: Lead Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

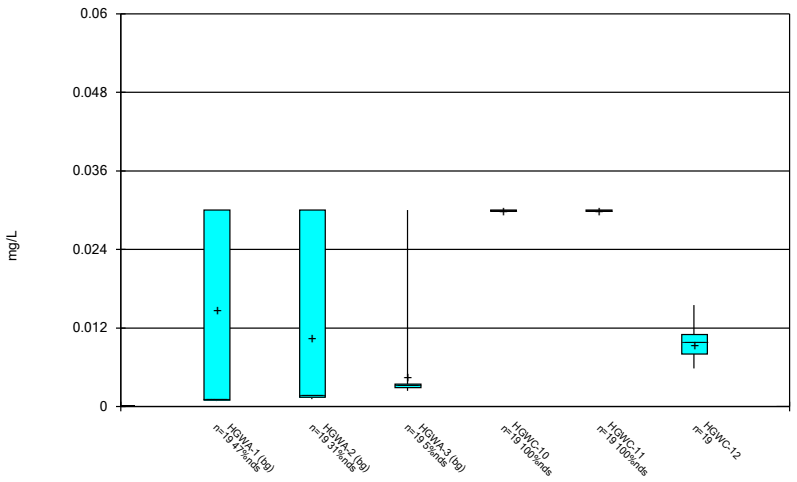
Box & Whiskers Plot



Constituent: Lead Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

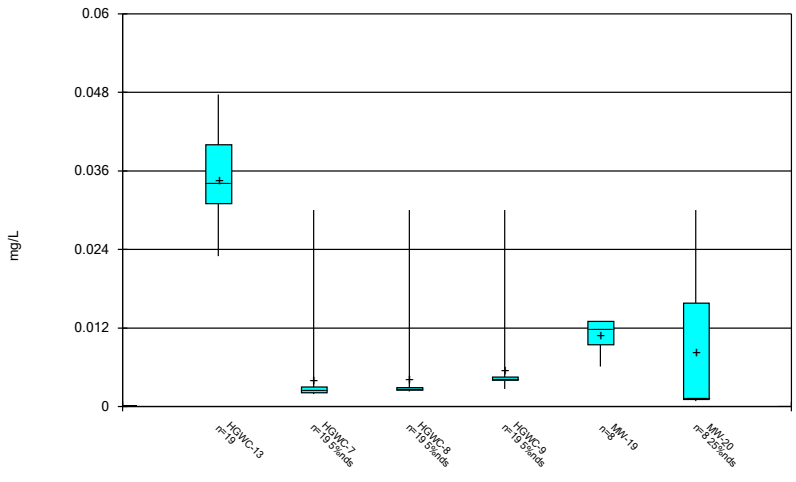


Constituent: Lithium Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

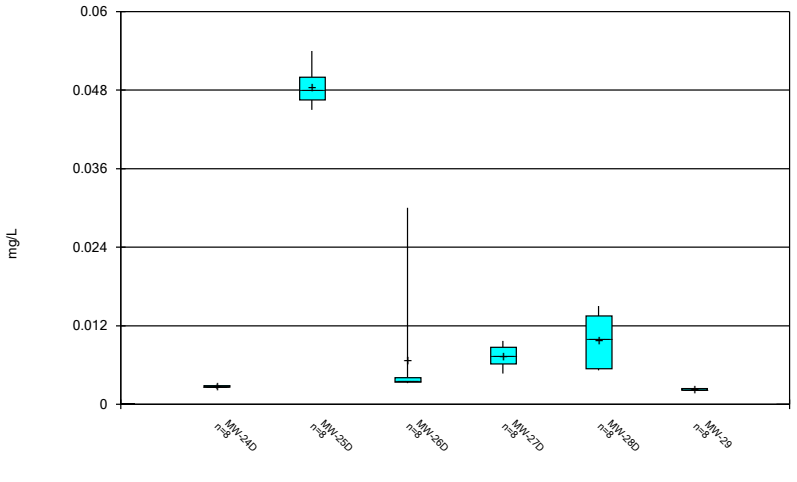


Constituent: Lithium Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

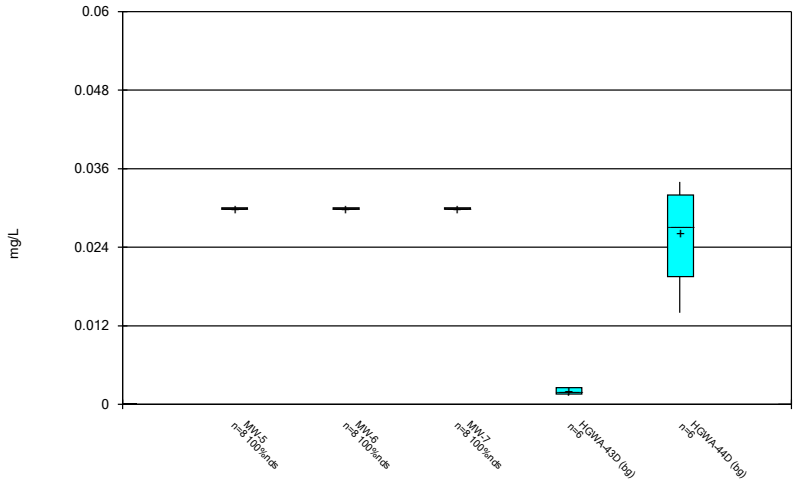


Constituent: Lithium Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

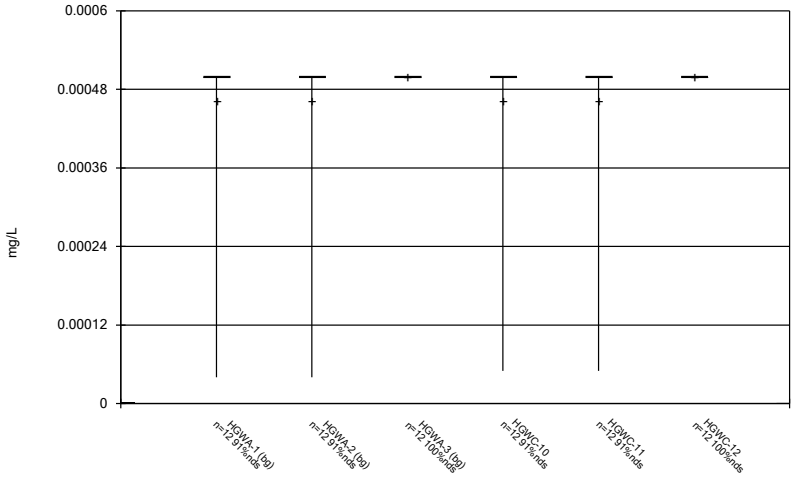
Box & Whiskers Plot



Constituent: Lithium Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

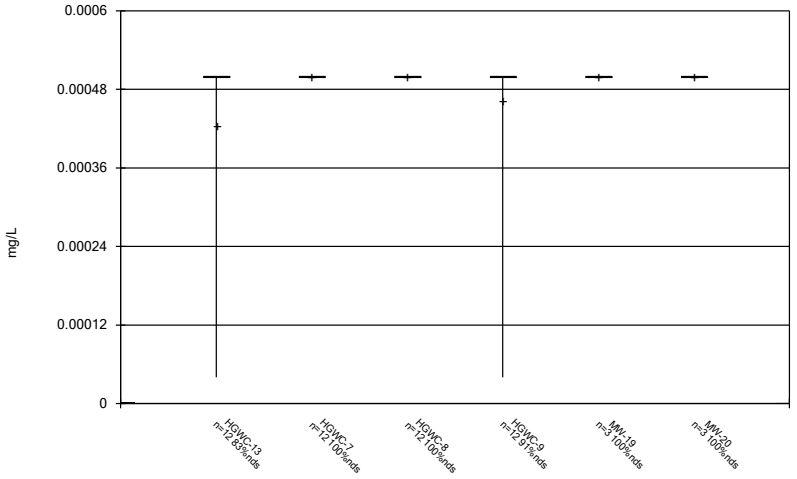


Constituent: Mercury Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

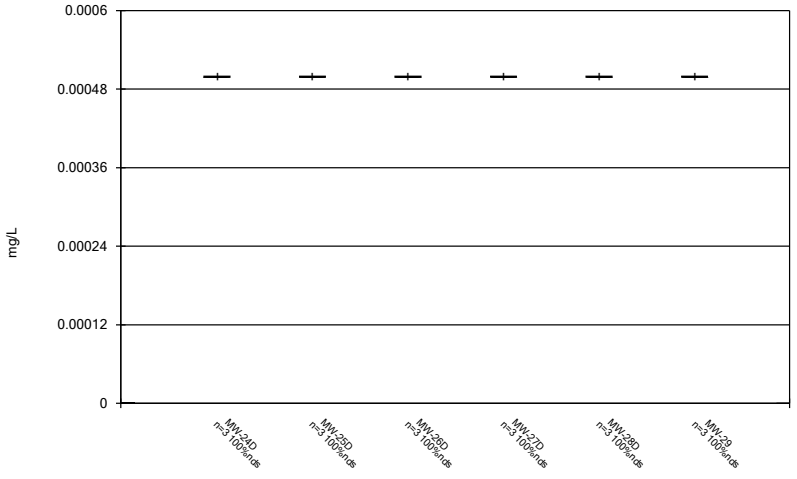


Constituent: Mercury Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

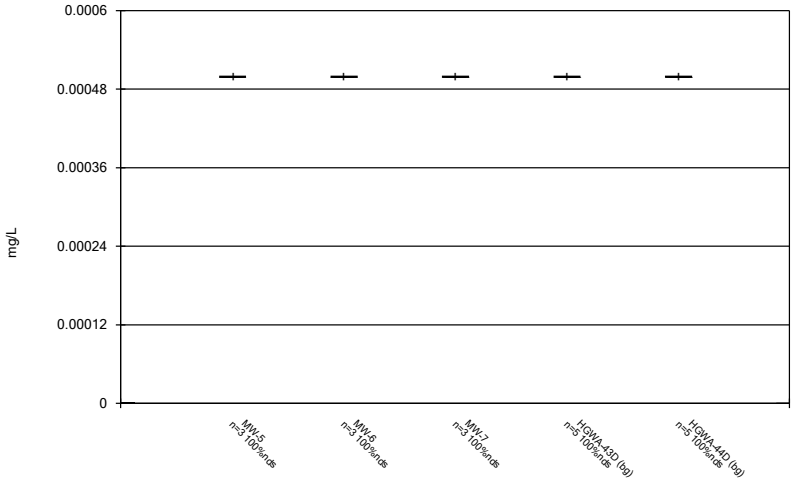


Constituent: Mercury Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

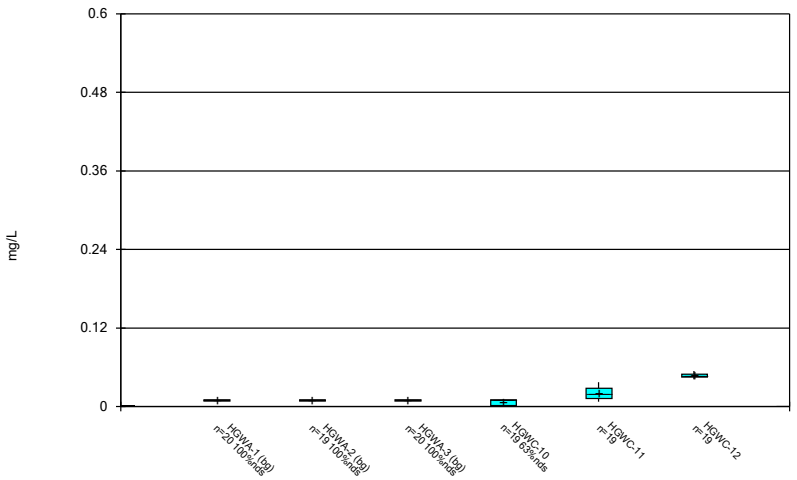
Box & Whiskers Plot



Constituent: Mercury Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

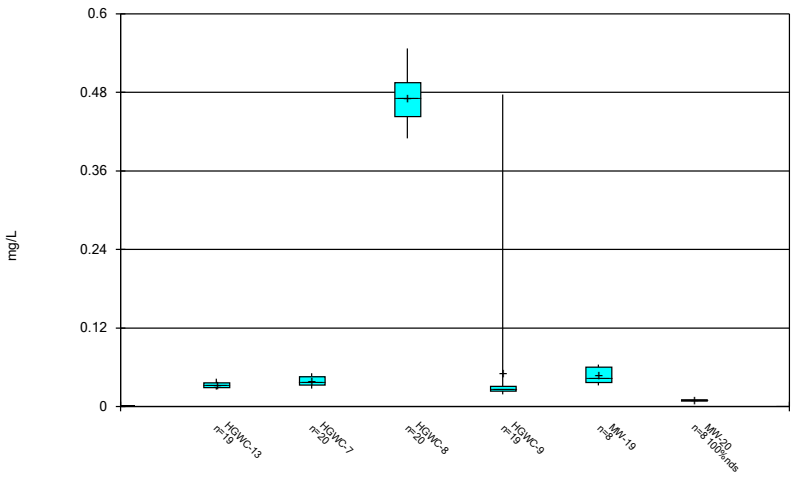


Constituent: Molybdenum Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

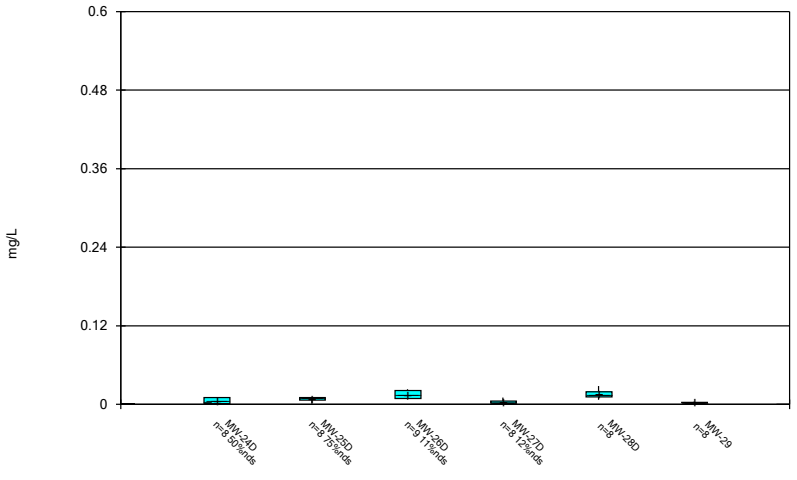


Constituent: Molybdenum Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

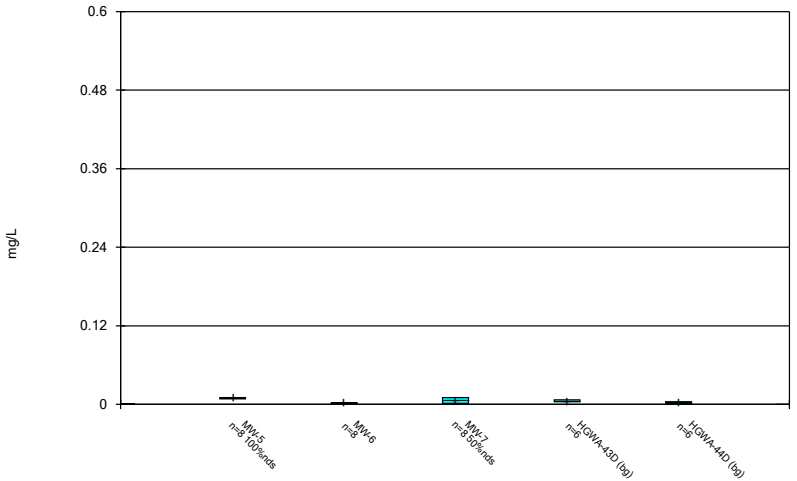


Constituent: Molybdenum Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

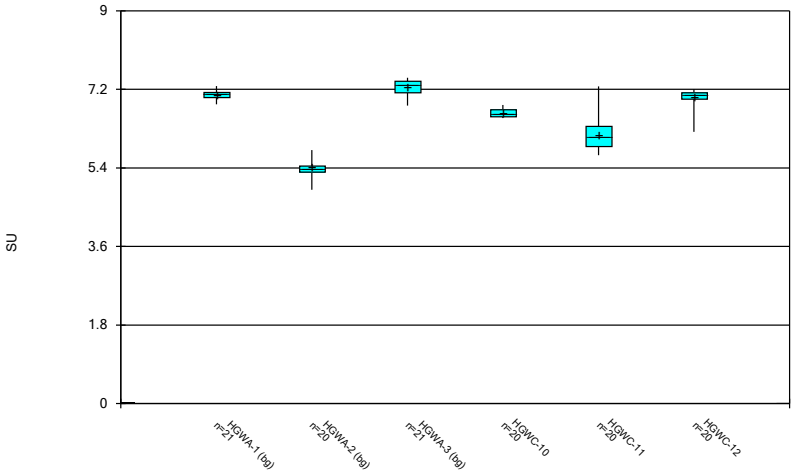
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

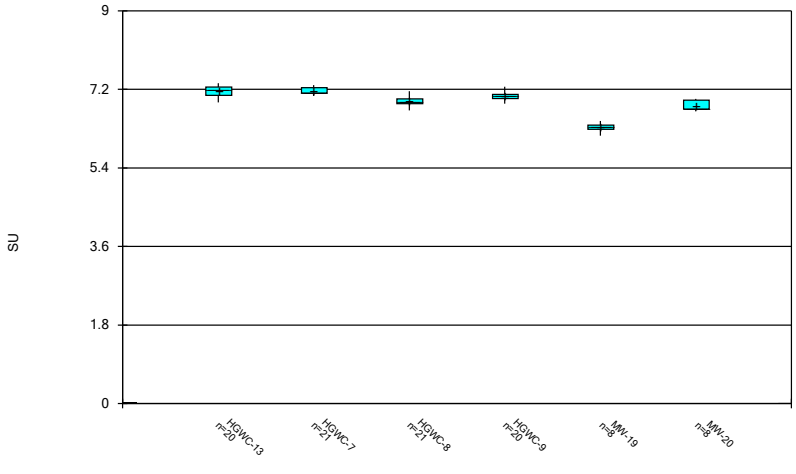


Constituent: pH, Field Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

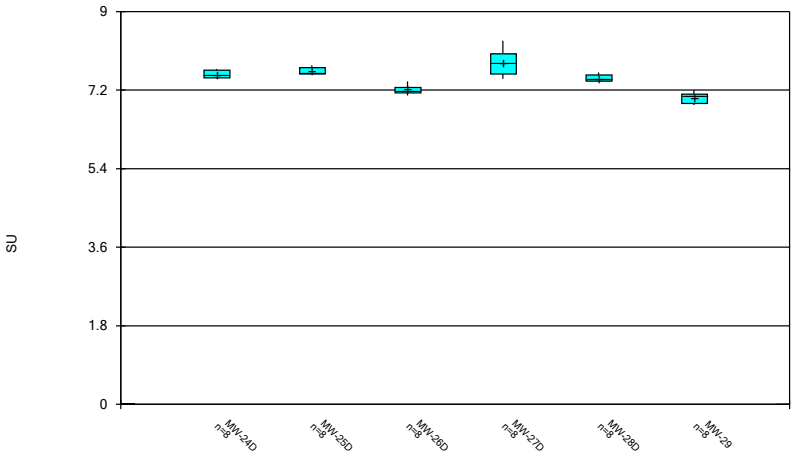


Constituent: pH, Field Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

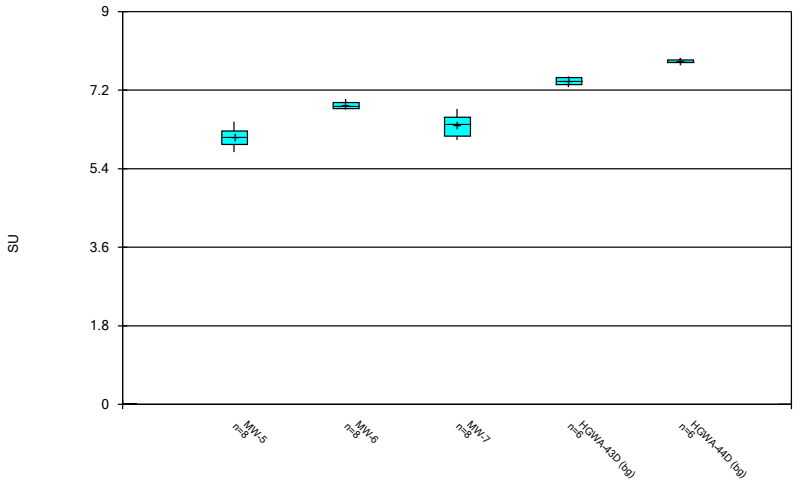


Constituent: pH, Field Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

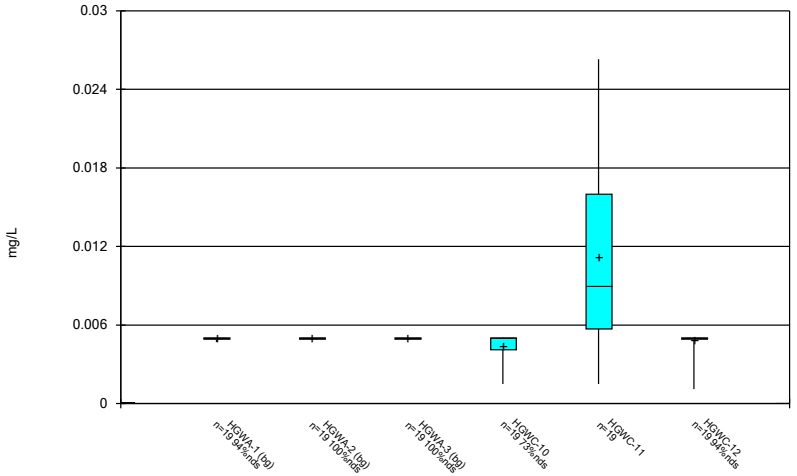
Box & Whiskers Plot



Constituent: pH, Field Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

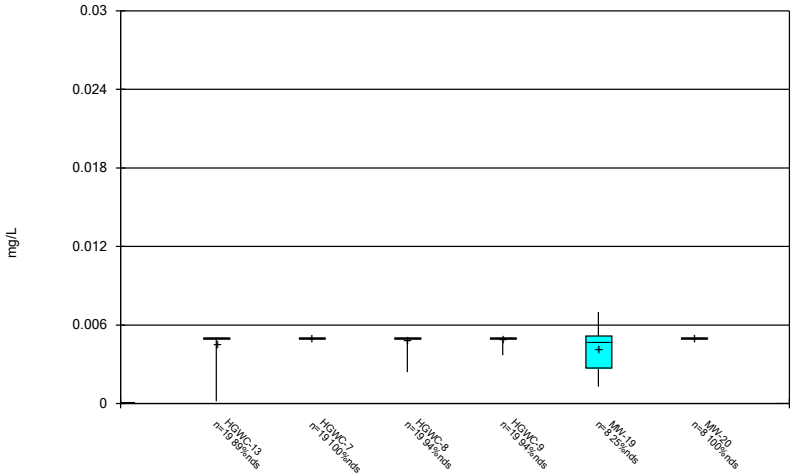


Constituent: Selenium Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

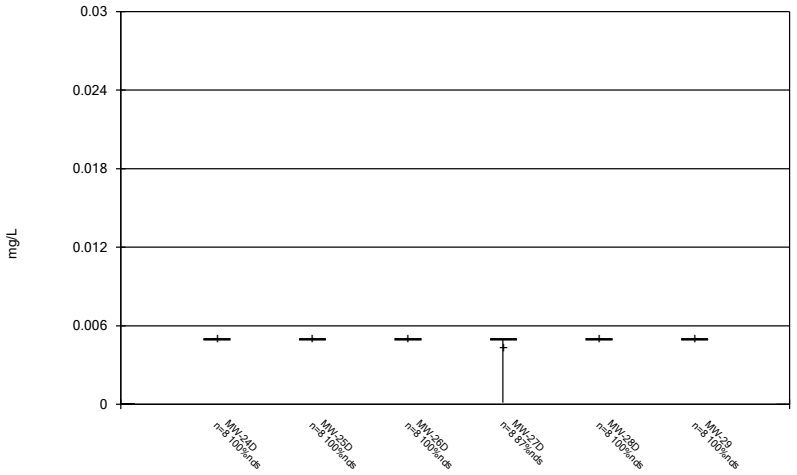


Constituent: Selenium Analysis Run 5/4/2021 7:13 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

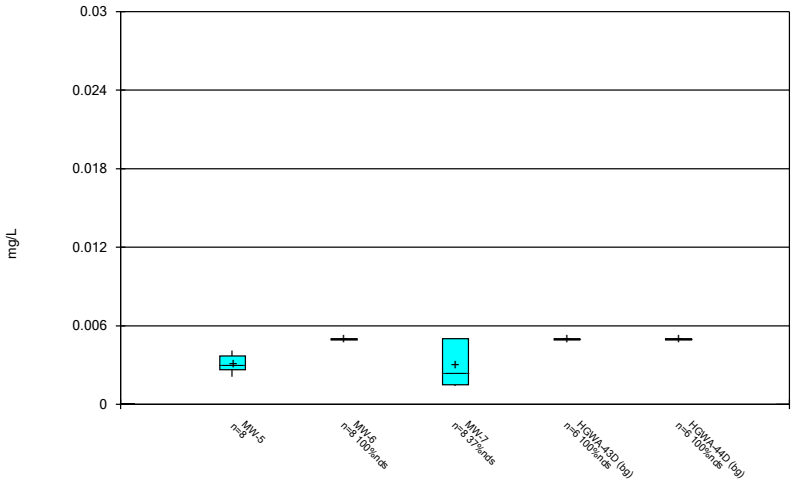


Constituent: Selenium Analysis Run 5/4/2021 7:14 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

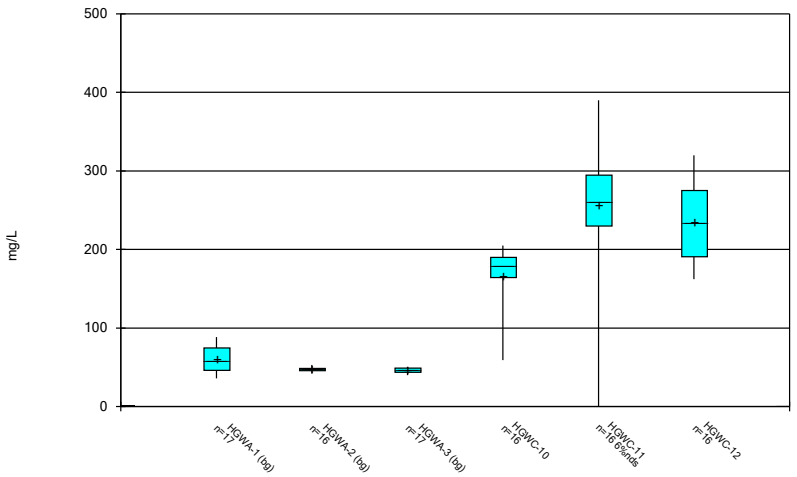
Box & Whiskers Plot



Constituent: Selenium Analysis Run 5/4/2021 7:14 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

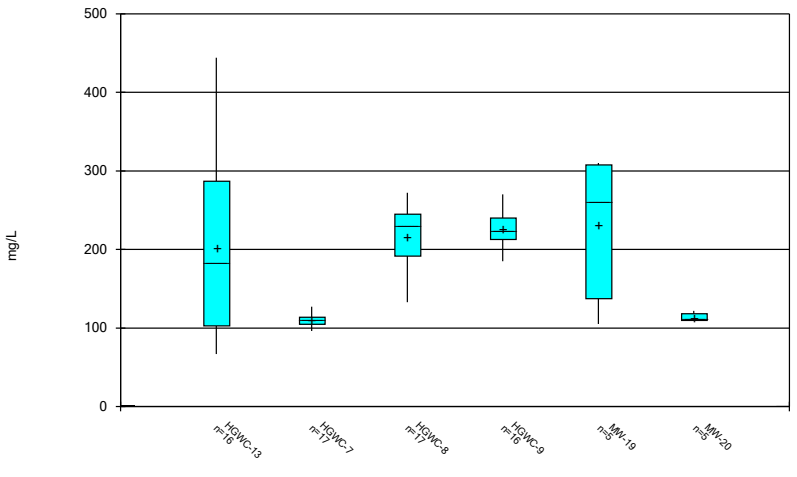


Constituent: Sulfate Analysis Run 5/4/2021 7:14 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

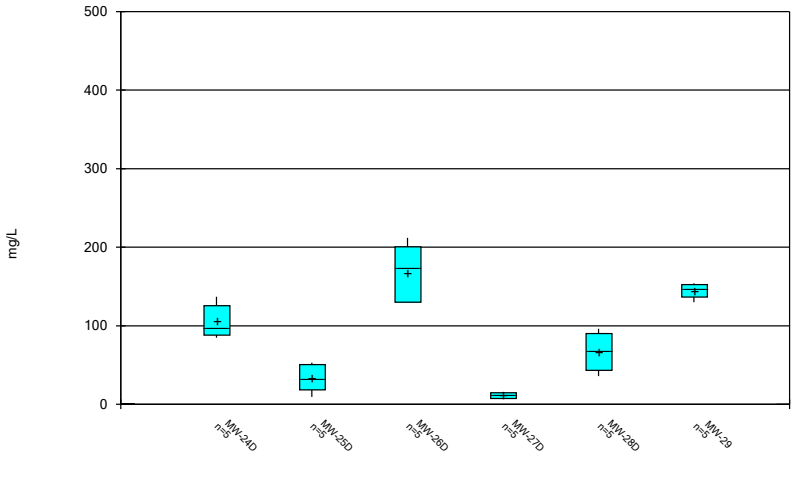


Constituent: Sulfate Analysis Run 5/4/2021 7:14 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

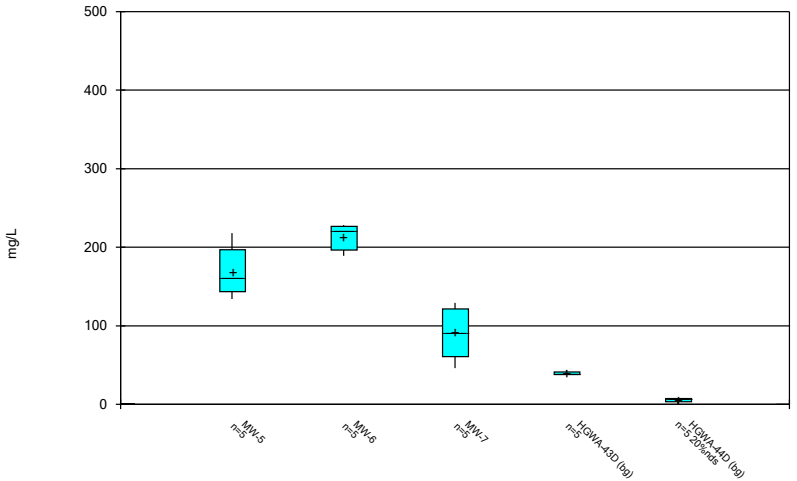


Constituent: Sulfate Analysis Run 5/4/2021 7:14 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

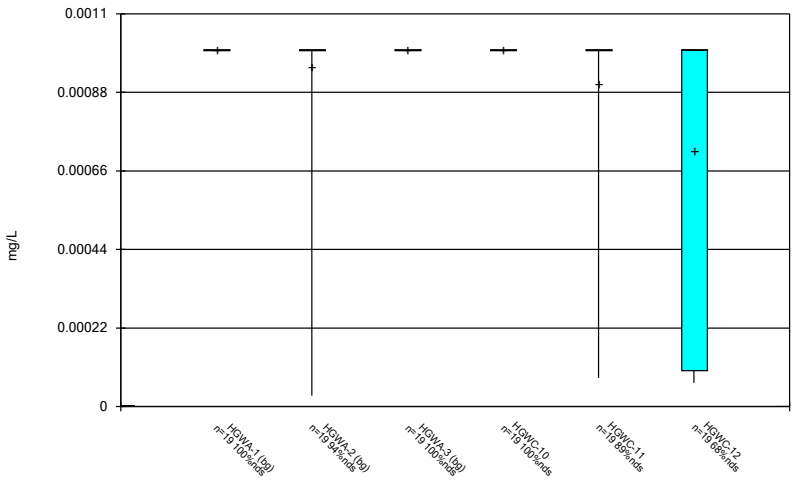
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 5/4/2021 7:14 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Box & Whiskers Plot

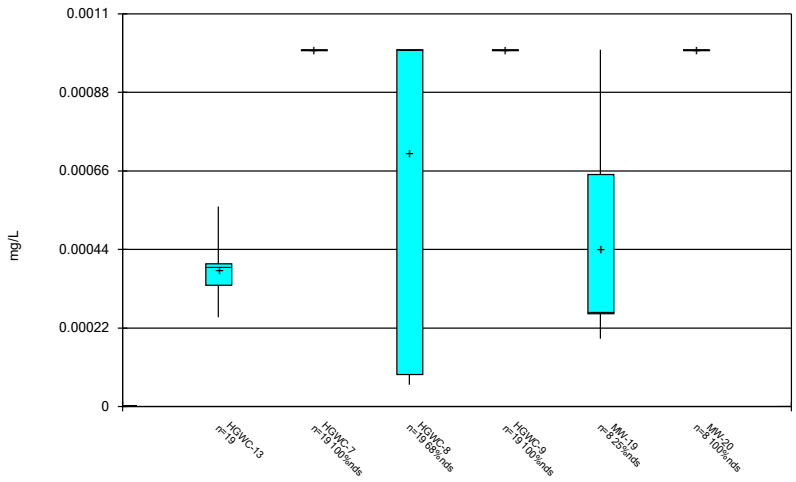


Constituent: Thallium Analysis Run 5/4/2021 7:14 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

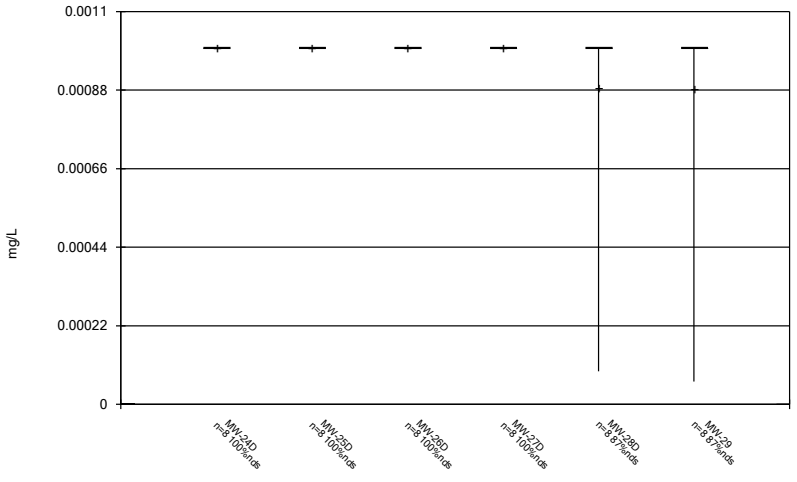


Constituent: Thallium Analysis Run 5/4/2021 7:14 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

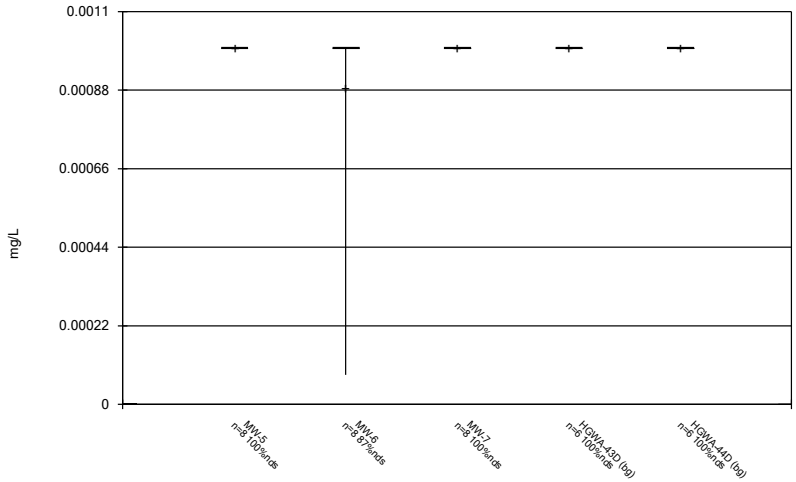


Constituent: Thallium Analysis Run 5/4/2021 7:14 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

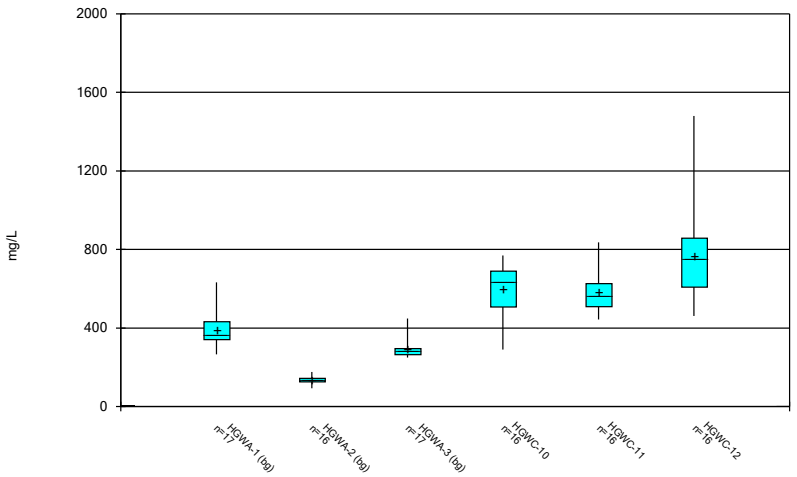
Box & Whiskers Plot



Constituent: Thallium Analysis Run 5/4/2021 7:14 PM

Plant Hammond Client: Southern Company Data: Hammond AP-1

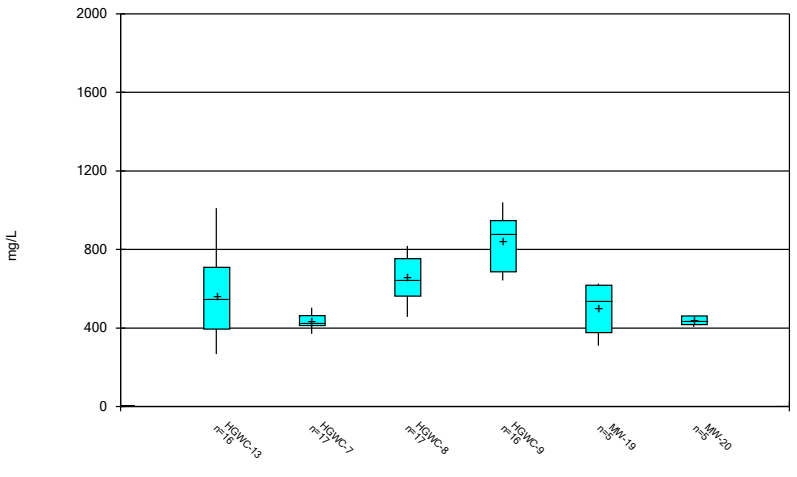
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 5/4/2021 7:14 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

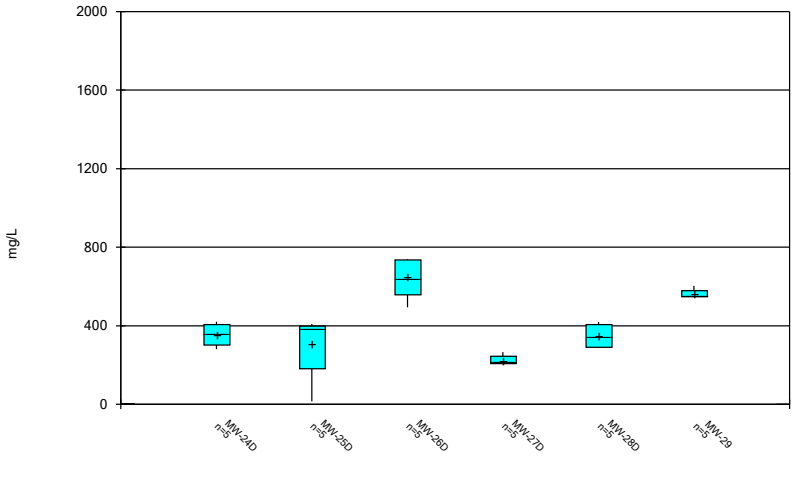
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 5/4/2021 7:14 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

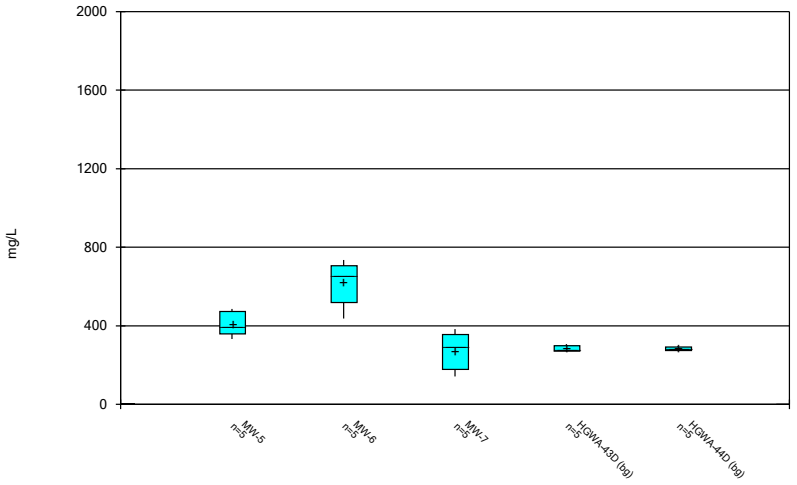
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 5/4/2021 7:14 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 5/4/2021 7:14 PM
Plant Hammond Client: Southern Company Data: Hammond AP-1

FIGURE C.

Outlier Summary

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 4/13/2021, 2:35 PM

No outliers were flagged.

FIGURE D.

Appendix III Interwell Prediction Limits - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 5/4/2021, 7:20 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	0.4	n/a	3/12/2021	0.64	Yes	60	n/a	n/a	3.333	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-11	0.4	n/a	3/16/2021	0.53	Yes	60	n/a	n/a	3.333	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-12	0.4	n/a	3/16/2021	1.9	Yes	60	n/a	n/a	3.333	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-13	0.4	n/a	3/17/2021	0.89	Yes	60	n/a	n/a	3.333	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-7	0.4	n/a	3/15/2021	1.1	Yes	60	n/a	n/a	3.333	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-8	0.4	n/a	3/15/2021	1.7	Yes	60	n/a	n/a	3.333	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-9	0.4	n/a	3/16/2021	2.2	Yes	60	n/a	n/a	3.333	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-10	137.2	n/a	3/12/2021	146	Yes	60	66.19	37	0	None	No	0.001075	Param Inter 1 of 2
Calcium (mg/L)	HGWC-12	137.2	n/a	3/16/2021	166	Yes	60	66.19	37	0	None	No	0.001075	Param Inter 1 of 2
Calcium (mg/L)	HGWC-13	137.2	n/a	3/17/2021	184	Yes	60	66.19	37	0	None	No	0.001075	Param Inter 1 of 2
Calcium (mg/L)	HGWC-8	137.2	n/a	3/15/2021	156	Yes	60	66.19	37	0	None	No	0.001075	Param Inter 1 of 2
Calcium (mg/L)	HGWC-9	137.2	n/a	3/16/2021	182	Yes	60	66.19	37	0	None	No	0.001075	Param Inter 1 of 2
Chloride (mg/L)	HGWC-12	41.1	n/a	3/16/2021	56.8	Yes	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-7	41.1	n/a	3/15/2021	44.5	Yes	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-8	41.1	n/a	3/15/2021	72.4	Yes	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-9	41.1	n/a	3/16/2021	94.7	Yes	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-10	88.2	n/a	3/12/2021	120	Yes	60	n/a	n/a	1.667	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-11	88.2	n/a	3/16/2021	291	Yes	60	n/a	n/a	1.667	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-12	88.2	n/a	3/16/2021	248	Yes	60	n/a	n/a	1.667	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-13	88.2	n/a	3/17/2021	384	Yes	60	n/a	n/a	1.667	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-7	88.2	n/a	3/15/2021	107	Yes	60	n/a	n/a	1.667	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-8	88.2	n/a	3/15/2021	272	Yes	60	n/a	n/a	1.667	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-9	88.2	n/a	3/16/2021	211	Yes	60	n/a	n/a	1.667	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-13	632	n/a	3/17/2021	716	Yes	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-9	632	n/a	3/16/2021	672	Yes	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2

Appendix III Interwell Prediction Limits - All Results

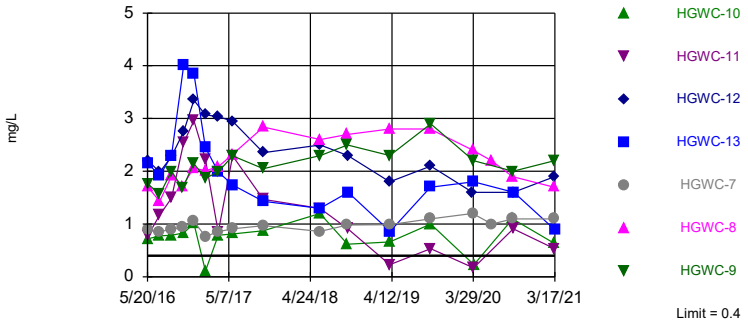
Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 5/4/2021, 7:20 PM

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**	**0.4**	**n/a**	**3/12/2021**	**0.64**	**Yes**	**60**	**n/a**	**n/a**	**3.333**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-11**	**0.4**	**n/a**	**3/16/2021**	**0.53**	**Yes**	**60**	**n/a**	**n/a**	**3.333**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-12**	**0.4**	**n/a**	**3/16/2021**	**1.9**	**Yes**	**60**	**n/a**	**n/a**	**3.333**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-13**	**0.4**	**n/a**	**3/17/2021**	**0.89**	**Yes**	**60**	**n/a**	**n/a**	**3.333**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-7**	**0.4**	**n/a**	**3/15/2021**	**1.1**	**Yes**	**60**	**n/a**	**n/a**	**3.333**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-8**	**0.4**	**n/a**	**3/15/2021**	**1.7**	**Yes**	**60**	**n/a**	**n/a**	**3.333**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-9**	**0.4**	**n/a**	**3/16/2021**	**2.2**	**Yes**	**60**	**n/a**	**n/a**	**3.333**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-10**	**137.2**	**n/a**	**3/12/2021**	**146**	**Yes**	**60**	**66.19**	**37**	**0**	**None**	**No**	**0.001075**	**Param Inter 1 of 2**
Calcium (mg/L)	HGWC-11	137.2	n/a	3/16/2021	132	No	60	66.19	37	0	None	No	0.001075	Param Inter 1 of 2
Calcium (mg/L)	**HGWC-12**	**137.2**	**n/a**	**3/16/2021**	**166**	**Yes**	**60**	**66.19**	**37**	**0**	**None**	**No**	**0.001075**	**Param Inter 1 of 2**
Calcium (mg/L)	**HGWC-13**	**137.2**	**n/a**	**3/17/2021**	**184**	**Yes**	**60**	**66.19**	**37**	**0**	**None**	**No**	**0.001075**	**Param Inter 1 of 2**
Calcium (mg/L)	HGWC-7	137.2	n/a	3/15/2021	113	No	60	66.19	37	0	None	No	0.001075	Param Inter 1 of 2
Calcium (mg/L)	**HGWC-8**	**137.2**	**n/a**	**3/15/2021**	**156**	**Yes**	**60**	**66.19**	**37**	**0**	**None**	**No**	**0.001075**	**Param Inter 1 of 2**
Calcium (mg/L)	**HGWC-9**	**137.2**	**n/a**	**3/16/2021**	**182**	**Yes**	**60**	**66.19**	**37**	**0**	**None**	**No**	**0.001075**	**Param Inter 1 of 2**
Chloride (mg/L)	HGWC-10	41.1	n/a	3/12/2021	35	No	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-11	41.1	n/a	3/16/2021	11.5	No	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Chloride (mg/L)	**HGWC-12**	**41.1**	**n/a**	**3/16/2021**	**56.8**	**Yes**	**60**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	HGWC-13	41.1	n/a	3/17/2021	31.4	No	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Chloride (mg/L)	**HGWC-7**	**41.1**	**n/a**	**3/15/2021**	**44.5**	**Yes**	**60**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**HGWC-8**	**41.1**	**n/a**	**3/15/2021**	**72.4**	**Yes**	**60**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**HGWC-9**	**41.1**	**n/a**	**3/16/2021**	**94.7**	**Yes**	**60**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Fluoride (mg/L)	HGWC-10	0.74	n/a	3/12/2021	0.054J	No	74	n/a	n/a	31.08	n/a	n/a	0.0003513	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-11	0.74	n/a	3/16/2021	0.21	No	74	n/a	n/a	31.08	n/a	n/a	0.0003513	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-12	0.74	n/a	3/16/2021	0.2	No	74	n/a	n/a	31.08	n/a	n/a	0.0003513	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-13	0.74	n/a	3/17/2021	0.65	No	74	n/a	n/a	31.08	n/a	n/a	0.0003513	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-7	0.74	n/a	3/15/2021	0.086J	No	74	n/a	n/a	31.08	n/a	n/a	0.0003513	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-8	0.74	n/a	3/15/2021	0.51	No	74	n/a	n/a	31.08	n/a	n/a	0.0003513	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-9	0.74	n/a	3/16/2021	0.098J	No	74	n/a	n/a	31.08	n/a	n/a	0.0003513	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-10	7.92	4.9	3/12/2021	6.76	No	74	n/a	n/a	0	n/a	n/a	0.0007026	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-11	7.92	4.9	3/16/2021	5.95	No	74	n/a	n/a	0	n/a	n/a	0.0007026	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-12	7.92	4.9	3/16/2021	7.15	No	74	n/a	n/a	0	n/a	n/a	0.0007026	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-13	7.92	4.9	3/17/2021	7.33	No	74	n/a	n/a	0	n/a	n/a	0.0007026	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-7	7.92	4.9	3/15/2021	7.19	No	74	n/a	n/a	0	n/a	n/a	0.0007026	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-8	7.92	4.9	3/15/2021	7.09	No	74	n/a	n/a	0	n/a	n/a	0.0007026	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-9	7.92	4.9	3/16/2021	7.1	No	74	n/a	n/a	0	n/a	n/a	0.0007026	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**HGWC-10**	**88.2**	**n/a**	**3/12/2021**	**120**	**Yes**	**60**	**n/a**	**n/a**	**1.667**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-11**	**88.2**	**n/a**	**3/16/2021**	**291**	**Yes**	**60**	**n/a**	**n/a**	**1.667**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-12**	**88.2**	**n/a**	**3/16/2021**	**248**	**Yes**	**60**	**n/a**	**n/a**	**1.667**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-13**	**88.2**	**n/a**	**3/17/2021**	**384**	**Yes**	**60**	**n/a**	**n/a**	**1.667**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-7**	**88.2**	**n/a**	**3/15/2021**	**107**	**Yes**	**60**	**n/a**	**n/a**	**1.667**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-8**	**88.2**	**n/a**	**3/15/2021**	**272**	**Yes**	**60**	**n/a**	**n/a**	**1.667**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-9**	**88.2**	**n/a**	**3/16/2021**	**211**	**Yes**	**60**	**n/a**	**n/a**	**1.667**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	HGWC-10	632	n/a	3/12/2021	490	No	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-11	632	n/a	3/16/2021	558	No	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-12	632	n/a	3/16/2021	614	No	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**HGWC-13**	**632**	**n/a**	**3/17/2021**	**716**	**Yes**	**60**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	HGWC-7	632	n/a	3/15/2021	370	No	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-8	632	n/a	3/15/2021	614	No	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**HGWC-9**	**632**	**n/a**	**3/16/2021**	**672**	**Yes**	**60**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0005205**	**NP Inter (normality) 1 of 2**

Exceeds Limit: HGWC-10, HGWC-11, HGWC-12, HGWC-13, HGWC-7, HGWC-8, HGWC-9

Prediction Limit

Interwell Non-parametric



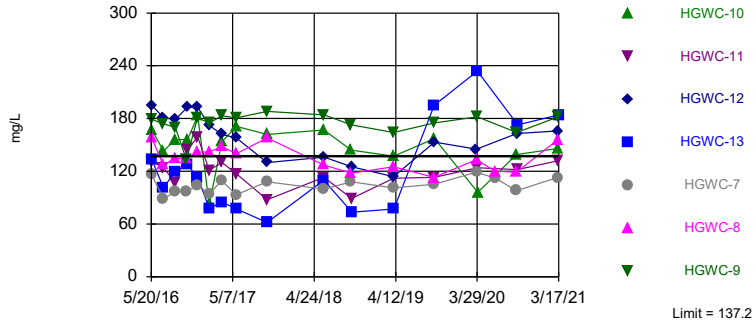
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 60 background values. 3.333% NDs. Annual per-constituent alpha = 0.007263. Individual comparison alpha = 0.0005205 (1 of 2). Comparing 7 points to limit.

Constituent: Boron Analysis Run 5/4/2021 7:17 PM View: Appendix III
Plant Hammond Client: Southern Company Data: Hammond AP-1

Exceeds Limit: HGWC-10, HGWC-12, HGWC-13, HGWC-8, HGWC-9

Prediction Limit

Interwell Parametric



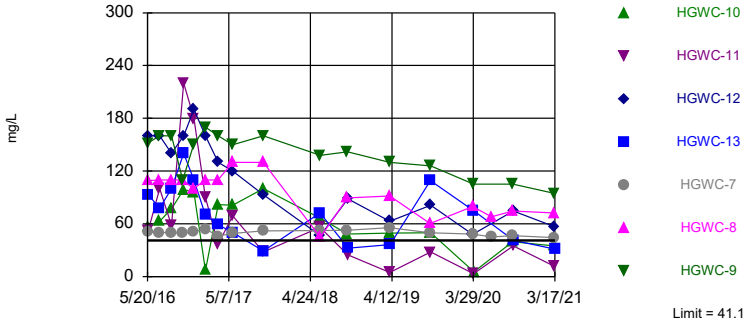
Background Data Summary: Mean=66.19, Std. Dev.=37, n=60. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9484, critical = 0.945. Kappa = 1.919 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001075. Comparing 7 points to limit.

Constituent: Calcium Analysis Run 5/4/2021 7:17 PM View: Appendix III
Plant Hammond Client: Southern Company Data: Hammond AP-1

Exceeds Limit: HGWC-12, HGWC-7, HGWC-8, HGWC-9

Prediction Limit

Interwell Non-parametric



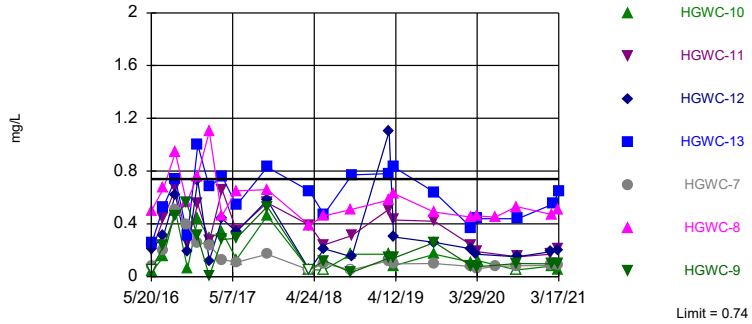
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 60 background values. Annual per-constituent alpha = 0.007263. Individual comparison alpha = 0.0005205 (1 of 2). Comparing 7 points to limit.

Constituent: Chloride Analysis Run 5/4/2021 7:17 PM View: Appendix III
Plant Hammond Client: Southern Company Data: Hammond AP-1

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 74 background values. 31.08% NDs. Annual per-constituent alpha = 0.004907. Individual comparison alpha = 0.0003513 (1 of 2). Comparing 7 points to limit.

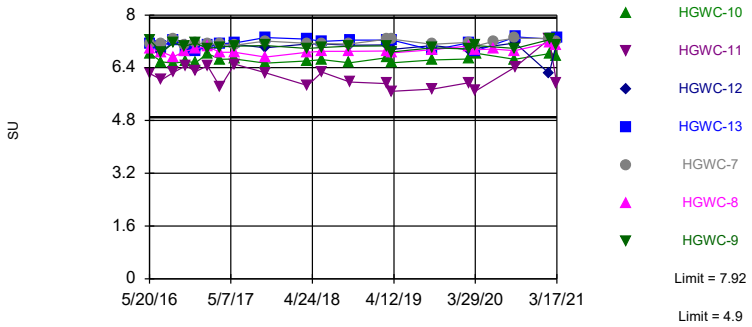
Constituent: Fluoride Analysis Run 5/4/2021 7:17 PM View: Appendix III
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 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 74 background values. Annual per-constituent alpha = 0.009813. Individual comparison alpha = 0.0007026 (1 of 2). Comparing 7 points to limit.

Constituent: pH, Field Analysis Run 5/4/2021 7:17 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

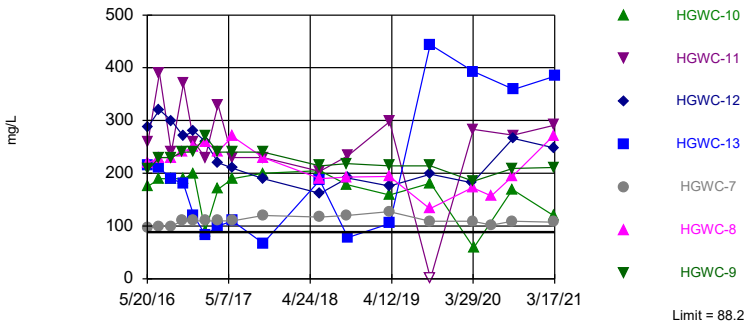
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Exceeds Limit: HGWC-10, 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 60 background values. 1.667% NDs. Annual per-constituent alpha = 0.007263. Individual comparison alpha = 0.0005205 (1 of 2). Comparing 7 points to limit.

Constituent: Sulfate Analysis Run 5/4/2021 7:17 PM View: Appendix III

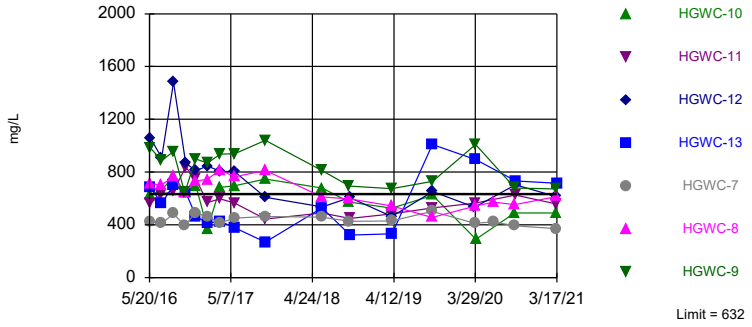
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 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 60 background values. Annual per-constituent alpha = 0.007263. Individual comparison alpha = 0.0005205 (1 of 2). Comparing 7 points to limit.

Constituent: Total Dissolved Solids Analysis Run 5/4/2021 7:17 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/4/2021 7:20 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-8	HGWC-7	HGWC-10	HGWC-13	HGWC-9	HGWC-11
5/19/2016	0.0214 (J)	<0.1	0.0321 (J)						
5/20/2016				1.71	0.885				
5/23/2016						0.72	2.15	1.76	0.787
7/11/2016	0.0142 (J)		0.0337 (J)						
7/12/2016		0.0074 (J)		1.43	0.857	0.778	1.91	1.56	1.17
8/30/2016	0.0074 (J)	<0.1	0.0173 (J)						
9/1/2016				1.91	0.904	0.786	2.3	2	1.49
10/19/2016	0.0224 (J)	0.0085 (J)	0.0341 (J)						
10/20/2016				1.72	0.936			1.68	
10/24/2016						0.831	4.01		2.54
12/6/2016	0.0211 (J)	0.0085 (J)	0.0326 (J)	2.06	1.06			2.15	
12/7/2016						1.01	3.85		2.96
1/24/2017	0.0165 (J)	0.01 (J)	0.0365 (J)						
1/25/2017				2.01	0.764				
1/26/2017						0.108	2.45	1.87	2.23
3/21/2017	0.0187 (J)	0.0079 (J)	0.0349 (J)	2.08	0.857				
3/22/2017						0.788	1.99	1.99	0.84
5/22/2017	0.0782	0.0131 (J)	0.0475						
5/23/2017				2.32	0.91			2.29	
5/24/2017						0.814	1.74		2.29
10/3/2017	0.0198 (J)	0.0097 (J)	0.0386 (J)	2.84	0.967	0.871	1.43	2.05	1.47
6/4/2018	0.02 (J)	0.017 (J)	0.036 (J)						
6/5/2018					0.86	1.2	1.3		1.3
6/6/2018				2.6				2.3	
10/1/2018	0.013 (J)	0.0061 (J)	0.035 (J)						
10/2/2018				2.7	0.98	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		0.66		2.3	0.23
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						1		2.9	0.53
3/25/2020	0.025 (J)	0.0096 (J)	0.039 (J)						
3/26/2020									
3/27/2020				2.4	1.2				
3/30/2020							1.8		
3/31/2020								2.2	0.17
4/1/2020						0.23			
6/16/2020	0.021 (J)	0.01 (J)		2.2					
6/17/2020					1				
9/15/2020	0.017 (J)	0.0071 (J)	0.044 (J)						
9/16/2020				1.9	1.1	1.1			
9/17/2020								2	
9/18/2020									0.91
9/21/2020							1.6		
11/10/2020									
12/15/2020									

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/4/2021 7:20 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-8	HGWC-7	HGWC-10	HGWC-13	HGWC-9	HGWC-11
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				1.7	1.1				
3/16/2021								2.2	0.53
3/17/2021							0.89		

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/4/2021 7:20 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 5/4/2021 7:20 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			

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/4/2021 7:20 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-8	HGWC-7	HGWC-10	HGWC-13	HGWC-9	HGWC-11
5/19/2016	138	76.2	22.9						
5/20/2016				159	117				
5/23/2016						167	133	179	131
7/11/2016	97.2		22.3						
7/12/2016		61.5		127	88.8	143	101	174	124
8/30/2016	97.5	65.1	26.4						
9/1/2016				135	96.3	156	120	170	107
10/19/2016	99.2	73.2	21.7						
10/20/2016				134	96.9			133	
10/24/2016						156	127		145
12/6/2016	105	74.9	18.2	142	104			181	
12/7/2016						183	113		159
1/24/2017	95.7	69.6	18.5						
1/25/2017				142	94.5				
1/26/2017						82.6	77.9	175	121
3/21/2017	106	75.7	18.6	148	109				
3/22/2017						154	85.1	183	130
5/22/2017	107	71.5	17.8						
5/23/2017				140	93.3			181	
5/24/2017						171	77.1		117
10/3/2017	102	76.3	20.2	158	108	162	62	188	87.7
6/4/2018	124	73.4	19.1						
6/5/2018					99.8	167	110		113
6/6/2018				127				184	
10/1/2018	108	80.9	20.5 (J)						
10/2/2018				118	108	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		137		164	112
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						157		175	113
3/25/2020	127	89.8	23						
3/26/2020									
3/27/2020				133	119				
3/30/2020							234		
3/31/2020								182	124
4/1/2020						96.2			
6/16/2020	130	85.1		120					
6/17/2020					112				
9/15/2020	103	73.1	21.1						
9/16/2020				119	98	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 5/4/2021 7:20 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-8	HGWC-7	HGWC-10	HGWC-13	HGWC-9	HGWC-11
1/19/2021									
3/10/2021	111								
3/11/2021		83.8	43.8						
3/12/2021						146 (M1)			
3/15/2021				156	113				
3/16/2021								182	132
3/17/2021							184		

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/4/2021 7:20 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 5/4/2021 7:20 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			

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/4/2021 7:20 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-8	HGWC-7	HGWC-10	HGWC-13	HGWC-9	HGWC-11
5/19/2016	9.94	5.93	6.14						
5/20/2016				109	50.4				
5/23/2016						56.1	93.2	152	51.9
7/11/2016	6.3		5.9						
7/12/2016		6.2		110	50	63	78	160	100
8/30/2016	6	6.4	6.2						
9/1/2016				110	50	77	100	160	58
10/19/2016	5.8	6.5	6.1						
10/20/2016				110	49			110	
10/24/2016						99	140		220
12/6/2016	5.4	7.2	6	100	51			150	
12/7/2016						96	110		180
1/24/2017	5.2	6.4	6.1						
1/25/2017				110	54				
1/26/2017						7	70	170	90
3/21/2017	4.6	7.5	5.9	110	46				
3/22/2017						82	59	160	37
5/22/2017	4.6	6.5	5.9						
5/23/2017				130	49			150	
5/24/2017						81	50		69
10/3/2017	5.6	6.5	6.3	130	52	100	29	160	28
6/4/2018	13.1	6.3	6.1						
6/5/2018					52.3	66.6	72.3		56.1
6/6/2018				44.8				138	
10/1/2018	6.6	6.4	6.4						
10/2/2018				89.4	52.6	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		49.3		130	4.6
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						49.9		126	27.9
3/25/2020	20.4	6.1	5.2						
3/26/2020									
3/27/2020				79.8	48.3				
3/30/2020							75.1		
3/31/2020								105	3.2
4/1/2020						5.4			
6/16/2020	41.1	5.8		67.9					
6/17/2020					45.2				
9/15/2020	13.4	6	5						
9/16/2020				74.6	46.4	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 5/4/2021 7:20 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-8	HGWC-7	HGWC-10	HGWC-13	HGWC-9	HGWC-11
1/19/2021									
3/10/2021	7.4								
3/11/2021		5.9	5.1						
3/12/2021						35			
3/15/2021				72.4	44.5				
3/16/2021								94.7	11.5
3/17/2021							31.4		

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/4/2021 7:20 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 5/4/2021 7:20 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			

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/4/2021 7:20 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-8	HGWC-7	HGWC-10	HGWC-12	HGWC-13	HGWC-9
5/19/2016	0.105 (J)	0.0513 (J)	0.0303 (J)						
5/20/2016				0.499	0.0828 (J)				
5/23/2016						0.0394 (J)	0.212 (J)	0.2587 (J)	<0.1
7/11/2016	0.16 (J)		0.05 (J)						
7/12/2016		0.12 (J)		0.67	0.2 (J)	0.15 (J)	0.31	0.53	0.24 (J)
8/30/2016	0.09 (J)	0.09 (J)	0.06 (J)						
9/1/2016				0.94	0.51	0.5	0.62	0.74	0.46
10/19/2016	0.1 (J)	0.1 (J)	0.04 (J)						
10/20/2016				0.56	0.4				0.56
10/24/2016						0.06 (J)	0.19 (J)	0.31	
12/6/2016	0.11 (J)	0.21 (J)	0.36	0.76	0.26 (J)				0.31
12/7/2016						0.44	0.73	1	
1/24/2017	0.09 (J)	0.06 (J)	<0.1						
1/25/2017				1.1	0.24 (J)				
1/26/2017						0.29 (J)	0.12 (J)	0.68	0.004 (J)
3/21/2017	0.13 (J)	0.005 (J)	<0.1	0.46	0.13 (J)				
3/22/2017						0.34	0.44	0.76	0.28 (J)
5/22/2017	0.12 (J)	0.05 (J)	<0.1						
5/23/2017				0.65	0.11 (J)				0.29 (J)
5/24/2017						0.13 (J)	0.34	0.54	
10/3/2017	0.13 (J)	0.13 (J)	<0.1	0.66	0.17 (J)	0.46	0.58	0.83	0.53
4/2/2018	<0.1		<0.1						
4/3/2018		<0.1		0.39	<0.1				<0.1
4/4/2018						<0.1	<0.1	0.65	
6/4/2018	0.074 (J)	<0.1	<0.1						
6/5/2018					0.099 (J)	<0.1		0.47	
6/6/2018				0.46			0.21 (J)		0.12 (J)
10/1/2018	<0.1	<0.1	<0.1						
10/2/2018				0.51	<0.1	0.17 (J)			0.031 (J)
10/3/2018							0.15 (J)		
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)	0.17 (J)		0.78	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		0.082 (J)	0.3 (J)		0.14 (J)
4/5/2019								0.83	
9/23/2019	0.078 (J)	<0.1	<0.1						
9/24/2019				0.49					
9/25/2019					0.1 (J)				
9/26/2019								0.64	
9/27/2019						0.17 (J)	0.26 (J)		0.26 (J)
3/2/2020	0.076 (J)	<0.1	<0.1						
3/3/2020				0.45		0.11 (J)	0.21 (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				0.46	0.059 (J)				
3/30/2020								0.44	
3/31/2020									0.074 (J)
4/1/2020						0.12 (J)			

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/4/2021 7:20 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-8	HGWC-7	HGWC-10	HGWC-12	HGWC-13	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				0.53	0.081 (J)	<0.1			
9/17/2020									0.1
9/18/2020							0.15		
9/21/2020								0.44	
11/10/2020									
12/15/2020									
1/19/2021									
2/8/2021	0.078 (J)								
2/9/2021		0.074 (J)	<0.1						
2/10/2021					0.085 (J)				
2/12/2021							0.19		
2/15/2021						0.08 (J)			
2/16/2021				0.47					0.096 (J)
2/22/2021								0.55	
3/10/2021	0.079 (J)								
3/11/2021		<0.1	0.1						
3/12/2021						0.054 (J)			
3/15/2021				0.51	0.086 (J)				
3/16/2021							0.2		0.098 (J)
3/17/2021								0.65	

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/4/2021 7:20 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWA-44D (bg)	HGWA-43D (bg)
5/19/2016			
5/20/2016			
5/23/2016	0.203 (J)		
7/11/2016			
7/12/2016	0.44		
8/30/2016			
9/1/2016	0.67		
10/19/2016			
10/20/2016			
10/24/2016	0.26 (J)		
12/6/2016			
12/7/2016	0.55		
1/24/2017			
1/25/2017			
1/26/2017	0.27 (J)		
3/21/2017			
3/22/2017	0.66		
5/22/2017			
5/23/2017			
5/24/2017	0.35		
10/3/2017	0.56		
4/2/2018			
4/3/2018			
4/4/2018	0.39		
6/4/2018			
6/5/2018	0.24 (J)		
6/6/2018			
10/1/2018			
10/2/2018			
10/3/2018	0.31		
10/5/2018			
3/12/2019			
3/13/2019	0.51		
3/14/2019			
4/1/2019			
4/2/2019			
4/3/2019	0.43		
4/5/2019			
9/23/2019			
9/24/2019			
9/25/2019			
9/26/2019			
9/27/2019	0.42		
3/2/2020			
3/3/2020	0.24 (J)		
3/4/2020			
3/25/2020			
3/26/2020			
3/27/2020			
3/30/2020			
3/31/2020	0.19 (J)		
4/1/2020			

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/4/2021 7:20 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWA-44D (bg)	HGWA-43D (bg)
6/16/2020			
6/17/2020			
9/15/2020			
9/16/2020		0.52	0.22
9/17/2020			
9/18/2020	0.15		
9/21/2020			
11/10/2020		0.59	0.19
12/15/2020		0.67	0.21
1/19/2021		0.74	0.16
2/8/2021			
2/9/2021		0.44	0.19
2/10/2021			
2/12/2021	0.17		
2/15/2021			
2/16/2021			
2/22/2021			
3/10/2021		0.65	
3/11/2021			0.2
3/12/2021			
3/15/2021			
3/16/2021	0.21		
3/17/2021			

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 5/4/2021 7:20 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-8	HGWC-7	HGWC-10	HGWC-12	HGWC-13	HGWC-9
5/19/2016	7.27	7.45	5.81						
5/20/2016				6.99	7.14				
5/23/2016						6.83	7.15	7.14	7.23
7/11/2016	7.06		5.68						
7/12/2016		7.32		6.88	7.13	6.58	6.87	7.04	6.87
8/30/2016	7.28	7.43	5.63						
9/1/2016				6.73	7.29	6.54	7.2	7.24	7.15
10/19/2016	7.02	7.03	5.46						
10/20/2016				6.9	7.1				7.05
10/24/2016						6.59	7.1	6.9	
12/6/2016	7.09	7.08	5.38	6.98	7.15				7.15
12/7/2016						6.56	6.92	6.91	
1/24/2017	7.2	7.39	5.37						
1/25/2017				7.04	7.11				
1/26/2017						6.83	7.05	7.08	6.99
3/21/2017	7.01	6.83	4.9	6.87	7.12				
3/22/2017						6.66	7.08	7.13	7.03
5/22/2017	7.11	7.02	5.2						
5/23/2017				6.87	7.08				7.05
5/24/2017						6.67	7.11	7.15	
10/3/2017	7.21	7.47	5.3	6.72	7.21	6.54	7.01	7.32	7.07
4/2/2018	7.1		5.4						
4/3/2018		7.38		6.87	7.14				6.99
4/4/2018						6.61	7.12	7.27	
6/4/2018	7.06	7.38	5.27						
6/5/2018					7.13	6.65		7.2	
6/6/2018				6.9			7.12		7.02
10/1/2018	7.09	7.13	5.31						
10/2/2018				6.9	7.12	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	6.7		7.24	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		6.55	6.96		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						6.64	7.07		7.01
3/2/2020	7.1	7.12	5.43						
3/3/2020				7.06		6.67	6.95		
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				6.95	7.05				
3/30/2020								6.91	
3/31/2020									7.07
4/1/2020						6.84			

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 5/4/2021 7:20 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-8	HGWC-7	HGWC-10	HGWC-12	HGWC-13	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				6.92	7.3	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				7.09	7.19				
3/16/2021							7.15		7.1
3/17/2021								7.33	

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 5/4/2021 7:20 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWA-44D (bg)	HGWA-43D (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 5/4/2021 7:20 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWC-11	HGWA-44D (bg)	HGWA-43D (bg)
6/16/2020			
6/17/2020			
9/15/2020			
9/16/2020		7.83	7.52
9/17/2020			
9/18/2020	6.42		
9/21/2020			
11/10/2020		7.84	7.27
12/15/2020		7.87	7.39
1/19/2021		7.86	7.39
2/8/2021			
2/9/2021		7.84	7.44
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			

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/4/2021 7:20 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-8	HGWC-7	HGWC-10	HGWC-13	HGWC-9	HGWC-11
5/19/2016	66.9	42.3	48.6						
5/20/2016				219	96				
5/23/2016						175	215	207	260
7/11/2016	41		45						
7/12/2016		44		230	100	190	210	230	390
8/30/2016	36	40	42						
9/1/2016				230	100	190	190	230	240
10/19/2016	46	43	44						
10/20/2016				240	110			240	
10/24/2016						190	180		370
12/6/2016	59	43	44	250	110			240	
12/7/2016						200	120		260
1/24/2017	46	48	46						
1/25/2017				260	110				
1/26/2017						90	83	270	230
3/21/2017	63	45	46	240	110				
3/22/2017						170	100	240	330
5/22/2017	77	46	48						
5/23/2017				270	110			240	
5/24/2017						190	110		230
10/3/2017	42	48	47	230	120	200	67	240	230
6/4/2018	71.8	46.6	47.8						
6/5/2018					117	205	187		204
6/6/2018				190				214	
10/1/2018	49.1	48.6	48.1						
10/2/2018				193	120	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		159		214	298
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						181		214	<1
3/25/2020	85.9	50.5	46.3						
3/26/2020									
3/27/2020				173	109				
3/30/2020							393		
3/31/2020								185	283
4/1/2020						59			
6/16/2020	88.2	49.5		157					
6/17/2020					102				
9/15/2020	47.3	44.7	51.5						
9/16/2020				194	109	169			
9/17/2020								209	
9/18/2020									272
9/21/2020							359		
11/10/2020									
12/15/2020									

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/4/2021 7:20 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-8	HGWC-7	HGWC-10	HGWC-13	HGWC-9	HGWC-11
1/19/2021									
3/10/2021	49.6								
3/11/2021		50.4	52.9						
3/12/2021						120			
3/15/2021				272	107				
3/16/2021								211	291
3/17/2021							384		

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/4/2021 7:20 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 5/4/2021 7:20 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			

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/4/2021 7:20 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-8	HGWC-7	HGWC-10	HGWC-13	HGWC-9	HGWC-11
5/19/2016	421	267	143						
5/20/2016				711	427				
5/23/2016						629	683	984	564
7/11/2016	363		125						
7/12/2016		249		704	410	661	563	887	627
8/30/2016	330	254	168						
9/1/2016				763	484	769	702	956	656
10/19/2016	380	357	176						
10/20/2016				644	393			642	
10/24/2016						643	647		836
12/6/2016	377	285	145	733	492			899	
12/7/2016						697	465		748
1/24/2017	342	300	129						
1/25/2017				744	461				
1/26/2017						368	411	869	571
3/21/2017	340	288	103	818	415				
3/22/2017						683	427	936	597
5/22/2017	338	263	92						
5/23/2017				765	450			939	
5/24/2017						696	377		566
10/3/2017	343	300	127	812	464	746	268	1040	443
6/4/2018	415	266	140						
6/5/2018					459	679	528		489
6/6/2018				611				810	
10/1/2018	354	291	135						
10/2/2018				597	426	572		693	
10/3/2018									449
10/5/2018							322		
4/1/2019		284							
4/2/2019	452		133		428				
4/3/2019				543		525		673	483
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						624		730	528
3/25/2020	496	284	138						
3/26/2020									
3/27/2020				541	413				
3/30/2020							895		
3/31/2020								1010	565
4/1/2020						290			
6/16/2020	632	448		573					
6/17/2020					423				
9/15/2020	265	258	124						
9/16/2020				552	392	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 5/4/2021 7:20 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-1

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWC-8	HGWC-7	HGWC-10	HGWC-13	HGWC-9	HGWC-11
1/19/2021									
3/10/2021	348								
3/11/2021		267	169						
3/12/2021						490 (H1)			
3/15/2021				614	370				
3/16/2021								672	558
3/17/2021							716		

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/4/2021 7:20 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 5/4/2021 7:20 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			

FIGURE E.

Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 5/5/2021, 11:47 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**HGWA-2 (bg)**	**0.00257**	**72**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-13**	**-0.2856**	**-63**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-7**	**0.04974**	**80**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-9**	**0.1581**	**61**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**HGWC-12**	**-13.85**	**-59**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**HGWC-12**	**-27.06**	**-82**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**HGWC-9**	**-11.82**	**-70**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWA-2 (bg)**	**1.382**	**64**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWA-3 (bg)**	**1.515**	**77**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWC-12**	**-29.88**	**-62**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**

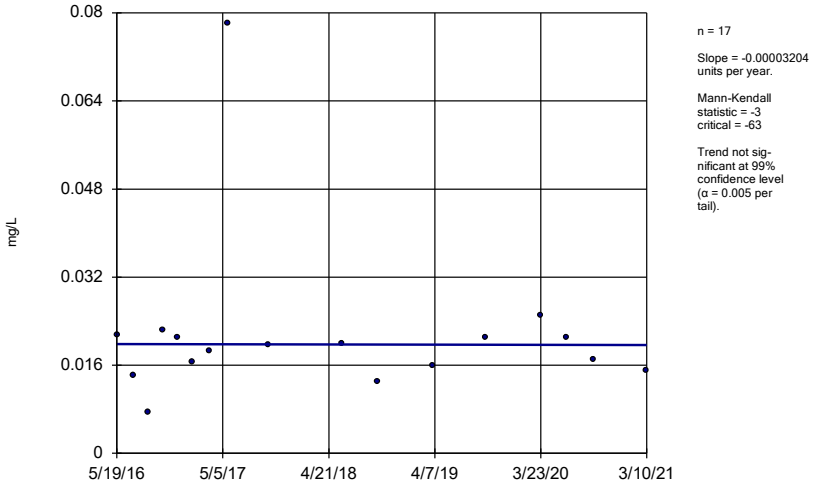
Trend Tests - Prediction Limit Exceedances - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 5/5/2021, 11:47 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	HGWA-1 (bg)	-0.00003204	-3	-63	No	17	0	n/a	n/a	0.01	NP
Boron (mg/L)	**HGWA-2 (bg)**	**0.00257**	**72**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	HGWA-3 (bg)	-0.0002616	-15	-63	No	17	11.76	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-10	0.03846	10	58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-11	-0.2774	-48	-58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-12	-0.2012	-47	-58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	**HGWC-13**	**-0.2856**	**-63**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-7**	**0.04974**	**80**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	HGWC-8	0.1969	43	63	No	17	0	n/a	n/a	0.01	NP
Boron (mg/L)	**HGWC-9**	**0.1581**	**61**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	HGWA-43D (bg)	-0.02892	-4	-12	No	5	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-44D (bg)	0.3386	8	12	No	5	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-1 (bg)	4.579	52	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-2 (bg)	0.3424	16	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-3 (bg)	2.895	58	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-10	-4.329	-28	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**HGWC-12**	**-13.85**	**-59**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	HGWC-13	9.634	7	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-8	-3.956	-40	-63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-9	0.3307	12	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-43D (bg)	-5.439	-2	-12	No	5	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-44D (bg)	-27.77	-4	-12	No	5	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-1 (bg)	1.507	45	63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-2 (bg)	-0.2299	-53	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-3 (bg)	-0.1011	-40	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**HGWC-12**	**-27.06**	**-82**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	HGWC-7	-0.8457	-32	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-8	-8.438	-55	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**HGWC-9**	**-11.82**	**-70**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	HGWA-43D (bg)	0.5656	3	12	No	5	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-44D (bg)	9.78	10	12	No	5	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-1 (bg)	4.851	51	63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**HGWA-2 (bg)**	**1.382**	**64**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWA-3 (bg)**	**1.515**	**77**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	HGWC-10	-5.5	-31	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-11	-14.95	-18	-58	No	16	6.25	n/a	n/a	0.01	NP
Sulfate (mg/L)	**HGWC-12**	**-29.88**	**-62**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	HGWC-13	10.64	6	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-7	0.9989	19	63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-8	-13.34	-29	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-9	-5.2	-42	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-43D (bg)	-8.995	-8	-12	No	5	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-44D (bg)	-2.396	-2	-12	No	5	20	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-1 (bg)	10.91	22	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-2 (bg)	-1.42	-11	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-3 (bg)	0.6748	7	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-13	-7.676	0	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-9	-50.47	-36	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-43D (bg)	-24.14	-2	-12	No	5	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-44D (bg)	31.49	4	12	No	5	0	n/a	n/a	0.01	NP

Sen's Slope Estimator

HGWA-1 (bg)



n = 17

Slope = -0.00003204 units per year.

Mann-Kendall statistic = -3
critical = -63

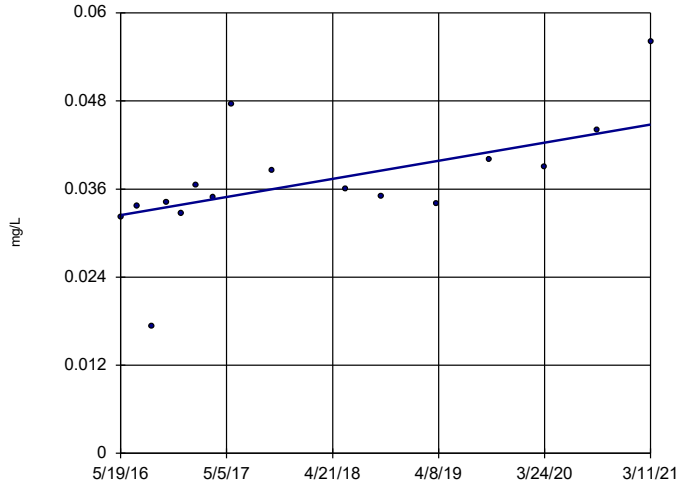
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/5/2021 11:44 AM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-2 (bg)



n = 16

Slope = 0.00257 units per year.

Mann-Kendall statistic = 72
critical = 58

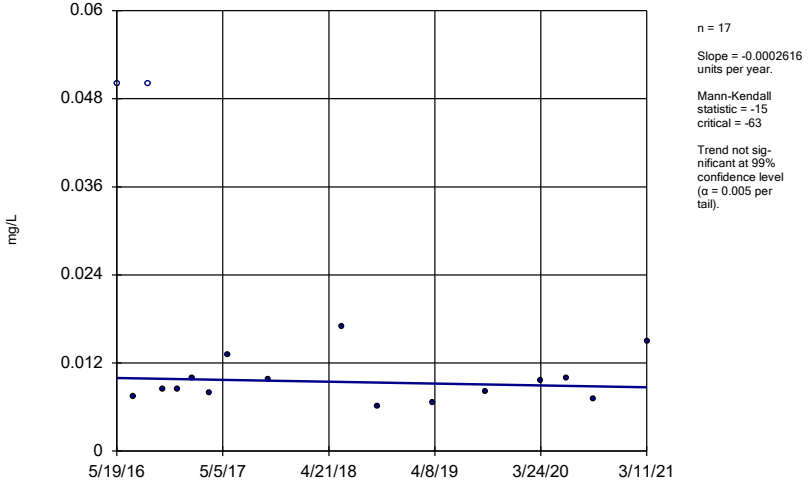
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/5/2021 11:44 AM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWA-3 (bg)



n = 17

Slope = -0.0002616 units per year.

Mann-Kendall statistic = -15
critical = -63

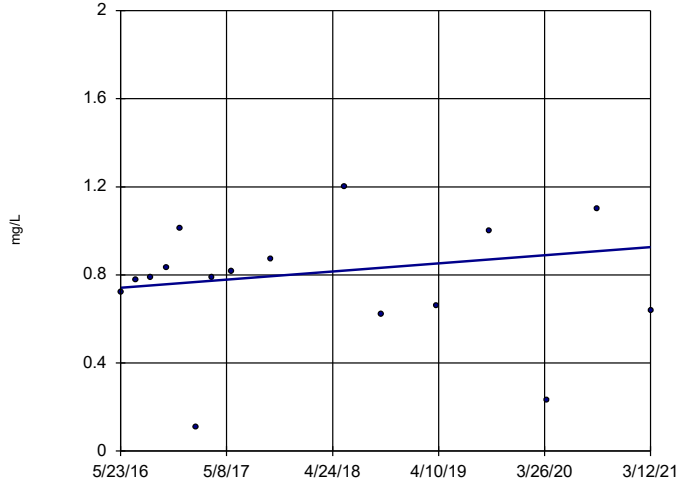
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/5/2021 11:44 AM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-10



n = 16

Slope = 0.03846 units per year.

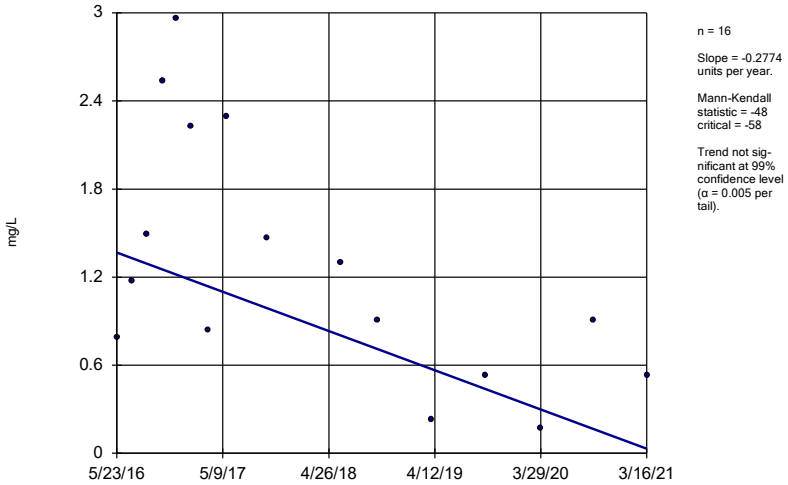
Mann-Kendall statistic = 10
critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/5/2021 11:44 AM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sen's Slope Estimator

HGWC-11



n = 16

Slope = -0.2774 units per year.

Mann-Kendall statistic = -48
critical = -58

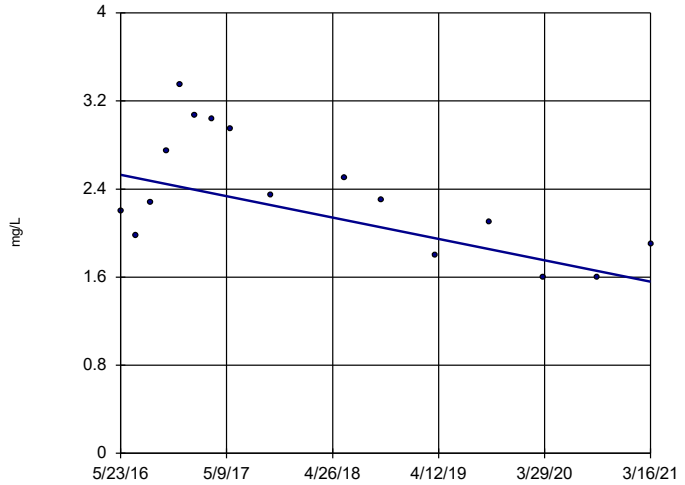
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/5/2021 11:44 AM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-12



n = 16

Slope = -0.2012 units per year.

Mann-Kendall statistic = -47
critical = -58

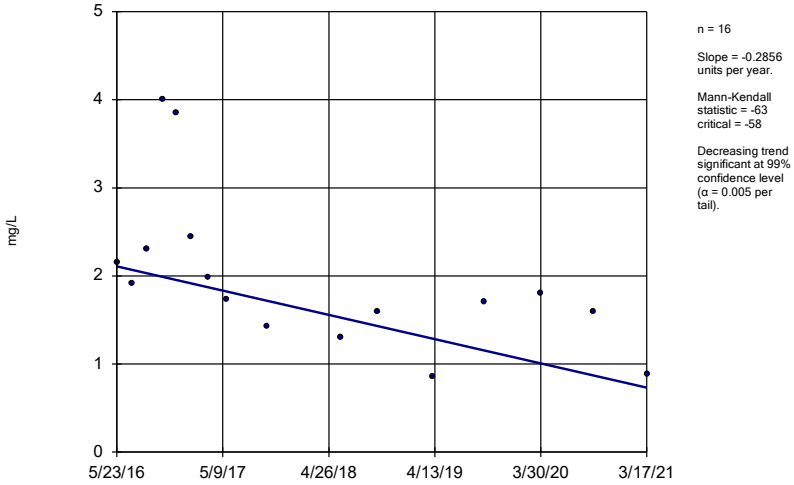
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/5/2021 11:44 AM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-13



n = 16

Slope = -0.2856 units per year.

Mann-Kendall statistic = -63
critical = -58

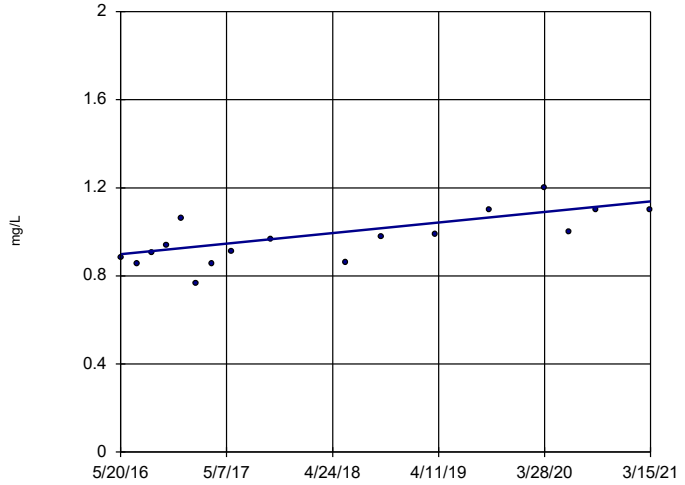
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/5/2021 11:44 AM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-7



n = 17

Slope = 0.04974 units per year.

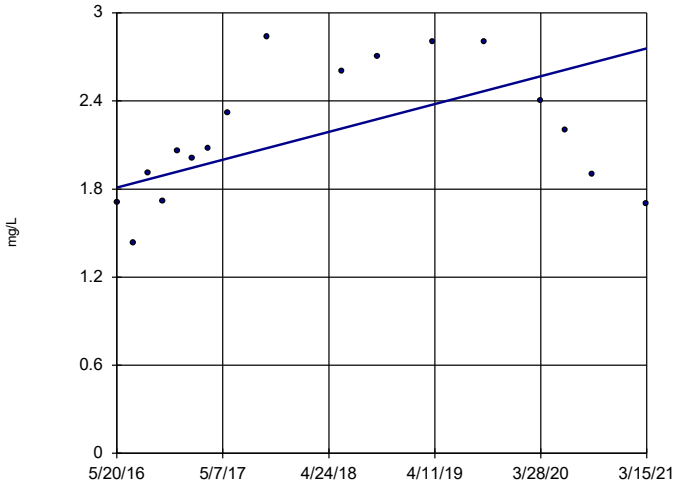
Mann-Kendall statistic = 80
critical = 63

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/5/2021 11:44 AM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sen's Slope Estimator

HGWC-8



n = 17

Slope = 0.1969 units per year.

Mann-Kendall statistic = 43
critical = 63

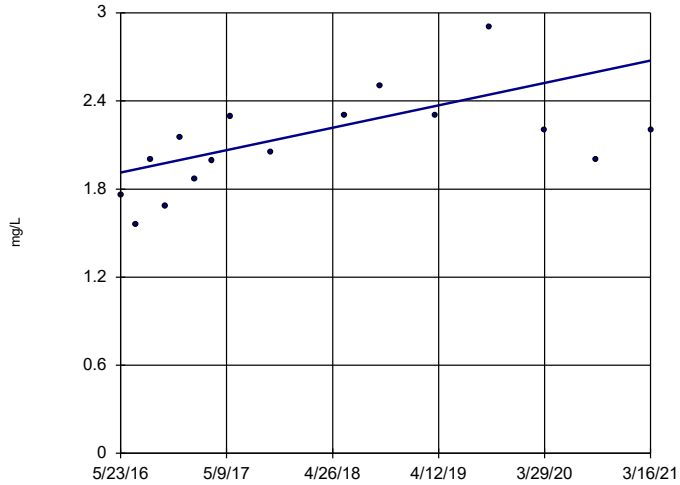
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/5/2021 11:44 AM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-9



n = 16

Slope = 0.1581 units per year.

Mann-Kendall statistic = 61
critical = 58

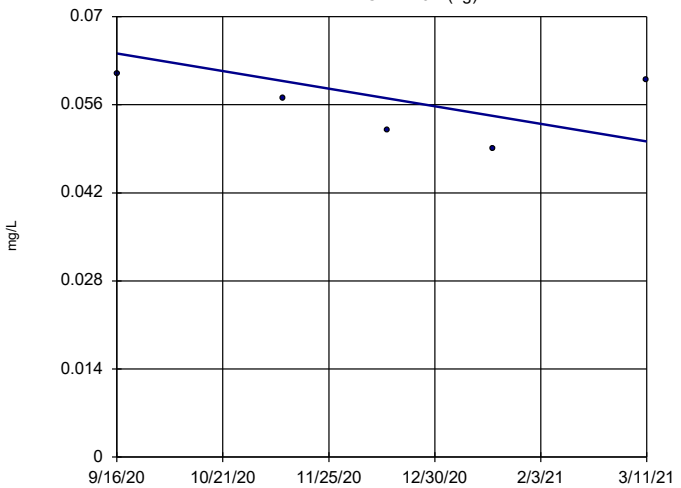
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/5/2021 11:44 AM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-43D (bg)



n = 5

Slope = -0.02892 units per year.

Mann-Kendall statistic = -4
critical = -12

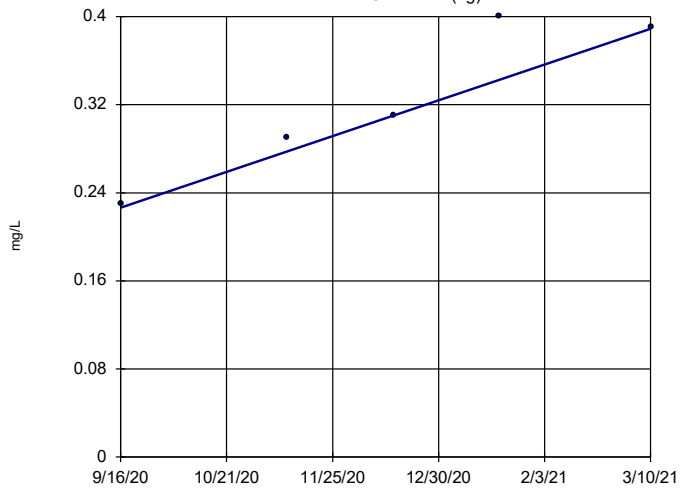
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/5/2021 11:44 AM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-44D (bg)



n = 5

Slope = 0.3386 units per year.

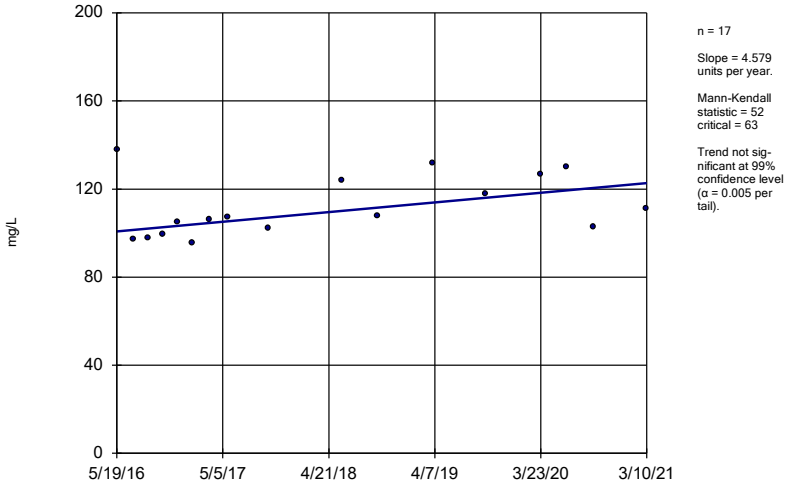
Mann-Kendall statistic = 8
critical = 12

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/5/2021 11:44 AM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sen's Slope Estimator

HGWA-1 (bg)



n = 17

Slope = 4.579 units per year.

Mann-Kendall statistic = 52 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

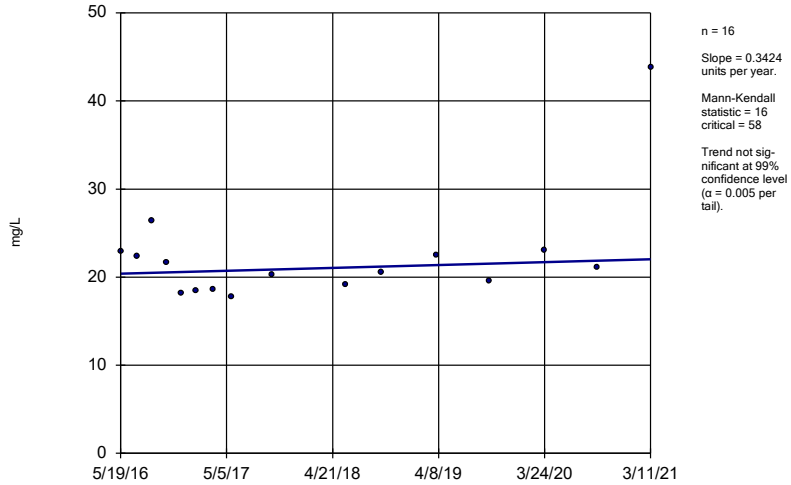
Constituent: Calcium Analysis Run 5/5/2021 11:44 AM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-2 (bg)



n = 16

Slope = 0.3424 units per year.

Mann-Kendall statistic = 16 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

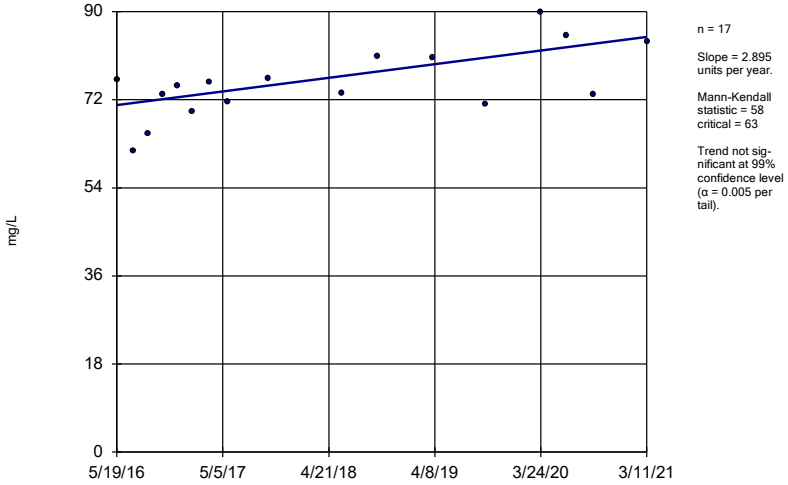
Constituent: Calcium Analysis Run 5/5/2021 11:44 AM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-3 (bg)



n = 17

Slope = 2.895 units per year.

Mann-Kendall statistic = 58 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

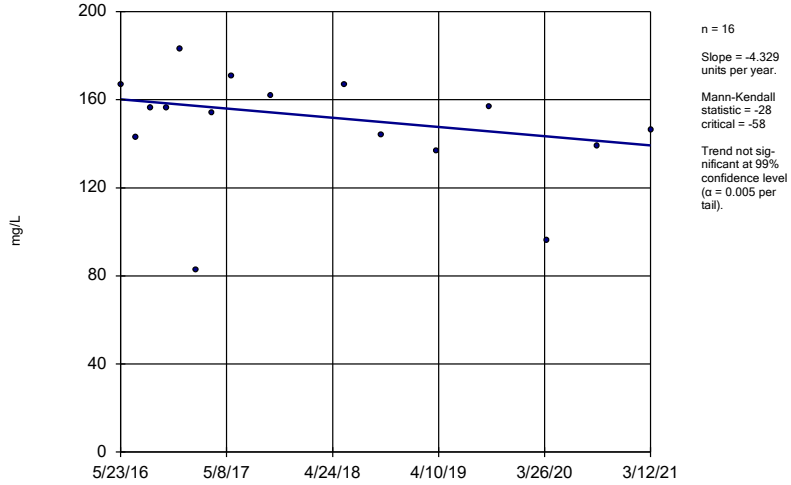
Constituent: Calcium Analysis Run 5/5/2021 11:44 AM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-10



n = 16

Slope = -4.329 units per year.

Mann-Kendall statistic = -28 critical = -58

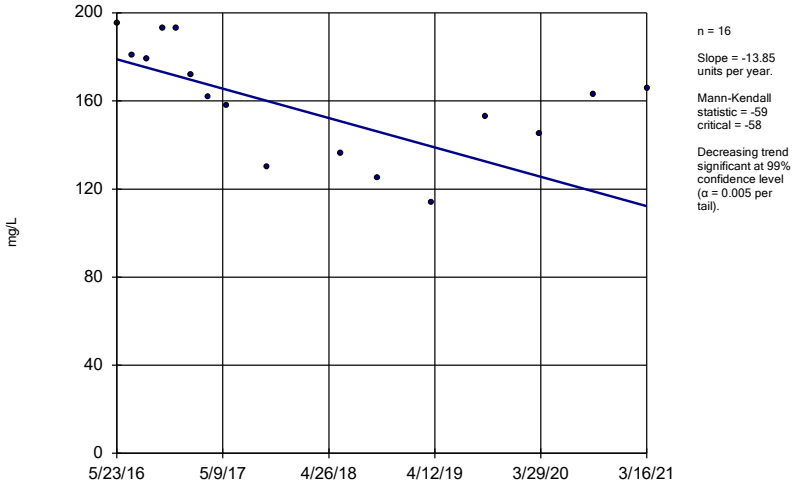
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/5/2021 11:44 AM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sen's Slope Estimator

HGWC-12



n = 16

Slope = -13.85 units per year.

Mann-Kendall statistic = -59 critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

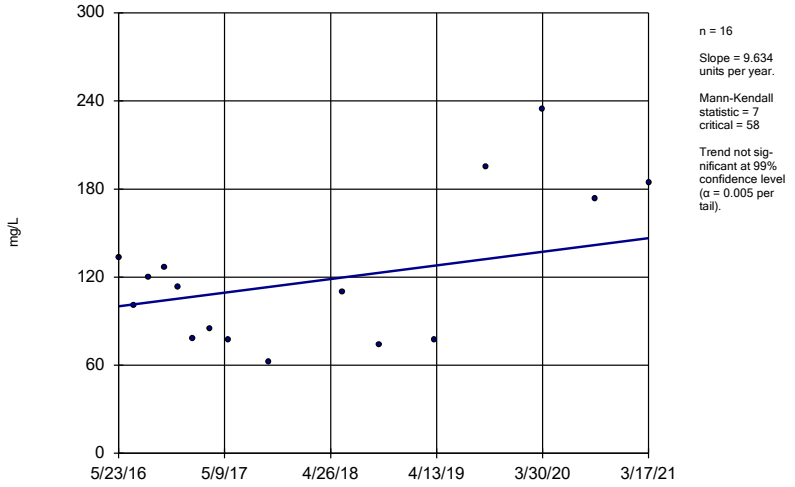
Constituent: Calcium Analysis Run 5/5/2021 11:44 AM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-13



n = 16

Slope = 9.634 units per year.

Mann-Kendall statistic = 7 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

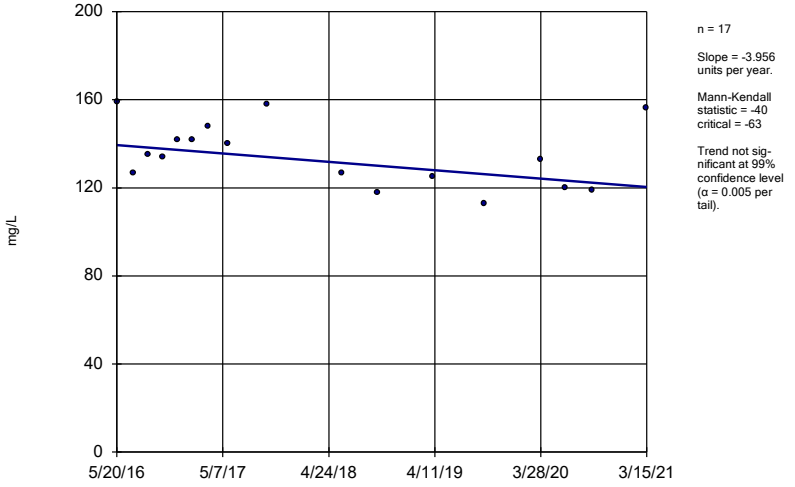
Constituent: Calcium Analysis Run 5/5/2021 11:44 AM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-8



n = 17

Slope = -3.956 units per year.

Mann-Kendall statistic = -40 critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

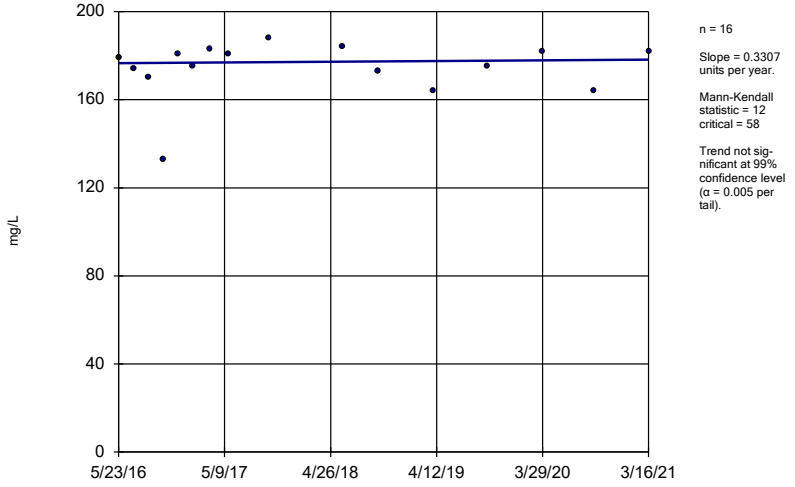
Constituent: Calcium Analysis Run 5/5/2021 11:44 AM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-9



n = 16

Slope = 0.3307 units per year.

Mann-Kendall statistic = 12 critical = 58

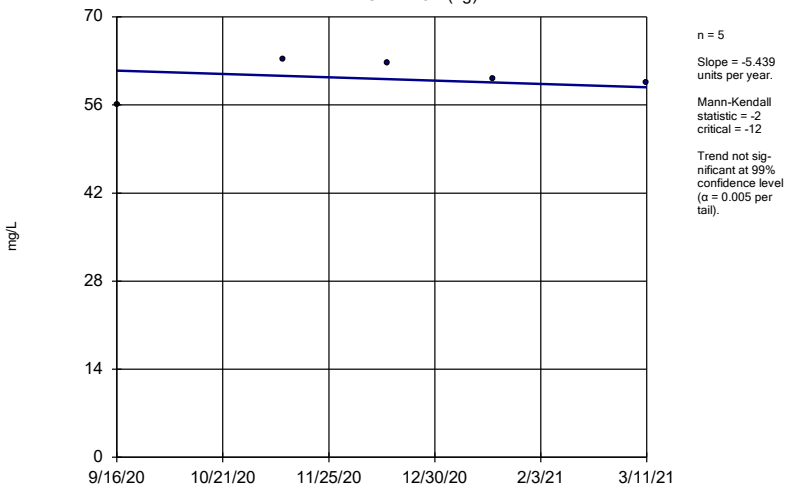
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/5/2021 11:44 AM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sen's Slope Estimator

HGWA-43D (bg)



n = 5

Slope = -5.439 units per year.

Mann-Kendall statistic = -2 critical = -12

Trend not significant at 99% confidence level (α = 0.005 per tail).

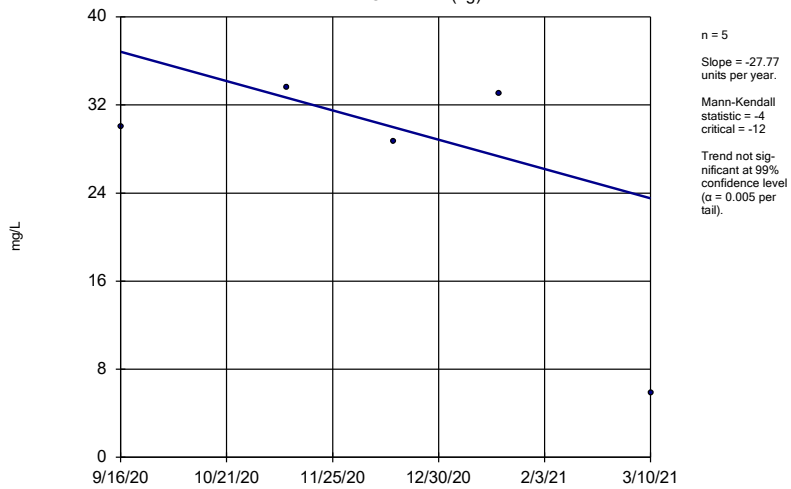
Constituent: Calcium Analysis Run 5/5/2021 11:44 AM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-44D (bg)



n = 5

Slope = -27.77 units per year.

Mann-Kendall statistic = -4 critical = -12

Trend not significant at 99% confidence level (α = 0.005 per tail).

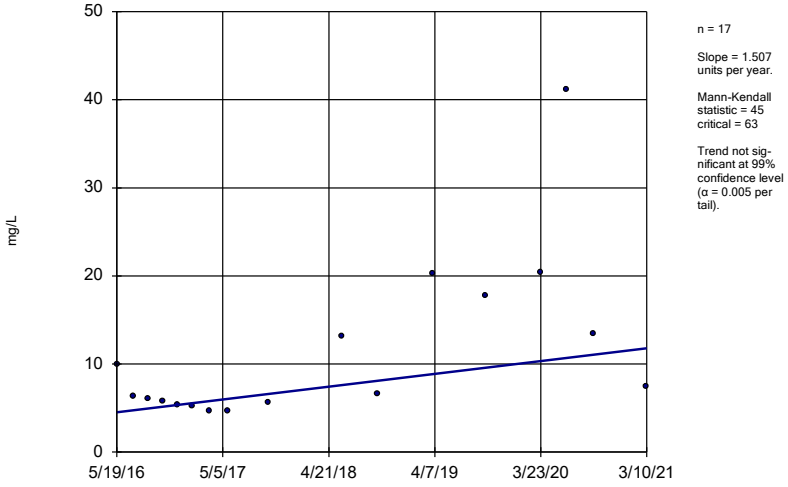
Constituent: Calcium Analysis Run 5/5/2021 11:44 AM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-1 (bg)



n = 17

Slope = 1.507 units per year.

Mann-Kendall statistic = 45 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

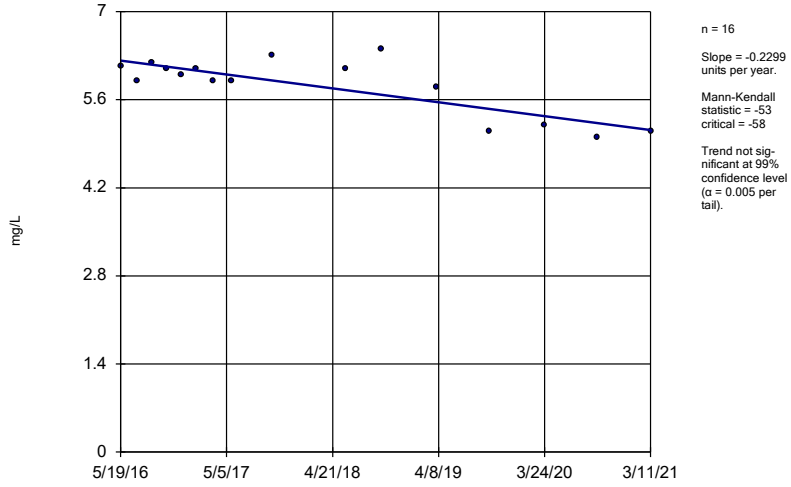
Constituent: Chloride Analysis Run 5/5/2021 11:45 AM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-2 (bg)



n = 16

Slope = -0.2299 units per year.

Mann-Kendall statistic = -53 critical = -58

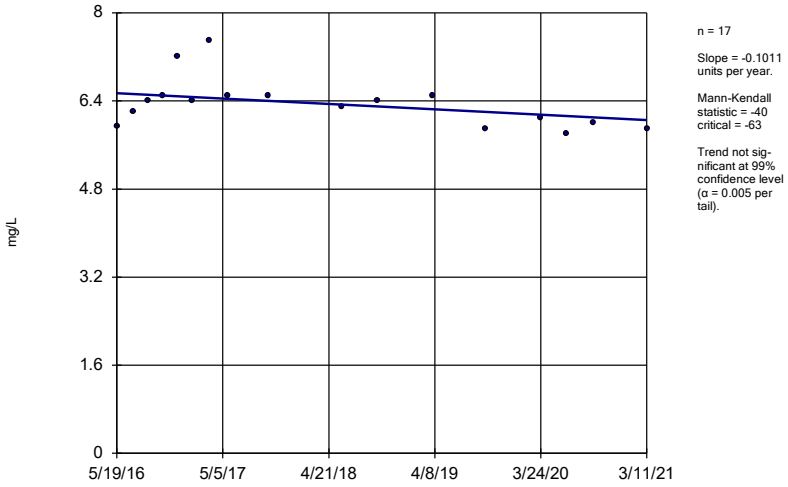
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/5/2021 11:45 AM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sen's Slope Estimator

HGWA-3 (bg)



n = 17

Slope = -0.1011 units per year.

Mann-Kendall statistic = -40
critical = -63

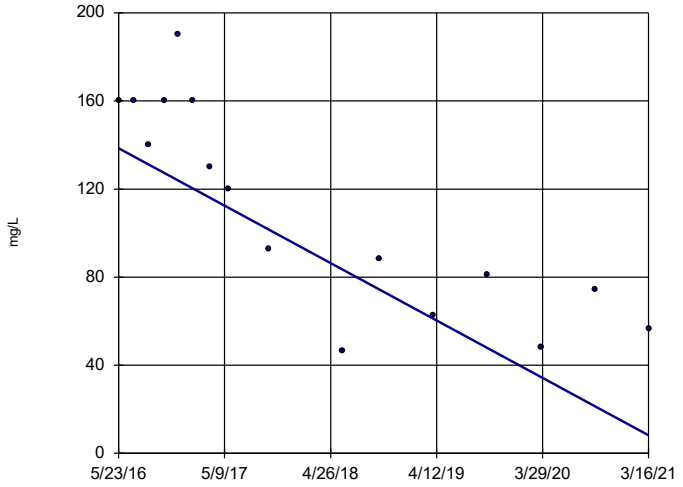
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/5/2021 11:45 AM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-12



n = 16

Slope = -27.06 units per year.

Mann-Kendall statistic = -82
critical = -58

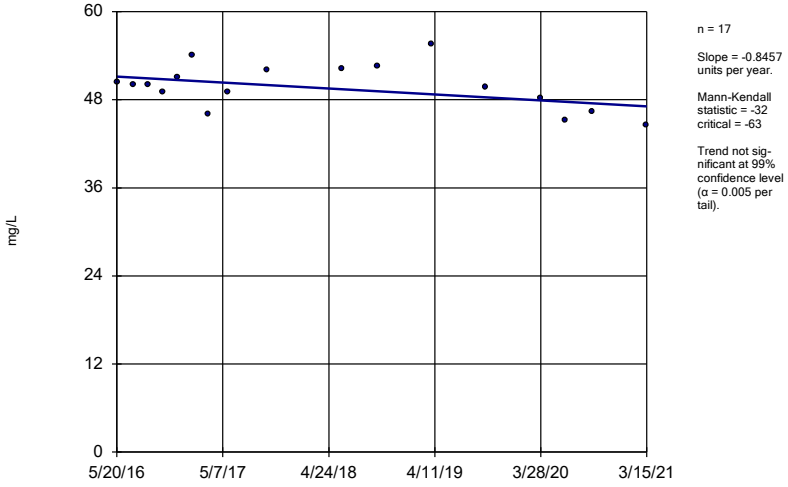
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/5/2021 11:45 AM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-7



n = 17

Slope = -0.8457 units per year.

Mann-Kendall statistic = -32
critical = -63

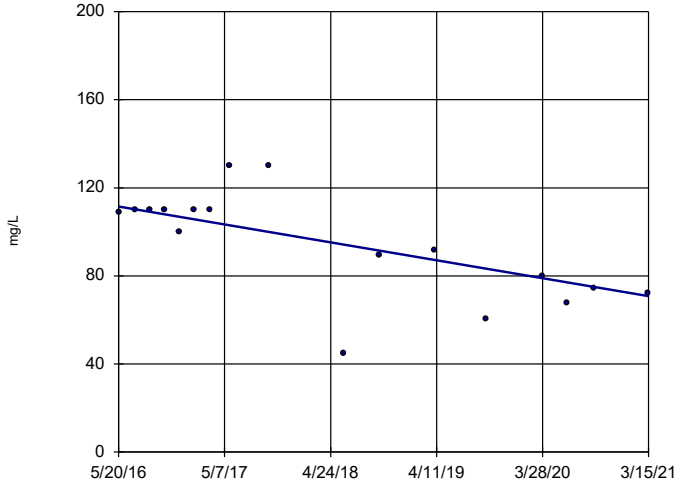
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/5/2021 11:45 AM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-8



n = 17

Slope = -8.438 units per year.

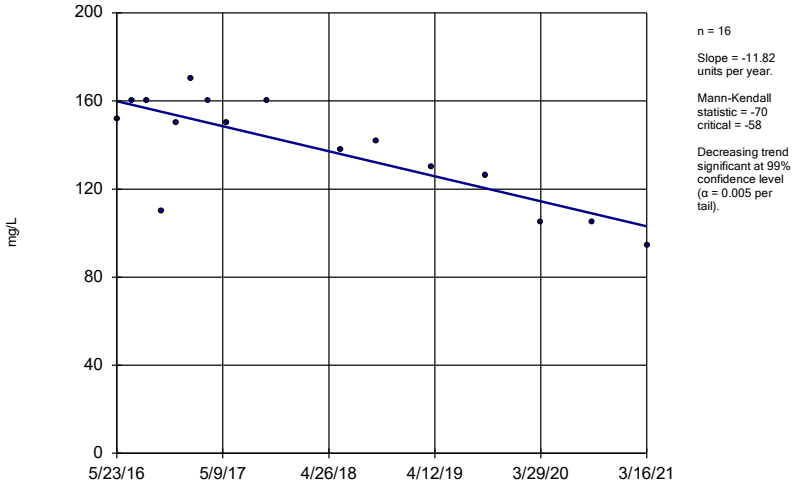
Mann-Kendall statistic = -55
critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/5/2021 11:45 AM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sen's Slope Estimator

HGWC-9



n = 16

Slope = -11.82 units per year.

Mann-Kendall statistic = -70 critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

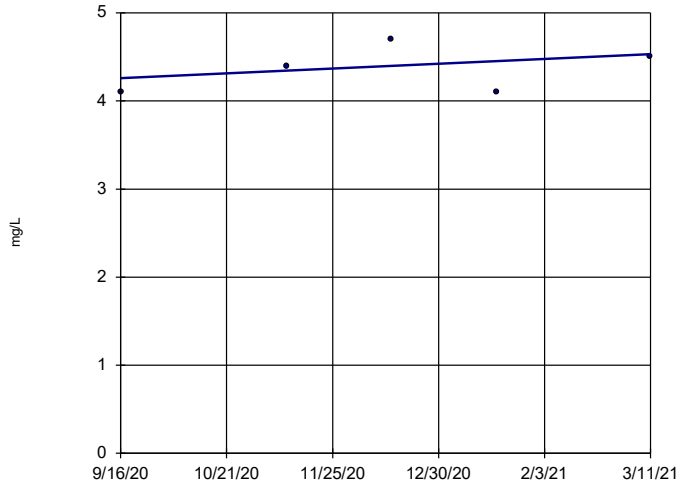
Constituent: Chloride Analysis Run 5/5/2021 11:45 AM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-43D (bg)



n = 5

Slope = 0.5656 units per year.

Mann-Kendall statistic = 3 critical = 12

Trend not significant at 99% confidence level (α = 0.005 per tail).

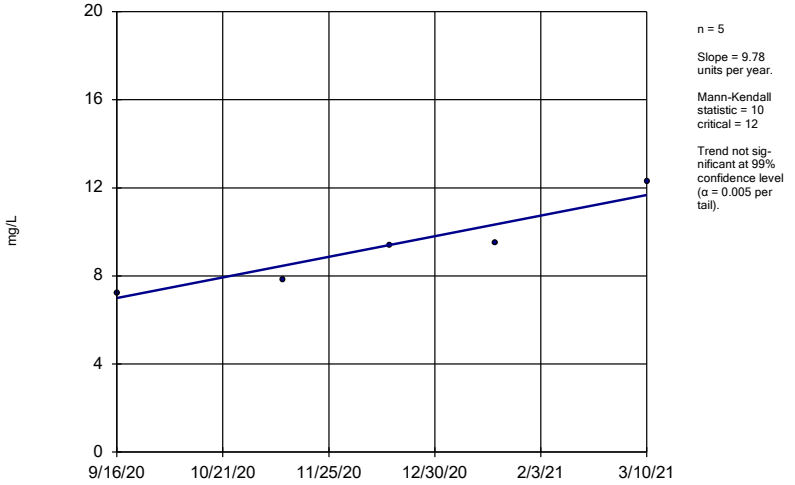
Constituent: Chloride Analysis Run 5/5/2021 11:45 AM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-44D (bg)



n = 5

Slope = 9.78 units per year.

Mann-Kendall statistic = 10 critical = 12

Trend not significant at 99% confidence level (α = 0.005 per tail).

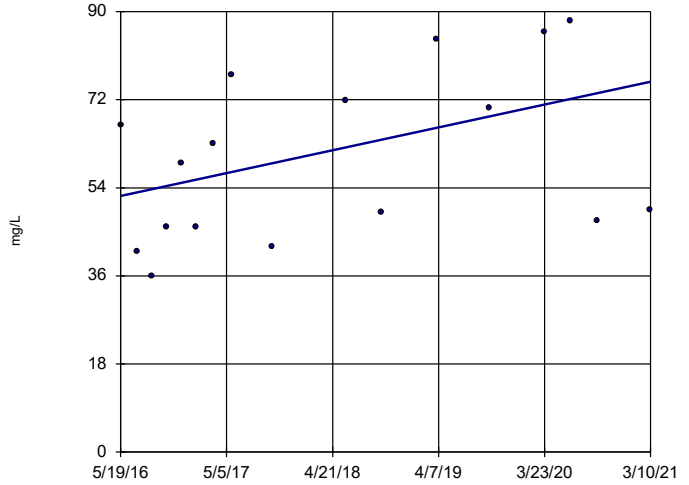
Constituent: Chloride Analysis Run 5/5/2021 11:45 AM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-1 (bg)



n = 17

Slope = 4.851 units per year.

Mann-Kendall statistic = 51 critical = 63

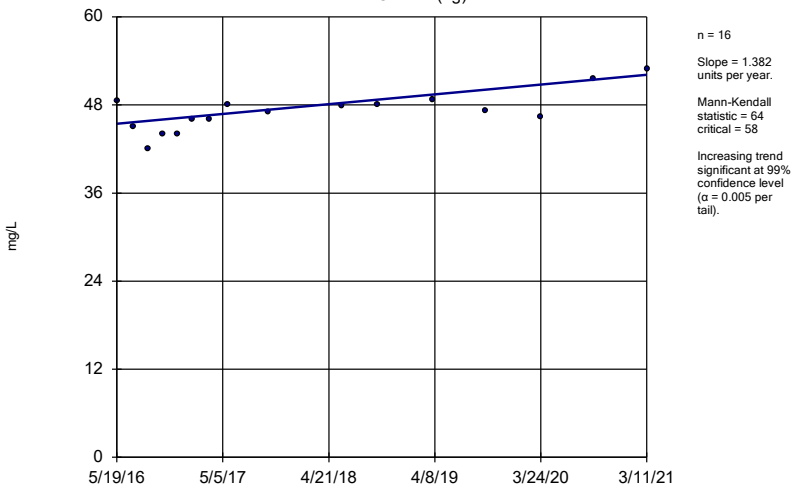
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/5/2021 11:45 AM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sen's Slope Estimator

HGWA-2 (bg)



n = 16

Slope = 1.382 units per year.

Mann-Kendall statistic = 64
critical = 58

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

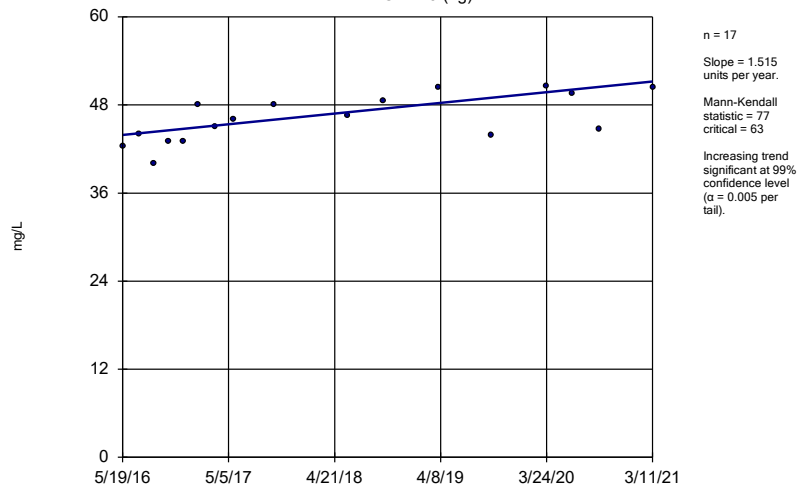
Constituent: Sulfate Analysis Run 5/5/2021 11:45 AM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-3 (bg)



n = 17

Slope = 1.515 units per year.

Mann-Kendall statistic = 77
critical = 63

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

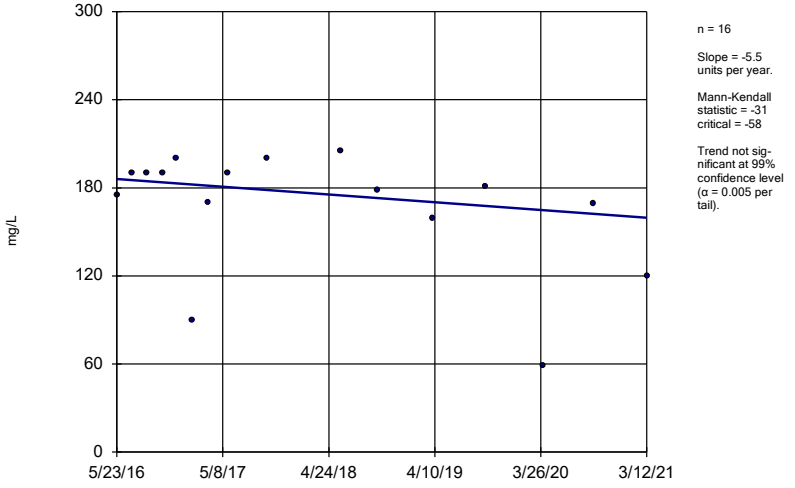
Constituent: Sulfate Analysis Run 5/5/2021 11:45 AM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-10



n = 16

Slope = -5.5 units per year.

Mann-Kendall statistic = -31
critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

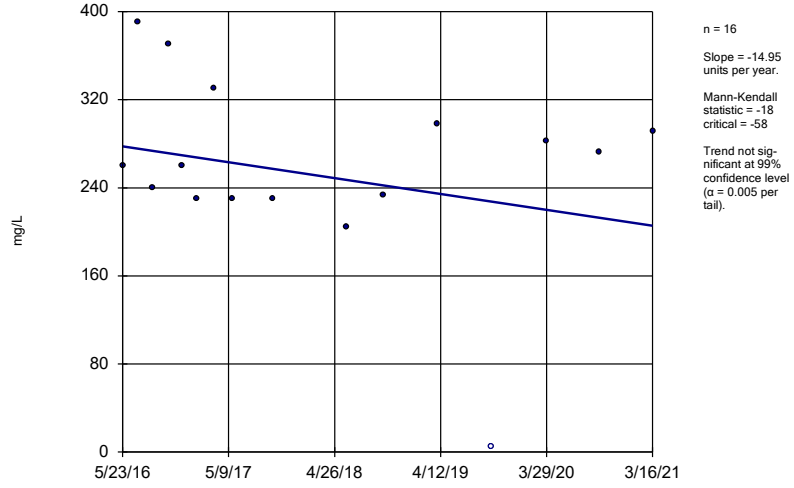
Constituent: Sulfate Analysis Run 5/5/2021 11:45 AM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWC-11



n = 16

Slope = -14.95 units per year.

Mann-Kendall statistic = -18
critical = -58

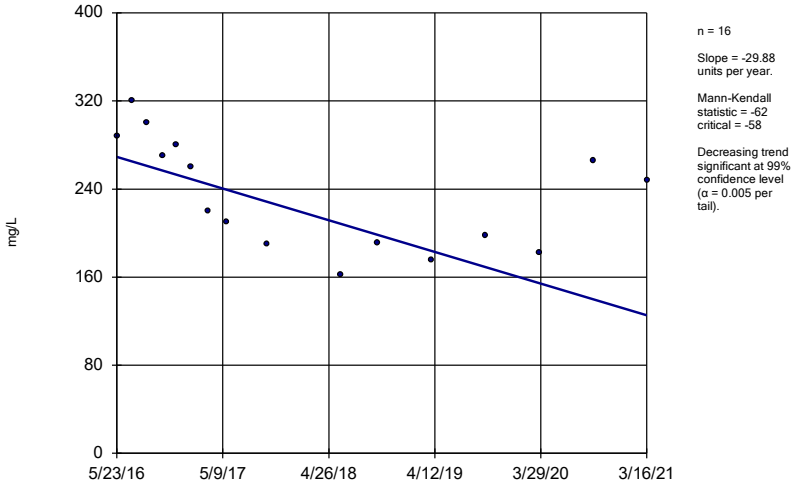
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/5/2021 11:45 AM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sen's Slope Estimator

HGWC-12



n = 16

Slope = -29.88 units per year.

Mann-Kendall statistic = -62 critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

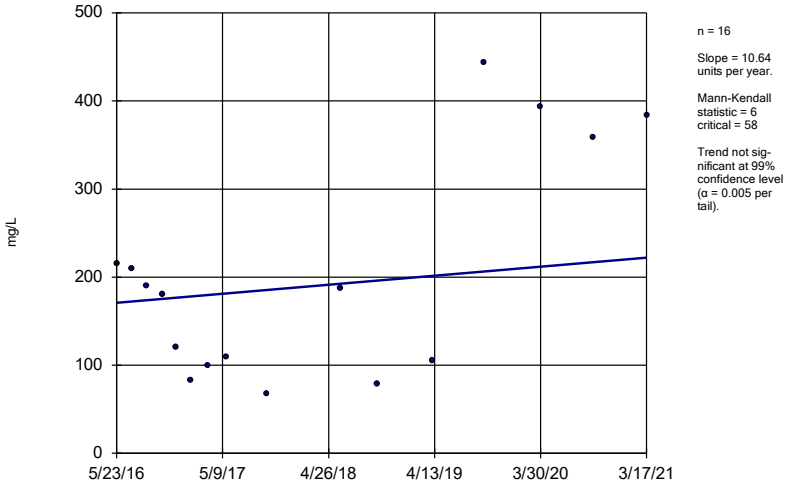
Constituent: Sulfate Analysis Run 5/5/2021 11:45 AM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-13



n = 16

Slope = 10.64 units per year.

Mann-Kendall statistic = 6 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

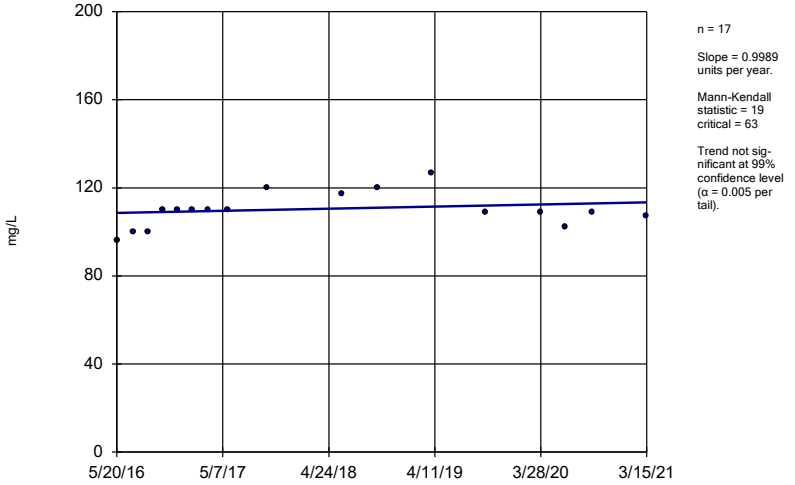
Constituent: Sulfate Analysis Run 5/5/2021 11:45 AM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-7



n = 17

Slope = 0.9989 units per year.

Mann-Kendall statistic = 19 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

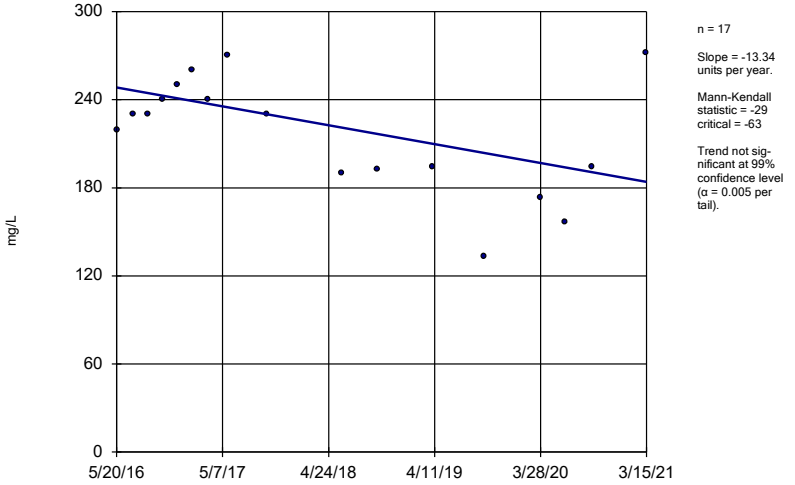
Constituent: Sulfate Analysis Run 5/5/2021 11:45 AM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-8



n = 17

Slope = -13.34 units per year.

Mann-Kendall statistic = -29 critical = -63

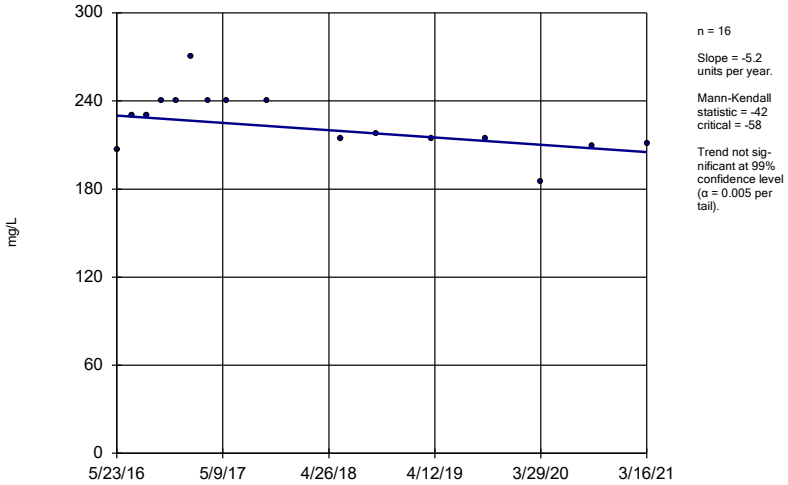
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/5/2021 11:45 AM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sen's Slope Estimator

HGWC-9



n = 16

Slope = -5.2 units per year.

Mann-Kendall statistic = -42 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

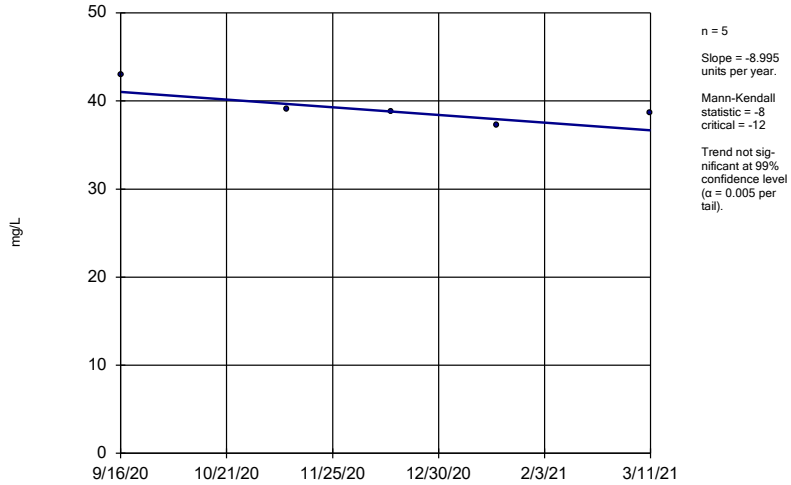
Constituent: Sulfate Analysis Run 5/5/2021 11:45 AM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-43D (bg)



n = 5

Slope = -8.995 units per year.

Mann-Kendall statistic = -8 critical = -12

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/5/2021 11:45 AM View: Appendix III - Trend Tests

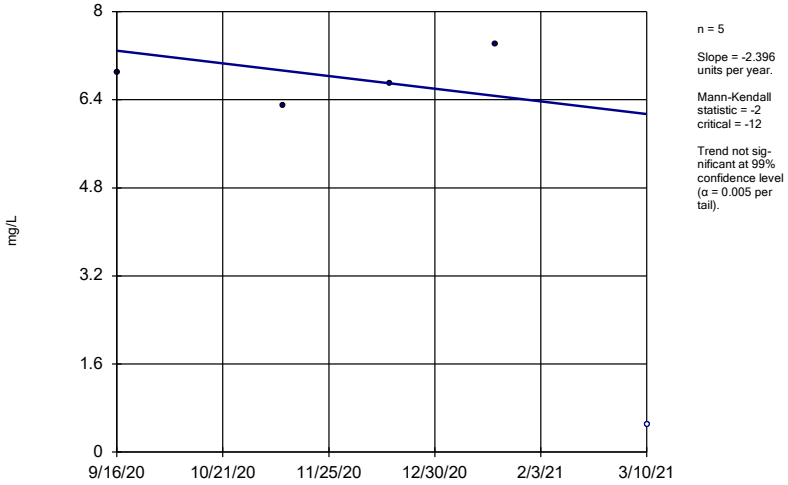
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWA-44D (bg)



n = 5

Slope = -2.396 units per year.

Mann-Kendall statistic = -2 critical = -12

Trend not significant at 99% confidence level (α = 0.005 per tail).

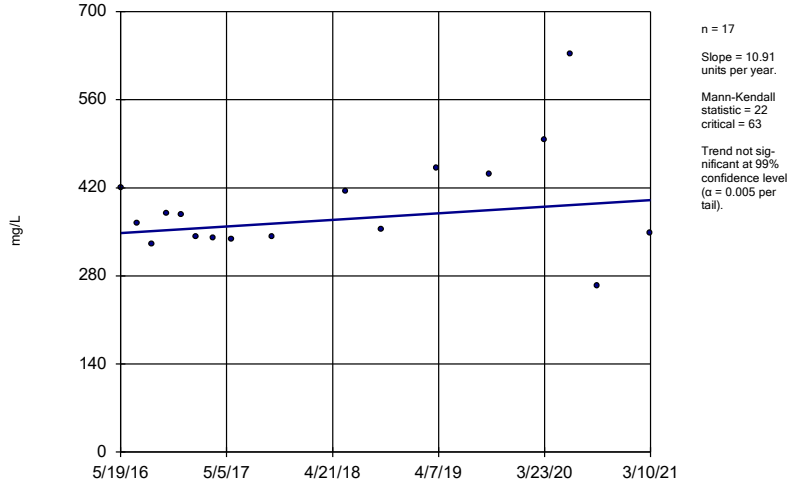
Constituent: Sulfate Analysis Run 5/5/2021 11:45 AM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-1 (bg)



n = 17

Slope = 10.91 units per year.

Mann-Kendall statistic = 22 critical = 63

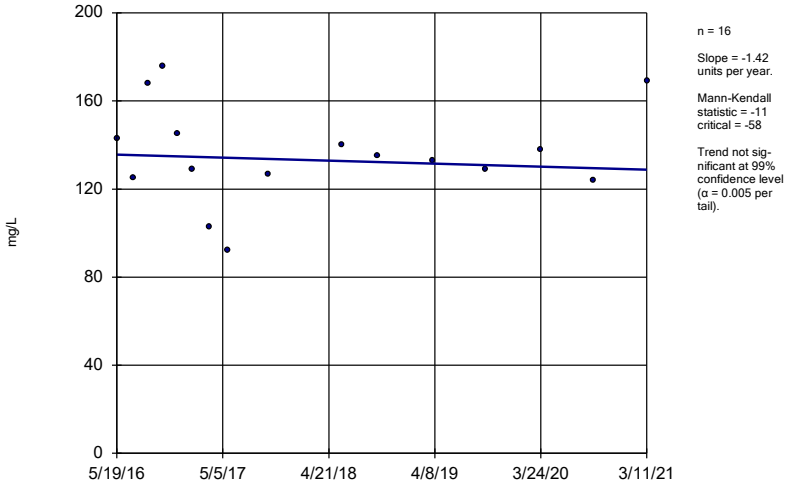
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/5/2021 11:45 AM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sen's Slope Estimator

HGWA-2 (bg)



n = 16

Slope = -1.42 units per year.

Mann-Kendall statistic = -11
critical = -58

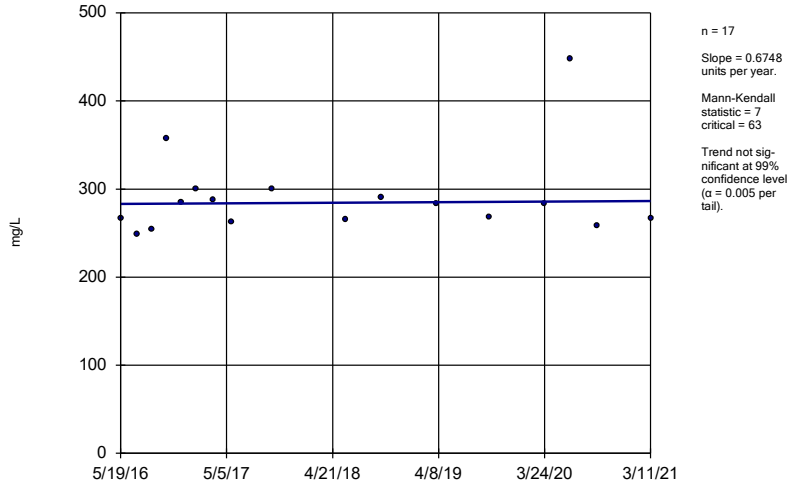
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/5/2021 11:45 AM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-3 (bg)



n = 17

Slope = 0.6748 units per year.

Mann-Kendall statistic = 7
critical = 63

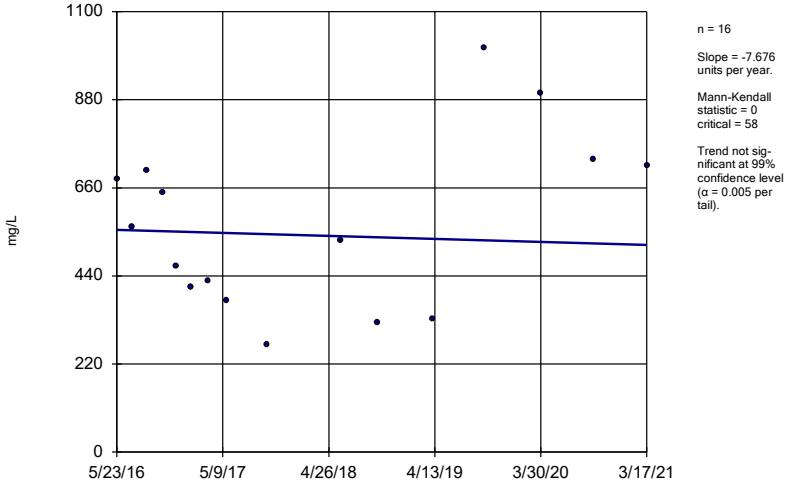
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/5/2021 11:45 AM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-13



n = 16

Slope = -7.676 units per year.

Mann-Kendall statistic = 0
critical = 58

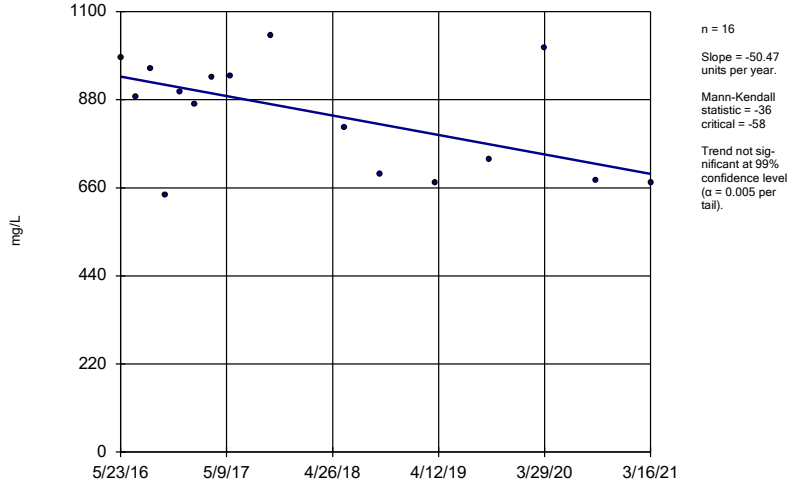
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/5/2021 11:45 AM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-9



n = 16

Slope = -50.47 units per year.

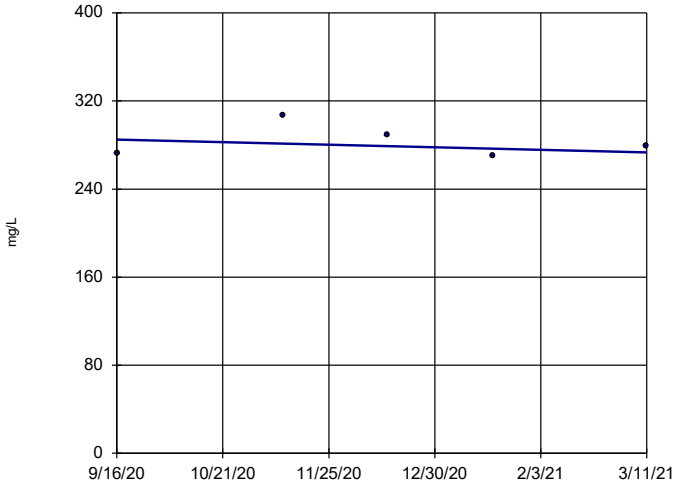
Mann-Kendall statistic = -36
critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/5/2021 11:45 AM View: Appendix III - Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sen's Slope Estimator

HGWA-43D (bg)



n = 5

Slope = -24.14 units per year.

Mann-Kendall statistic = -2
critical = -12

Trend not significant at 99% confidence level (α = 0.005 per tail).

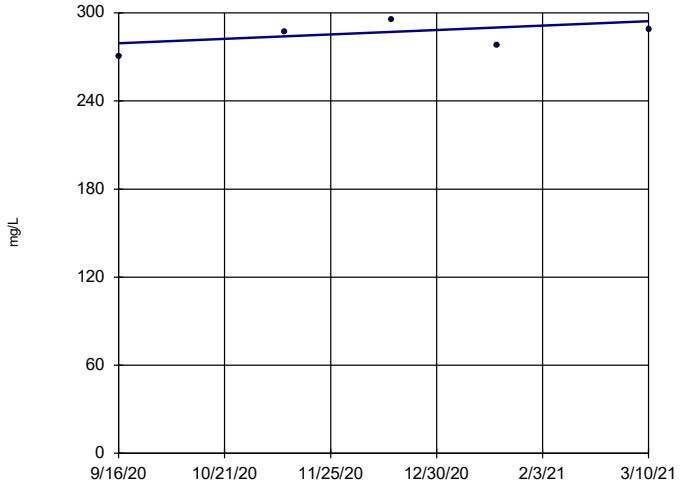
Constituent: Total Dissolved Solids Analysis Run 5/5/2021 11:45 AM View: Appendix III - Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-44D (bg)



n = 5

Slope = 31.49 units per year.

Mann-Kendall statistic = 4
critical = 12

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/5/2021 11:45 AM 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 5/4/2021, 7:25 PM

Constituent	Upper Lim.	Lower Lim.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.003	n/a	n/a	63	n/a	n/a	76.19	n/a	n/a	0.0395	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	n/a	69	n/a	n/a	66.67	n/a	n/a	0.02904	NP Inter(NDs)
Barium (mg/L)	0.46	n/a	n/a	69	n/a	n/a	0	n/a	n/a	0.02904	NP Inter(normality)
Beryllium (mg/L)	0.0005	n/a	n/a	63	n/a	n/a	77.78	n/a	n/a	0.0395	NP Inter(NDs)
Cadmium (mg/L)	0.0005	n/a	n/a	63	n/a	n/a	87.3	n/a	n/a	0.0395	NP Inter(NDs)
Chromium (mg/L)	0.0079	n/a	n/a	63	n/a	n/a	80.95	n/a	n/a	0.0395	NP Inter(NDs)
Cobalt (mg/L)	0.038	n/a	n/a	63	n/a	n/a	71.43	n/a	n/a	0.0395	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	4.36	n/a	n/a	69	n/a	n/a	0	n/a	n/a	0.02904	NP Inter(normality)
Fluoride (mg/L)	0.74	n/a	n/a	74	n/a	n/a	31.08	n/a	n/a	0.02247	NP Inter(normality)
Lead (mg/L)	0.001	n/a	n/a	60	n/a	n/a	58.33	n/a	n/a	0.04607	NP Inter(NDs)
Lithium (mg/L)	0.034	n/a	n/a	69	n/a	n/a	23.19	n/a	n/a	0.02904	NP Inter(normality)
Mercury (mg/L)	0.0005	n/a	n/a	46	n/a	n/a	95.65	n/a	n/a	0.09447	NP Inter(NDs)
Molybdenum (mg/L)	0.01	n/a	n/a	71	n/a	n/a	83.1	n/a	n/a	0.0262	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	n/a	69	n/a	n/a	98.55	n/a	n/a	0.02904	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	69	n/a	n/a	98.55	n/a	n/a	0.02904	NP Inter(NDs)

FIGURE G.

PLANT HAMMOND AP-1 GWPS (State)				
Constituent Name	**MCL**	**CCR-Rule Specified**	**Background Limit**	**State 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		0.74	4
Lead, Total (mg/L)	n/a	0.015	0.001	0.001
Lithium, Total (mg/L)	n/a	0.04	0.034	0.034
Mercury, Total (mg/L)	0.002		0.0005	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.01	0.01
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

**Grey cell indidcates background is higher than MCL or CCR-Rule*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residuals*

**GWPS = Groundwater Protection Statard*

FIGURE H.

PLANT HAMMOND AP-1 GWPS (Federal)				
Constituent Name	**MCL**	**CCR-Rule Specified**	**Background Limit**	**Federal 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		0.74	4
Lead, Total (mg/L)	n/a	0.015	0.001	0.015
Lithium, Total (mg/L)	n/a	0.04	0.034	0.04
Mercury, Total (mg/L)	0.002		0.0005	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 I.

State Confidence Intervals - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 5/4/2021, 7:37 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**HGWC-13**	**0.4313**	**0.3592**	**0.01**	**Yes**	**19**	**0.3953**	**0.06154**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**MW-25D**	**0.05155**	**0.04545**	**0.034**	**Yes**	**8**	**0.0485**	**0.002878**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**HGWC-11**	**0.02514**	**0.01508**	**0.01**	**Yes**	**19**	**0.02011**	**0.00859**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**HGWC-12**	**0.04978**	**0.0457**	**0.01**	**Yes**	**19**	**0.04774**	**0.003483**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**HGWC-13**	**0.03593**	**0.0301**	**0.01**	**Yes**	**19**	**0.03302**	**0.004974**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**HGWC-7**	**0.04274**	**0.03437**	**0.01**	**Yes**	**20**	**0.03856**	**0.007368**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**HGWC-8**	**0.4928**	**0.4503**	**0.01**	**Yes**	**20**	**0.4716**	**0.03743**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**HGWC-9**	**0.033**	**0.0234**	**0.01**	**Yes**	**19**	**0.05098**	**0.1033**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Molybdenum (mg/L)	**MW-19**	**0.06073**	**0.03377**	**0.01**	**Yes**	**8**	**0.04725**	**0.01271**	**0**	**None**	**No**	**0.01**	**Param.**

State Confidence Intervals - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 5/4/2021, 7:37 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	0.00065	0.006	No	17	0.002862	0.00057	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-11	0.003	0.00038	0.006	No	17	0.002846	0.0006354	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-13	0.003	0.00036	0.006	No	17	0.001925	0.001327	58.82	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-7	0.003	0.00034	0.006	No	17	0.002844	0.0006451	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-8	0.003	0.00064	0.006	No	17	0.002861	0.0005724	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-9	0.003	0.00043	0.006	No	17	0.002539	0.001026	82.35	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-24D	0.003	0.0017	0.006	No	8	0.002838	0.0004596	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	MW-26D	0.003	0.0013	0.006	No	8	0.002663	0.0006523	75	None	No	0.004	NP (NDs)
Antimony (mg/L)	MW-27D	0.003	0.00016	0.006	No	8	0.0009775	0.00125	25	None	No	0.004	NP (normality)
Antimony (mg/L)	MW-28D	0.003	0.0019	0.006	No	8	0.002863	0.0003889	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	MW-29	0.003	0.00094	0.006	No	8	0.002743	0.0007283	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	MW-6	0.003	0.0014	0.006	No	8	0.0028	0.0005657	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	MW-7	0.003	0.00051	0.006	No	8	0.002096	0.001065	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	HGWC-11	0.005	0.0015	0.01	No	19	0.003266	0.001768	42.11	None	No	0.01	NP (normality)
Arsenic (mg/L)	HGWC-12	0.004589	0.003137	0.01	No	19	0.003863	0.00124	10.53	None	No	0.01	Param.
Arsenic (mg/L)	**HGWC-13**	**0.4313**	**0.3592**	**0.01**	**Yes**	**19**	**0.3953**	**0.06154**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	HGWC-7	0.005	0.0019	0.01	No	19	0.004837	0.0007112	94.74	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-9	0.005	0.0008	0.01	No	19	0.004312	0.001635	84.21	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-19	0.005	0.00045	0.01	No	8	0.004431	0.001609	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-20	0.005	0.00038	0.01	No	8	0.003577	0.002033	62.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-25D	0.005	0.00075	0.01	No	8	0.003094	0.002064	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	MW-26D	0.005	0.0006	0.01	No	8	0.003925	0.001991	75	None	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-27D	0.005	0.0002	0.01	No	8	0.003361	0.002272	62.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-28D	0.005	0.0011	0.01	No	8	0.004512	0.001379	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-29	0.005	0.00037	0.01	No	8	0.004421	0.001637	87.5	None	No	0.004	NP (NDs)
Barium (mg/L)	HGWC-10	0.08901	0.06608	2	No	19	0.07754	0.01958	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-11	0.05343	0.03154	2	No	19	0.04375	0.02072	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	HGWC-12	0.13	0.084	2	No	19	0.1029	0.02097	0	None	No	0.01	NP (normality)
Barium (mg/L)	HGWC-13	0.09256	0.06961	2	No	19	0.08108	0.0196	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-7	0.07536	0.06864	2	No	19	0.072	0.005743	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-8	0.0829	0.06	2	No	19	0.06984	0.01122	0	None	No	0.01	NP (normality)
Barium (mg/L)	HGWC-9	0.1226	0.1065	2	No	19	0.1146	0.01374	0	None	No	0.01	Param.
Barium (mg/L)	MW-19	0.0677	0.0498	2	No	8	0.05875	0.008447	0	None	No	0.01	Param.
Barium (mg/L)	MW-20	0.098	0.08425	2	No	8	0.09113	0.00649	0	None	No	0.01	Param.
Barium (mg/L)	MW-24D	0.08729	0.04433	2	No	8	0.06538	0.02462	0	None	ln(x)	0.01	Param.
Barium (mg/L)	MW-25D	0.4797	0.3928	2	No	8	0.4363	0.04104	0	None	No	0.01	Param.
Barium (mg/L)	MW-26D	0.17	0.093	2	No	8	0.1131	0.02538	0	None	No	0.004	NP (normality)
Barium (mg/L)	MW-27D	1.5	0.95	2	No	8	1.088	0.1866	0	None	No	0.004	NP (normality)
Barium (mg/L)	MW-28D	0.7327	0.1773	2	No	8	0.455	0.262	0	None	No	0.01	Param.
Barium (mg/L)	MW-29	0.08638	0.07637	2	No	8	0.08138	0.004719	0	None	No	0.01	Param.
Barium (mg/L)	MW-5	0.05227	0.04398	2	No	8	0.04813	0.003907	0	None	No	0.01	Param.
Barium (mg/L)	MW-6	0.09421	0.08179	2	No	8	0.088	0.005855	0	None	No	0.01	Param.
Barium (mg/L)	MW-7	0.06481	0.04669	2	No	8	0.05575	0.008548	0	None	No	0.01	Param.
Beryllium (mg/L)	HGWC-11	0.0005	0.0001	0.004	No	17	0.000341	0.000197	58.82	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-13	0.0005	0.000097	0.004	No	17	0.000333	0.000206	58.82	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-7	0.0005	0.00019	0.004	No	17	0.0004322	0.0001526	82.35	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-8	0.0005	0.0001	0.004	No	17	0.0004014	0.0001834	76.47	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-28D	0.0005	0.000048	0.004	No	8	0.0003428	0.0002188	62.5	None	No	0.004	NP (NDs)
Beryllium (mg/L)	MW-7	0.0005	0.000051	0.004	No	8	0.0004439	0.0001587	87.5	None	No	0.004	NP (NDs)
Cadmium (mg/L)	HGWC-10	0.0005	0.0001	0.005	No	17	0.0003421	0.0001959	58.82	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-11	0.0005	0.0001	0.005	No	17	0.0004292	0.0001577	82.35	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-12	0.0005	0.0003	0.005	No	17	0.0004259	0.000143	76.47	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-7	0.0005	0.0002	0.005	No	17	0.0004235	0.0001437	76.47	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-8	0.00032	0.00014	0.005	No	17	0.0003141	0.0003708	5.882	None	No	0.01	NP (normality)
Cadmium (mg/L)	HGWC-9	0.0005	0.0002	0.005	No	17	0.0004335	0.00015	82.35	None	No	0.01	NP (NDs)

State Confidence Intervals - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 5/4/2021, 7:37 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cadmium (mg/L)	MW-19	0.0002284	0.0001459	0.005	No	8	0.000265	0.0001497	25	Kaplan-Meier	ln(x)	0.01	Param.
Chromium (mg/L)	HGWC-10	0.02	0.005	0.1	No	17	0.005882	0.003638	94.12	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-11	0.005	0.00061	0.1	No	17	0.004465	0.00151	88.24	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-12	0.005	0.0025	0.1	No	17	0.004342	0.001516	82.35	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-13	0.005	0.00059	0.1	No	17	0.004209	0.001762	82.35	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-7	0.071	0.0016	0.1	No	17	0.007779	0.01639	64.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-8	0.005	0.0015	0.1	No	17	0.004031	0.001811	76.47	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-9	0.005	0.00067	0.1	No	17	0.004482	0.001463	88.24	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-19	0.005	0.00047	0.1	No	8	0.00254	0.002111	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	MW-20	0.005	0.00051	0.1	No	8	0.003362	0.002261	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-24D	0.005	0.00042	0.1	No	8	0.004015	0.001856	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-25D	0.005	0.00061	0.1	No	8	0.004451	0.001552	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-26D	0.005	0.00076	0.1	No	8	0.002757	0.001958	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	MW-27D	0.005	0.0007	0.1	No	8	0.00394	0.001963	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-28D	0.005	0.00078	0.1	No	8	0.002692	0.002009	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	MW-29	0.005	0.001	0.1	No	8	0.0045	0.001414	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-5	0.004565	0.00231	0.1	No	8	0.003438	0.001064	0	None	No	0.01	Param.
Chromium (mg/L)	MW-6	0.005	0.00044	0.1	No	8	0.003879	0.002077	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-7	0.005	0.0013	0.1	No	8	0.00215	0.001198	12.5	None	No	0.004	NP (normality)
Cobalt (mg/L)	HGWC-10	0.005	0.0007	0.038	No	17	0.003506	0.00209	64.71	None	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-11	0.00192	0.0009744	0.038	No	17	0.002656	0.001712	29.41	Kaplan-Meier	ln(x)	0.01	Param.
Cobalt (mg/L)	HGWC-12	0.0021	0.0012	0.038	No	17	0.001871	0.001212	11.76	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-13	0.004247	0.002671	0.038	No	17	0.003459	0.001258	5.882	None	No	0.01	Param.
Cobalt (mg/L)	HGWC-7	0.0026	0.0005	0.038	No	17	0.001598	0.001703	17.65	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-8	0.0023	0.0019	0.038	No	17	0.002204	0.0007606	5.882	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-9	0.0011	0.00057	0.038	No	17	0.001238	0.001459	11.76	None	No	0.01	NP (normality)
Cobalt (mg/L)	MW-19	0.04433	0.02892	0.038	No	8	0.03663	0.007269	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-20	0.005	0.0011	0.038	No	8	0.004512	0.001379	87.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	MW-24D	0.005	0.00025	0.038	No	8	0.003364	0.00227	62.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	MW-26D	0.005	0.0003	0.038	No	8	0.002715	0.002444	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	MW-27D	0.005	0.000091	0.038	No	8	0.003243	0.002428	62.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	MW-28D	0.005	0.00093	0.038	No	8	0.004491	0.001439	87.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	MW-29	0.001302	0.0005925	0.038	No	8	0.0009475	0.0003349	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-6	0.005	0.00036	0.038	No	8	0.00109	0.00159	12.5	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	HGWC-10	1.137	0.597	5	No	19	0.8671	0.4612	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-11	1.226	0.6603	5	No	19	0.9432	0.4832	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-12	1.1	0.548	5	No	19	0.8239	0.4713	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-13	1.052	0.5958	5	No	19	0.824	0.3897	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-7	0.9855	0.4718	5	No	19	0.7699	0.4916	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-8	0.9892	0.6793	5	No	19	0.8343	0.2646	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-9	0.959	0.541	5	No	19	0.75	0.3569	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-19	1.183	0.4412	5	No	8	0.8119	0.3497	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-20	1.185	0.2405	5	No	8	0.713	0.4458	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-24D	0.8936	0.0469	5	No	8	0.4703	0.3994	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-25D	1.296	0.7346	5	No	8	1.015	0.2647	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-26D	1.275	0.1638	5	No	8	0.7193	0.524	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-27D	1.938	0.7381	5	No	8	1.338	0.5659	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-28D	1.449	0.4152	5	No	8	0.9321	0.4877	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-29	1.144	0.2969	5	No	8	0.7203	0.3994	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-5	1.116	0.5638	5	No	8	0.8399	0.2604	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-6	2.07	0.198	5	No	8	0.8654	0.5289	0	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	MW-7	1.363	0.6459	5	No	8	1.004	0.3382	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-10	0.2311	0.08652	4	No	20	0.1758	0.1484	15	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	HGWC-11	0.4538	0.2685	4	No	20	0.3612	0.1632	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-12	0.4227	0.1819	4	No	20	0.3266	0.2544	5	None	sqrt(x)	0.01	Param.

State Confidence Intervals - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 5/4/2021, 7:37 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	HGWC-13	0.7221	0.5018	4	No	20	0.6119	0.194	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-7	0.1671	0.08288	4	No	21	0.1468	0.1188	9.524	None	ln(x)	0.01	Param.
Fluoride (mg/L)	HGWC-8	0.6486	0.4876	4	No	21	0.5823	0.1742	0	None	ln(x)	0.01	Param.
Fluoride (mg/L)	HGWC-9	0.2594	0.08768	4	No	20	0.1957	0.1662	10	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	MW-19	0.3621	0.09633	4	No	8	0.2245	0.1448	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	MW-20	0.072	0.05	4	No	8	0.05275	0.007778	87.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	MW-24D	0.18	0.048	4	No	8	0.07088	0.04503	37.5	None	No	0.004	NP (normality)
Fluoride (mg/L)	MW-25D	2.2	1.4	4	No	8	1.65	0.239	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	MW-26D	0.19	0.044	4	No	8	0.075	0.0477	12.5	None	No	0.004	NP (normality)
Fluoride (mg/L)	MW-27D	0.42	0.22	4	No	8	0.27	0.06302	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	MW-28D	0.2674	0.1476	4	No	8	0.2075	0.05651	0	None	No	0.01	Param.
Fluoride (mg/L)	MW-29	0.18	0.045	4	No	8	0.06813	0.04582	62.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	MW-5	0.09236	0.04939	4	No	8	0.07088	0.02027	12.5	None	No	0.01	Param.
Fluoride (mg/L)	MW-6	0.19	0.05	4	No	8	0.1014	0.06371	25	None	No	0.004	NP (normality)
Fluoride (mg/L)	MW-7	0.17	0.05	4	No	8	0.06738	0.042	75	None	No	0.004	NP (NDs)
Lead (mg/L)	HGWC-10	0.001	0.00005	0.001	No	15	0.0009367	0.0002453	93.33	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-11	0.001	0.000099	0.001	No	15	0.0006706	0.0004226	60	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-12	0.001	0.000089	0.001	No	15	0.0007159	0.0004245	66.67	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-13	0.001	0.00014	0.001	No	15	0.0006527	0.000441	60	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-7	0.001	0.00009	0.001	No	15	0.0005996	0.0004589	40	None	No	0.01	NP (normality)
Lead (mg/L)	HGWC-8	0.001	0.00013	0.001	No	15	0.0007684	0.0003982	73.33	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-9	0.001	0.0001	0.001	No	15	0.0005543	0.0004342	46.67	None	No	0.01	NP (normality)
Lead (mg/L)	MW-19	0.0001214	0.00004136	0.001	No	6	0.000384	0.0004777	33.33	Kaplan-Meier	ln(x)	0.01	Param.
Lead (mg/L)	MW-20	0.0001907	0.00004523	0.001	No	6	0.0004065	0.0004617	33.33	Kaplan-Meier	x^(1/3)	0.01	Param.
Lead (mg/L)	MW-24D	0.0001737	0.0000328	0.001	No	6	0.0002427	0.0003754	16.67	Kaplan-Meier	ln(x)	0.01	Param.
Lead (mg/L)	MW-26D	0.001	0.00008	0.001	No	6	0.0006967	0.00047	66.67	Kaplan-Meier	No	0.0155	NP (NDs)
Lead (mg/L)	MW-27D	0.001	0.00013	0.001	No	6	0.00076	0.0003837	66.67	Kaplan-Meier	No	0.0155	NP (NDs)
Lead (mg/L)	MW-28D	0.0008507	-0.0000419	0.001	No	6	0.0005037	0.0004058	16.67	Kaplan-Meier	No	0.01	Param.
Lead (mg/L)	MW-29	0.001	0.000052	0.001	No	6	0.000542	0.0005021	50	None	No	0.0155	NP (normality)
Lead (mg/L)	MW-5	0.001	0.000047	0.001	No	6	0.0008412	0.0003891	83.33	None	No	0.0155	NP (NDs)
Lead (mg/L)	MW-6	0.0002477	0.00003146	0.001	No	6	0.0004183	0.0004567	33.33	Kaplan-Meier	sqrt(x)	0.01	Param.
Lead (mg/L)	MW-7	0.001	0.000062	0.001	No	6	0.0008437	0.0003829	83.33	Kaplan-Meier	No	0.0155	NP (NDs)
Lithium (mg/L)	HGWC-12	0.01088	0.008093	0.034	No	19	0.009484	0.002375	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-13	0.03828	0.0309	0.034	No	19	0.03459	0.006309	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-7	0.0032	0.0021	0.034	No	19	0.003195	0.002903	5.263	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-8	0.0029	0.0025	0.034	No	19	0.003342	0.002837	5.263	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-9	0.0046	0.004	0.034	No	19	0.004779	0.002518	5.263	None	No	0.01	NP (normality)
Lithium (mg/L)	MW-19	0.01336	0.008619	0.034	No	8	0.011	0.002491	0	None	x^2	0.01	Param.
Lithium (mg/L)	MW-20	0.015	0.00082	0.034	No	8	0.004652	0.006392	25	None	No	0.004	NP (normality)
Lithium (mg/L)	MW-24D	0.002919	0.002531	0.034	No	8	0.002725	0.0001832	0	None	No	0.01	Param.
Lithium (mg/L)	**MW-25D**	**0.05155**	**0.04545**	**0.034**	**Yes**	**8**	**0.0485**	**0.002878**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	MW-26D	0.03	0.0032	0.034	No	8	0.006925	0.009329	0	None	No	0.004	NP (normality)
Lithium (mg/L)	MW-27D	0.009164	0.005536	0.034	No	8	0.00735	0.001711	0	None	No	0.01	Param.
Lithium (mg/L)	MW-28D	0.0141	0.005449	0.034	No	8	0.009775	0.004082	0	None	No	0.01	Param.
Lithium (mg/L)	MW-29	0.002433	0.002117	0.034	No	8	0.002275	0.0001488	0	None	No	0.01	Param.
Molybdenum (mg/L)	HGWC-10	0.005	0.0014	0.01	No	19	0.003663	0.001814	63.16	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	**HGWC-11**	**0.02514**	**0.01508**	**0.01**	**Yes**	**19**	**0.02011**	**0.00859**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**HGWC-12**	**0.04978**	**0.0457**	**0.01**	**Yes**	**19**	**0.04774**	**0.003483**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**HGWC-13**	**0.03593**	**0.0301**	**0.01**	**Yes**	**19**	**0.03302**	**0.004974**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**HGWC-7**	**0.04274**	**0.03437**	**0.01**	**Yes**	**20**	**0.03856**	**0.007368**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**HGWC-8**	**0.4928**	**0.4503**	**0.01**	**Yes**	**20**	**0.4716**	**0.03743**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**HGWC-9**	**0.033**	**0.0234**	**0.01**	**Yes**	**19**	**0.05098**	**0.1033**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Molybdenum (mg/L)	**MW-19**	**0.06073**	**0.03377**	**0.01**	**Yes**	**8**	**0.04725**	**0.01271**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	MW-24D	0.005	0.00027	0.01	No	8	0.002902	0.002254	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	MW-25D	0.005	0.00094	0.01	No	8	0.004142	0.001623	75	None	No	0.004	NP (NDs)

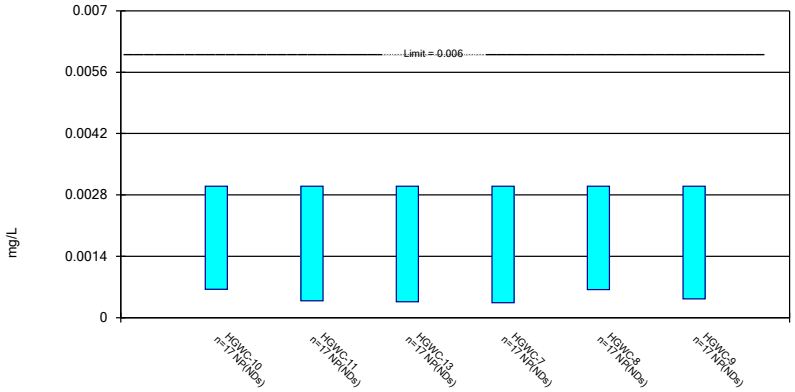
State Confidence Intervals - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 5/4/2021, 7:37 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Molybdenum (mg/L)	MW-26D	0.02056	0.007442	0.01	No	9	0.014	0.006793	11.11	None	No	0.01	Param.
Molybdenum (mg/L)	MW-27D	0.004925	0.00115	0.01	No	8	0.003037	0.001781	12.5	None	No	0.01	Param.
Molybdenum (mg/L)	MW-28D	0.02271	0.008486	0.01	No	8	0.0156	0.006712	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-29	0.003366	0.002184	0.01	No	8	0.002775	0.0005574	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-6	0.002589	0.002136	0.01	No	8	0.002363	0.0002134	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-7	0.005	0.0015	0.01	No	8	0.003475	0.001733	50	None	No	0.004	NP (normality)
Selenium (mg/L)	HGWC-10	0.005	0.0028	0.05	No	19	0.004353	0.001207	73.68	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-11	0.01552	0.006815	0.05	No	19	0.01117	0.007435	0	None	No	0.01	Param.
Selenium (mg/L)	HGWC-12	0.005	0.0011	0.05	No	19	0.004795	0.0008947	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-13	0.005	0.0016	0.05	No	19	0.004567	0.001317	89.47	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-8	0.005	0.0024	0.05	No	19	0.004863	0.0005965	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-9	0.005	0.0037	0.05	No	19	0.004932	0.0002982	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	MW-19	0.005561	0.001677	0.05	No	8	0.004175	0.001851	25	Kaplan-Meier	No	0.01	Param.
Selenium (mg/L)	MW-27D	0.005	0.00012	0.05	No	8	0.00439	0.001725	87.5	Kaplan-Meier	No	0.004	NP (NDs)
Selenium (mg/L)	MW-5	0.003857	0.002393	0.05	No	8	0.003125	0.0006902	0	None	No	0.01	Param.
Selenium (mg/L)	MW-7	0.005	0.0014	0.05	No	8	0.003012	0.001692	37.5	None	No	0.004	NP (normality)
Thallium (mg/L)	HGWC-11	0.001	0.00008	0.002	No	19	0.0009032	0.0002901	89.47	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-12	0.001	0.00009	0.002	No	19	0.0007171	0.0004287	68.42	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-13	0.0004261	0.000341	0.002	No	19	0.0003836	0.00007267	0	None	No	0.01	Param.
Thallium (mg/L)	HGWC-8	0.001	0.00008	0.002	No	19	0.0007099	0.0004388	68.42	None	No	0.01	NP (NDs)
Thallium (mg/L)	MW-19	0.001	0.00019	0.002	No	8	0.0004425	0.0003455	25	None	No	0.004	NP (normality)
Thallium (mg/L)	MW-28D	0.001	0.000092	0.002	No	8	0.0008865	0.000321	87.5	None	No	0.004	NP (NDs)
Thallium (mg/L)	MW-29	0.001	0.000064	0.002	No	8	0.000883	0.0003309	87.5	None	No	0.004	NP (NDs)
Thallium (mg/L)	MW-6	0.001	0.000082	0.002	No	8	0.0008853	0.0003246	87.5	None	No	0.004	NP (NDs)

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

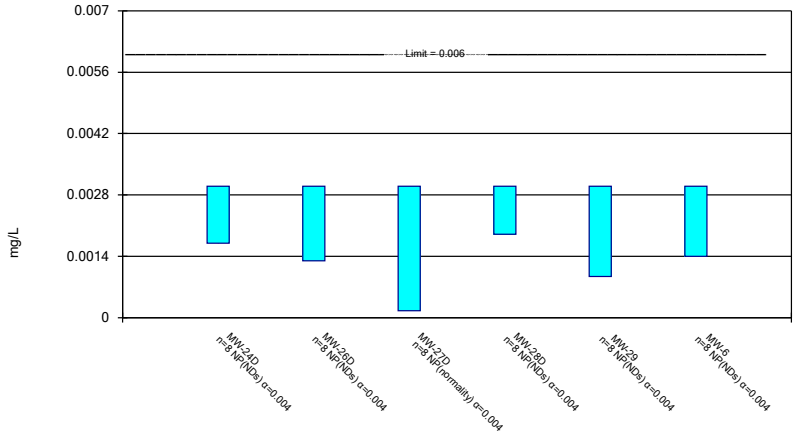


Constituent: Antimony Analysis Run 5/4/2021 7:35 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

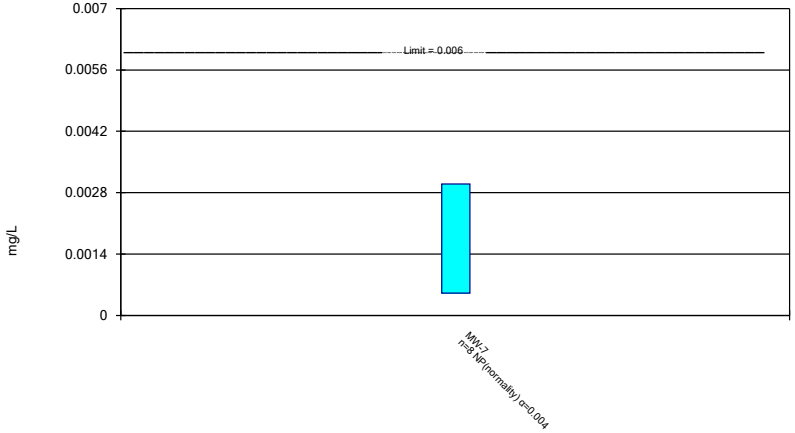


Constituent: Antimony Analysis Run 5/4/2021 7:35 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

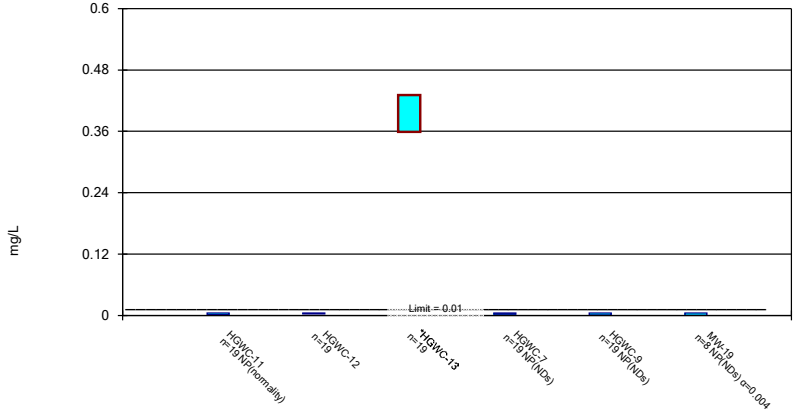


Constituent: Antimony Analysis Run 5/4/2021 7:35 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

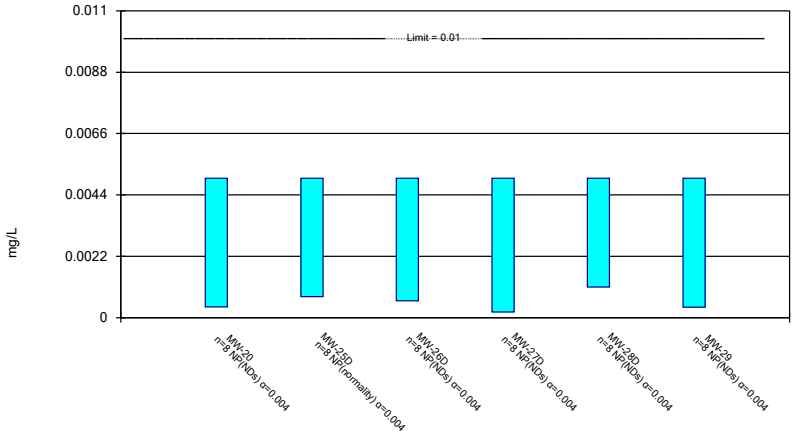
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 5/4/2021 7:35 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Non-Parametric Confidence Interval

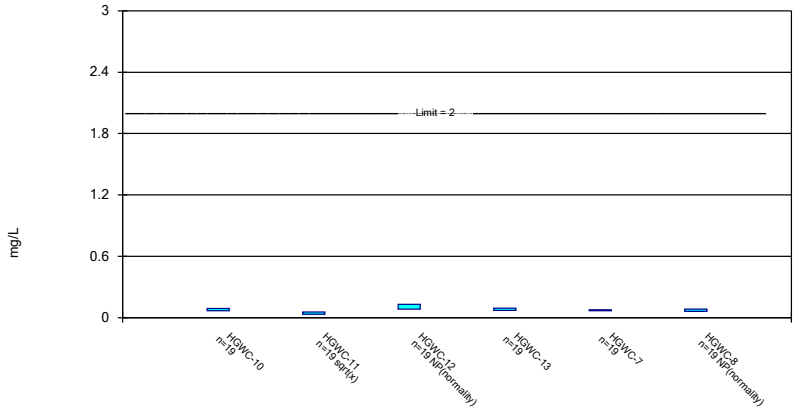
Compliance Limit is not exceeded.



Constituent: Arsenic Analysis Run 5/4/2021 7:35 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

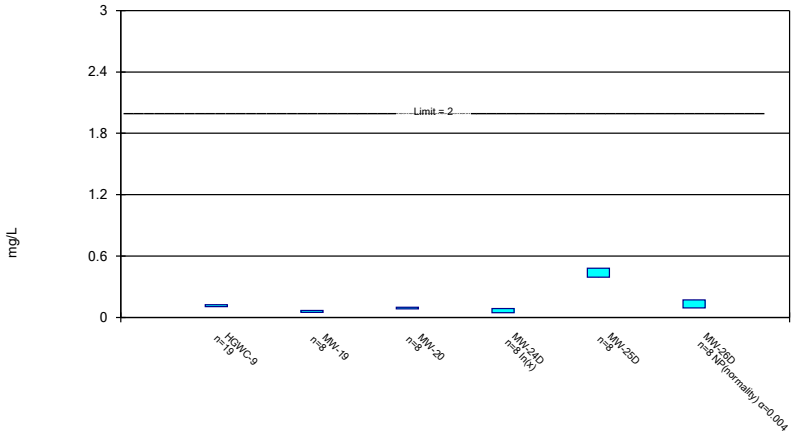
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 5/4/2021 7:35 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

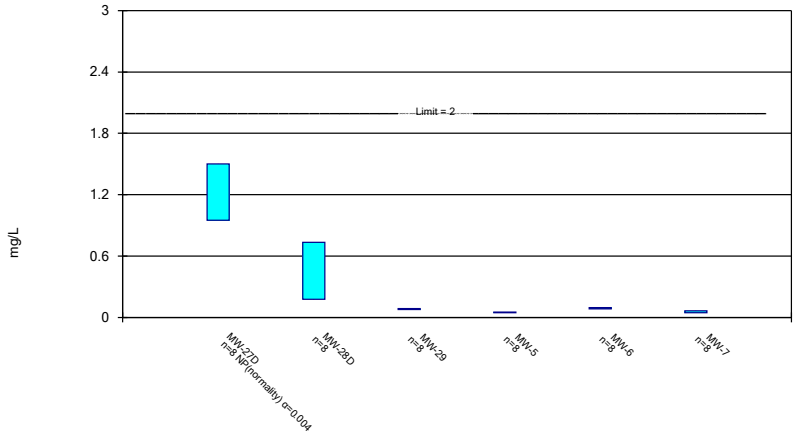
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 5/4/2021 7:35 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

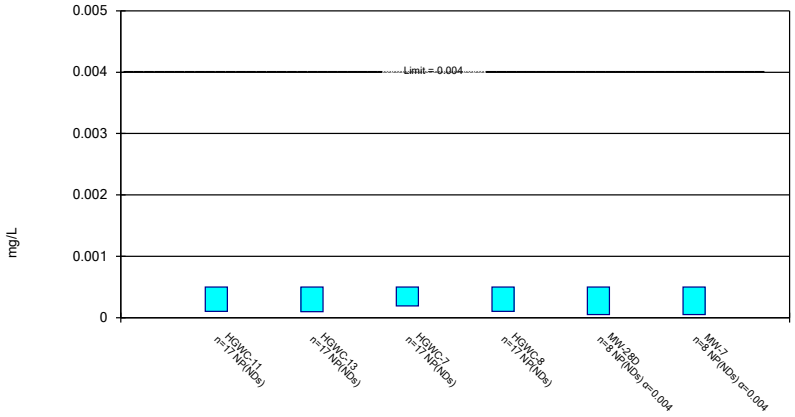
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 5/4/2021 7:35 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.

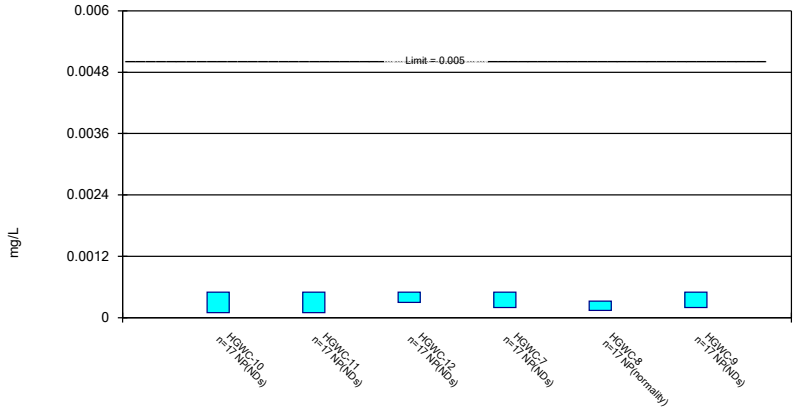


Constituent: Beryllium Analysis Run 5/4/2021 7:35 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

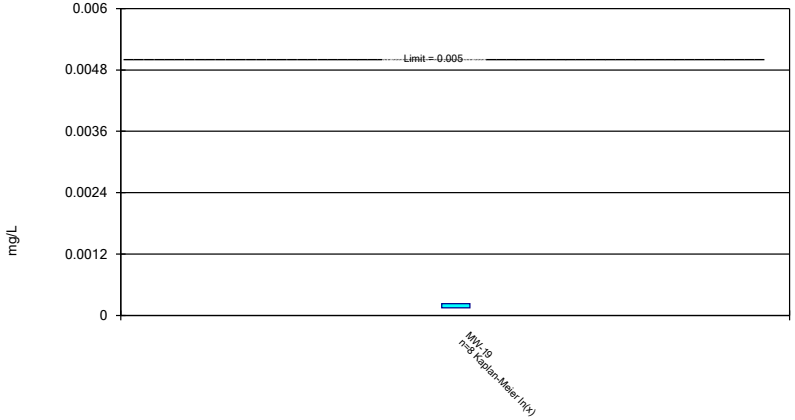


Constituent: Cadmium Analysis Run 5/4/2021 7:35 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 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.

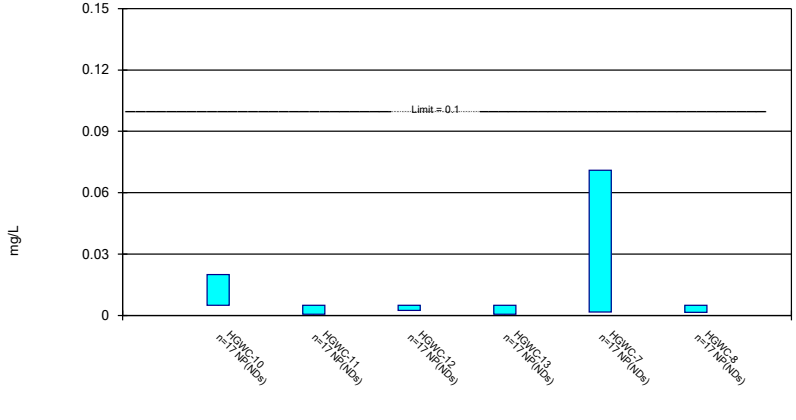


Constituent: Cadmium Analysis Run 5/4/2021 7:35 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

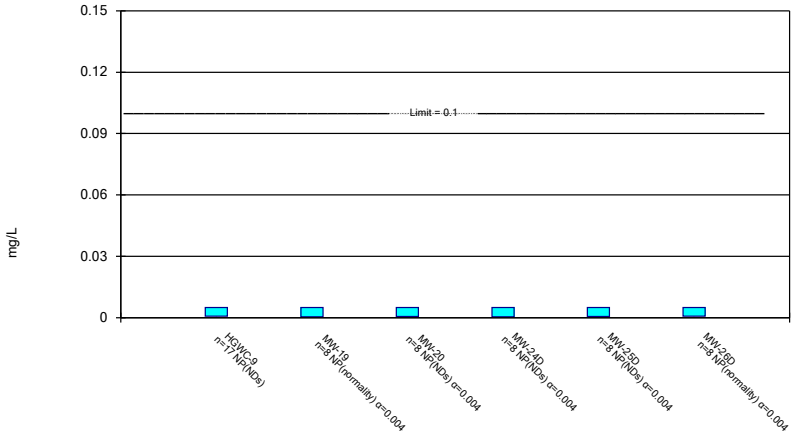
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 5/4/2021 7:36 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.

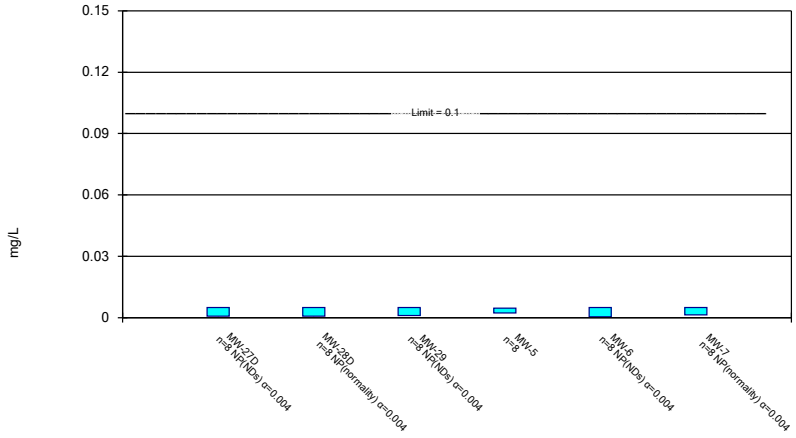


Constituent: Chromium Analysis Run 5/4/2021 7:36 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

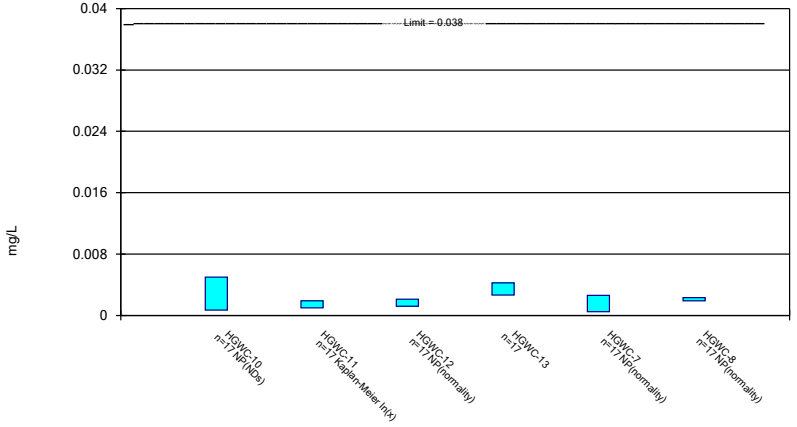


Constituent: Chromium Analysis Run 5/4/2021 7:36 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 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.

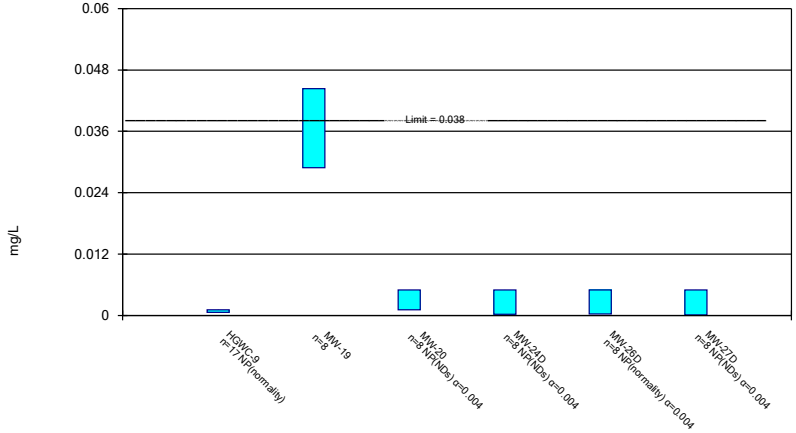


Constituent: Cobalt Analysis Run 5/4/2021 7:36 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

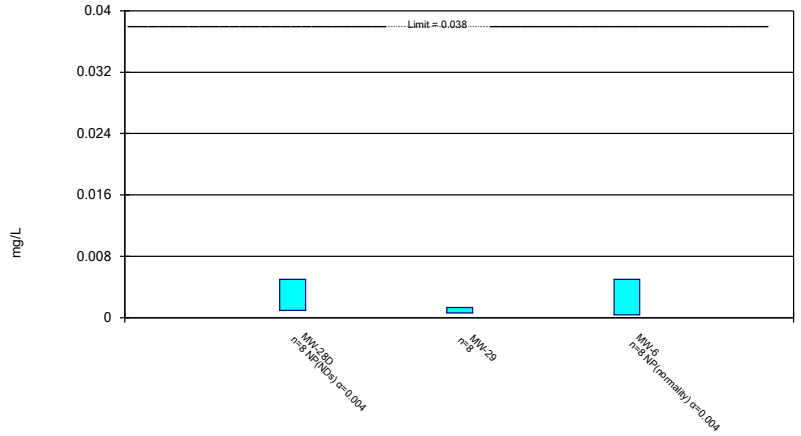
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 5/4/2021 7:36 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

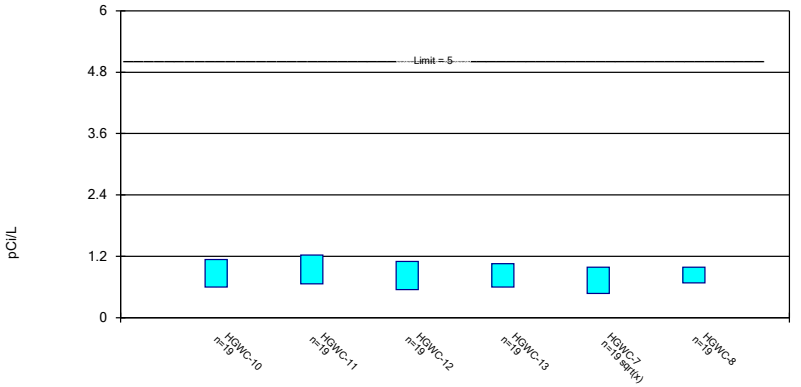
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 5/4/2021 7:36 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric Confidence Interval

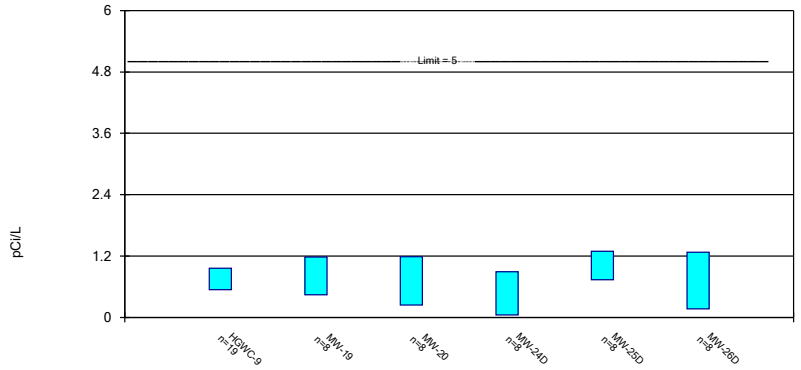
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 5/4/2021 7:36 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric Confidence Interval

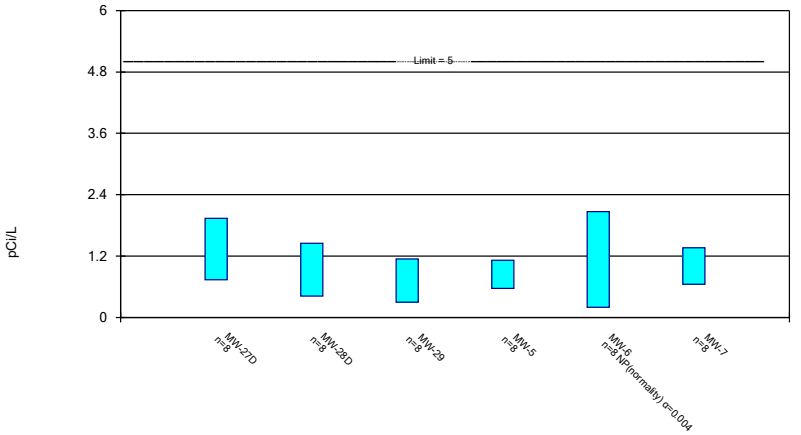
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 5/4/2021 7:36 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

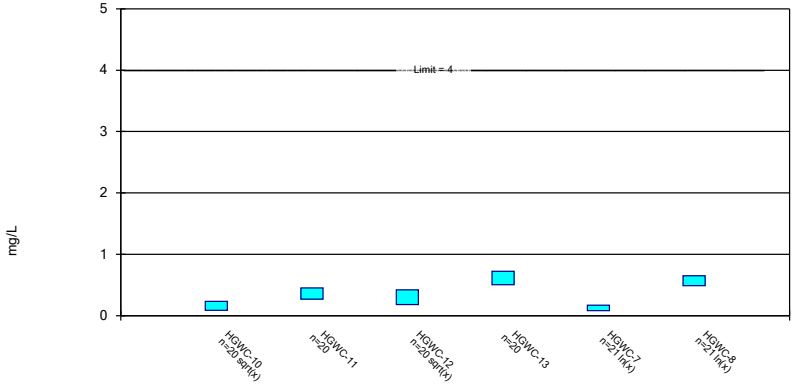
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 5/4/2021 7:36 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.

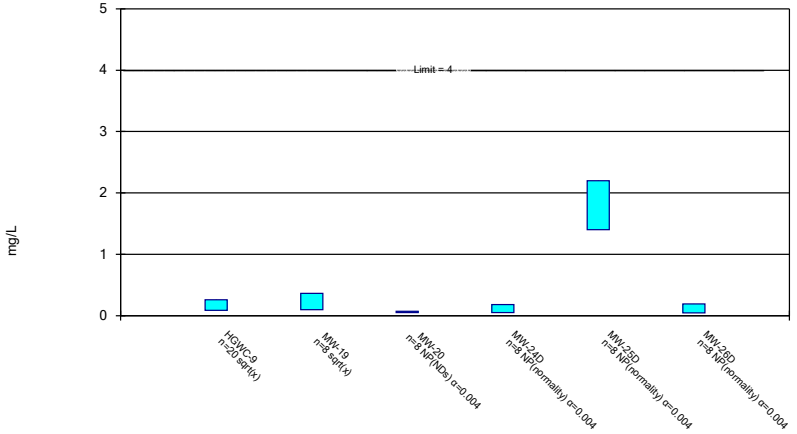


Constituent: Fluoride Analysis Run 5/4/2021 7:36 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

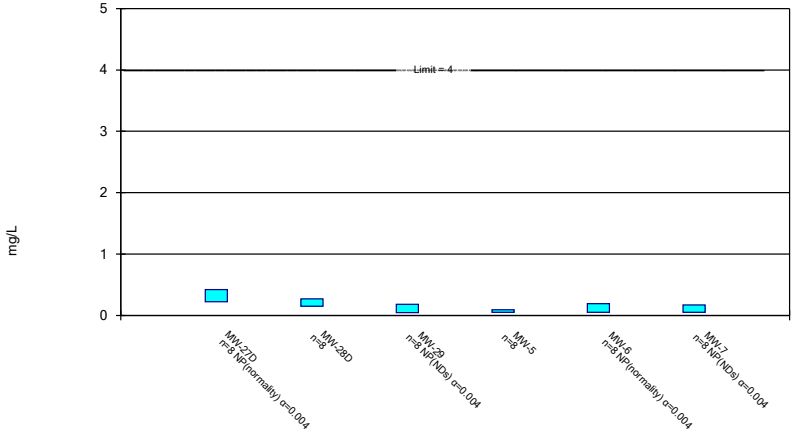


Constituent: Fluoride Analysis Run 5/4/2021 7:36 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

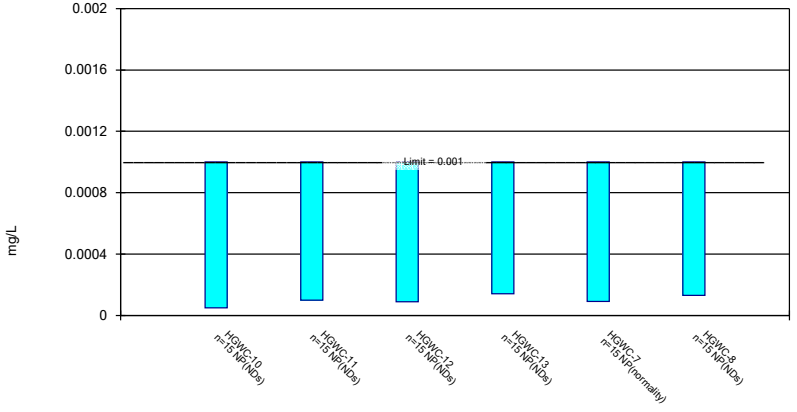


Constituent: Fluoride Analysis Run 5/4/2021 7:36 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

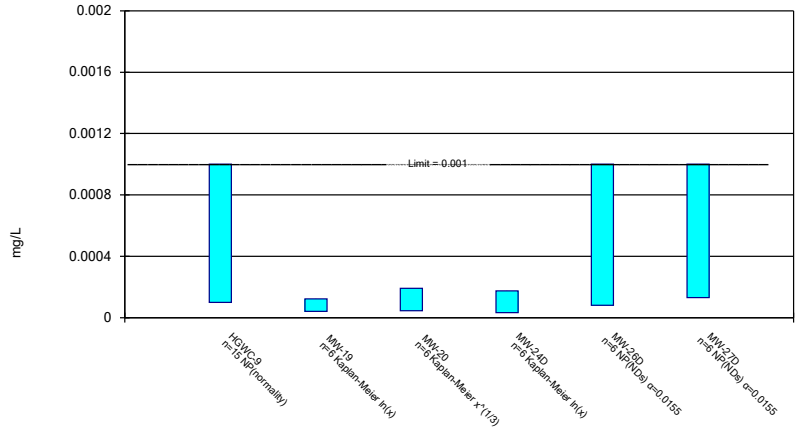
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 5/4/2021 7:36 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 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

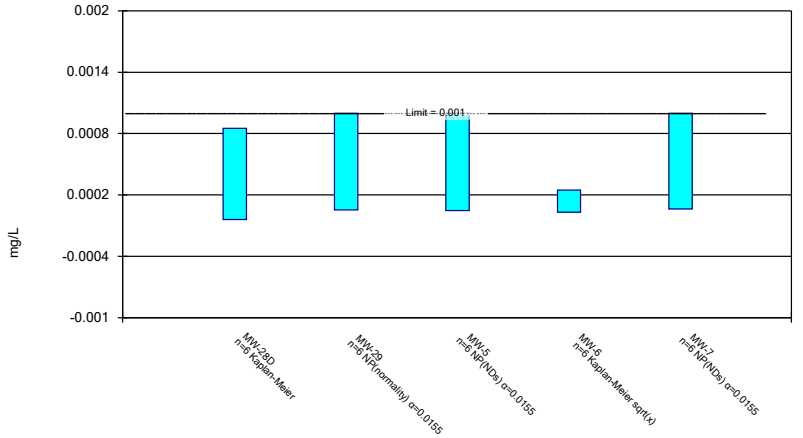


Constituent: Lead Analysis Run 5/4/2021 7:36 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

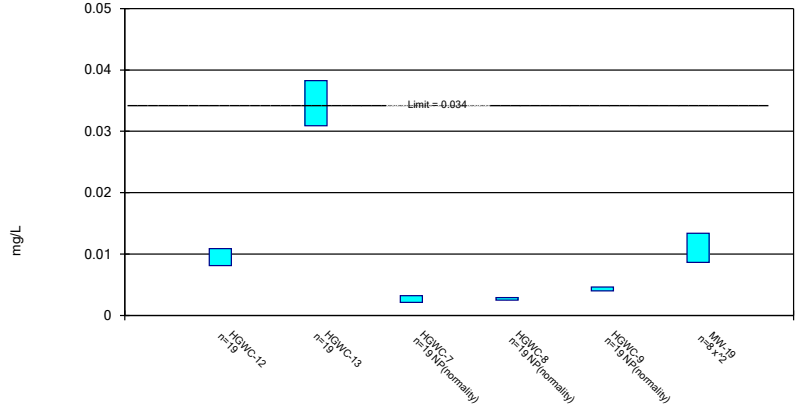


Constituent: Lead Analysis Run 5/4/2021 7:36 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 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.

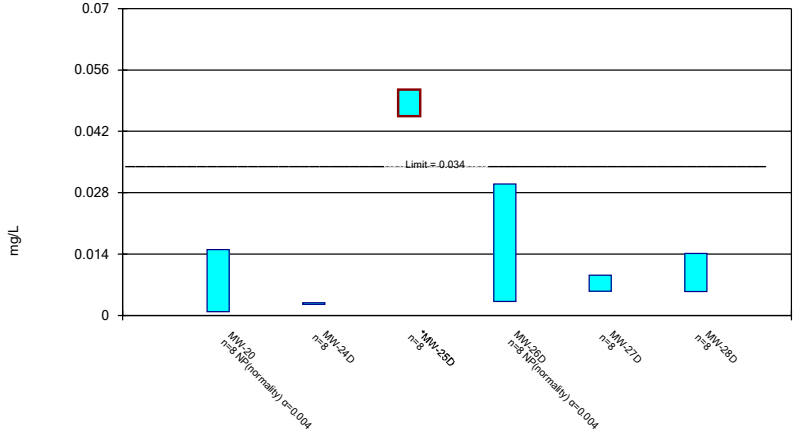


Constituent: Lithium Analysis Run 5/4/2021 7:36 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

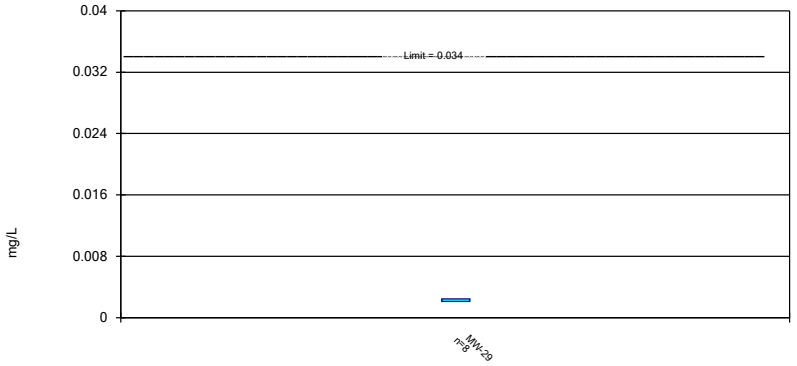
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 5/4/2021 7:36 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric Confidence Interval

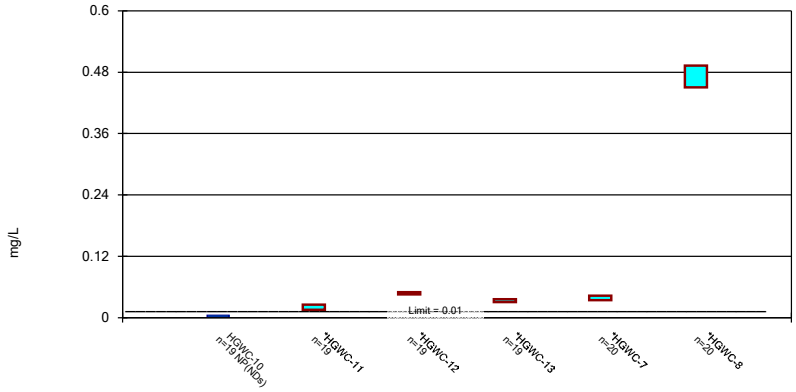
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 5/4/2021 7:36 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

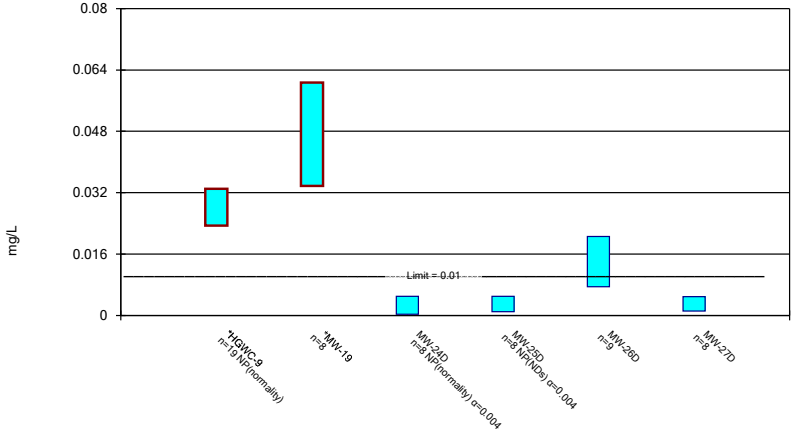
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 5/4/2021 7:36 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

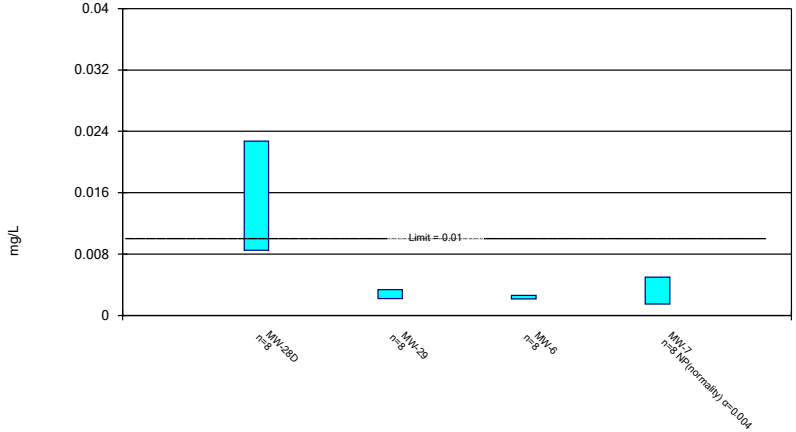
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 5/4/2021 7:36 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

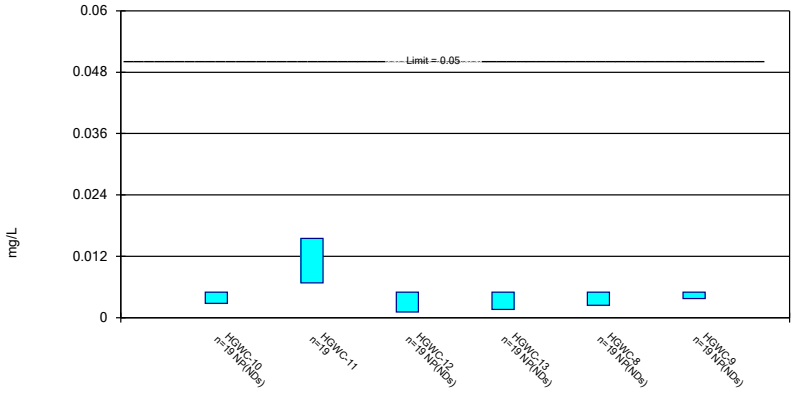
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 5/4/2021 7:36 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.



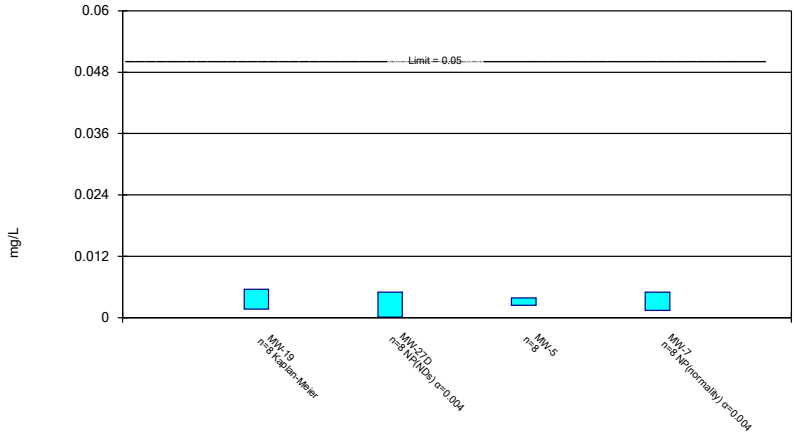
Constituent: Selenium Analysis Run 5/4/2021 7:36 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



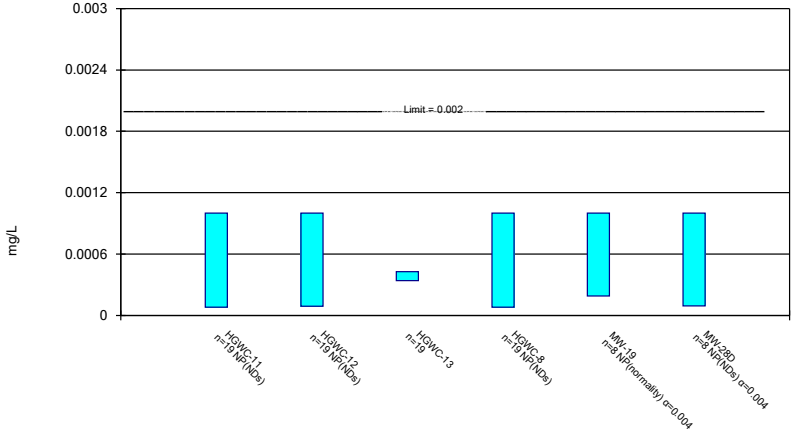
Constituent: Selenium Analysis Run 5/4/2021 7:36 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



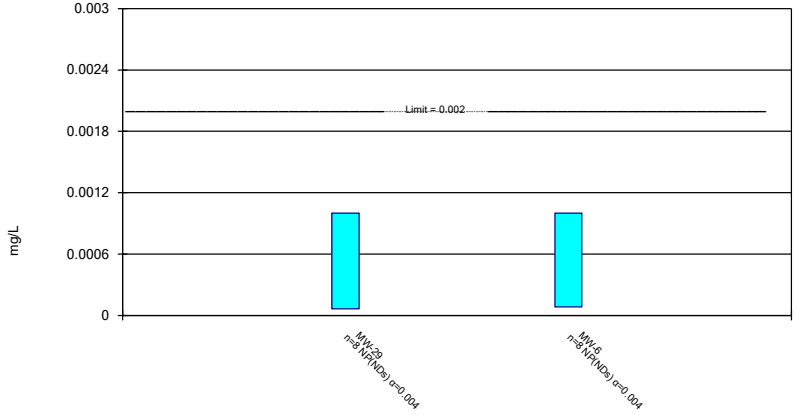
Constituent: Thallium Analysis Run 5/4/2021 7:36 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Thallium Analysis Run 5/4/2021 7:36 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

FIGURE J.

Federal Confidence Intervals - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 5/4/2021, 7:34 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**HGWC-13**	**0.4313**	**0.3592**	**0.01**	**Yes**	**19**	**0.3953**	**0.06154**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**MW-25D**	**0.05155**	**0.04545**	**0.04**	**Yes**	**8**	**0.0485**	**0.002878**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**HGWC-8**	**0.4928**	**0.4503**	**0.1**	**Yes**	**20**	**0.4716**	**0.03743**	**0**	**None**	**No**	**0.01**	**Param.**

Federal Confidence Intervals - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 5/4/2021, 7:34 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	0.00065	0.006	No	17	0.002862	0.00057	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-11	0.003	0.00038	0.006	No	17	0.002846	0.0006354	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-13	0.003	0.00036	0.006	No	17	0.001925	0.001327	58.82	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-7	0.003	0.00034	0.006	No	17	0.002844	0.0006451	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-8	0.003	0.00064	0.006	No	17	0.002861	0.0005724	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-9	0.003	0.00043	0.006	No	17	0.002539	0.001026	82.35	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-24D	0.003	0.0017	0.006	No	8	0.002838	0.0004596	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	MW-26D	0.003	0.0013	0.006	No	8	0.002663	0.0006523	75	None	No	0.004	NP (NDs)
Antimony (mg/L)	MW-27D	0.003	0.00016	0.006	No	8	0.0009775	0.00125	25	None	No	0.004	NP (normality)
Antimony (mg/L)	MW-28D	0.003	0.0019	0.006	No	8	0.002863	0.0003889	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	MW-29	0.003	0.00094	0.006	No	8	0.002743	0.0007283	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	MW-6	0.003	0.0014	0.006	No	8	0.0028	0.0005657	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	MW-7	0.003	0.00051	0.006	No	8	0.002096	0.001065	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	HGWC-11	0.005	0.0015	0.01	No	19	0.003266	0.001768	42.11	None	No	0.01	NP (normality)
Arsenic (mg/L)	HGWC-12	0.004589	0.003137	0.01	No	19	0.003863	0.00124	10.53	None	No	0.01	Param.
Arsenic (mg/L)	**HGWC-13**	**0.4313**	**0.3592**	**0.01**	**Yes**	**19**	**0.3953**	**0.06154**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	HGWC-7	0.005	0.0019	0.01	No	19	0.004837	0.0007112	94.74	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-9	0.005	0.0008	0.01	No	19	0.004312	0.001635	84.21	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-19	0.005	0.00045	0.01	No	8	0.004431	0.001609	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-20	0.005	0.00038	0.01	No	8	0.003577	0.002033	62.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-25D	0.005	0.00075	0.01	No	8	0.003094	0.002064	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	MW-26D	0.005	0.0006	0.01	No	8	0.003925	0.001991	75	None	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-27D	0.005	0.0002	0.01	No	8	0.003361	0.002272	62.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-28D	0.005	0.0011	0.01	No	8	0.004512	0.001379	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-29	0.005	0.00037	0.01	No	8	0.004421	0.001637	87.5	None	No	0.004	NP (NDs)
Barium (mg/L)	HGWC-10	0.08901	0.06608	2	No	19	0.07754	0.01958	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-11	0.05343	0.03154	2	No	19	0.04375	0.02072	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	HGWC-12	0.13	0.084	2	No	19	0.1029	0.02097	0	None	No	0.01	NP (normality)
Barium (mg/L)	HGWC-13	0.09256	0.06961	2	No	19	0.08108	0.0196	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-7	0.07536	0.06864	2	No	19	0.072	0.005743	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-8	0.0829	0.06	2	No	19	0.06984	0.01122	0	None	No	0.01	NP (normality)
Barium (mg/L)	HGWC-9	0.1226	0.1065	2	No	19	0.1146	0.01374	0	None	No	0.01	Param.
Barium (mg/L)	MW-19	0.0677	0.0498	2	No	8	0.05875	0.008447	0	None	No	0.01	Param.
Barium (mg/L)	MW-20	0.098	0.08425	2	No	8	0.09113	0.00649	0	None	No	0.01	Param.
Barium (mg/L)	MW-24D	0.08729	0.04433	2	No	8	0.06538	0.02462	0	None	ln(x)	0.01	Param.
Barium (mg/L)	MW-25D	0.4797	0.3928	2	No	8	0.4363	0.04104	0	None	No	0.01	Param.
Barium (mg/L)	MW-26D	0.17	0.093	2	No	8	0.1131	0.02538	0	None	No	0.004	NP (normality)
Barium (mg/L)	MW-27D	1.5	0.95	2	No	8	1.088	0.1866	0	None	No	0.004	NP (normality)
Barium (mg/L)	MW-28D	0.7327	0.1773	2	No	8	0.455	0.262	0	None	No	0.01	Param.
Barium (mg/L)	MW-29	0.08638	0.07637	2	No	8	0.08138	0.004719	0	None	No	0.01	Param.
Barium (mg/L)	MW-5	0.05227	0.04398	2	No	8	0.04813	0.003907	0	None	No	0.01	Param.
Barium (mg/L)	MW-6	0.09421	0.08179	2	No	8	0.088	0.005855	0	None	No	0.01	Param.
Barium (mg/L)	MW-7	0.06481	0.04669	2	No	8	0.05575	0.008548	0	None	No	0.01	Param.
Beryllium (mg/L)	HGWC-11	0.0005	0.0001	0.004	No	17	0.000341	0.000197	58.82	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-13	0.0005	0.000097	0.004	No	17	0.000333	0.000206	58.82	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-7	0.0005	0.00019	0.004	No	17	0.0004322	0.0001526	82.35	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-8	0.0005	0.0001	0.004	No	17	0.0004014	0.0001834	76.47	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-28D	0.0005	0.000048	0.004	No	8	0.0003428	0.0002188	62.5	None	No	0.004	NP (NDs)
Beryllium (mg/L)	MW-7	0.0005	0.000051	0.004	No	8	0.0004439	0.0001587	87.5	None	No	0.004	NP (NDs)
Cadmium (mg/L)	HGWC-10	0.0005	0.0001	0.005	No	17	0.0003421	0.0001959	58.82	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-11	0.0005	0.0001	0.005	No	17	0.0004292	0.0001577	82.35	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-12	0.0005	0.0003	0.005	No	17	0.0004259	0.000143	76.47	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-7	0.0005	0.0002	0.005	No	17	0.0004235	0.0001437	76.47	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-8	0.00032	0.00014	0.005	No	17	0.0003141	0.0003708	5.882	None	No	0.01	NP (normality)
Cadmium (mg/L)	HGWC-9	0.0005	0.0002	0.005	No	17	0.0004335	0.00015	82.35	None	No	0.01	NP (NDs)

Federal Confidence Intervals - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 5/4/2021, 7:34 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cadmium (mg/L)	MW-19	0.0002284	0.0001459	0.005	No	8	0.000265	0.0001497	25	Kaplan-Meier	ln(x)	0.01	Param.
Chromium (mg/L)	HGWC-10	0.02	0.005	0.1	No	17	0.005882	0.003638	94.12	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-11	0.005	0.00061	0.1	No	17	0.004465	0.00151	88.24	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-12	0.005	0.0025	0.1	No	17	0.004342	0.001516	82.35	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-13	0.005	0.00059	0.1	No	17	0.004209	0.001762	82.35	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-7	0.071	0.0016	0.1	No	17	0.007779	0.01639	64.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-8	0.005	0.0015	0.1	No	17	0.004031	0.001811	76.47	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-9	0.005	0.00067	0.1	No	17	0.004482	0.001463	88.24	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-19	0.005	0.00047	0.1	No	8	0.00254	0.002111	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	MW-20	0.005	0.00051	0.1	No	8	0.003362	0.002261	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-24D	0.005	0.00042	0.1	No	8	0.004015	0.001856	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-25D	0.005	0.00061	0.1	No	8	0.004451	0.001552	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-26D	0.005	0.00076	0.1	No	8	0.002757	0.001958	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	MW-27D	0.005	0.0007	0.1	No	8	0.00394	0.001963	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-28D	0.005	0.00078	0.1	No	8	0.002692	0.002009	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	MW-29	0.005	0.001	0.1	No	8	0.0045	0.001414	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-5	0.004565	0.00231	0.1	No	8	0.003438	0.001064	0	None	No	0.01	Param.
Chromium (mg/L)	MW-6	0.005	0.00044	0.1	No	8	0.003879	0.002077	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-7	0.005	0.0013	0.1	No	8	0.00215	0.001198	12.5	None	No	0.004	NP (normality)
Cobalt (mg/L)	HGWC-10	0.005	0.0007	0.038	No	17	0.003506	0.00209	64.71	None	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-11	0.00192	0.0009744	0.038	No	17	0.002656	0.001712	29.41	Kaplan-Meier	ln(x)	0.01	Param.
Cobalt (mg/L)	HGWC-12	0.0021	0.0012	0.038	No	17	0.001871	0.001212	11.76	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-13	0.004247	0.002671	0.038	No	17	0.003459	0.001258	5.882	None	No	0.01	Param.
Cobalt (mg/L)	HGWC-7	0.0026	0.0005	0.038	No	17	0.001598	0.001703	17.65	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-8	0.0023	0.0019	0.038	No	17	0.002204	0.0007606	5.882	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-9	0.0011	0.00057	0.038	No	17	0.001238	0.001459	11.76	None	No	0.01	NP (normality)
Cobalt (mg/L)	MW-19	0.04433	0.02892	0.038	No	8	0.03663	0.007269	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-20	0.005	0.0011	0.038	No	8	0.004512	0.001379	87.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	MW-24D	0.005	0.00025	0.038	No	8	0.003364	0.00227	62.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	MW-26D	0.005	0.0003	0.038	No	8	0.002715	0.002444	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	MW-27D	0.005	0.000091	0.038	No	8	0.003243	0.002428	62.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	MW-28D	0.005	0.00093	0.038	No	8	0.004491	0.001439	87.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	MW-29	0.001302	0.0005925	0.038	No	8	0.0009475	0.0003349	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-6	0.005	0.00036	0.038	No	8	0.00109	0.00159	12.5	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	HGWC-10	1.137	0.597	5	No	19	0.8671	0.4612	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-11	1.226	0.6603	5	No	19	0.9432	0.4832	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-12	1.1	0.548	5	No	19	0.8239	0.4713	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-13	1.052	0.5958	5	No	19	0.824	0.3897	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-7	0.9855	0.4718	5	No	19	0.7699	0.4916	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-8	0.9892	0.6793	5	No	19	0.8343	0.2646	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-9	0.959	0.541	5	No	19	0.75	0.3569	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-19	1.183	0.4412	5	No	8	0.8119	0.3497	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-20	1.185	0.2405	5	No	8	0.713	0.4458	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-24D	0.8936	0.0469	5	No	8	0.4703	0.3994	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-25D	1.296	0.7346	5	No	8	1.015	0.2647	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-26D	1.275	0.1638	5	No	8	0.7193	0.524	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-27D	1.938	0.7381	5	No	8	1.338	0.5659	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-28D	1.449	0.4152	5	No	8	0.9321	0.4877	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-29	1.144	0.2969	5	No	8	0.7203	0.3994	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-5	1.116	0.5638	5	No	8	0.8399	0.2604	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-6	2.07	0.198	5	No	8	0.8654	0.5289	0	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	MW-7	1.363	0.6459	5	No	8	1.004	0.3382	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-10	0.2311	0.08652	4	No	20	0.1758	0.1484	15	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	HGWC-11	0.4538	0.2685	4	No	20	0.3612	0.1632	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-12	0.4227	0.1819	4	No	20	0.3266	0.2544	5	None	sqrt(x)	0.01	Param.

Federal Confidence Intervals - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 5/4/2021, 7:34 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	HGWC-13	0.7221	0.5018	4	No	20	0.6119	0.194	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-7	0.1671	0.08288	4	No	21	0.1468	0.1188	9.524	None	ln(x)	0.01	Param.
Fluoride (mg/L)	HGWC-8	0.6486	0.4876	4	No	21	0.5823	0.1742	0	None	ln(x)	0.01	Param.
Fluoride (mg/L)	HGWC-9	0.2594	0.08768	4	No	20	0.1957	0.1662	10	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	MW-19	0.3621	0.09633	4	No	8	0.2245	0.1448	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	MW-20	0.072	0.05	4	No	8	0.05275	0.007778	87.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	MW-24D	0.18	0.048	4	No	8	0.07088	0.04503	37.5	None	No	0.004	NP (normality)
Fluoride (mg/L)	MW-25D	2.2	1.4	4	No	8	1.65	0.239	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	MW-26D	0.19	0.044	4	No	8	0.075	0.0477	12.5	None	No	0.004	NP (normality)
Fluoride (mg/L)	MW-27D	0.42	0.22	4	No	8	0.27	0.06302	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	MW-28D	0.2674	0.1476	4	No	8	0.2075	0.05651	0	None	No	0.01	Param.
Fluoride (mg/L)	MW-29	0.18	0.045	4	No	8	0.06813	0.04582	62.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	MW-5	0.09236	0.04939	4	No	8	0.07088	0.02027	12.5	None	No	0.01	Param.
Fluoride (mg/L)	MW-6	0.19	0.05	4	No	8	0.1014	0.06371	25	None	No	0.004	NP (normality)
Fluoride (mg/L)	MW-7	0.17	0.05	4	No	8	0.06738	0.042	75	None	No	0.004	NP (NDs)
Lead (mg/L)	HGWC-10	0.001	0.00005	0.015	No	15	0.0009367	0.0002453	93.33	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-11	0.001	0.000099	0.015	No	15	0.0006706	0.0004226	60	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-12	0.001	0.000089	0.015	No	15	0.0007159	0.0004245	66.67	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-13	0.001	0.00014	0.015	No	15	0.0006527	0.000441	60	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-7	0.001	0.00009	0.015	No	15	0.0005996	0.0004589	40	None	No	0.01	NP (normality)
Lead (mg/L)	HGWC-8	0.001	0.00013	0.015	No	15	0.0007684	0.0003982	73.33	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-9	0.001	0.0001	0.015	No	15	0.0005543	0.0004342	46.67	None	No	0.01	NP (normality)
Lead (mg/L)	MW-19	0.0001214	0.00004136	0.015	No	6	0.000384	0.0004777	33.33	Kaplan-Meier	ln(x)	0.01	Param.
Lead (mg/L)	MW-20	0.0001907	0.00004523	0.015	No	6	0.0004065	0.0004617	33.33	Kaplan-Meier	x^(1/3)	0.01	Param.
Lead (mg/L)	MW-24D	0.0001737	0.0000328	0.015	No	6	0.0002427	0.0003754	16.67	Kaplan-Meier	ln(x)	0.01	Param.
Lead (mg/L)	MW-26D	0.001	0.00008	0.015	No	6	0.0006967	0.00047	66.67	Kaplan-Meier	No	0.0155	NP (NDs)
Lead (mg/L)	MW-27D	0.001	0.00013	0.015	No	6	0.00076	0.0003837	66.67	Kaplan-Meier	No	0.0155	NP (NDs)
Lead (mg/L)	MW-28D	0.0008507	-0.0000419	0.015	No	6	0.0005037	0.0004058	16.67	Kaplan-Meier	No	0.01	Param.
Lead (mg/L)	MW-29	0.001	0.000052	0.015	No	6	0.000542	0.0005021	50	None	No	0.0155	NP (normality)
Lead (mg/L)	MW-5	0.001	0.000047	0.015	No	6	0.0008412	0.0003891	83.33	None	No	0.0155	NP (NDs)
Lead (mg/L)	MW-6	0.0002477	0.00003146	0.015	No	6	0.0004183	0.0004567	33.33	Kaplan-Meier	sqrt(x)	0.01	Param.
Lead (mg/L)	MW-7	0.001	0.000062	0.015	No	6	0.0008437	0.0003829	83.33	Kaplan-Meier	No	0.0155	NP (NDs)
Lithium (mg/L)	HGWC-12	0.01088	0.008093	0.04	No	19	0.009484	0.002375	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-13	0.03828	0.0309	0.04	No	19	0.03459	0.006309	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-7	0.0032	0.0021	0.04	No	19	0.003195	0.002903	5.263	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-8	0.0029	0.0025	0.04	No	19	0.003342	0.002837	5.263	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-9	0.0046	0.004	0.04	No	19	0.004779	0.002518	5.263	None	No	0.01	NP (normality)
Lithium (mg/L)	MW-19	0.01336	0.008619	0.04	No	8	0.011	0.002491	0	None	x^2	0.01	Param.
Lithium (mg/L)	MW-20	0.015	0.00082	0.04	No	8	0.004652	0.006392	25	None	No	0.004	NP (normality)
Lithium (mg/L)	MW-24D	0.002919	0.002531	0.04	No	8	0.002725	0.0001832	0	None	No	0.01	Param.
Lithium (mg/L)	**MW-25D**	**0.05155**	**0.04545**	**0.04**	**Yes**	**8**	**0.0485**	**0.002878**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	MW-26D	0.03	0.0032	0.04	No	8	0.006925	0.009329	0	None	No	0.004	NP (normality)
Lithium (mg/L)	MW-27D	0.009164	0.005536	0.04	No	8	0.00735	0.001711	0	None	No	0.01	Param.
Lithium (mg/L)	MW-28D	0.0141	0.005449	0.04	No	8	0.009775	0.004082	0	None	No	0.01	Param.
Lithium (mg/L)	MW-29	0.002433	0.002117	0.04	No	8	0.002275	0.0001488	0	None	No	0.01	Param.
Molybdenum (mg/L)	HGWC-10	0.005	0.0014	0.1	No	19	0.003663	0.001814	63.16	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	HGWC-11	0.02514	0.01508	0.1	No	19	0.02011	0.00859	0	None	No	0.01	Param.
Molybdenum (mg/L)	HGWC-12	0.04978	0.0457	0.1	No	19	0.04774	0.003483	0	None	No	0.01	Param.
Molybdenum (mg/L)	HGWC-13	0.03593	0.0301	0.1	No	19	0.03302	0.004974	0	None	No	0.01	Param.
Molybdenum (mg/L)	HGWC-7	0.04274	0.03437	0.1	No	20	0.03856	0.007368	0	None	No	0.01	Param.
Molybdenum (mg/L)	**HGWC-8**	**0.4928**	**0.4503**	**0.1**	**Yes**	**20**	**0.4716**	**0.03743**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	HGWC-9	0.033	0.0234	0.1	No	19	0.05098	0.1033	0	None	No	0.01	NP (normality)
Molybdenum (mg/L)	MW-19	0.06073	0.03377	0.1	No	8	0.04725	0.01271	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-24D	0.005	0.00027	0.1	No	8	0.002902	0.002254	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	MW-25D	0.005	0.00094	0.1	No	8	0.004142	0.001623	75	None	No	0.004	NP (NDs)

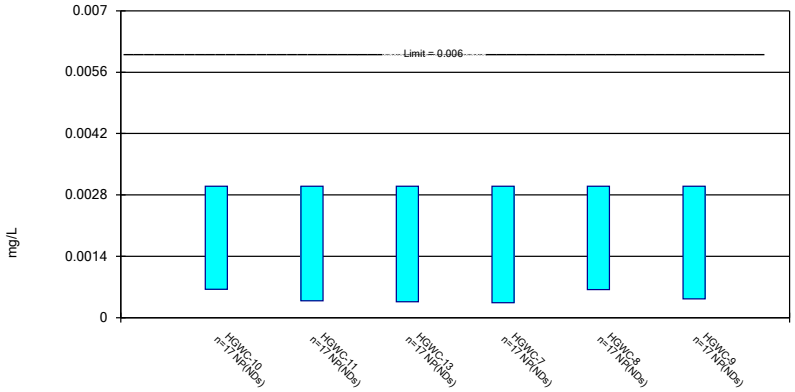
Federal Confidence Intervals - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-1 Printed 5/4/2021, 7:34 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Molybdenum (mg/L)	MW-26D	0.02056	0.007442	0.1	No	9	0.014	0.006793	11.11	None	No	0.01	Param.
Molybdenum (mg/L)	MW-27D	0.004925	0.00115	0.1	No	8	0.003037	0.001781	12.5	None	No	0.01	Param.
Molybdenum (mg/L)	MW-28D	0.02271	0.008486	0.1	No	8	0.0156	0.006712	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-29	0.003366	0.002184	0.1	No	8	0.002775	0.0005574	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-6	0.002589	0.002136	0.1	No	8	0.002363	0.0002134	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-7	0.005	0.0015	0.1	No	8	0.003475	0.001733	50	None	No	0.004	NP (normality)
Selenium (mg/L)	HGWC-10	0.005	0.0028	0.05	No	19	0.004353	0.001207	73.68	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-11	0.01552	0.006815	0.05	No	19	0.01117	0.007435	0	None	No	0.01	Param.
Selenium (mg/L)	HGWC-12	0.005	0.0011	0.05	No	19	0.004795	0.0008947	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-13	0.005	0.0016	0.05	No	19	0.004567	0.001317	89.47	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-8	0.005	0.0024	0.05	No	19	0.004863	0.0005965	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-9	0.005	0.0037	0.05	No	19	0.004932	0.0002982	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	MW-19	0.005561	0.001677	0.05	No	8	0.004175	0.001851	25	Kaplan-Meier	No	0.01	Param.
Selenium (mg/L)	MW-27D	0.005	0.00012	0.05	No	8	0.00439	0.001725	87.5	Kaplan-Meier	No	0.004	NP (NDs)
Selenium (mg/L)	MW-5	0.003857	0.002393	0.05	No	8	0.003125	0.0006902	0	None	No	0.01	Param.
Selenium (mg/L)	MW-7	0.005	0.0014	0.05	No	8	0.003012	0.001692	37.5	None	No	0.004	NP (normality)
Thallium (mg/L)	HGWC-11	0.001	0.00008	0.002	No	19	0.0009032	0.0002901	89.47	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-12	0.001	0.00009	0.002	No	19	0.0007171	0.0004287	68.42	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-13	0.0004261	0.000341	0.002	No	19	0.0003836	0.00007267	0	None	No	0.01	Param.
Thallium (mg/L)	HGWC-8	0.001	0.00008	0.002	No	19	0.0007099	0.0004388	68.42	None	No	0.01	NP (NDs)
Thallium (mg/L)	MW-19	0.001	0.00019	0.002	No	8	0.0004425	0.0003455	25	None	No	0.004	NP (normality)
Thallium (mg/L)	MW-28D	0.001	0.000092	0.002	No	8	0.0008865	0.000321	87.5	None	No	0.004	NP (NDs)
Thallium (mg/L)	MW-29	0.001	0.000064	0.002	No	8	0.000883	0.0003309	87.5	None	No	0.004	NP (NDs)
Thallium (mg/L)	MW-6	0.001	0.000082	0.002	No	8	0.0008853	0.0003246	87.5	None	No	0.004	NP (NDs)

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

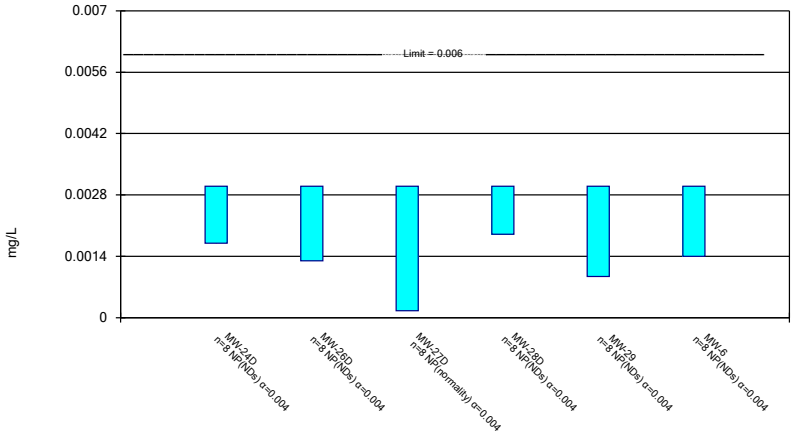


Constituent: Antimony Analysis Run 5/4/2021 7:30 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

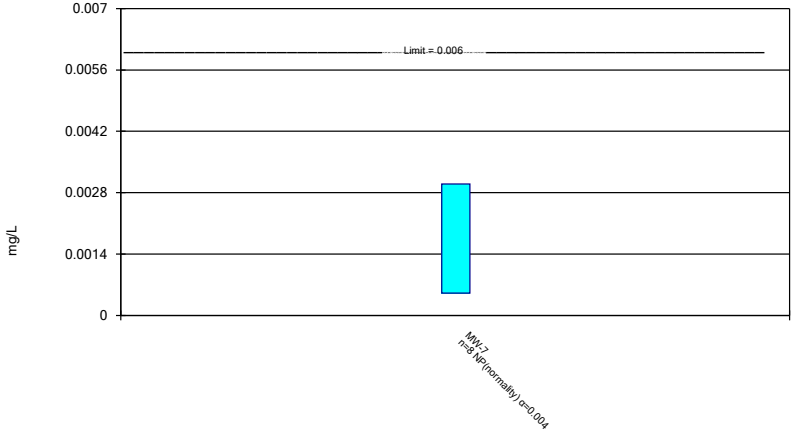


Constituent: Antimony Analysis Run 5/4/2021 7:30 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

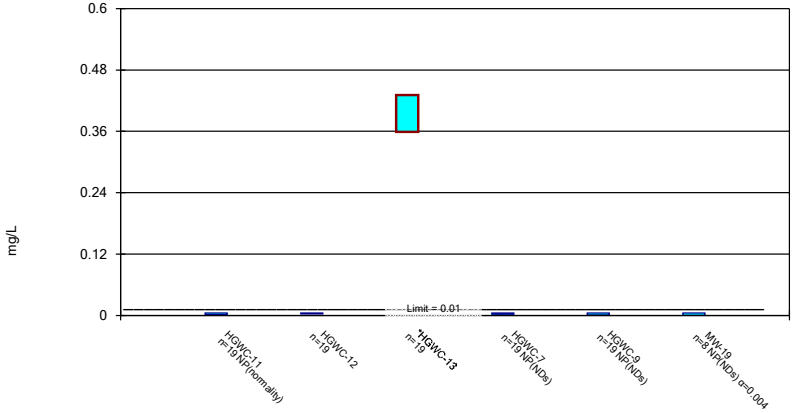


Constituent: Antimony Analysis Run 5/4/2021 7:30 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

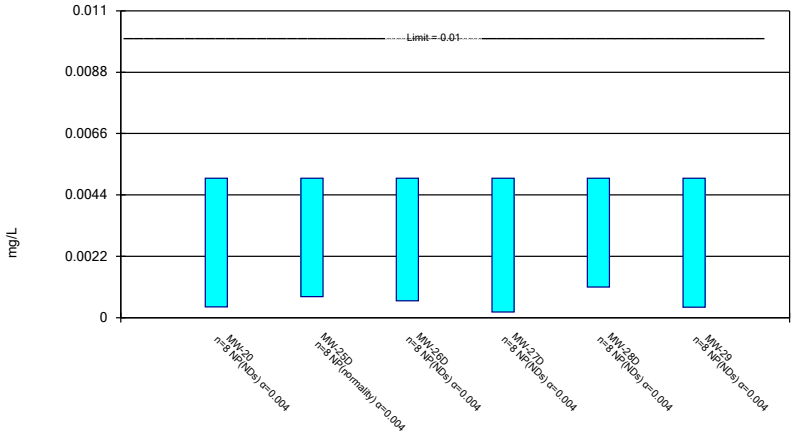
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 5/4/2021 7:30 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Non-Parametric Confidence Interval

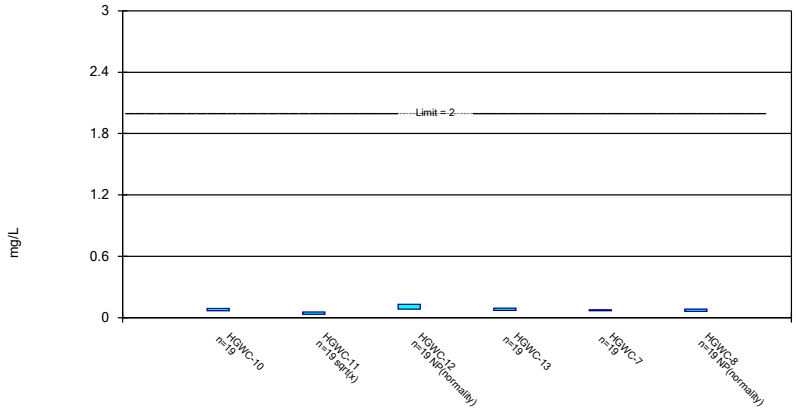
Compliance Limit is not exceeded.



Constituent: Arsenic Analysis Run 5/4/2021 7:30 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

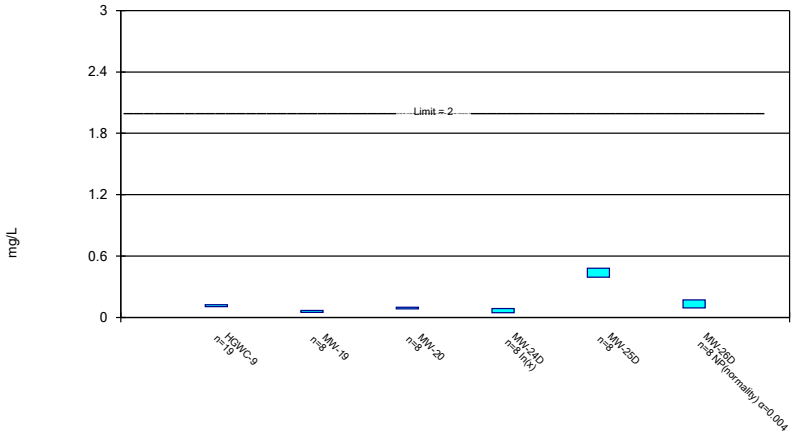
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 5/4/2021 7:30 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

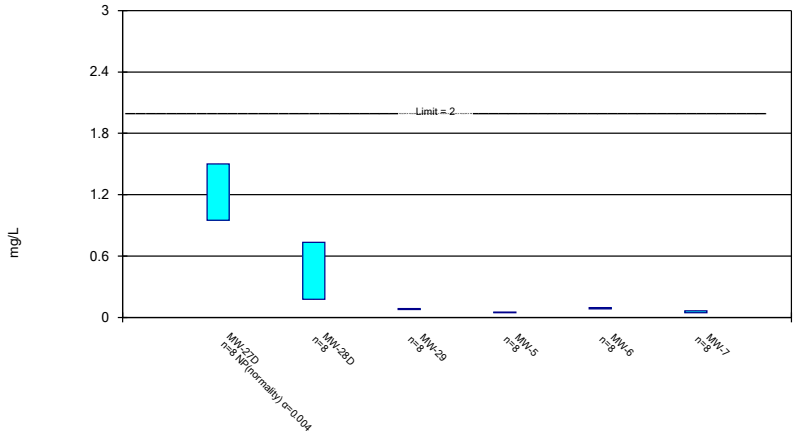
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 5/4/2021 7:30 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 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

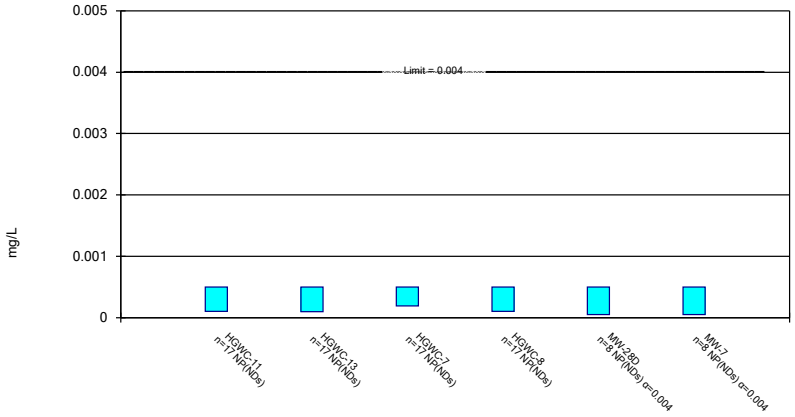


Constituent: Barium Analysis Run 5/4/2021 7:30 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

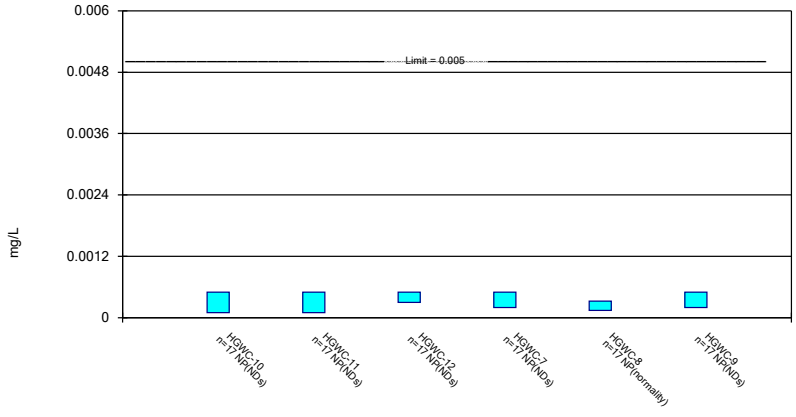


Constituent: Beryllium Analysis Run 5/4/2021 7:30 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

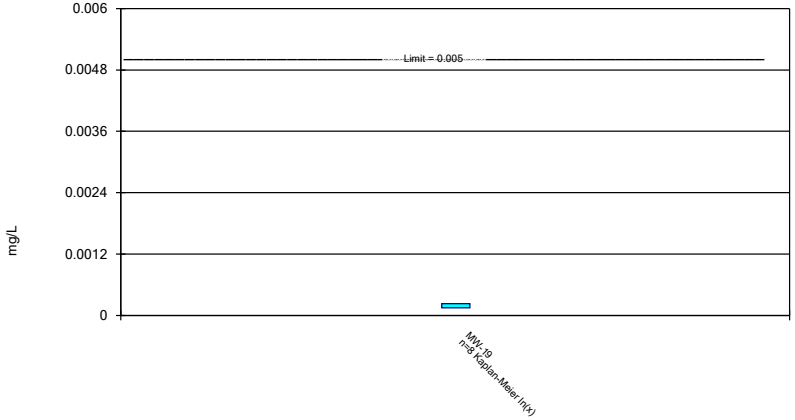


Constituent: Cadmium Analysis Run 5/4/2021 7:30 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 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.

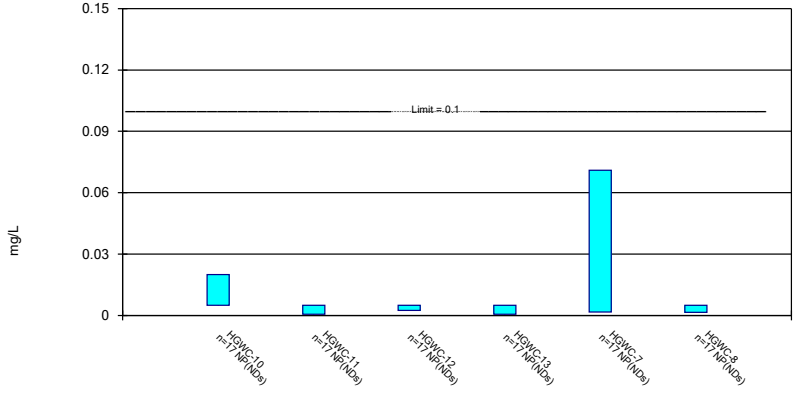


Constituent: Cadmium Analysis Run 5/4/2021 7:30 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

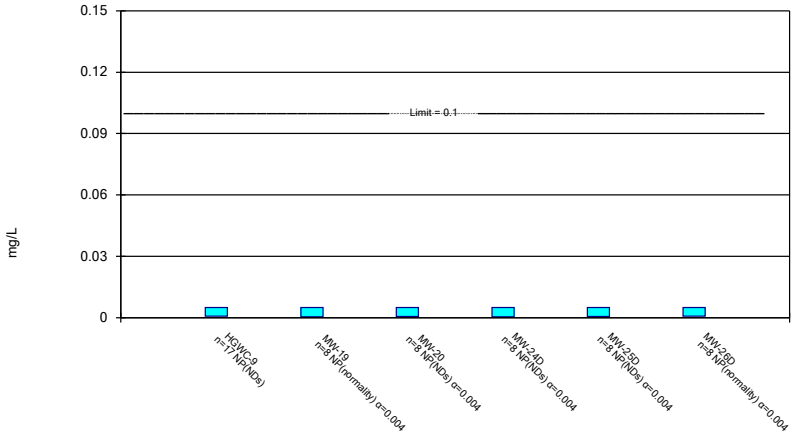
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 5/4/2021 7:30 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Non-Parametric Confidence Interval

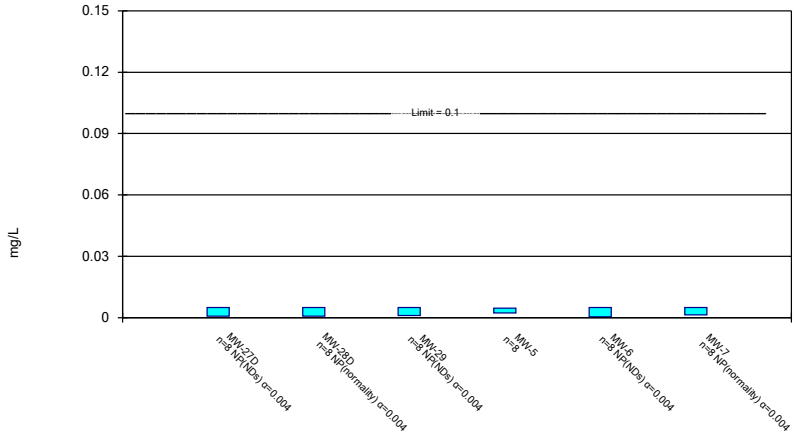
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Chromium Analysis Run 5/4/2021 7:30 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

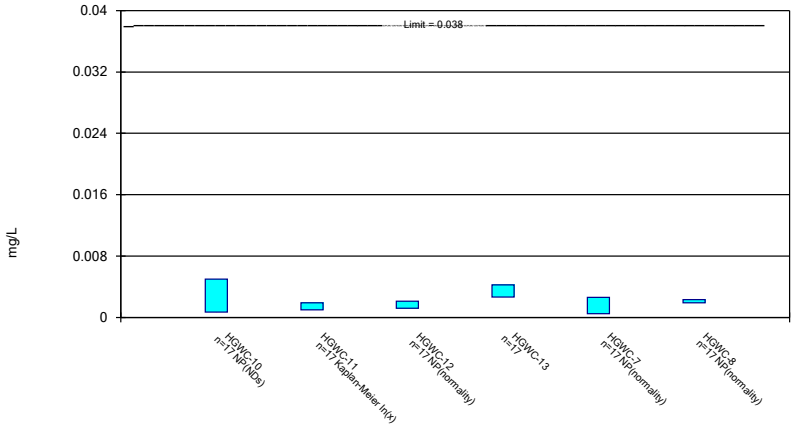
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chromium Analysis Run 5/4/2021 7:30 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

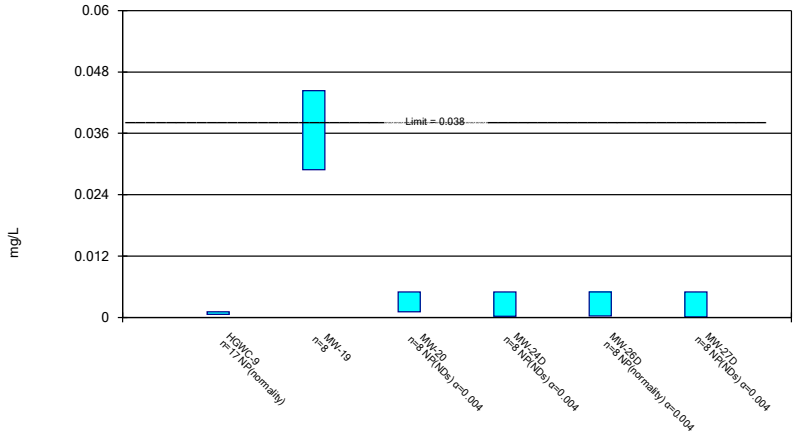
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 5/4/2021 7:30 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

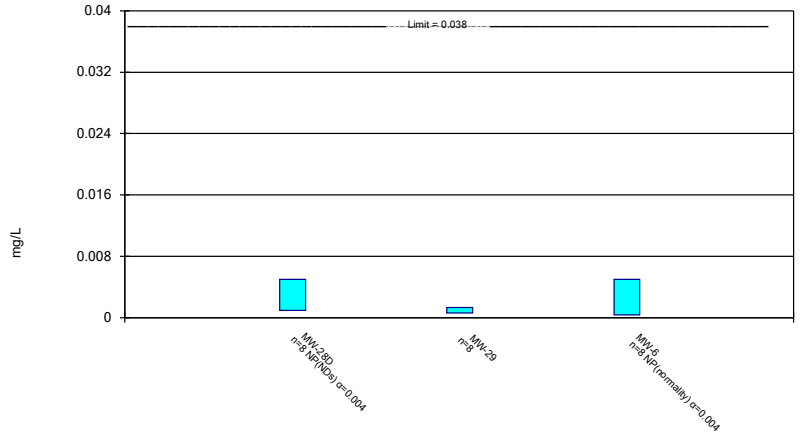
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 5/4/2021 7:30 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

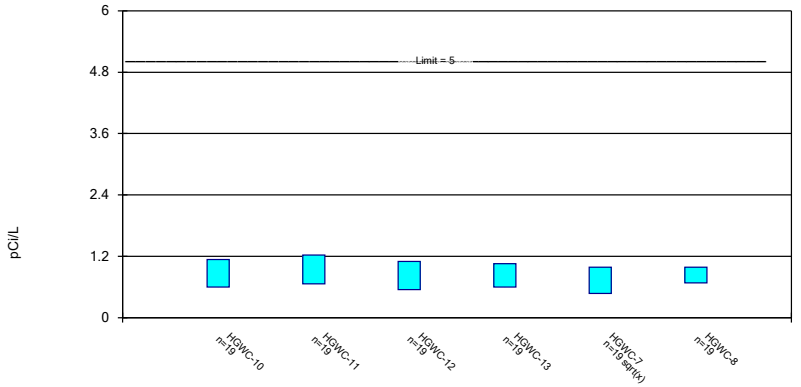
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 5/4/2021 7:30 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric Confidence Interval

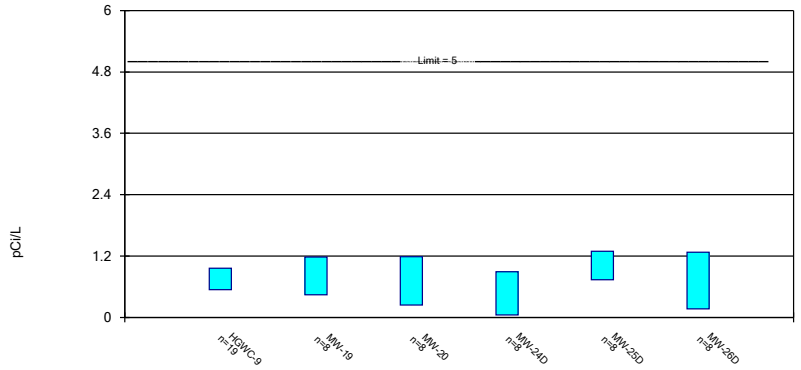
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 5/4/2021 7:30 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric Confidence Interval

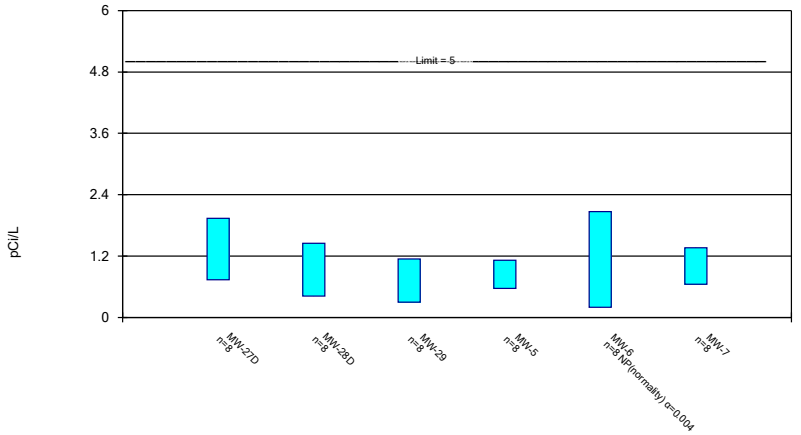
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 5/4/2021 7:30 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

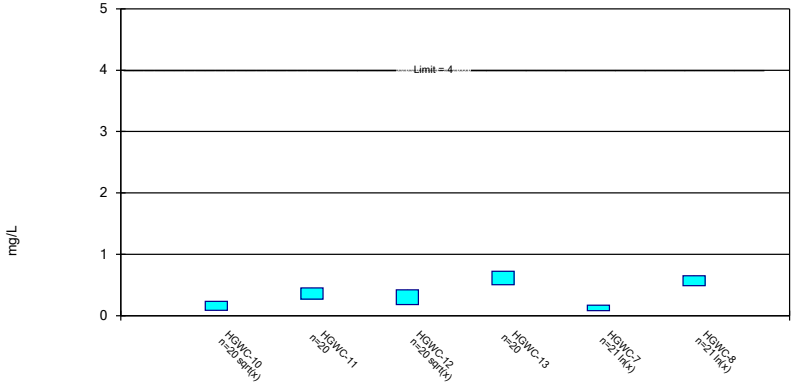
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 5/4/2021 7:30 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.

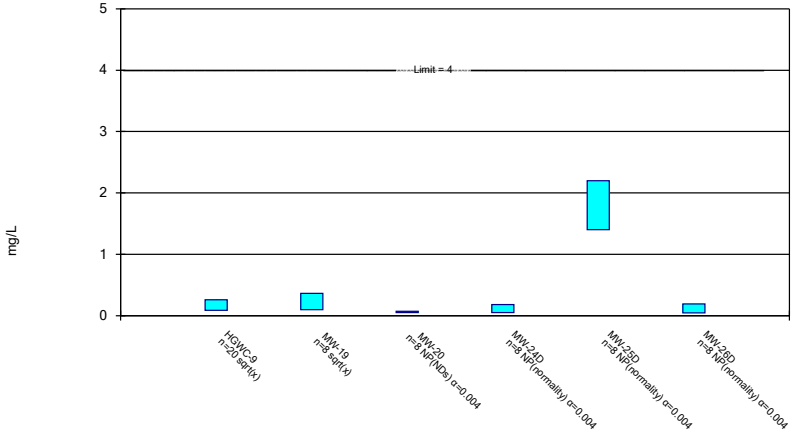


Constituent: Fluoride Analysis Run 5/4/2021 7:30 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

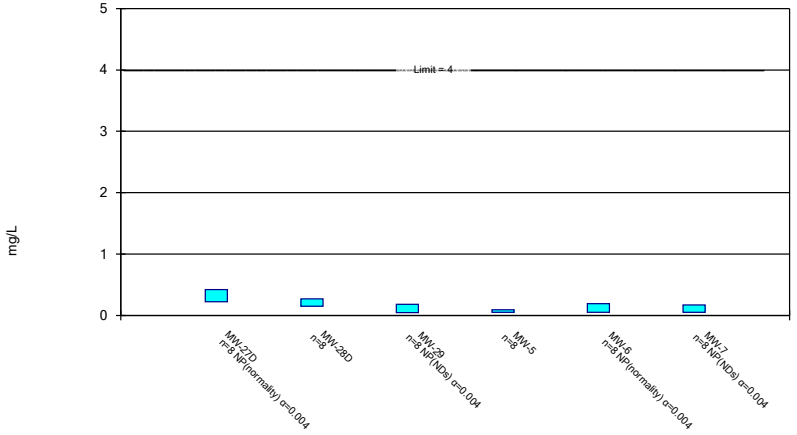


Constituent: Fluoride Analysis Run 5/4/2021 7:30 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

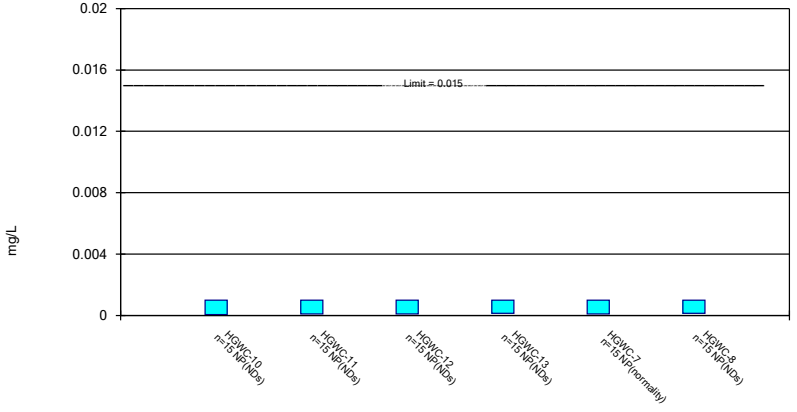


Constituent: Fluoride Analysis Run 5/4/2021 7:30 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

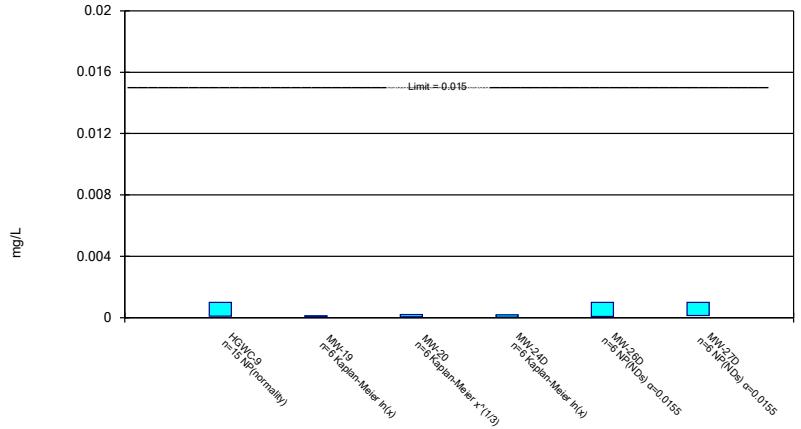
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 5/4/2021 7:30 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 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

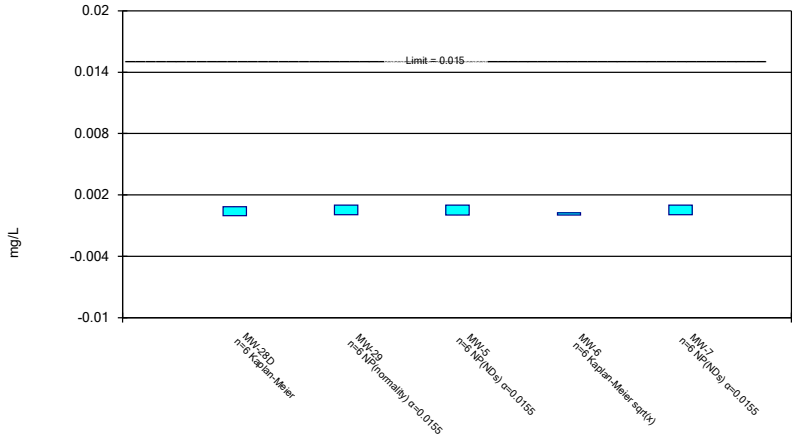


Constituent: Lead Analysis Run 5/4/2021 7:30 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

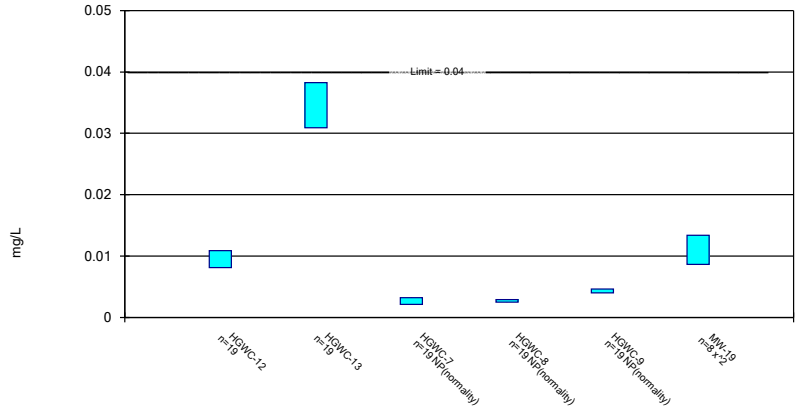


Constituent: Lead Analysis Run 5/4/2021 7:30 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 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.

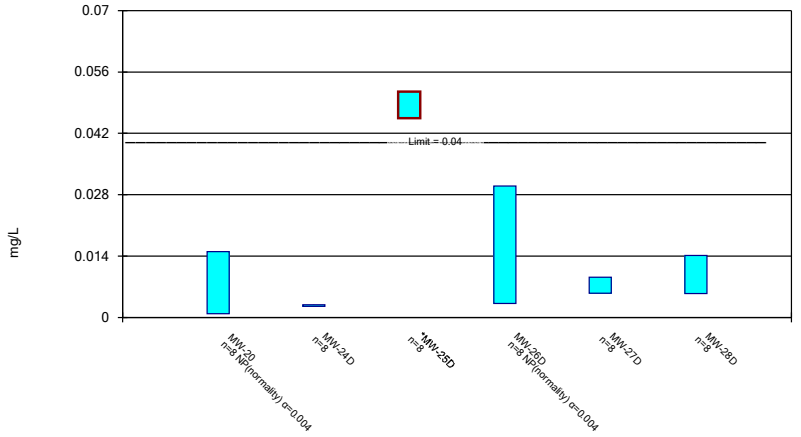


Constituent: Lithium Analysis Run 5/4/2021 7:30 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

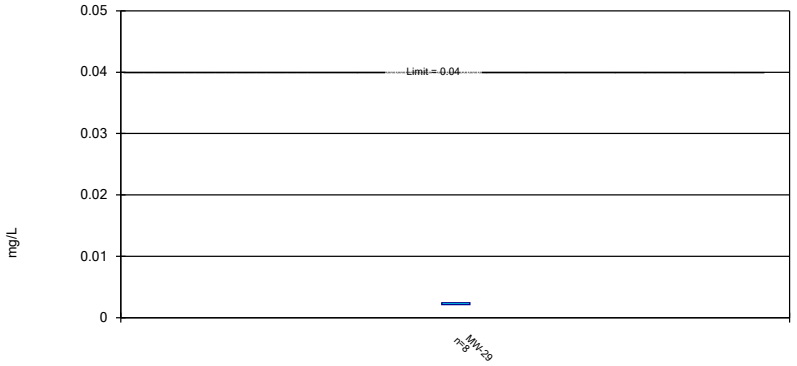
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 5/4/2021 7:30 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric Confidence Interval

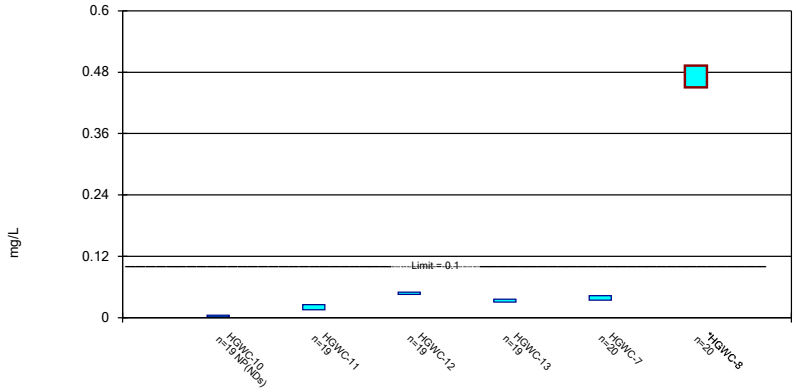
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 5/4/2021 7:30 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

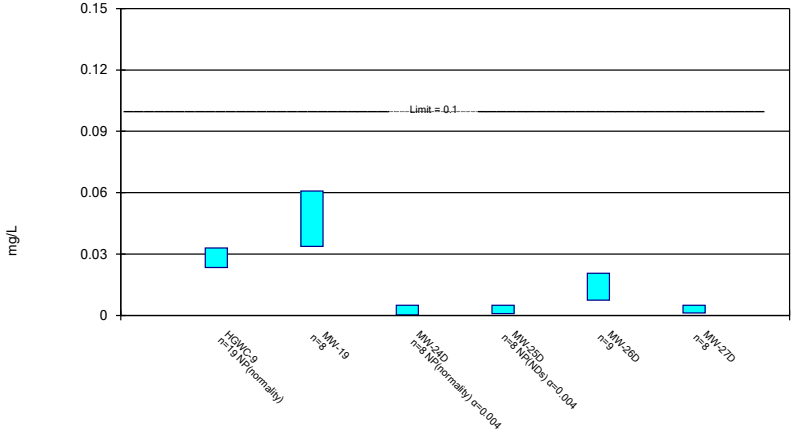
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 5/4/2021 7:30 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

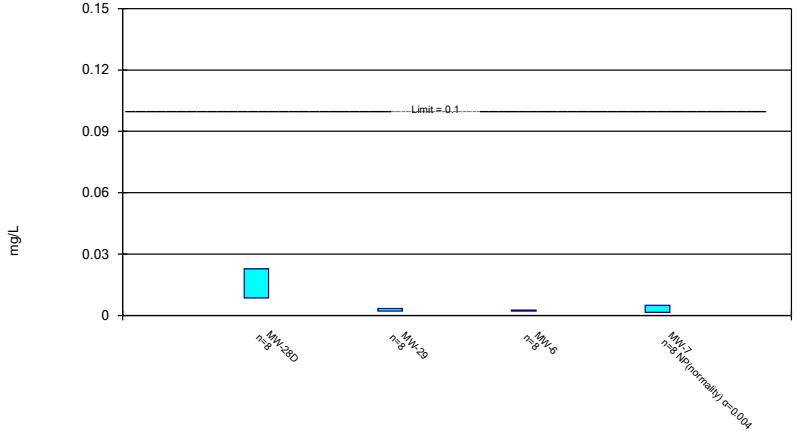
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 5/4/2021 7:30 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-1

Parametric and Non-Parametric (NP) Confidence Interval

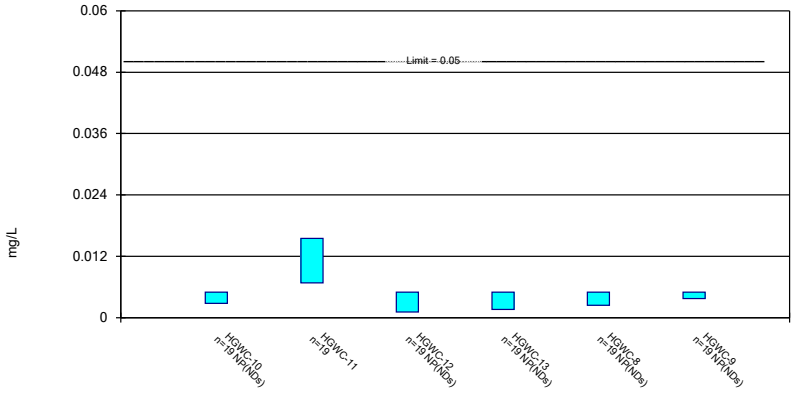
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 5/4/2021 7:30 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.

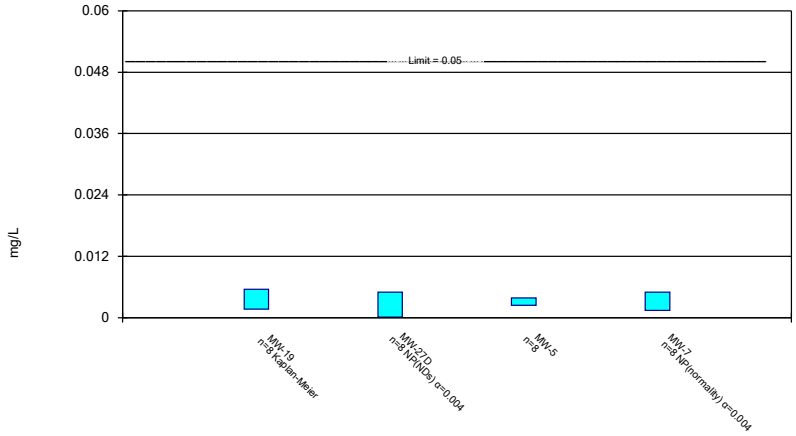


Constituent: Selenium Analysis Run 5/4/2021 7:30 PM View: Appendix IV

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 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

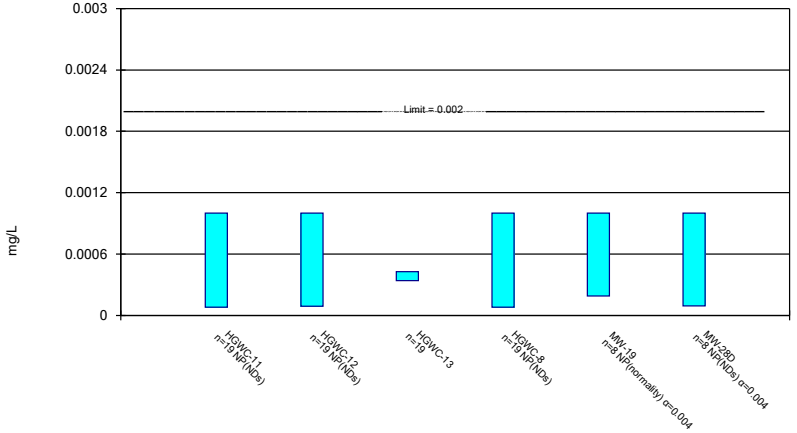


Constituent: Selenium Analysis Run 5/4/2021 7:30 PM View: Appendix IV

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 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

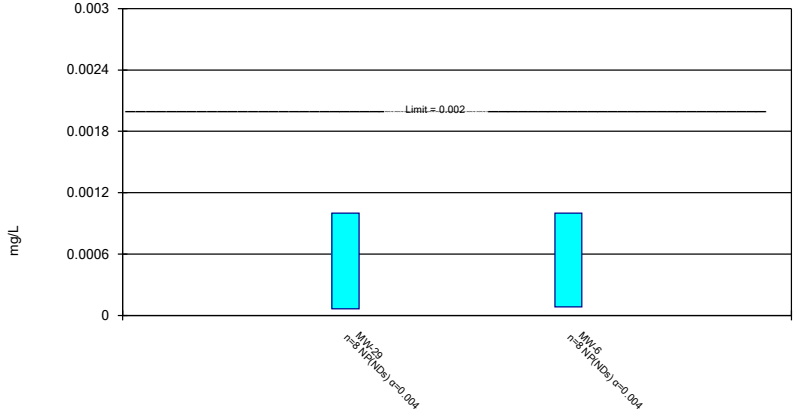


Constituent: Thallium Analysis Run 5/4/2021 7:30 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Thallium Analysis Run 5/4/2021 7:30 PM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-1