REPORT

Assessment of Corrective Measures

Georgia Power Company - Plant Scherer Ash Pond 1 (AP-1)

Submitted to:

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1.0 INTRODUCTION

This *Assessment of Corrective Measures* (ACM) report has been prepared pursuant to the United States Environmental Protection Agency (US EPA) coal combustion residuals (CCR) rule (40 Code of Federal Regulations [CFR] Part 257 Subpart D) and the Georgia Environmental Protection Division (GA EPD) Administrative Code 391-3-4-.10(6), to evaluate potential groundwater corrective measures at Plant Scherer Ash Pond 1 (AP-1, Site). This ACM evaluates potential corrective measures to address statistically significant levels (SSLs) of cobalt in groundwater at AP-1. Georgia Power submitted an alternate source demonstration (ASD) for cobalt in January 2019. GA EPD reviewed the ASD and acknowledge that cobalt does naturally occur in groundwater at the site in their letter dated August 20, 2021. However, EPD was not able to discount that higher cobalt concentrations at SSLs above the groundwater protection standard may be influenced by the CCR unit and requested that Georgia Power initiate the ACM process.

The ACM was initiated on November 18, 2021, and a 60-day extension was filed on February 16, 2021. Pursuant to 40 CFR § 257.97-98 and 391-3-4-.10(6), based on the results of this ACM, further evaluation may be performed, site-specific studies completed, and a final long-term corrective action plan developed and implemented. The evaluation of the nature and extent of cobalt in groundwater, conducted under this ACM is complete. Results from further characterization efforts and the delineation of target constituents and ongoing ACM evaluations will be provided in subsequent semi-annual remedy selection progress reports. These progress reports will be included as an attachment to the Semi-Annual Groundwater Monitoring and Corrective Action Reports. The next semi-annual report will be submitted by August 31, 2022.

In addition to the assessment monitoring program at the Site, Georgia Power conducted a human health and ecological risk assessment of groundwater data reported between 2015 and 2020 to evaluate cobalt SSLs in groundwater at AP-1. The results of the risk evaluation were presented in the *Risk Evaluation Report*, submitted to GA EPD (Wood, 2021; Appendix A). The evaluation provides multiple lines of evidence that indicate further risk evaluation for groundwater and surface water is not warranted. Each of these lines of evidence 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 cobalt detected in groundwater at AP-1 between 2016 and 2019 are not expected to pose a risk to human health or the environment (Wood, 2021). Data collected since 2020 are generally consistent with data used in the risk evaluation; therefore, the conclusions provided in the Risk Evaluation Report are supported by current conditions reported during the 2021 reporting period.

1.1 Purpose

The purpose of this ACM is to identify potential corrective measure(s) to address cobalt in groundwater at AP-1 using the criteria outlined in 40 CFR 257.96 and Georgia Rule 391-3-4-.10(6)(a). This process is typically iterative and include multiple steps to analyze the effectiveness of corrective measures to address the potential migration of cobalt in groundwater at AP-1.

Once potential corrective measures are identified, they will be further evaluated using the criteria outlined in 40 CFR 257.97-98 and 391-3-4-.10(6), which state that assessment of corrective measures should include an analysis of the following:

- Performance
- Reliability

- Ease of implementation
- Potential impacts
- The time required to begin and complete the remedy
- Any institutional requirements that could affect implementation of the remedy.

These evaluation criteria, discussed in more detail in the following sections, were considered for each potential remedy.

1.2 Site Location and Description

Plant Scherer is a coal-fired power generation facility located in northeast Monroe County approximately 5 miles south of Juliette, GA. The Plant Scherer property occupies approximately 13,000 acres and is bounded on the south by Lake Juliette. The Plant is primarily surrounded by agricultural and residential use. Figure 1 depicts the location of Plant Scherer within its topographic region.

CCR resulting from power generation has historically been stored in AP-1. Figure 2 depicts the general configuration of AP-1 and Site monitoring wells. As of 2019, AP-1 no longer received CCR and as of October 30, 2020, AP-1 no longer received non-CCR waste streams.

Plant Scherer is located within the Piedmont Physiographic Province of central Georgia, which is characterized by gently rolling hills and narrow valleys, with locally pronounced linear ridges. Overall, the property slopes gently south toward Lake Juliette and east toward the Ocmulgee River (Figure 1). AP-1 is located on a topographically high area, with several relatively small, intermittent, and perennial creeks and streams surrounding the pond. Several isolated hilltops occur west of the pond and represent topographic high points on the site. Topographic relief across the site is greater than 200 feet, with a natural topographic high of over 570 feet above mean sea level (ft msl) occurring along the ridge west of the Ash Pond, and a topographic low of less than 380 ft msl in the eastern portion of the site near the property boundary.

1.3 Pond Closure

The *Amended Written Closure Plan* (Georgia Power, 2020) was prepared in accordance with 40 CFR 257, Subpart D and meets the requirements of 40 CFR 257.102(b) and 391-3-4-.10.

The surface impoundment (AP-1) at Plant Scherer will be closed by consolidating the CCR within the 550-acre impoundment to a smaller footprint in accordance with 391-3-4-.10 and 40 CFR 257.102(b)(1)(iii). The proposed closure footprint will consist of two principal regions within the existing AP-1 footprint in the remaining area; a closure-by-removal area located to the north and the consolidated closure-in-place footprint in the south. The two proposed closure areas will be separated by a new northern embankment berm (referenced herein as the north berm) that will buttress the consolidated CCR materials within the consolidated closure-in-place footprint and for the limit of the final cover. The reduced

footprint of the consolidated CCR will then be closed in place (see inset figure).

2.0 CONCEPTUAL SITE MODEL

The following sections summarize the geologic and hydrogeologic conditions at Plant Scherer as described in the Hydrogeologic Assessment Report (HAR, Golder, 2021).

2.1 Site Geology

The Site is directly underlain by a variably thick blanket of overburden, which is comprised of residual and saprolitic soils, saprolitic rock, partially weathered rock (PWR)/transitionally weathered rock (TWR). The geology beneath the site is generally consistent across the site (i.e., feldspathic biotite gneiss) with isolated granitic, mafic, and ultramafic bodies. Lineaments identified around the site are consistent in orientation with structural features observed during geologic mapping, indicating that development of surface lineation is likely controlled by preferential weathering related to discontinuities in bedrock. The top of rock surface generally mimics site topography.

In general, the bedrock lithology at the site is relatively uniform with the exception of discontinuous granitic bodies and granitic lenses within the gneiss. There are numerous discontinuous lenses and bodies of mafic and ultramafic rocks in the northern, central and eastern portions of the site and south of Lake Juliette, and feldspathic granitic bodies in the western portions of the site. Many of these relatively small and discontinuous mafic and ultramafic bodies remain unmapped. These differing rock types may result in geochemical variation in the overburden and groundwater chemistry.

Figures 2 and 3A through 3D present the profile orientation and subsurface geologic cross sections for the site depicting the geologic and hydrogeologic features for the site.

2.2 Uppermost Aquifer

The uppermost aquifer occurs within the overburden and includes the TWR. Data from boring logs, water level measurements, well development, well purging, and groundwater quality data suggest that the overburden aquifer is hydraulically connected to the bedrock aquifer, consistent with the conceptual models described for the Piedmont. Available site data suggest that the hydraulic connectivity between overburden aquifer and the bedrock aquifer is dependent on the topographic location, storage capacity of the overburden storehouse, and the occurrence of interconnected fractures to the bedrock aquifer. Lithologic and hydrogeologic data reflect limited connectivity between the uppermost aquifer and the bedrock aquifer. Groundwater in the uppermost aquifer appears to be supporting base flow of creeks on site (many groundwater contours cross topographic contours of similar elevation at headwaters of the creek).

2.3 Groundwater Flow Conditions

A potentiometric map for the site is presented as Figure 4. As illustrated on Figure 4, the water table surface of the uppermost aquifer is a subdued reflection of topography at the site, with localized influences of topography and the effects of mounding. AP-1 pool level maintains a higher head on all sides of AP-1 except the western edge, including the knob. Thus, the groundwater surrounding AP-1 (with the exception to the west and upgradient of AP-1) is elevated compared to areas further away from AP-1. Local groundwater mounding effects may induce gradients towards AP-1. However, in general, groundwater flow is from the western higher terrains towards the

pond but eventually flows from the pond to north, east, and south. However, the current flow is expected to revert to pre-site development conditions following dewatering of the pond and post-closure capping of the pond.

Groundwater flow rates at the site were calculated based on hydraulic gradients, hydraulic conductivity from previous slug test results, and an estimated effective porosity of the screened horizon. Based on slug test data collected at the site, hydraulic conductivity averages 1.31 to 2.36 feet per day (ft/day), which are used in the flow calculations. Using August 2021 site data (Figure 4), the hydraulic gradient can be calculated between well pairs (SGWC-14/PZ-29S, SGWC-13/PZ-35I, and SGWC-20/PZ-43S). An effective porosity of 0.2 is used based on the default values for effective porosity recommended by US EPA for a silty sand-type soil (US EPA, 1996).

Based on the August 2021 site data, groundwater flow velocity at the site ranges from approximately 0.09 ft/day to 0.32 ft/day (approximately 34 to 116 feet per year) near AP-1. The observed groundwater velocities are generally consistent with expected velocities in the regolith-upper bedrock aquifers.

3.0 NATURE AND EXTENT OF APPENDIX IV SSLS

The following sections describe Site assessment activities performed through February 2022 in support of 1) delineating the nature and extent of SSLs in groundwater and 2) evaluating potential corrective measures to address them.

3.1 Groundwater Monitoring and Constituents of Concern

3.1.1 Groundwater Monitoring Program

A compliance groundwater monitoring well network was installed which 1) consists of a sufficient number of wells, 2) is installed at appropriate locations and depths to yield groundwater samples from the uppermost aquifer, and 3) represents groundwater quality both upgradient (i.e., representing background conditions) and downgradient of AP-1. The locations of these wells (number, spacing, and depths) were selected based on the understanding of site-specific hydrogeologic conditions and the justification for placement is presented in the *Hydrogeologic Assessment Report* (Golder, 2021). The well network was certified by a professional engineer (PE) on October 17, 2017, and the certification is maintained in the AP-1 Operating Record. Detection monitoring well locations for AP-1 are presented in Table 1 and are shown on Figure 4. The detection monitoring well network is evaluated and certified by a professional engineer on a semi-annual basis to confirm the adequacy of the network to identify any potential release from the CCR unit.

An assessment monitoring well network has been established for the site following the initiation of ACM. The assessment well network is also included on Table 1 and well locations are shown on Figure 4.

The piezometer network for the Ash Pond currently consists of numerous site piezometers (Table 1) installed at the Site to further characterize groundwater conditions. Piezometers are presented in Table 1 and shown on Figure 4. Groundwater is currently monitored in AP-1 under the assessment monitoring program pursuant to 40 CFR § 257.95.

3.1.2 Statistically Significant Levels (SSLs) for Appendix IV Constituents

During the assessment sampling events, groundwater samples were collected and analyzed for Appendix IV parameters to meet the requirement of § 257.95(b). Analytical data from the semi-annual assessment monitoring events have been statistically analyzed pursuant to § 257.93(f) and in general accordance with the US EPA document *Statistical Analysis of Groundwater Data at RCRA Facilities Unified Guidance* (Unified Guidance; US

EPA, 2009). Following federal and state rule requirements, groundwater protection standards (GWPS) were established for statistical comparisons of Appendix IV groundwater monitoring parameters. Site-specific GWPS are presented in Table 2. Details regarding the statistical analyses are provided in the *2021 Annual Groundwater and Corrective Action Monitoring Report* (Golder, 2022).

SSLs of Appendix IV groundwater monitoring parameter, cobalt are identified at wells:

- SGWC-10
- SGWC-11
- SGWC-15
- SGWC-18
- SGWC-20

3.2 Field Investigation Activities

The following summarizes the field investigation activities and data evaluations completed to assess the presence of cobalt in Site groundwater:

- Installation of delineation wells
- Completion of multiple assessment monitoring events
- Evaluation of natural sources of cobalt.

3.2.1 Delineation Well Installation

To delineate the extent of cobalt in Site groundwater, additional monitoring wells and/or piezometers have been installed at locations near each detection monitoring well where Appendix IV SSLs have been observed.

Horizontal delineation wells were installed at the same general screen elevation at locations stepped out from detection monitoring wells SGWC-10, SGWC-11, SGWC-15, SGWC-18, and SGWC-20. Vertical delineation wells were installed within the fractured bedrock, slightly off-set from detection monitoring wells SGWC-10, SGWC-11, SGWC-15, SGWC-18, and SGWC-20 resulting in a shallow and deep well pair at each of these locations. The locations of the delineation wells are shown on Figure 4. The table below presents each of the detection monitoring wells that have identified SSLs and the associated horizontal and vertical delineation well.

Detection Monitoring Well	Vertical Delineation Well	Horizontal Delineation Well
SGWC-10	PZ-69I	PZ-13S
SGWC-11	PZ-44I	PZ-14S
SGWC-15	PZ-17I	PZ-39S
SGWC-18	PZ-40I	PZ-41S
SGWC-20	PZ-42I	PZ-43S

3.2.2 Groundwater Sampling

Pursuant to 40 CFR 257.96, groundwater in the vicinity of AP-1 continues to be monitored in accordance with the assessment monitoring program established for AP-1. During the February 2022 semi-annual monitoring event, groundwater samples were collected from both the detection monitoring network and the assessment monitoring well network and analyzed for the full suite of Appendix III and Appendix IV constituents per 40 CFR 257.95(b). Groundwater analytical results from August 2021 semi-annual monitoring event and the recent assessment monitoring event conducted in February 2022 are summarized in Tables 3A through 3C. Laboratory reports associated with the August 2021 and February 2022 sampling events are provided in Appendix B. Statistical analyses of the February 2022 monitoring results will be submitted with the semi-annual groundwater monitoring report in August 2022.

3.2.3 SSL Constituent Trend Analyses

Based on GA EPD guidance, cobalt concentrations in upgradient wells and wells with SSLs were evaluated using the Sen's Slope/Mann Kendall trend test (Appendix C). No statistically significant increasing cobalt trends were identified in detection monitoring wells with SSLs; however, statistically significant decreasing trends for cobalt were identified in SGWA-1, SGWA-25, SGWC-11, SGWC-20.

The lack of increasing trends at wells where SSLs have been identified along with some decreasing trends confirms the stable nature of groundwater conditions at the Site. Where SSLs have been identified, cobalt concentrations appear to be stable or shrinking.

3.3 Nature and Extent Evaluation

To characterize the nature and extent of cobalt, multiple piezometers have been installed and sampled at the Site. Figures 5 and 5A through 5C present isoconcentration contours for cobalt. The isoconcentration contours show that cobalt concentrations are below the GWPS of 0.02 milligrams per liter (mg/L) within a short horizontal distance from wells with SSLs. Cobalt concentrations are also below the GWPS at vertical delineation wells screened within the upper bedrock. Based on interpretation of the data collected to date, the horizontal and vertical delineation of cobalt for AP-1 at Plant Scherer is complete. Data presented are from August 2021, with the exception of a few delineation wells, which are from February 2022 (Appendix B). The horizontal and vertical delineation wells will be sampled semi-annually and statistically analyzed as part of the assessment monitoring network going forward.

3.4 Natural Sources of Cobalt

During site investigation activities, natural sources of cobalt were identified at the Site and an ASD was submitted to GA EPD on January 14, 2019, to address SSLs for cobalt identified at SGWC-10, SGWC-11, SGWC-15,

SGWC-18, and SGWC-20. The ASD concluded that the source of the elevated concentrations of cobalt is not the result of a release from AP-1 (where no cobalt has been detected in porewater samples) but rather naturally-occurring cobalt in subsurface aquifer materials (Golder, 2019). Although GA EPD concurred with Georgia Power that cobalt occurs naturally in groundwater at the Site, a letter of non-concurrence with the ASD report was issued on August 20, 2021, and the ACM was initiated.

Supplemental geochemical data have been obtained for Site rock samples since the January 2019 ASD at the Site. These data continue to support the natural occurrence of cobalt in soils and saprolite surrounding AP-1. The regional geologic setting includes rock types that represent a source for cobalt, which is released to the regional aquifers through chemical weathering and interaction with groundwater. Areas of low-pH groundwater have caused the release and mobilization of naturally-occurring cobalt into groundwater. The presence of the acid sulfate salt mineral, jarosite, in the aquifer indicates the low pH is likely due to the natural weathering of sulfide minerals (Jambor et al. 2000; Nordstrom and Alpers 1999) over geologic time scale, where sulfides are a common host for cobalt. Further evaluation of these natural sources of cobalt may be conducted as it relates to selection of remedial alternatives for groundwater corrective action.

4.0 GROUNDWATER CORRECTIVE MEASURES

Although natural sources of cobalt are present in certain rock types in the aquifer, this section reviews potentially applicable remediation alternatives to address the mechanism causing the release of cobalt to the groundwater and the presence of cobalt in groundwater at concentrations exceeding the GWPS.

4.1 Objectives of the Corrective Measures

In evaluating the effectiveness of potential corrective measures using the criteria listed in 40 CFR 257.96(c), including performance, reliability, ease of implementation, potential impacts, remedy duration, and institutional and public health requirements, the following criteria listed in 40 CFR 257.97(b) must be met by the corrective measure when selected:

- Protect human health and the environment
- Attain applicable GWPS as specified pursuant to 40 CFR 257.95(h)
- Control the sources of releases to reduce or eliminate, to the maximum extent feasible, further releases of Appendix IV constituents to the environment
- Remove from the environment as much of the contaminated material that was released from the CCR unit as is feasible, considering factors such as avoiding inappropriate disturbance of sensitive ecosystems
- Comply with standards for management of wastes as specified in 40 CFR 257.98(d).

Corrective measures selected for evaluation for potential use at AP-1 are anticipated to satisfy the above criteria.

4.2 Summary of Potential Groundwater Corrective Measures

The following presents a summary of potential corrective measures evaluated as part of this ACM. The closure of AP-1 as described in Section 1.3 is a source control measure that reduces the potential for migration of CCR constituents to groundwater. Corrective measures discussed in this ACM are being evaluated to address SSLs of cobalt in groundwater at and downgradient of the CCR unit boundary. Based on Golder Associates USA Inc.

(Golder)'s knowledge of remedial alternatives and understanding of Site conditions at AP-1, the following remedies – or combinations of remedies - were evaluated using the criteria specified in 40 CFR 257.96(c):

- In-Situ Geochemical Approaches (In-Situ Injection)
- Hydraulic Containment (Pump and Treat)
- In-Situ Solidification/Stabilization
- Monitored Natural Attenuation (MNA)
- Permeable Reactive Barrier (PRB)
- Phytoremediation
- Subsurface Vertical Barrier Walls.

Following the preliminary assessment, a more detailed evaluation of these corrective measures is required to 1) verify the feasibility of each, and 2) provide sufficient information to design a corrective action system that meets the criteria specified in 40 CFR 257.97(b). Table 4 provides a summary of the remedial technologies compared to the evaluation criteria as applied to Site conditions.

4.2.1 In-Situ Geochemical Approaches (In-Situ Injection)

Subsurface in-situ injections of reagents are a potential remediation technology for inorganic constituents such as cobalt. In-situ injections for inorganic constituents may be applied in three general modes that influence solubility, mobility, and/or toxicity of inorganic constituents: (i) oxidation-reduction potential (redox) manipulation; (ii) adsorption to, or coprecipitation with, aluminum, iron oxyhydroxides, other metal oxyhydroxides, or various sulfate compounds under oxidizing groundwater conditions; and (iii) adsorption to, or coprecipitation with, iron or other metal sulfides under reducing conditions. This technology requires a thorough understanding of the subsurface transport and (geo)chemical characteristics as well as the reaction kinetics of the geochemical reactions of interest to derive appropriate reagent dosing. Often this technology is field evaluated in a relatively small area (i.e., pilot test) to bolster the understanding of these factors prior to remedial design and/or implementation.

Cobalt can be precipitated and/or immobilized under different combinations of pH and redox conditions. A variety of pH and/or redox-altering technologies are available which can incorporate biological processes, use of chemical oxidants and reductants, and/or mechanical processes such as air sparging.

Recent advances in dissolved cobalt treatment in groundwater involve injecting substrates to stimulate biomass production. Cobalt, incorporated into the biomass, is subsequently immobilized and declines in groundwater from parts per million (ppm) concentrations to less than ten parts per billion (ppb). A key to this geochemical approach is an understanding of and modifications to the amounts of exchangeable and non-exchangeable potassium (Anderson et al., 1989).

Air sparging can be used to provide oxygen to the subsurface in an attempt to precipitate (or make more 'sorptive') metals and metalloids that are generally more soluble and mobile under reducing conditions. In addition to changing the redox state of the constituents of interest themselves, promoting oxidizing conditions can also enhance the formation of iron or manganese (oxy-) hydroxides for subsequent co-precipitation and/or sorption of cobalt and other (Dzombak and Morel, 1990; Karamalidis and Dzombak, 2011). If sufficient iron is

present in groundwater, the use of air sparging alone may be considered to precipitate iron (oxy-) hydroxides for sorption of cobalt.

To understand the geochemical processes that would effectively immobilize cobalt, bench-scale treatability studies and/or field-scale pilot tests specific to the conditions at AP-1 are needed to evaluate amendment effectiveness in promoting the conditions conducive to the removal of cobalt without mobilizing other naturally-occurring constituents. Once removed from solution, the cobalt may remain sequestered even if geochemical conditions revert to a different redox environment.

The key process limiting in-situ geochemical approaches and their effectiveness is often the delivery of amendments within the area of interest. Mixing and contact with the target constituents are necessary and can be difficult to achieve in heterogeneous and/or fine-grained materials.

Geochemical approaches, including in-situ injections may be considered a potentially viable corrective measure to address cobalt in groundwater at AP-1, especially in smaller, more localized areas. In-situ injection technology will be retained for further evaluation.

4.2.2 Hydraulic Containment (Pump and Treat)

Generally, hydraulic containment or pump and treat (P&T) refers to the use of groundwater extraction to artificially induce a hydraulic gradient for capture or control of the migration of impacted groundwater. It is often considered to be a viable remedial technology and has been implemented at many sites (US EPA, 1996). This approach uses extraction wells or trenches to capture groundwater, which may subsequently undergo above-ground treatment and permitted discharge to a receiving water body or sewer system, reinjection into the aquifer, or reuse. Groundwater P&T is often relatively slow and may be when restoration of groundwater quality over a long time period is required. However, P&T can be effective as a stand-alone remedy, a temporary measure, or in combination with another measure to provide hydraulic containment and limit constituent migration toward a potential receptor.

Groundwater extraction for hydraulic control can often effectively address the inorganic constituents typically encountered at CCR sites, including cobalt. Extraction technologies are targeted for physical removal of groundwater and thereby removing the constituents with it. Space constraints are mainly limited to the above-ground conveyance and treatment component of a P&T system since extraction wells can generally be installed into relatively tight spaces at the edge of waste facilities or other points of compliance.

P&T can be an effective in addressing cobalt in groundwater as a stand-alone remedy, temporary measure, or in combination with another measure to provide hydraulic containment upgradient of a potential receptor. Therefore, P&T is a potentially viable corrective measure for cobalt in groundwater at AP-1 and will be retained for further evaluation.

4.2.3 In-Situ Stabilization

In-situ stabilization (ISS) is a technique that involves solidifying subsurface unconsolidated materials in place to reduce future dissolution of CCR compounds from the stabilized material. Additives typically include Portland cement, bentonite, and/or additives that are specific to solidify CCR compounds and the solidification is completed in-situ using large diameter augers. Due to the unconsolidated soils, relatively shallow depths, and anticipated relatively small area of treatment, ISS technology is a potential viable option for targeted treatment areas and will be retained for further evaluation.

4.2.4 Monitored Natural Attenuation

US EPA defines MNA as the reliance on natural attenuation processes (within the context of a carefully controlled and monitored site clean-up approach) to achieve site-specific remediation objectives within a timeframe that is reasonable compared to that offered by other, more active methods. The natural attenuation processes that are at work in such a remediation approach include a variety of physical, chemical, and/or biological processes that, under favorable conditions, act without human intervention to reduce the mass, toxicity, mobility, volume, or concentration of constituents in soil or groundwater.

Attenuation mechanisms for inorganic constituents, such as cobalt are either physical (e.g., dilution, dispersion, flushing, and related processes) or biological/chemical (e.g., sorption (co-)precipitation). Select chemical processes can be facilitated by promoting certain (bio)geochemical reactions, for instance through injection of reagents.

As discussed in Section 4.2.1, cobalt can undergo effective sorption to aluminum, iron and manganese (hydr)oxides.

The US EPA uses four tiers to establish whether MNA can be successfully implemented for inorganics parameters at a given site, including:

Tier 1: Demonstration that SSLs in groundwater are delineated and stable.

Tier 2: Evaluation of the mechanisms and rates of attenuation.

Tier 3: Assessment if the capacity of the aquifer is sufficient to attenuate the mass of constituents in groundwater and that the immobilized constituents are stable and will not remobilize.

Tier 4: Design of a performance monitoring program based on the mechanisms of attenuation and including a decision framework for consideration of a contingent remedy tailored to site-specific conditions should MNA not perform adequately.

A successful MNA approach requires a detailed understanding of hydrogeologic conditions and long-term monitoring of site conditions. Under current conditions, attenuation processes for cobalt are already occurring as evidenced by soil and groundwater data from delineation wells.

MNA is a potentially viable corrective measure for cobalt in groundwater at Plant Scherer and will be retained for further evaluation.

4.2.5 Permeable Reactive Barriers

Permeable reactive barriers (PRBs) typically involve the installation of a permeable subsurface wall constructed with reactive media for the removal of constituents of interest as groundwater passes through. PRBs can be installed in downgradient locations using conventional excavation methods or one-pass trenching method. Excavated trenches are backfilled with reactive media to create a barrier that treats dissolved constituents as they passively flow through the PRB with the groundwater (e.g., ITRC, 2011). These systems can either be constructed as continuous “walls” or as “funnel-and-gate” systems where (impermeable) slurry walls create a “funnel” that directs groundwater to permeable “treatment gates” filled with reactive materials. PRBs are typically keyed into an underlying low-permeability unit such as a clay layer.

PRBs may present a viable alternative for in-situ treatment of cobalt. The technology typically includes reactive media such as ZVI, biologically active media (to induce oxidizing or reducing conditions), or clays, apatite, zeolites, and/or peat moss (to promote ionic exchange and/or sorption). PRBs have proven to be effective in passively treating several inorganic constituents typically found at CCR sites, including cobalt (e.g., ITRC, 2011).

The installation depths of a PRB are generally limited to about 90 ft below ground surface (bgs). Additional subsurface investigations, reactive media testing, and compatibility testing of groundwater with the components of a PRB are needed to evaluate the feasibility of installing a PRB at Plant Scherer. Pending these evaluations, the technology is currently considered to be a potentially viable corrective measure to address cobalt in groundwater at Plant Scherer and will be retained for further evaluation.

4.2.6 Phytoremediation

Phytoremediation pertains to the use of plants to degrade, immobilize, or contain constituents of concern in soil, groundwater, surface water, and sediments to meet the environmental goals for a given site. Phytotechnologies include a variety of applications ranging from constructed wetlands to alternative landfill covers, from tree fields for hydraulic control to the use of plants for slope stabilization, from planted (riparian) buffers for nutrient management and sediment control to the classical applications of constituent uptake and degradation (Goldemund and Gestler, 2019). Phytoremediation has emerged as a viable alternative to more active environmental cleanup technologies, especially for large areas with relatively low levels of constituents in shallow soils or groundwater.

In general, the main mechanisms involved in the application of phytoremediation for inorganic constituents include:

- Phytosequestration: the ability of plants to sequester constituents in the rhizosphere (an area a few millimeters away from a root surface). This is a containment mechanism.
- Phytohydraulics: the ability of plants to capture and evaporate water. This represents hydraulic control of a groundwater plume through plant root uptake and is considered a containment mechanism.
- Phytoextraction: the process of constituent uptake into the plant. This is remediation by removal.

Typically, a combination of these mechanisms acts in concert to achieve successful applications of phytoremediation for inorganic constituents.

The effectiveness of groundwater remediation using traditional phytoremediation approaches may be limited by compacted soil conditions that impede root penetration, or depth to groundwater that is too great for root access. Given the groundwater wells at AP-1 with SSLs for cobalt are screened at depths exceeding 60 ft bgs in some instances, traditional plantings for phytoremediation are not expected to be successful. However, more recently, an engineered approach to phytoremediation, the TreeWell® system (which is a proprietary system developed by Applied Natural Sciences), has been shown to overcome these constraints by utilizing a specialized lined planting unit constructed with optimum planting media designed to promote downward root growth, encourage constituent treatment, and focus groundwater extraction from a targeted depth interval (e.g., Gatliff et al., 2016).

By installing a cased “well” for tree planting using large diameter auger technology, extraction of relatively deeper groundwater zones can be achieved since the surface of the “well” is sealed and only groundwater from a targeted zone is allowed into the cased-off borehole. This type of system mirrors a traditional mechanical

extraction system using the trees as pumps. The TreeWell® system can be used for either hydraulic control of groundwater or immobilization/containment mechanisms (for inorganic constituents). With respect to the specific conditions at AP-1, the system would be applied for hydraulic control, and cobalt may also be immobilized within the root zone or taken up into the tree biomass (Roychoudhury and Chakraborty, 2021)

The advantage of an engineered phytoremediation system includes no above-ground water management needs and limited long-term operation and maintenance (O&M) requirements following the establishment of the system. Such systems have been observed to meet design hydraulic control parameters typically within three years of installation. The layout for a phytoremediation remediation system is generally based on groundwater flow modeling. Given the current groundwater flow velocities, the approach may not be considered viable, however, changing site conditions during ash pond closure make it a viable option. As such, phytoremediation will be retained for further evaluation.

4.2.7 Subsurface Vertical Barrier Walls

Vertical barrier walls have been used for decades to control the flow of groundwater in both environmental applications as well as general foundation construction. 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. Soil-bentonite walls, which are the most common barrier walls, are constructed by excavating a narrow vertical trench and injecting bentonite slurry to support the trench walls. The bentonite slurry generally comprises a mixture of pulverized bentonite in water. Water from the slurry bleeds into the trench wall, leaving behind a mat of particles known as filter cake which, along with the hydrostatic force of the slurry, holds the trench open. Once the trench reaches final grade, the trench is backfilled with a mixture of soil from the excavation, slurry, and soil from other sources, as necessary, to achieve the desired properties of strength and hydraulic conductivity. The backfill is generally placed with a tremie, clamshell, and/or a bulldozer, displacing the trench support slurry. Installation of soil-bentonite barrier walls can require significant amounts of space for mixing backfill (Bliss, 2014). At CCR facilities, berms may be constructed to provide the working space for barrier wall emplacement. Groundwater pumping may be required to maintain hydraulic gradients along the barrier wall. The extracted groundwater may require treatment in an above-ground treatment system.

Cement-bentonite barrier walls are similar to soil-bentonite walls except that the stabilizing fluid used during excavation is a cement-bentonite water mix. The slurry remains in place to form the wall, so a separate operation to mix the backfill and displace the slurry is not necessary. Since the excavated material is not used in the backfill mix, significant amounts of spoil are generated with this type of barrier wall. Also, due to the method of excavation with the slurry, there can be a significant amount of slurry waste (up to 40% of the total trench/panel volume) during excavation (EPRI, 2015b).

Barrier walls can be used to improve the subsurface hydraulic (flow) conditions for PRB walls, pump-and-treat systems, or to improve MNA performance. For example, barrier walls can form the impermeable portions of a funnel-and-gate PRB wall to direct groundwater to the treatment gates containing reactive media and can be used in a similar way to direct groundwater toward pumping wells in a pump-and-treat system. Because barrier walls can be part of PRB or hydraulic control (pump-and-treat) systems, they are viable corrective measures at AP-1 and, therefore will be retained for further evaluation.

5.0 REMEDY SELECTION PROCESS

The purpose of this ACM is to identify potential corrective measure(s) for groundwater using the criteria outlined in 40 CFR 257.96 and Georgia Rule 391-3-4-.10(6)(a). The following sections present the pond closure and site management strategy, additional data gathering, schedule, reporting, and next steps.

5.1 Pond Closure and Site Management Strategy

Georgia Power initiated site preparation work associated with AP-1 closure in 2021, and dewatering water treatment is expected to commence in 2023. The closure plan includes consolidation of AP-1 within a reduced footprint and then capping the consolidated CCR in place. The closure of AP-1 provides a source control measure that reduces the potential for migration of CCR constituents to groundwater. The current conceptual model for the release and fate and transport of CCR constituents may need to be refined and/or updated as more information is obtained.

Georgia Power will utilize adaptive management for Plant Scherer during implementation of the remedial strategy to address changes in AP-1 conditions (e.g., successful reduction of constituent concentrations or changing trends). Under an adaptive management strategy, a remedial approach will be selected whereby:

1) A corrective measure will be installed or implemented to address current conditions (for AP-1, this corrective measure consists of consolidation and capping).

2) The performance of the corrective measure is monitored, evaluated, and reported at least semi-annually.

3) The conceptual model is updated as a greater understanding is obtained, for instance through data collection and modeling; and

4) Adjustments and augmentations are made to the corrective measure(s), as needed, to assure that performance criteria and remedial goals are met.

5.2 Additional Data Collection and Evaluation

Collection and evaluation of additional data are necessary to refine the conceptual site model and to further evaluate the feasibility of each corrective measure presented herein such that an appropriate groundwater corrective measure or combination of measures may be selected. Some of the data needed to refine the conceptual site model may be collected concurrent with routine groundwater monitoring events under the assessment monitoring program, or during supplemental sampling, as required.

Additional data collection and evaluation that may include aquifer testing, groundwater modeling, material compatibility testing, bench-scale studies, and pilot testing. This may require an estimated two to three additional years to complete. Once sufficient information is available to arrive at a combination of corrective measures, in consideration of the closure plan, that would provide an effective groundwater remedy, necessary steps will be taken to implement a remedy at the site in accordance with 40 CFR 257.98.

A groundwater remedy process that incorporates one or more remedies described in this ACM will be implemented at the former CCR Unit. The remedy process will be designed to meet the performance standards as referenced in EPD Rule 391-3-4-.10(6) and listed in 40 CFR 257.98(c). Because the groundwater remedy may incorporate multiple approaches, additional data collection and evaluation will be required to (i) perform a

thorough location-specific evaluation regarding the feasibility of each potential remedy and (ii) to design or configure a groundwater corrective action plan.

The following summarizes typical additional information needed to evaluate and select a remedy:

- Refined site characterization
- Geochemical studies of groundwater and aquifer media
- Groundwater flow, and constituent transport modeling
- Laboratory treatability studies on groundwater, aquifer media, reactive media, and potential treatment solutions for injection

These evaluations will be progressively performed over the next several reporting periods, and progress updates will be made in subsequent semi-annual monitoring reports.

5.3 Schedule, Reporting and Next Steps

Additional data collection is ongoing to refine the understanding of the nature and extent of the cobalt SSL and to gather additional information regarding the presence of natural sources of cobalt and evaluate remedial alternatives to address the cobalt SSLs. Georgia Power will include semi-annual remedy selection progress reports as an appendix to the routine semi-annual and annual groundwater monitoring reports for the site. Progress summaries will be included to document groundwater conditions for AP-1 at Plant Scherer, and present results associated with additional data collection, and describe the progress in selecting and designing the remedy in accordance with 40 CFR 257.97(a).

Because data collection is ongoing at AP-1, data submitted within the next (August 2022) semi-annual groundwater monitoring report may include:

- Groundwater sampling results, including analytical data from newly installed assessment monitoring wells.
- Define scope, objectives, and schedule for additional data collection and evaluation as described in Section 5.2 to adequately characterize the subsurface conditions in areas where there are noted exceedance of the groundwater protection standards and assess site-specific transport mechanisms.

At least 30 days prior to the selection of remedy or remedies, a public meeting to discuss the results of the corrective measures assessment will be held pursuant to 40 CFR 257.96(e). The final remedy selection report will be developed as outlined in 40 CFR 257.97(a). Once the remedy has been selected, the implementation of the remedy will be initiated in accordance with 40 CFR 257.98.

6.0 REFERENCES

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Tables

TABLE 1
SUMMARY OF MONITORING WELL CONSTRUCTION DATA
Georgia Power Company - Plant Scherer Ash Pond 1
Juliette, GA

Well ID	Hydraulic Location	Screened Matrix	NAD 83 Northing[1]	NAD 83 Easting[1]	Ground Surface Elevation at Concrete Pad (feet NAVD88)	Ground Surface Elevation (feet NAVD88)[2]	Top of Casing Elevation (feet NAVD88)[2]	Well Depth (ft BTOC)[2]	Top of Screen Elevation (feet NAVD88)[2]	Bottom of Screen Elevation (feet NAVD88)[2]	Screen Length (feet)	Date of Installation
AP-1 MONITORING WELL NETWORK												
SGWA-1	Upgradient	Overburden	1119233.10	2399899.81	544.27	544.1	546.83	53.7	503.57	493.57	10	2/11/2015
SGWA-2	Upgradient	Bedrock	1119237.67	2399908.19	544.20	544.0	546.94	98.5	458.55	448.55	10	2/17/2015
SGWA-3	Upgradient	Overburden	1120224.15	2399296.64	543.03	542.9	545.83	53.0	502.88	492.88	10	11/18/2015
SGWA-4	Upgradient	Overburden	1121477.05	2401124.64	544.96	544.8	547.66	63.3	494.31	484.31	10	11/17/2015
SGWA-5	Upgradient	Overburden	1118088.42	2397426.26	505.93	505.7	508.48	32.8	485.53	475.53	10	11/18/2015
SGWC-6	Downgradient	Overburden	1122167.18	2401979.98	507.87	507.7	510.49	27.8	492.67	482.67	10	11/12/2015
SGWC-7	Downgradient	Bedrock	1122668.61	2402259.75	503.65	503.5	506.40	37.9	478.45	468.45	10	11/11/2015
SGWC-8	Downgradient	Overburden/Bedrock	1122865.98	2402979.50	511.68	511.5	514.28	42.8	481.48	471.48	10	11/11/2015
SGWC-9	Downgradient	Overburden	1122634.64	2403455.19	507.88	507.6	510.62	38.0	482.63	472.63	10	11/6/2015
SGWC-10	Downgradient	Overburden	1121895.85	2404046.92	506.80	506.6	509.41	32.8	486.60	476.60	10	11/5/2015
SGWC-11	Downgradient	Overburden	1121542.11	2404332.12	508.77	508.6	511.47	42.9	478.62	468.62	10	10/29/2015
SGWC-12	Downgradient	Overburden	1121576.75	2405009.92	497.80	497.7	500.53	50.4	460.70	450.70	10	10/30/2015
SGWC-13	Downgradient	Overburden	1121274.85	2405761.20	480.17	479.9	482.71	37.8	454.92	444.92	10	11/4/2015
SGWC-14	Downgradient	Overburden	1120966.13	2406329.89	473.52	473.3	476.72	38.7	448.52	438.52	10	2/24/2015
SGWC-15	Downgradient	Overburden	1120191.20	2407093.92	479.76	479.7	482.75	48.3	444.86	434.86	10	2/26/2015
SGWC-16	Downgradient	Overburden	1119221.42	2407155.89	457.18	457.0	460.31	43.5	428.23	418.23	10	3/3/2015
SGWC-17	Downgradient	Overburden	1118308.77	2407267.44	415.13	414.9	418.00	27.6	400.83	390.83	10	3/11/2015
SGWC-18	Downgradient	Overburden	1116947.75	2406931.32	510.41	510.3	513.29	47.5	476.21	466.21	10	3/17/2015
SGWC-19	Downgradient	Overburden	1116024.59	2406097.05	476.13	475.8	478.94	37.7	451.63	441.63	10	3/18/2015
SGWC-20	Downgradient	Overburden	1116020.73	2405307.67	501.69	501.5	504.60	28.1	486.49	476.49	10	11/19/2015
SGWC-21	Downgradient	Overburden	1115409.88	2404197.33	484.92	484.7	487.67	27.9	470.17	460.17	10	5/6/2015
SGWC-22	Downgradient	Overburden	1115540.08	2403001.81	515.51	515.4	518.02	52.7	478.91	468.91	10	1/22/2015
SGWC-23	Downgradient	Bedrock	1116693.80	2402131.07	520.17	520.0	523.10	52.8	480.72	470.72	10	2/3/2015
SGWA-24	Upgradient	Overburden	1118121.96	2400743.52	489.47	489.3	492.38	43.1	461.62	451.62	10	2/10/2015
SGWA-25	Upgradient	Overburen	1120555.28	2400857.08	523.45	523.2	526.49	48.3	488.60	478.60	10	2/18/2015

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AP-1 ASSESSMENT MONITORING WELL NETWORK												
PZ-13S	Downgradient	Overburden	1121957.03	2404227.47	517.68	517.5	520.51	48.3	482.58	472.58	10	4/1/2015
PZ-14S	Downgradient	Overburden	1121852.80	2404820.56	509.03	508.7	512.13	48.4	474.18	464.18	10	3/26/2015
PZ-17I	Downgradient	Bedrock	1120190.27	2407107.37	480.20	479.9	483.03	100.4	393.20	383.20	10	2/27/2015
PZ-39S	Downgradient	Overburden	1120178.43	2407470.49	471.99	471.8	474.58	82.8	405.79	395.79	10	8/21/2018
PZ-40I	Downgradient	Bedrock	1116960.39	2406934.72	510.19	510.1	512.55	86.5	437.09	427.09	10	8/15/2018
PZ-41S	Downgradient	Overburden	1116799.18	2407124.98	488.66	488.6	491.50	47.9	453.56	443.56	5	8/16/2018
PZ-42I	Downgradient	Bedrock	1116013.79	2405294.12	500.65	500.5	503.18	107.7	414.45	404.45	10	8/21/2018
PZ-43S	Downgradient	Overburden	1115598.12	2405507.16	501.34	501.2	504.03	57.8	460.69	450.69	10	8/17/2018
PZ-44I	Downgradient	Bedrock	1121515.40	2404330.23	507.91	507.9	510.36	116.5	403.86	393.86	10	9/5/2018
PZ-69I	Downgradient	Bedrock	1121906.36	2404051.35	506.44	506.0	508.85	108.9	410.00	400.00	10	1/13/2022
PIEZOMETERS												
PZ-2I	Downgradient	Bedrock	1115544.85	2402990.76	515.06	514.8	517.56	86.8	440.91	430.91	10	1/27/2015
PZ-3S	Downgradient	Overburden	1116085.04	2402533.80	514.57	514.4	517.29	52.9	474.77	464.77	10	1/29/2015
PZ-5I	Downgradient	Bedrock	1117484.15	2401816.71	520.73	520.6	523.26	49.8	484.03	474.03	10	2/4/2015
PZ-9I	Upgradient	Bedrock	1120562.72	2400862.76	523.61	523.3	526.57	83.5	453.51	443.51	10	2/19/2015
PZ-10S	Downgradient	Overburden	1122338.03	2401768.92	514.78	514.4	517.53	38.1	489.88	479.88	10	5/5/2015
PZ-11S	Downgradient	Overburden	1123169.22	2402767.44	526.19	526.0	529.31	49.2	490.54	480.54	10	4/6/2015
PZ-12S	Downgradient	Overburden	1122684.90	2403618.46	514.64	514.5	517.69	47.5	480.54	470.54	10	4/1/2015
PZ-14I	Downgradient	Bedrock	1121866.36	2404822.43	510.03	509.7	512.89	98.4	424.93	414.93	10	3/25/2015
PZ-15S	Downgradient	Overburden	1121486.96	2405558.59	497.59	497.4	500.60	43.3	467.74	457.74	10	4/28/2015
PZ-19I	Downgradient	Bedrock	1118588.47	2407251.56	414.74	414.5	417.76	75.1	353.04	343.04	10	3/4/2015
PZ-19S	Downgradient	Overburden	1118587.24	2407241.54	414.79	414.5	417.80	28.3	399.94	389.94	10	3/4/2015
PZ-20I	Downgradient	Bedrock	1118318.15	2407273.36	414.46	414.3	417.41	82.7	345.11	335.11	10	3/10/2015
PZ-21S	Downgradient	Overburden	1117639.19	2407006.52	470.85	470.6	473.74	28.1	457.60	447.60	10	3/12/2015
PZ-25S	Downgradient	Overburden	1121848.11	2404567.52	525.78	525.5	528.24	58.8	480.78	470.68	10	5/25/2016
PZ-25I	Downgradient	Overburden	1121837.80	2404573.04	526.02	525.8	528.39	128.6	410.97	400.97	10	5/24/2016

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PIEZOMETERS - continued												
PZ-26S	Downgradient	Overburden	1121696.65	2405733.23	489.17	489.1	491.65	48.6	454.27	444.27	10	6/1/2016
PZ-27D	Downgradient	Bedrock	1121558.94	2406023.17	472.659	472.4	475.43	129.0	367.61	347.61	20	6/17/2016
PZ-27S	Downgradient	Overburden	1121565.33	2406028.25	473.175	473.1	475.80	48.7	438.33	428.33	10	5/26/2016
PZ-28I	Downgradient	Bedrock	1121394.06	2406373.94	481.587	481.4	484.18	72.7	422.84	412.84	10	6/3/2016
PZ-29S	Downgradient	Overburden	1121269.19	2406618.29	488.704	488.5	491.31	48.8	453.70	443.70	10	5/26/2016
PZ-30I	Downgradient	Bedrock	1121073.53	2407078.99	475.712	475.6	478.31	89.8	400.46	390.46	10	6/2/2016
PZ-31I	Downgradient	Bedrock	1121204.03	2407445.73	464.163	464.0	466.89	79.9	399.06	389.06	10	6/2/2016
PZ-32D	Downgradient	Bedrock	1121089.64	2407719.37	462.561	462.4	465.42	129.6	366.56	336.56	30	6/1/2016
PZ-32S	Downgradient	Overburden	1121089.22	2407698.44	462.52	462.3	465.06	59.8	417.47	407.47	10	6/1/2016
PZ-33I	Downgradient	Overburden	1121245.25	2409064.05	466.547	466.4	469.38	79.4	400.65	390.65	10	6/8/2016
PZ-34S	Downgradient	Overburden	1121331.59	2409288.37	441.08	440.8	443.67	48.8	405.53	395.53	10	6/4/2016
PZ-35I	Downgradient	Overburden	1121598.57	2406058.33	474.72	474.6	474.40	55.8	429.27	419.27	10	6/22/2016
PZ-36I	Downgradient	Bedrock	1120410.99	2407256.25	478.96	478.9	481.52	99.7	393.56	383.56	10	6/5/2016
PZ-36S	Downgradient	Overburden	1120401.04	2407248.04	479.50	479.4	482.35	59.0	434.40	424.40	10	8/22/2018
PZ-37I	Downgradient	Overburden/Bedrock	1121178.48	2408419.19	479.68	479.5	482.18	75.2	418.48	408.48	10	6/2/2016
PZ-38I	Downgradient	Overburden	1121475.86	2406352.98	482.38	482.2	482.24	76.0	418.43	408.43	10	6/23/2016
PZ-45D	Downgradient	Bedrock	1125296.24	2400250.55	509.94	509.7	512.33	167.6	399.74	344.74	55	3/9/2020
PZ-46D	Downgradient	Overburden/Bedrock	1123512.22	2400923.25	447.37	447.1	450.28	56.7	423.57	393.57	30	3/17/2020
PZ-47D	Downgradient	Bedrock	1126623.42	2404366.80	406.91	406.8	410.01	29.2	396.66	381.66	15	3/11/2020
PZ-48S	Downgradient	Overburden	1125014.71	2405779.92	441.45	441.3	444.33	64.0	390.55	380.55	10	3/4/2020
PZ-49D	Downgradient	Bedrock	1123429.73	2410615.29	365.13	364.9	367.41	108.5	288.88	258.88	30	3/6/2020
PZ-49S	Downgradient	Overburden	1123434.46	2410605.99	365.29	365.2	367.89	27.7	350.19	340.19	10	3/7/2020
PZ-50D	Upgradient	Bedrock	1103125.91	2408306.87	470.70	470.7	473.78	103.1	380.66	370.66	10	3/18/2020
PZ-51D	Upgradient	Bedrock	1119239.99	2399955.07	543.47	543.2	546.04	128.9	427.17	417.17	10	3/8/2020
PZ-52	Downgradient	Overburden	1122822.91	2403622.69	519.68	519.4	521.84	79.4	452.43	442.43	10	3/17/2020
PZ-53	Downgradient	Overburden	1121932.34	2404813.43	513.81	513.6	516.64	48.0	478.61	468.61	10	3/19/2020

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PIEZOMETERS - continued												
PZ-54	Downgradient	Overburden	1121509.71	2406555.15	490.27	490.2	492.96	47.8	455.17	445.17	10	3/19/2020
PZ-55	Downgradient	Overburden	1121931.60	2409132.43	444.25	444.2	447.21	39.1	418.15	408.15	10	3/20/2020
PZ-56	Downgradient	Bedrock	1123524.68	2409037.21	431.10	430.8	433.68	48.8	395.10	385.10	10	3/19/2020
PZ-57	Downgradient	Overburden/Bedrock	1123405.64	2407361.88	436.55	436.4	439.51	62.1	387.45	377.45	10	3/19/2020
PZ-58	Downgradient	Overburden	1123299.43	2405207.09	489.35	489.3	492.21	49.0	453.25	443.25	10	3/16/2020
PZ-59S	Downgradient	Overburden	1125213.65	2407658.45	383.13	382.8	385.93	27.1	368.83	358.83	10	3/20/2020
PZ-59D	Downgradient	Bedrock	1125229.89	2407668.93	383.16	382.9	385.86	72.0	328.86	313.86	15	3/27/2020
PZ-60D	Downgradient	Bedrock	1124410.72	2408242.87	386.53	386.4	389.34	102.9	317.03	286.73	30	3/29/2020
PZ-60S	Downgradient	Overburden	1124400.44	2408243.59	386.66	386.4	389.88	23.5	376.36	366.36	10	3/31/2020
PZ-61	Downgradient	Overburden/Bedrock	1122537.21	2408531.43	436.84	436.8	439.27	52.5	397.34	387.34	10	4/11/2020
PZ-62	Downgradient	Overburden	1122370.34	2406175.11	498.45	498.3	501.32	55.1	456.00	446.00	10	4/9/2020
PZ-63	Downgradient	Bedrock	1123955.38	2404060.61	499.12	498.9	501.54	42.7	468.87	458.87	10	4/12/2020
PZ-64	Downgradient	Bedrock	1123724.36	2406404.18	476.09	476.0	479.52	72.5	416.99	406.99	10	4/8/2020
PZ-65	Downgradient	Overburden	1121937.16	2407733.04	429.77	429.6	432.42	32.8	409.57	399.57	10	4/11/2020
PZ-66D	Downgradient	Bedrock	1124644.48	2409028.45	424.64	424.4	427.60	269.2	-	-	open borehole	4/2/2020
PZ-66	Downgradient	Bedrock	1124664.10	2409115.98	418.68	418.4	421.24	62.9	373.38	358.38	15	5/8/2020
PZ-67D	Downgradient	Bedrock	1125764.81	2408259.40	424.86	424.7	428.48	304.8	-	-	open borehole	4/1/2020
PZ-67	Downgradient	Overburden	1125782.26	2408248.89	423.37	423.2	425.94	42.7	393.47	383.47	10	4/25/2020
PZ-68	Downgradient	Overburden	1125116.59	2407181.92	392.34	392.1	395.55	23.4	382.14	372.14	10	4/15/2020
LPZ-01	Upgradient	Overburden/Bedrock	1117001.58	2398513.19	550.47	550.0	553.29	69.1	495.97	485.97	10	11/10/2015
LPZ-02	Upgradient	Overburden	1119972.34	2398004.93	511.42	511.1	514.52	23.4	501.07	491.07	10	11/20/2015
LPZ-03	Upgradient	Overburden	1117883.86	2398657.00	512.55	512.2	515.45	38.3	487.15	477.15	10	11/18/2015
LPZ-04	Upgradient	Overburden	1115962.59	2397083.47	458.31	458.1	461.24	43.1	440.11	430.11	10	11/19/2015
LPZ-05	Upgradient	Overburden	1115328.95	2399698.53	521.81	521.5	524.51	106.405	479.41	469.41	10	11/5/2015

TABLE 1
SUMMARY OF MONITORING WELL CONSTRUCTION DATA
Georgia Power Company - Plant Scherer Ash Pond 1
Juliette, GA

Well ID	Hydraulic Location	Screened Matrix	NAD 83 Northing[1]	NAD 83 Easting[1]	Ground Surface Elevation at Concrete Pad (feet NAVD88)	Ground Surface Elevation (feet NAVD88)[2]	Top of Casing Elevation (feet NAVD88)[2]	Well Depth (ft BTOC)[2]	Top of Screen Elevation (feet NAVD88)[2]	Bottom of Screen Elevation (feet NAVD88)[2]	Screen Length (feet)	Date of Installation
GYPSUM CELL 1												
GWC-1	Downgradient	Overburden	1120077.85	2411555.32	371.77	371.6	374.95	39.35	346.91	336.91	10	10/28/2009
GWC-2	Downgradient	Overburden	1119816.59	2411493.53	377.02	376.9	380.22	57.82	332.12	322.12	10	10/8/2009
GWC-3	Downgradient	Overburden	1119615.01	2411201.98	409.97	409.6	412.66	49.46	373.20	363.20	10	10/29/2009
GWC-4	Downgradient	Overburden	1119255.96	2411041.82	408.50	408.4	411.75	42.85	378.70	368.70	10	11/21/2009
GWC-5	Downgradient	Overburden	1118897.72	2411025.88	393.37	393.3	396.69	38.22	372.84	362.84	10	10/22/2009
GWC-6	Downgradient	Bedrock	1118575.69	2410872.56	412.48	412.4	415.80	47.92	377.52	367.52	10	10/21/2009
GWC-7	Downgradient	Overburden	1118243.67	2410645.91	414.51	414.4	418.27	58.36	369.84	359.84	10	10/20/2009
GWC-8A	Downgradient	Overburden	1117917.32	2410375.16	398.65	398.6	401.62	48.02	364.30	354.30	10	3/29/2017
GWC-9	Downgradient	Overburden	1117955.40	2410167.75	383.21	382.8	386.18	19.87	376.02	366.02	10	11/4/2009
GWC-10	Downgradient	Overburden	1118306.77	2410018.28	389.49	388.9	392.87	39.48	367.50	357.50	10	11/3/2009
GWC-11	Downgradient	Overburden	1118648.98	2409778.84	399.21	398.8	402.33	33.52	377.81	367.81	10	11/3/2009
GWC-12	Downgradient	Overburden	1118977.87	2409554.57	409.66	409.2	412.89	37.23	384.94	374.94	10	11/3/2009
GWC-13	Downgradient	Overburden	1119338.68	2409390.95	416.71	416.5	419.77	42.76	386.52	376.52	10	11/2/2009
GWC-14	Downgradient	Overburden	1119655.05	2409111.75	400.41	400.2	403.60	28.43	386.09	376.09	10	11/4/2009
GWA-15	Upgradient	Overburden	1120009.40	2409282.43	412.00	411.7	415.01	28.31	395.51	385.51	10	11/4/2009
GWA-16	Upgradient	Overburden	1120248.68	2409579.75	441.01	440.9	444.24	58.33	396.71	386.71	10	10/13/2009
GWA-17	Upgradient	Overburden	1120210.57	2409946.73	442.92	442.8	445.84	46.32	409.27	399.27	10	9/28/2009
GWC-18	Downgradient	Overburden	1119998.73	2410261.85	436.40	436.3	439.66	62.86	389.49	379.49	10	9/29/2009
GWC-19	Downgradient	Overburden	1119645.70	2410713.20	426.34	426.3	430.20	73.90	382.45	372.45	10	10/2/2009
GWC-20	Downgradient	Overburden	1119950.51	2411195.38	423.03	423.0	426.30	72.93	363.85	353.85	10	10/6/2009

TABLE 1
SUMMARY OF MONITORING WELL CONSTRUCTION DATA
Georgia Power Company - Plant Scherer Ash Pond 1
Juliette, GA

Well ID	Hydraulic Location	Screened Matrix	NAD 83 Northing[1]	NAD 83 Easting[1]	Ground Surface Elevation at Concrete Pad (feet NAVD88)	Ground Surface Elevation (feet NAVD88)[2]	Top of Casing Elevation (feet NAVD88)[2]	Well Depth (ft BTOC)[2]	Top of Screen Elevation (feet NAVD88)[2]	Bottom of Screen Elevation (feet NAVD88)[2]	Screen Length (feet)	Date of Installation
PAC ASH CELL												
GWA-21	Upgradient	Overburden	1120675.73	2409462.70	419.81	419.7	422.58	19.88	412.04	402.04	10	6/29/2010
GWA-22	Upgradient	Overburden/Bedrock	1120962.12	2409473.22	442.01	442.0	444.50	42.49	412.29	402.29	10	6/30/2010
GWC-29	Downgradient	Overburden	1119875.58	2408717.95	396.98	396.9	399.64	27.12	382.78	372.78	10	6/28/2010
GWA-45	Upgradient	Overburden	1120669.03	2407889.56	448.33	448.3	451.08	35.81	425.99	415.99	10	6/23/2010
GWA-46	Upgradient	Overburden	1120783.23	2408235.69	458.37	458.3	461.13	46.31	424.38	414.38	10	6/23/2010
GWA-47	Upgradient	Overburden	1120862.63	2408585.01	463.03*	462.9	465.77	57.87	421.74	411.74	10	6/22/2010
GWA-48	Upgradient	Overburden	1120953.42	2408939.48	459.00	458.8	461.73	74.89	407.74	397.74	10	6/22/2010
GWA-49	Upgradient	Overburden	1121030.08	2409288.38	430.16	429.9	432.88	40.02	401.81	391.81	10	6/21/2010
GWC-50	Downgradient	Overburden	1119917.51	2408956.10	404.44	404.3	407.16	37.82	380.88	370.88	10	6/28/2010
GWC-51	Downgradient	Overburden	1119835.51	2408436.95	407.37	407.3	410.15	29.87	393.78	383.78	10	7/27/2010
GWC-52	Downgradient	Overburden	1119972.34	2408203.99	414.43	414.4	417.13	32.75	394.53	384.53	10	6/24/2010
GWC-53	Downgradient	Overburden	1120319.65	2407943.05	433.10	432.9	435.83	30.93	412.84	402.84	10	6/23/2010

TABLE 1
SUMMARY OF MONITORING WELL CONSTRUCTION DATA
Georgia Power Company - Plant Scherer Ash Pond 1
Juliette, GA

Well ID	Hydraulic Location	Screened Matrix	NAD 83 Northing[1]	NAD 83 Easting[1]	Ground Surface Elevation at Concrete Pad (feet NAVD88)	Ground Surface Elevation (feet NAVD88)[2]	Top of Casing Elevation (feet NAVD88)[2]	Well Depth (ft BTOC)[2]	Top of Screen Elevation (feet NAVD88)[2]	Bottom of Screen Elevation (feet NAVD88)[2]	Screen Length (feet)	Date of Installation
CELL 3												
GWC-30	Downgradient	Overburden/Bedrock	1119366.69	2408976.35	392.19	392.0	394.49	21.5	384.04	374.04	10	1/24/2020
GWC-31	Downgradient	Overburden	1118970.00	2409062.02	390.13	390.0	392.78	21.8	380.68	370.68	10	1/23/2020
GWC-32	Downgradient	Overburden	1118749.53	2409084.83	407.25	406.9	410.03	38.1	381.95	371.95	10	1/21/2020
GWC-33A	Downgradient	Overburden	1118458.68	2409359.58	391.32	390.9	393.96	27.1	376.87	366.87	10	1/25/2020
GWC-34	Downgradient	Overburden	1118248.26	2409680.41	386.48	386.2	389.29	22.1	377.23	367.23	10	1/13/2020
GWC-35	Downgradient	Overburden	1117860.46	2409906.21	385.35	385.1	387.90	22.8	375.10	365.10	10	1/12/2020
GWC-36	Downgradient	Overburden	1117561.29	2409681.44	422.52	422.0	425.12	48.5	386.62	376.62	10	1/10/2020
GWC-37	Downgradient	Overburden	1117239.70	2409636.56	427.38	427.2	429.80	44.6	395.23	385.23	10	1/8/2020
GWC-38	Downgradient	Overburden	1116786.45	2409533.11	416.23	416.0	418.68	41.7	386.98	376.98	10	1/7/2020
GWA-39	Upgradient	Bedrock	1116967.57	2408671.68	454.59	454.2	457.62	62.4	405.24	395.24	10	12/20/2019
GWA-40	Upgradient	Overburden	1117365.24	2408730.04	461.25	461.2	463.84	47.5	427.15	417.15	10	12/18/2020
GWA-41	Upgradient	Overburden	1118096.97	2408412.15	431.70	431.4	434.12	46.7	403.75	393.75	10	1/26/2020
GWA-42	Upgradient	Overburden	1118500.68	2408233.53	402.57	402.2	405.19	21.8	393.37	383.37	10	1/27/2020
GWA-43	Upgradient	Overburden	1118861.38	2408484.42	398.42	398.1	400.94	21.8	389.12	379.12	10	1/26/2020
GWA-44A	Upgradient	Overburden	1119296.99	2408569.76	396.83	396.5	399.62	23.9	386.58	376.58	10	1/27/2020
GWA-54	Upgradient	Bedrock	1117751.40	2408588.52	448.78	448.6	451.49	51.7	409.83	399.83	10	12/21/2020

Notes:

ft = feet; feet bgs = feet below ground surface; ft BTOC = feet below top of casing; Kh = horizontal hydraulic conductivity; Kv = vertical hydraulic conductivity

(1) Coordinates in North American Datum (NAD) 1983, State Plane, Georgia-West, feet.

(2) Vertical elevations are in feet relative to the North American Vertical Datum (NAVD) 1988.

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

(4) Survey data provided by Jordan Engineering, Inc., July 2020.

(5) - = not applicable

TABLE 2
SUMMARY OF BACKGROUND LEVELS AND GWPS
Georgia Power Company - Plant Scherer Ash Pond 1
Juliette, Georgia

Analyte	Units	Maximum Contaminant Level (MCL)	Rule Specified Limit	Site Specific Background August 2021[1]	GWPS[2]
Antimony	mg/L	0.006	--	0.0021	0.006
Arsenic	mg/L	0.01	--	0.0015	0.01
Barium	mg/L	2	--	0.071	2
Beryllium	mg/L	0.004	--	0.0025[3]	0.004
Cadmium	mg/L	0.005	--	0.0025[3]	0.005
Chromium	mg/L	0.1	--	0.021	0.1
Cobalt	mg/L	NA	0.006	0.02	0.02
Fluoride	mg/L	4	--	0.16	4
Lead	mg/L	NA	0.015	0.001[3]	0.015
Lithium	mg/L	NA	0.04	0.005	0.04
Mercury	mg/L	0.002	--	0.0005	0.002
Molybdenum	mg/L	NA	0.1	0.015[3]	0.1
Radium (226 + 228)	pCi/L	5	--	1.54	5
Selenium	mg/L	0.05	--	0.005	0.05
Thallium	mg/L	0.002	--	0.001[3]	0.002

Notes:
mg/L = milligrams per liter; pCi/L = picocuries per liter; NA = Not Available

[1] The background limits are used when determining the groundwater protection standard (GWPS) under 40 CFR § 257.95(h) and 391-3 4-.10(6)(a).

[2] The GWPS is: (i) the MCL/RSL, (ii) where the MCL is not established, the background concentration, or (iii) background levels for constituents where the background level is higher than the MCL or rule-specified GWPS.

[3] The background tolerance limit (TL) used to evaluate GWPS for this analyte equals the laboratory specified reporting limit (RL). Per the Statistical Analysis Plan, and in accordance with the Unified Guidance, a non-parametric limit approach was used when the data set contains greater than 50% non-detect results for this analyte. Under this approach, the TL equals the highest value reported, for which is the laboratory RL. We also note that the values reported herein have been updated from the previously established GWPS which was determined based on estimated data. The modified GWPS also reflects additional outlier identification.

TABLE 3A
ANALYTICAL DATA SUMMARY ASSESSMENT MONITORING - AUGUST 2021
Georgia Power Company - Plant Scherer Ash Pond 1
Juliette, Georgia

Analyte	Units	GROUNDWATER MONITORING WELLS														
		SGWA-1	SGWA-2	SGWA-3	SGWA-4	SGWA-5	SGWA-24	SGWA-25	SGWC-6	SGWC-7	SGWC-8	SGWC-9	SGWC-10	SGWC-11	SGWC-12	SGWC-13
		8/17/2021	8/17/2021	8/18/2021	8/17/2021	8/18/2021	8/18/2021	8/17/2021	8/18/2021	8/18/2021	8/18/2021	8/19/2021	8/19/2021	8/19/2021	8/20/2021	8/19/2021
Appendix III																
BORON, TOTAL	mg/L	< 0.039	< 0.039	< 0.039	< 0.039	< 0.039	< 0.039	< 0.039	< 0.039	0.047 J	0.14	1.5	0.091	0.54	0.043 J	0.59
CALCIUM, TOTAL	mg/L	1.8	12	5.9	18	1.7	14	9.6	11	22	49	34	0.67	1.9	23	20
CHLORIDE, TOTAL	mg/L	1.9	1.6	2.4	1.6	2.2	2.7	2.6	2.5	5.0	14	18	9.3	9.9	9.9	12
FLUORIDE, TOTAL	mg/L	0.052 J	0.096 J	0.066 J	0.093 J	0.070 J	0.16	0.079 J	0.19	0.31	0.48	0.078 J	< 0.026	< 0.026	0.082 J	< 0.026
pH	S.U.	5.26	6.84	5.85	6.41	5.51	6.45	6.08	6.33	6.61	6.48	6.22	5.21	5.23	6.13	5.99
SULFATE, TOTAL	mg/L	< 0.76	< 0.76	0.90 J	1.1	< 0.76	1.0	< 0.76	< 0.76	12	78	160	2.2	< 0.76	60	82
TOTAL DISSOLVED SOLID	mg/L	27	110	66	130	53	120	97	140	210	410	380	54	36	220	210
Appendix IV																
ANTIMONY, TOTAL	mg/L	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038
ARSENIC, TOTAL	mg/L	< 0.00031	< 0.00031	< 0.00031	< 0.00031	< 0.00031	< 0.00031	< 0.00031	< 0.00031	< 0.00031	< 0.00031	< 0.00031	< 0.00031	< 0.00031	< 0.00031	< 0.00031
BARIUM, TOTAL	mg/L	0.047	0.038	0.036	0.066	0.011	0.025	0.027	0.13	0.24	0.16	0.043	0.025	0.045	0.057	0.036
BERYLLIUM, TOTAL	mg/L	0.00029 J	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018
CADMIUM, TOTAL	mg/L	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	0.00022 J	< 0.00022	< 0.00022
CHROMIUM, TOTAL	mg/L	< 0.0015	0.013	0.020	0.0053	< 0.0015	0.0056	0.0047	< 0.0015	0.0026	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015
COBALT, TOTAL	mg/L	0.00072 J	< 0.00013	< 0.00013	< 0.00013	< 0.00013	0.00057 J	0.0011 J	0.00024 J	0.0021 J	0.00021 J	0.00072 J	0.022	0.014	0.0019 J	0.0021 J
FLUORIDE, TOTAL	mg/L	0.052 J	0.096 J	0.066 J	0.093 J	0.070 J	0.16	0.079 J	0.19	0.31	0.48	0.078 J	< 0.026	< 0.026	0.082 J	< 0.026
LEAD, TOTAL	mg/L	< 0.00013	< 0.00013	< 0.00013	< 0.00013	0.00030 J	0.00023 J	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013
LITHIUM, TOTAL	mg/L	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	0.0034 J	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034
MERCURY, TOTAL	mg/L	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013
MOLYBDENUM, TOTAL	mg/L	< 0.00061	< 0.00061	< 0.00061	< 0.00061	< 0.00061	< 0.00061	< 0.00061	< 0.00061	0.0016 J	< 0.00061	< 0.00061	< 0.00061	< 0.00061	< 0.00061	< 0.00061
RADIUM (226 + 228)	pCi/L	0.651	0.192 U	0.228 U	1.54	0.242 U	0.160 U	0.228 U	-0.0332 U	0.726	1.68	0.145 U	0.102 U	0.755	0.0109 U	0.228 U
SELENIUM, TOTAL	mg/L	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015
THALLIUM, TOTAL	mg/L	< 0.00015	< 0.00015	< 0.00015	< 0.00015	0.00030 J	< 0.00015	< 0.00015	0.00017 J	< 0.00015	< 0.00015	0.00040 J	0.00024 J	0.00015 J	< 0.00015	< 0.00015

NOTES:

1. mg/L - milligrams per Liter
2. pCi/L - picocuries per Liter
3. S.U. - Standard Units
4. < indicates the substance was not detected above the analytical method detection limit (MDL). The value displayed is the method detection limit.
5. J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed is qualified by the laboratory as an estimated number.
6. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.

TABLE 3A
ANALYTICAL DATA SUMMARY ASSESSMENT MONITORING - AUGUST 2021
Georgia Power Company - Plant Scherer Ash Pond 1
Juliette, Georgia

Analyte	Units	GROUNDWATER MONITORING WELLS									
		SGWC-14	SGWC-15	SGWC-16	SGWC-17	SGWC-18	SGWC-19	SGWC-20	SGWC-21	SGWC-22	SGWC-23
		8/19/2021	8/19/2021	8/19/2021	8/18/2021	8/18/2021	8/19/2021	8/19/2021	8/18/2021	8/18/2021	8/18/2021
Appendix III											
BORON, TOTAL	mg/L	1.7	1.6	0.72	0.32	6.6	2.1	1.9	1.1	0.44	0.42
CALCIUM, TOTAL	mg/L	40	17	1.1	55	55	45	12	39	30	21
CHLORIDE, TOTAL	mg/L	11	11	9.5	8.9	15	9.4	10	13	11	11
FLUORIDE, TOTAL	mg/L	< 0.026	0.12	0.038 J	0.087 J	0.099 J	< 0.026	0.17	0.12	0.054 J	0.11
pH	S.U.	5.86	4.63	5.28	6.26	4.83	5.61	4.28	6.26	5.76	6.01
SULFATE, TOTAL	mg/L	190	200	38	200	940	280	230	130	110	66
TOTAL DISSOLVED SOLIDS	mg/L	370	320	100	450	1400	440	340	380	260	210
Appendix IV											
ANTIMONY, TOTAL	mg/L	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038
ARSENIC, TOTAL	mg/L	< 0.00031	0.0014	< 0.00031	< 0.00031	0.0028	< 0.00031	0.00066 J	< 0.00031	< 0.00031	< 0.00031
BARIUM, TOTAL	mg/L	0.042	0.027	0.029	0.024	0.022	0.027	0.020	0.12	0.074	0.056
BERYLLIUM, TOTAL	mg/L	< 0.00018	0.00033 J	< 0.00018	< 0.00018	0.00035 J	< 0.00018	0.00091 J	< 0.00018	< 0.00018	< 0.00018
CADMIUM, TOTAL	mg/L	< 0.00022	0.00026 J	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022
CHROMIUM, TOTAL	mg/L	< 0.0015	0.032	0.011	0.012	0.019	0.014	< 0.0015	0.0022	< 0.0015	0.0019 J
COBALT, TOTAL	mg/L	0.0047	0.27	0.0051	0.00043 J	0.095	< 0.00013	0.20	0.00016 J	0.0010 J	< 0.00013
FLUORIDE, TOTAL	mg/L	< 0.026	0.12	0.038 J	0.087 J	0.099 J	< 0.026	0.17	0.12	0.054 J	0.11
LEAD, TOTAL	mg/L	< 0.00013	< 0.00013	< 0.00013	< 0.00013	0.00071 J	< 0.00013	0.00034 J	0.00041 J	< 0.00013	< 0.00013
LITHIUM, TOTAL	mg/L	< 0.0034	< 0.0034	< 0.0034	< 0.0034	0.0047 J	< 0.0034	0.0046 J	< 0.0034	< 0.0034	< 0.0034
MERCURY, TOTAL	mg/L	< 0.00013	< 0.00013	< 0.00013	0.00017 J	0.00022	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013
MOLYBDENUM, TOTAL	mg/L	< 0.00061	< 0.00061	< 0.00061	< 0.00061	< 0.00061	< 0.00061	< 0.00061	< 0.00061	< 0.00061	< 0.00061
RADIUM (226 + 228)	pCi/L	-0.0806 U	0.518	0.0370 U	0.130 U	0.277 U	-0.0514 U	-0.210 U	0.505	0.0260 U	0.603
SELENIUM, TOTAL	mg/L	< 0.0015	< 0.0015	< 0.0015	< 0.0015	0.0020 J	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015
THALLIUM, TOTAL	mg/L	< 0.00015	< 0.00015	< 0.00015	< 0.00015	0.00022 J	< 0.00015	0.00018 J	< 0.00015	< 0.00015	< 0.00015

NOTES:

1. mg/L - milligrams per Liter
2. pCi/L - picocuries per Liter
3. S.U. - Standard Units
4. < indicates the substance was not detected above the analytical method detection limit (MDL). The value displayed is the method detection limit.
5. J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed is qualified by the laboratory as an estimated number.
6. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.

TABLE 3B
ANALYTICAL DATA SUMMARY SUPPLEMENTAL ASSESSMENT MONITORING - AUGUST 2021
Georgia Power Company - Plant Scherer Ash Pond 1
Juliette, Georgia

Analyte	Units	GROUNDWATER MONITORING WELLS					
		PZ-13S	PZ-14S	PZ-39S	PZ-41S	PZ-43S	PZ-44I
		8/20/2021	8/18/2021	8/19/2021	8/19/2021	8/18/2021	8/18/2021
Appendix III							
BORON, TOTAL	mg/L	--	--	--	2.2	--	--
pH	S.U.	5.13	5.40	6.68	5.91	6.35	6.5
Appendix IV							
COBALT, TOTAL	mg/L	0.006	0.00030 J	0.00028 J	0.0013 J	0.00025 J	--
LITHIUM, TOTAL	mg/L	--	< 0.0034	--	--	--	0.0095

NOTES:

1. mg/L - milligrams per Liter
2. S.U. - Standard Units
3. < indicates the substance was not detected above the analytical method detection limit (MDL). The value displayed is the method detection limit.
4. J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed is qualified by the laboratory as an estimated number.

TABLE 3C
ANALYTICAL DATA SUMMARY ASSESSMENT MONITORING - FEBRUARY 2022
Georgia Power Company - Plant Scherer Ash Pond 1
Juliette, Georgia

Analyte	Units	GROUNDWATER MONITORING WELLS									
		PZ-13S	PZ-14S	PZ-17I	PZ-39S	PZ-40I	PZ-41S	PZ-42I	PZ-43S	PZ-44I	PZ-69I
		2/8/2022	2/8/2022	2/9/2022	2/9/2022	2/10/2022	2/9/2022	2/9/2022	2/9/2022	2/9/2022	2/10/2022
Appendix III											
BORON, TOTAL	mg/L	<0.060	<0.060	0.16	<0.060	4.1	3.2	2.7	0.90	<0.060	0.44
CALCIUM, TOTAL	mg/L	4.7	4.0	35	22	150	120	68	54	20	46
CHLORIDE, TOTAL	mg/L	8.9	4.1	6.9	5.8	10	6.8	11	7.5	2.5	12
FLUORIDE, TOTAL	mg/L	<0.026	<0.026	0.028 J	<0.026	<0.026	<0.026	0.033 J	0.028 J	<0.026	0.15
pH	S.U.	4.92	5.42	6.71	6.55	6.11	5.95	6.25	6.66	6.57	6.61
SULFATE, TOTAL	mg/L	<0.76	<0.76	100	38	720	<0.76	240	150	0.76 J	110
TOTAL DISSOLVED SOLIDS	mg/L	37	48	240	150	1200	820	470	310	120	320
Appendix IV											
ANTIMONY, TOTAL	mg/L	<0.00051	<0.00051	0.00061 J	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051
ARSENIC, TOTAL	mg/L	<0.00028	<0.00028	<0.00028	<0.00028	<0.00028	<0.00028	<0.00028	<0.00028	<0.00028	0.00059 J
BARIUM, TOTAL	mg/L	0.049	0.033	0.060	0.040	0.042	0.026	0.056	0.085	0.0078 J	0.14
BERYLLIUM, TOTAL	mg/L	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027
CADMIUM, TOTAL	mg/L	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022
CHROMIUM, TOTAL	mg/L	0.0030	0.0018 J	0.0036	0.028	< 0.0015	0.0058	< 0.0015	< 0.0015	< 0.0015	< 0.0015
COBALT, TOTAL	mg/L	0.0052	0.00028 J	<0.00026	'<0.00026	0.0025	0.00093 J	0.00061 J	<0.00026	0.0024 J	0.0020 J
FLUORIDE, TOTAL	mg/L	<0.026	<0.026	0.028 J	<0.026	<0.026	<0.026	0.033 J	0.028 J	<0.026	0.15
LEAD, TOTAL	mg/L	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	< 0.00017
LITHIUM, TOTAL	mg/L	0.0025 J	0.0015 J	<0.00083	0.012	0.010	<0.00083	0.0026 J	0.0031 J	0.010	0.0029 J
MERCURY, TOTAL	mg/L	0.00022	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013
MOLYBDENUM, TOTAL	mg/L	<0.00061	<0.00061	<0.00061	0.0011 J	<0.00061	<0.00061	0.0057 J	<0.00061	<0.00061	0.0017 J
COMBINED RADIUM (226 + 228)	pCi/L	-0.0564 U	0.0627 U	0.31 U	0.332 U	0.366 U	0.229 U	0.274 U	0.412 U	0.237 U	0.418 U
SELENIUM, TOTAL	mg/L	<0.00074	<0.00074	<0.00074	0.0022 J	<0.00074	0.0061	<0.00074	<0.00074	<0.00074	<0.00074
THALLIUM, TOTAL	mg/L	<0.00047	< 0.00047	< 0.00047	< 0.00047	< 0.00047	< 0.00047	< 0.00047	< 0.00047	< 0.00047	< 0.00047

TABLE 3C
ANALYTICAL DATA SUMMARY ASSESSMENT MONITORING - FEBRUARY 2022
Georgia Power Company - Plant Scherer Ash Pond 1
Juliette, Georgia

Analyte	Units	GROUNDWATER MONITORING WELLS									
		PZ-13S	PZ-14S	PZ-17I	PZ-39S	PZ-40I	PZ-41S	PZ-42I	PZ-43S	PZ-44I	PZ-69I
		2/8/2022	2/8/2022	2/9/2022	2/9/2022	2/10/2022	2/9/2022	2/9/2022	2/9/2022	2/9/2022	2/10/2022
Supplemental Monitoring											
BICARBONATE ALKALINITY as CaCO3	mg/L	16	22	62	75	33	21	76	54	100	94
CARBONATE ALKALINITY as CaCO3	mg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
TOTAL ALKALINITY as CaCO3 to pH 4.5	mg/L	16	22	62	75	33	21	76	54	100	94
FERRIC IRON	mg/L	0.22	<0.10	<0.10	<0.10	0.43	0.21	<0.10	<0.10	0.31	0.71
FERROUS IRON	mg/L	<0.081	<0.081	<0.081	<0.081	0.97	<0.081	0.24	<0.081	0.28	0.29
MAGNESIUM, TOTAL	mg/L	1.6	2.5	15	9.1	60	42	27	15	9.7	12
MANGANESE, TOTAL	mg/L	0.051	0.0097	0.0016	0.14	0.38	0.011	0.14	0.025	0.2	1.4
POTASSIUM	mg/L	0.39	0.6	2	1.6	8.1	3.7	3.5	3.4	1.9	5.8
SODIUM	mg/L	5	1.9	11	6.6	56	45	27	10	5.5	20
SULFIDE	mg/L	2.7	<2.1	<2.1	<2.1	<2.1	2.3	2.3	4.9	<2.1	2.1

NOTES:

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3. S.U. - Standard Units

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5. J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed is qualified by the laboratory as an estimated number.

6. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.

TABLE 4
EVALUATION OF REMEDIAL TECHNOLOGIES
Georgia Power Company – Plant Scherer Ash Pond 1
Juliette, Georgia

Corrective Measure	REGULATORY CITATION FOR CRITERIA: 40 CFR 257.96(C)(1)		
	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 Co. Under anaerobic conditions, Co would be attenuated within sparingly soluble sulfide minerals. 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 Co 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 Co.	The effective immobilization of Co 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 less complex, additional aquifer characterization is needed to further evaluate these options.	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 Co in groundwater.
Hydraulic Containment (pump- and-treat)	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 as a means of hydraulic control in the site geology.	Hydraulic containment is effective at providing hydraulic control, 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.

TABLE 4
EVALUATION OF REMEDIAL TECHNOLOGIES
Georgia Power Company – Plant Scherer Ash Pond 1
Juliette, Georgia

Corrective Measure	REGULATORY CITATION FOR CRITERIA: 40 CFR 257.96(C)(1)		
	Description	**Performance**	**Reliability**
In-Situ Solidification / Stabilization	In-situ stabilization (ISS) is a technique that involves solidifying soil or waste materials in place to reduce future dissolution of CCR compounds from the stabilized material. Additives typically include Portland cement, bentonite, and/or additives that are specific to CCR compounds and the solidification is completed in-situ using large diameter augers.	Medium to high, groundwater impacts would be addressed through the processes of natural attenuation. This alternative would isolate/secure the "plume" in a bound matrix and, over time, allow the concentrations of COCs in downgradient groundwater to decline to below applicable standards.	In-situ stabilization can be a reliable corrective measure for Co in groundwater. Reliability is dependent on the permeability of the subsurface and mechanics of injection.
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. 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. For Co, the main attenuation processes include sorption to iron and manganese oxides, and formation of sparingly soluble sulfide minerals.	Chemical MNA mechanisms for Co, including sorption, and oxidation reduction reactions can be effective at achieving groundwater protection standards (GWPS) within a reasonable time frame. Attenuation processes for Co 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 Co, at AP-1 will further enhance ongoing MNA.	Reliable as long as the aquifer conditions that result in Co attenuation remain favorable and/or are being enhanced and sufficient attenuation capacity is present. Under appropriate conditions, MNA is reliable and can either be used as a stand-alone corrective measure for groundwater impacted by dissolved Co, or in combination with a second technology.
Permeable Reactive Barrier (PRB)	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 likely viable for the concurrent removal of Co. The carbon could be composed of peat moss, mulch, or another carbon source. Exact placement of the PRB is contingent on finalization of the nature and extent 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 have been shown to effectively address Co in groundwater. The approach is expected to achieve GWPS for cobalt as impacted groundwater passes through the reactive barrier. Redox kinetics may be slow and hence a thicker wall might be needed relative to solely treating for Co. Furthermore, additional testing is required to select the appropriate sorptive media mix, related to Co.	Reliable groundwater corrective measure technology, 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.
Phyto Remediation (TreeWall®)	Phytoremediation uses trees and other plants to degrade 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 Co within the root zone	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 Co 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 may not be 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.

TABLE 4
EVALUATION OF REMEDIAL TECHNOLOGIES
Georgia Power Company – Plant Scherer Ash Pond 1
Juliette, Georgia

Corrective Measure	REGULATORY CITATION FOR CRITERIA: 40 CFR 257.96(C)(1)		
	Description	**Performance**	**Reliability**
	as well as incidental uptake of dissolved Co with groundwater is expected to occur concurrent with hydraulic control.		
Subsurface Vertical Barrier Wells	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. 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 groundwater cutoff at impoundments. Slurry walls are limited by the depth of installation, which is 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 Co 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. Reliability of a barrier wall for groundwater treatment may also be dependent upon managing the groundwater head along the barrier wall.

TABLE 4
EVALUATION OF REMEDIAL TECHNOLOGIES
Georgia Power Company – Plant Scherer Ash Pond 1
Juliette, Georgia

Corrective Measure	REGULATORY CITATION FOR CRITERIA: 40 CFR 257.96(C)(1)		
	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 (pump- and-treat)	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 Co. 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 Co.
In-Situ Solidification / Stabilization	Moderate, implementation of ISS will require a detailed design effort with bench scale testing to determine the appropriate amendment mix for a variety of overburden geologic materials. Pilot testing will also be needed to verify the ability of equipment to solidify material at depth. ISS has not been commonly used to stabilize entire ash units as part of a closure strategy.	Minimal impacts may be realized. Disruption to groundwater flow paths may introduce the potential for changed conditions.	In-situ stabilization of “plume” areas outside of AP-1 is predicted to take a year or more to complete, depending on the availability of specialized contractors and equipment.
Monitored Natural Attenuation (MNA)	Easily 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. MNA is expected to be successful within a reasonable time frame. Engineering measures for source control are included with pond closure to minimize potential impacts to the subsurface. Routine groundwater monitoring will be used to verify that groundwater impacts remain stable or decrease over time.

TABLE 4
EVALUATION OF REMEDIAL TECHNOLOGIES
Georgia Power Company – Plant Scherer Ash Pond 1
Juliette, Georgia

Corrective Measure	REGULATORY CITATION FOR CRITERIA: 40 CFR 257.96(C)(1)		
	Ease of Implementation	**Potential Impacts**	**Time Requirement to Begin/Complete**
Permeable Reactive Barrier (PRB)	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.	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.
Phyto Remediation (TreeWall®)	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). 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 multiple 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 Wells	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. 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.	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 will take a considerable amount of time to construct considering the size of AP-1. Additionally, some design phase and additional aquifer and compatibility testing will be required, which may take up to 12 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.

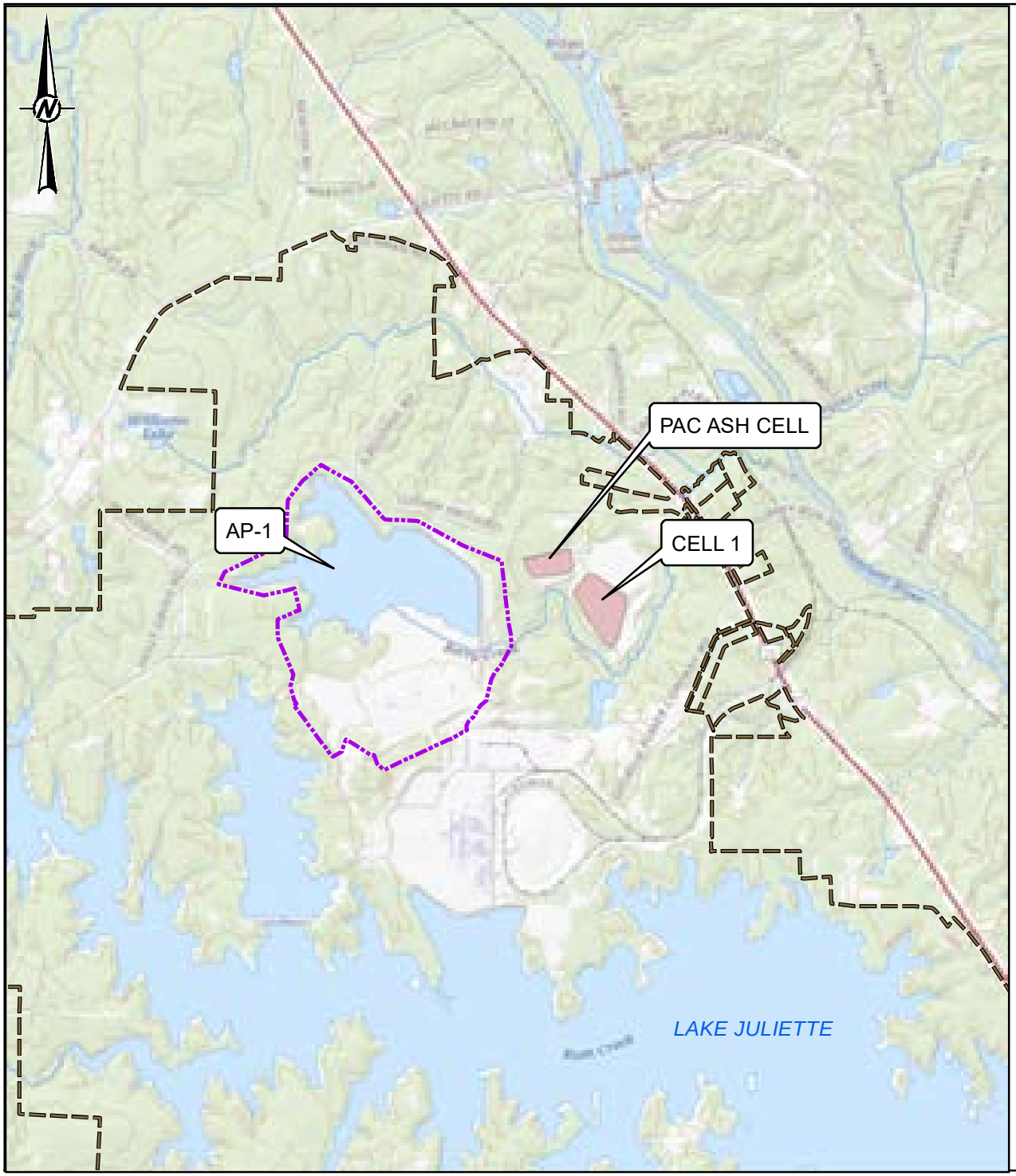
TABLE 4
EVALUATION OF REMEDIAL TECHNOLOGIES
Georgia Power Company – Plant Scherer Ash Pond 1
Juliette, Georgia

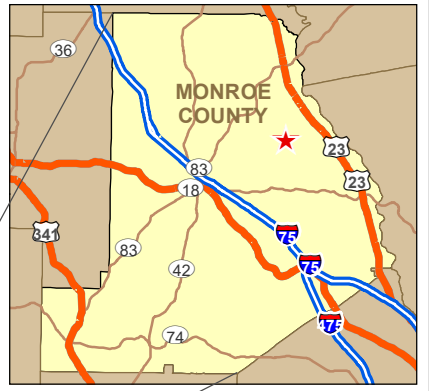
Corrective Measure	REGULATORY CITATION FOR CRITERIA: 40 CFR 257.96(C)(1)			Retention Evaluation
	Institutional Requirements	Other Env. Or Public Health Requirements	Relative Costs	
Geochemical Approaches (In situ injection)	Deed restrictions may be necessary until in-situ treatment has achieved GWPS. 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.	None expected at this point. 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; can be applied to remove Co in the form of a sparingly-soluble mineral or could be applied to raise the groundwater pH to promote immobilization through sorption mechanisms.
Hydraulic Containment (pump- and-treat)	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.	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; extracted water could be routed to wastewater treatment infrastructure built for dewatering and closure of AP-1. Could be considered an effective measure to maintain hydraulic control. .
In-Situ Solidification / Stabilization	Deed restrictions may be necessary until groundwater concentrations are below GWPS. No other institutional requirements that may limit application of this technology are expected at this time.	Changes to groundwater chemistry relative to the mobility of Appendix IV constituents following completion of ISS, where large volumes of amendments (typically Portland cement) are added to the subsurface, are unknown and would require pilot testing.	Medium, depending on saturated thickness of the materials to be treated.	Based on the unconsolidated soils, relatively shallow depths, and anticipated relatively small area of treatment, ISS technology is a potential viable option for targeted treatment areas and will be retained for further evaluation.
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.	Low to medium	Retained for further analysis; Under appropriate conditions, MNA may be used as a stand-alone corrective measure or in conjunction with other potential groundwater corrective measures.
Permeable Reactive Barrier (PRB)	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.	None expected at this point. 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	Retained for further analysis; a PRB can be considered independently or as a component of a subsurface vertical barrier wall for groundwater treatment.
Phyto Remediation (TreeWall®)	Deed restrictions may be necessary for groundwater areas upgradient of the TreeWell system. No other institutional requirements are expected at this time.	None expected at this point. 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 targeted placement of TreeWell® units downgradient of AP-1; may require combination with other potential corrective measures; could be effective for hydraulic control.

TABLE 4
EVALUATION OF REMEDIAL TECHNOLOGIES
Georgia Power Company – Plant Scherer Ash Pond 1
Juliette, Georgia

Corrective Measure	REGULATORY CITATION FOR CRITERIA: 40 CFR 257.96(C)(1)			Retention Evaluation
	Institutional Requirements	Other Env. Or Public Health Requirements	Relative Costs	
Subsurface Vertical Barrier Wells	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.	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)	Retained for further evaluation. This methodology may be considered in combination with PRB also for treatment of Co.

Figures





LEGEND

PROPERTY BOUNDARY

AP-1 PERMIT BOUNDARY

Service Layer Credits: USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset,

0 4000 8000

Feet

CLIENT
GEORGIA POWER COMPANY
PLANT SCHERER

PROJECT
ASSESSMENT OF CORRECTIVE MEASURES
PLANT SCHERER ASH POND 1 (AP-1)

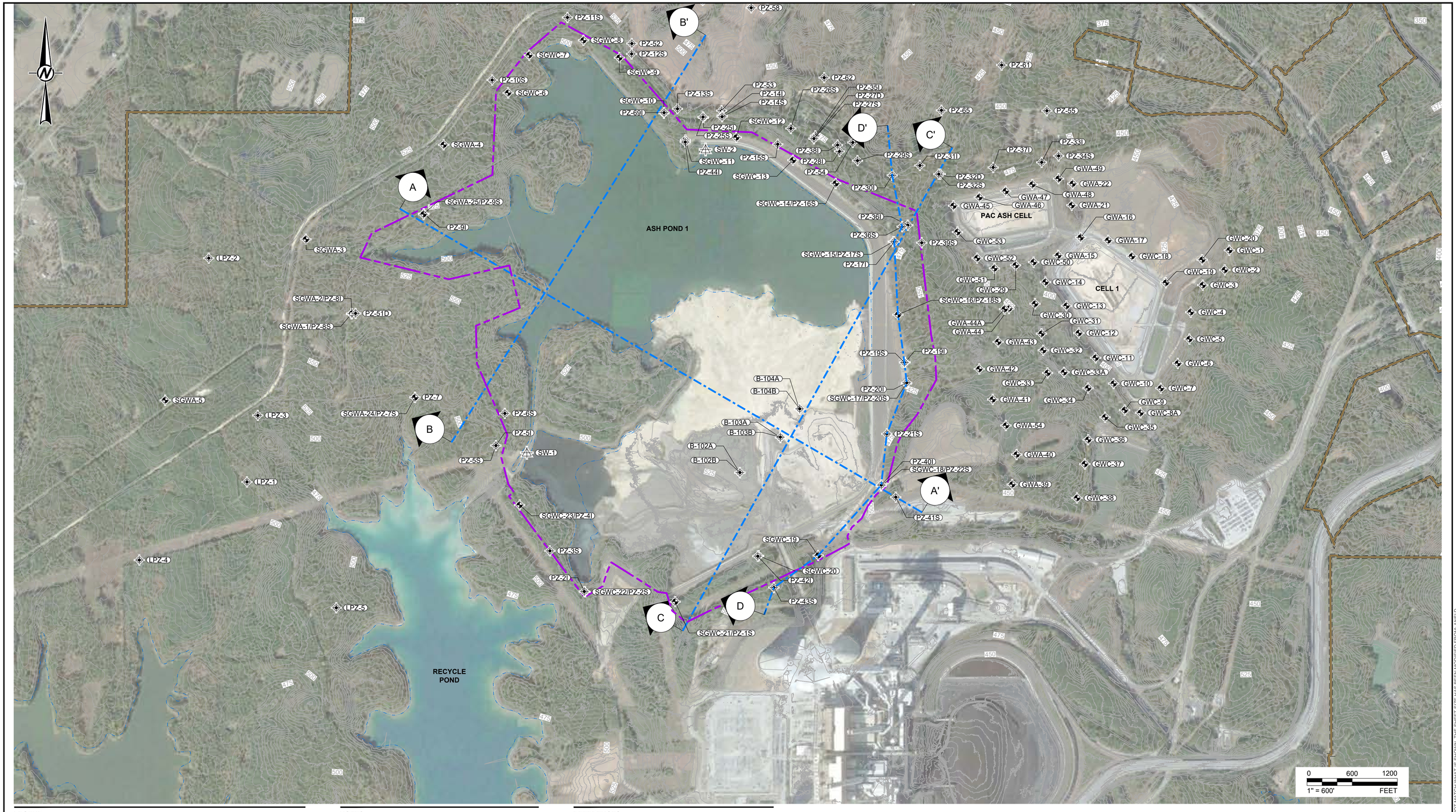
TITLE
SITE LOCATION MAP

CONSULTANT
GOLDER

YYYY-MM-DD	2022-03-02
PREPARED	DJC
DESIGN	DLP
CHECKED	DLP
REVIEWED/APPROVED	RPK

PROJECT No.	CONTROL	Rev.	FIGURE
GL166235021	GL166235021D000-GIS.mxd	0	1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET HAS BEEN MODIFIED FROM: ANSI A



LEGEND

PZ-6S	EXISTING PIEZOMETER LOCATIONS
BRGWC-12I	EXISTING MONITORING WELL LOCATIONS
SW-1	SURFACE WATER LOCATION
SPT-11	HISTORICAL BORING LOCATION
	CROSS-SECTION LINES
	PROPERTY BOUNDARY
	PERMIT BOUNDARY
	SURFACE WATER

NOTES

1. TOPOGRAPHIC CONTOUR INTERVAL = 5 FEET
2. MONITORING WELLS AND PIEZOMETERS ARE PROJECTED ONTO THE SECTION LINES AT A DISTANCE OF UP TO 730 FEET.

REFERENCES

1. BORING/WELL/PIEZOMETER LOCATIONS AND PROPERTY LINE PROVIDED BY SOUTHERN COMPANY SERVICES, INC. AND GOLDER ASSOCIATES.
2. TOPOGRAPHIC MAP FROM USGS 7.5 MINUTE QUADRANGLE, EAST JULIETTE, 2011 SUPPLEMENTED WITH SITE SPECIFIC TOPO INFORMATION PROVIDED BY GEORGIA POWER COMPANY.

CLIENT
GEORGIA POWER COMPANY
PLANT SCHERER

Georgia Power

CONSULTANT

wsp GOLDER

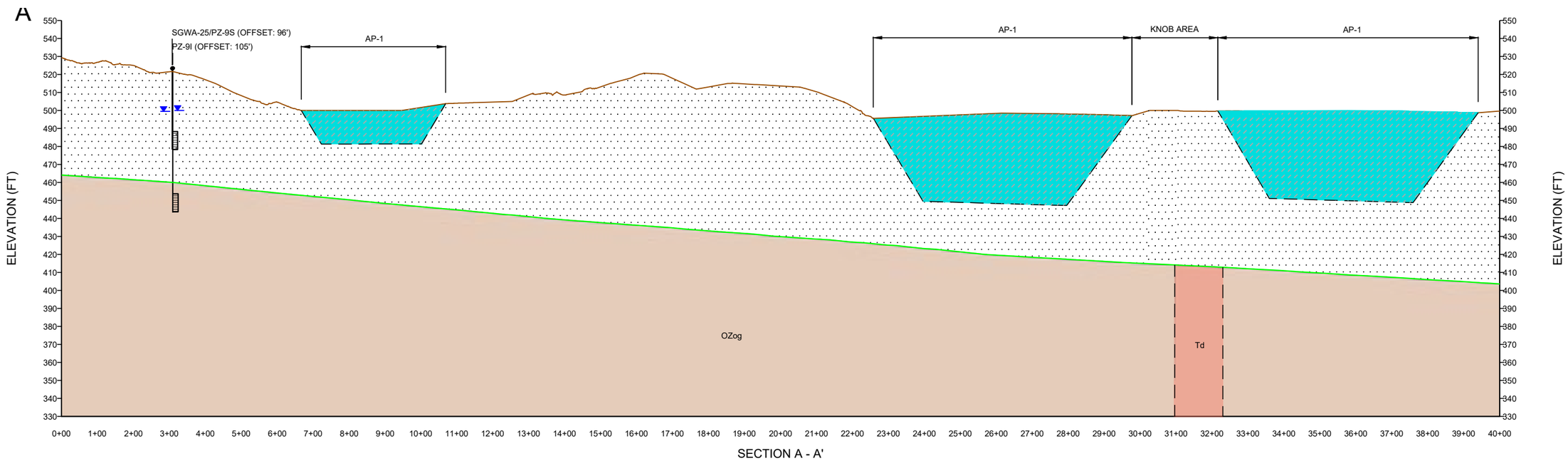
YYYY-MM-DD	2021-03-02
DESIGNED	DLP
PREPARED	DJC
CHECKED	DLP
REVIEWED/APPROVED	RPK

PROJECT
ASSESSMENT OF CORRECTIVE MEASURES
PLANT SCHERER ASH POND 1 (AP-1)

TITLE
SITE PLAN AND PROFILE ORIENTATION MAP

PROJECT NO.	CONTROL	REV.	FIGURE
GL166235021	1662350H001.dwg	0	2

0 1in
IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D



LEGEND

- EXISTING GRADE
- ESTIMATED TOP OF ROCK SURFACE
- OVERBURDEN/RESIDUUM
- OZog - BIOTITE GNEISS
- OZpd - B-DIORITE (PORPHYRITIC) (ESTIMATED)
- Td - DIABASE
- ESTIMATED CCR
- WATER
- GROUNDWATER ELEVATION (MEASURED AUGUST 16, 2021)

NOTE

1. MONITORING WELLS AND PIEZOMETERS ARE PROJECTED ONTO THE SECTION LINES AT A DISTANCE OF UP TO 730 FEET.
2. NO STRUCTURAL FEATURES WERE MAPPABLE FOR THE DIORITE SILL TO USE AS A BASIS FOR THE CROSS-SECTION PROJECTION. THEREFORE, THE LOCATION DEPICTED IS ESTIMATED

REFERENCES

1. EXISTING GRADE FROM USGS 7.5 MINUTE QUADRANGLE; EAST JULIETTE, 2011.
2. MONITORING WELL AND PIEZOMETER LOCATIONS PROVIDED BY JORDAN ENGINEERING. BORING LOCATIONS PROVIDED BY GEORGIA POWER COMPANY.
3. GEOLOGIC UNITS TAKEN FROM PETROLOGIC SOLUTIONS INC'S MAPPING PRESENTED IN THE GEOLOGIC AND HYDROGEOLOGIC SUMMARY REPORT (NOVEMBER 2018).

0 150 300
1" = 300' FEET

5X VERTICAL EXAGGERATION

CLIENT
GEORGIA POWER COMPANY
PLANT SCHERER

Georgia Power

CONSULTANT
WSP GOLDER

YYYY-MM-DD	2022-03-02
DESIGNED	DLP
PREPARED	DJC
CHECKED	DLP
REVIEW/APPROVED	RPK

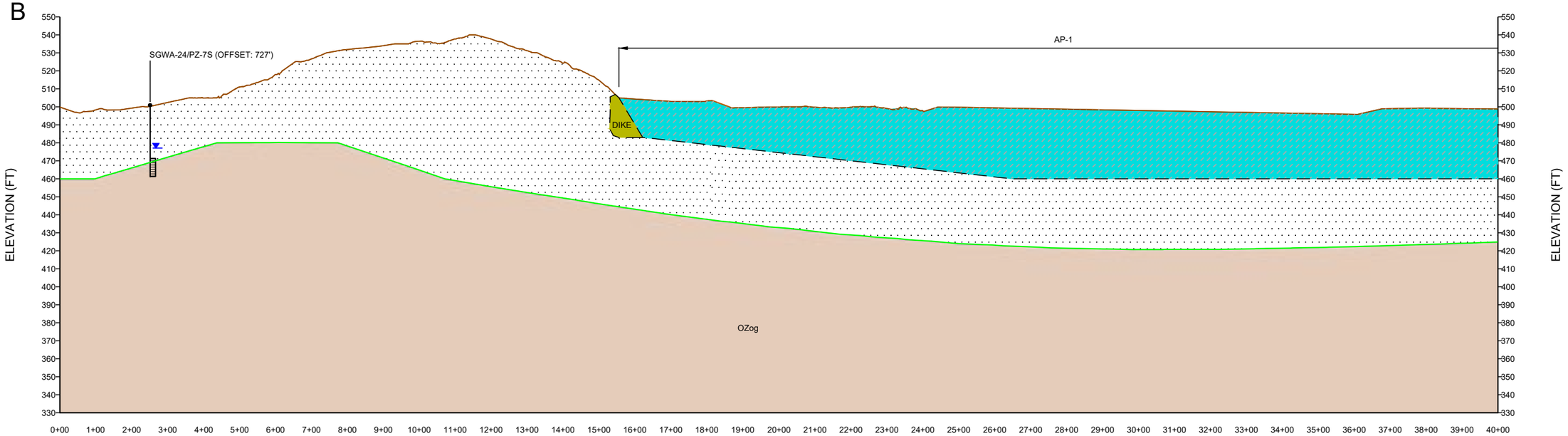
PROJECT
ASSESSMENT OF CORRECTIVE MEASURES
PLANT SCHERER ASH POND 1 (AP-1)

TITLE
GEOLOGIC AND HYDROGEOLOGIC CROSS SECTIONS SCHEMATIC A-A'

PROJECT NO.	CONTROL	REV.	FIGURE
GL166235021	1662350H002.dwg	0	3A

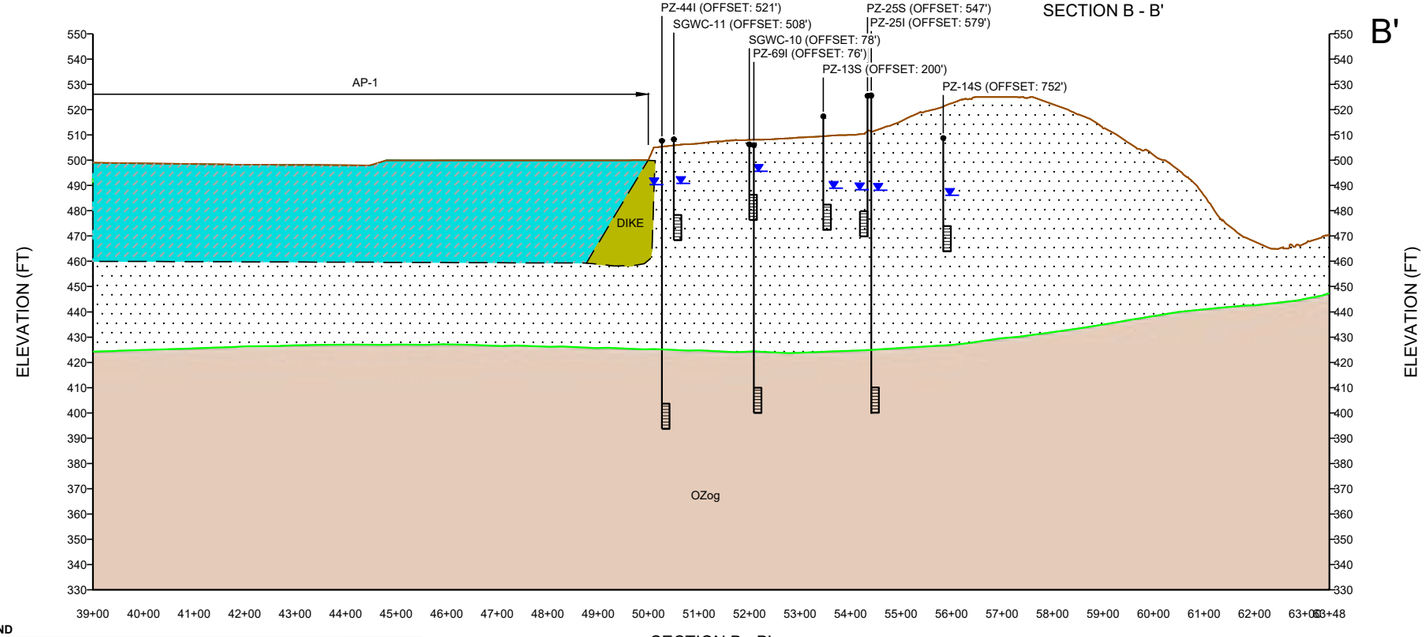
IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSI B
1 in
0

B



SECTION B - B'

B'



SECTION B - B'

LEGEND

- EXISTING GRADE
- ESTIMATED TOP OF ROCK SURFACE
- OVERBURDEN/RESIDUUM
- OZog - BIOTITE GNEISS
- OZpd - B-DIORITE (PORPHYRITIC) (ESTIMATED)
- ESTIMATED CCR
- WATER
- GROUNDWATER ELEVATION (MEASURED AUGUST 16, 2021)

NOTE

MONITORING WELLS AND PIEZOMETERS ARE PROJECTED ONTO THE SECTION LINES AT A DISTANCE OF UP TO 730 FEET.

REFERENCES

1. EXISTING GRADE FROM USGS 7.5 MINUTE QUADRANGLE; EAST JULIETTE, 2011.
2. MONITORING WELL AND PIEZOMETER LOCATIONS PROVIDED BY JORDAN ENGINEERING. BORING LOCATIONS PROVIDED BY GEORGIA POWER COMPANY.
3. GEOLOGIC UNITS TAKEN FROM PETROLOGIC SOLUTIONS INC'S MAPPING PRESENTED IN THE GEOLOGIC AND HYDROGEOLOGIC SUMMARY REPORT (NOVEMBER 2018).

0 150 300
1" = 300' FEET

5X VERTICAL EXAGGERATION

CLIENT
GEORGIA POWER COMPANY
PLANT SCHERER

CONSULTANT
WSP GOLDER

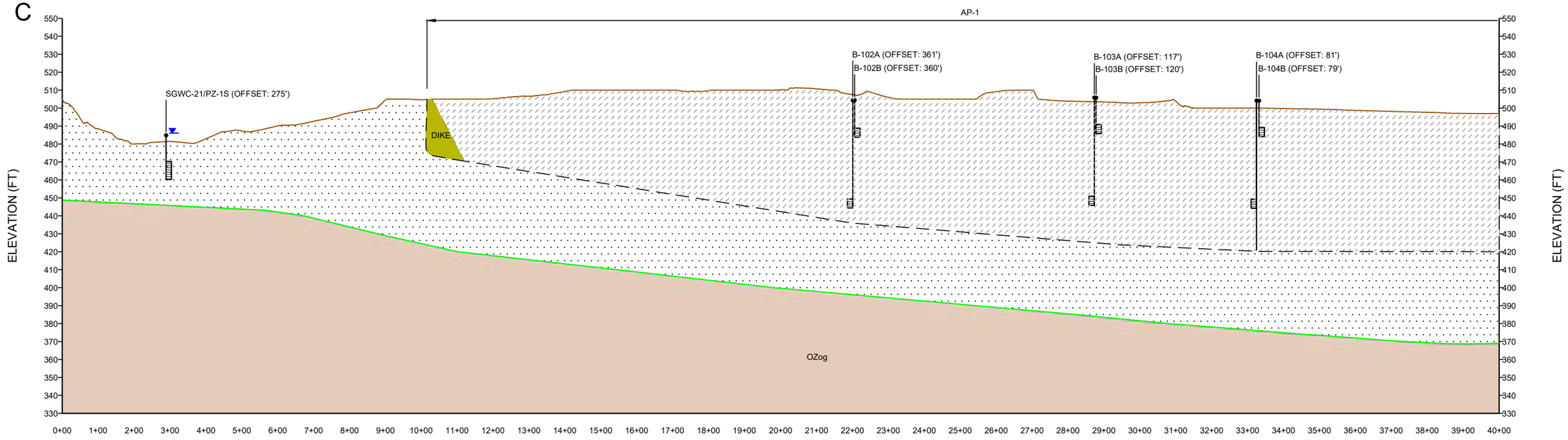
YYYY-MM-DD	2021-12-13
DESIGNED	DLP
PREPARED	DJC
CHECKED	DLP
REVIEW/APPROVED	RPK

PROJECT
ASSESSMENT OF CORRECTIVE MEASURES
PLANT SCHERER ASH POND 1 (AP-1)

TITLE
GEOLOGIC AND HYDROGEOLOGIC CROSS SECTIONS SCHEMATIC B-B'

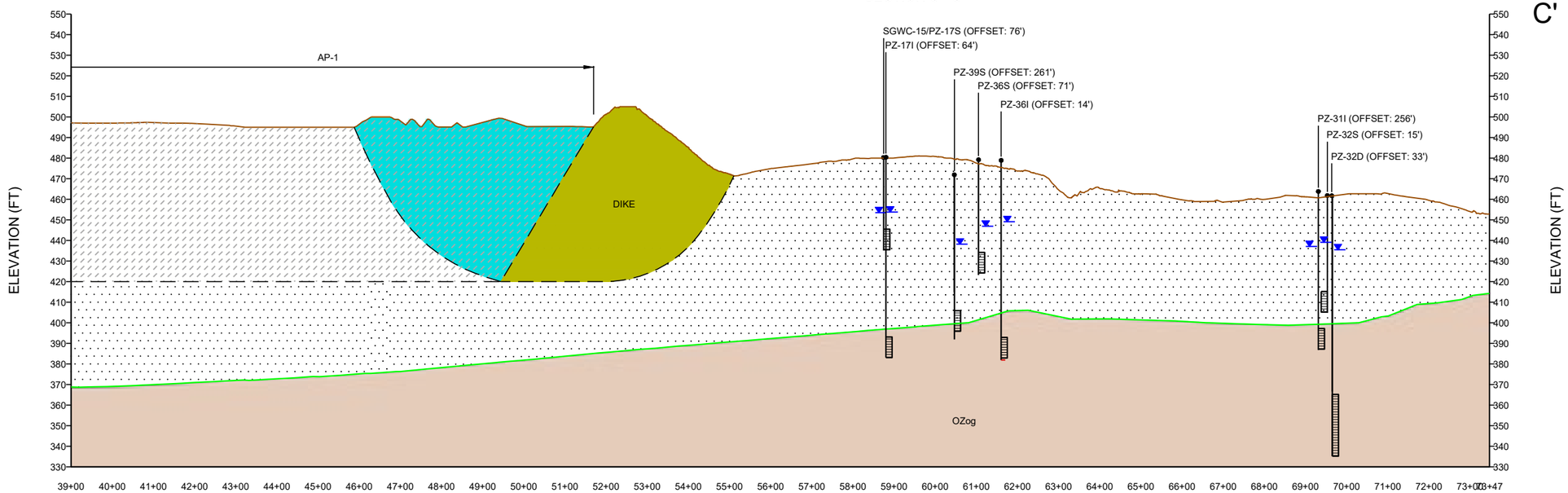
PROJECT NO.	CONTROL	REV.	FIGURE
GL166235021	1662350H002.dwg	0	3B

C



SECTION C - C'

C'



SECTION C - C'

LEGEND

- EXISTING GRADE
- ESTIMATED TOP OF ROCK SURFACE
- OVERBURDEN/RESIDUUM
- OZog - BIOTITE GNEISS
- OZpd - B-DIORITE (PORPHYRITIC) (ESTIMATED)
- ESTIMATED CCR
- WATER
- GROUNDWATER ELEVATION (MEASURED AUGUST 16, 2021)

NOTES

1. THE WATER LEVEL FOR PZ-1S APPEARS AS ABOVE GROUND SURFACE IS AN ARTIFACT OF PROJECTING THIS POINT ONTO THE LINE OF SECTION.
2. MONITORING WELLS AND PIEZOMETERS ARE PROJECTED ONTO THE SECTION LINES AT A DISTANCE OF UP TO 730 FEET.
3. MONITORING WELL SGWC-20 AND PIEZOMETER PZ-42I ARE PROJECTED ONTO THE SECTION FROM A DISTANCE OF APPROXIMATELY 400 FEET. THESE WELLS ARE NOT INSTALLED WITHIN AP-1. REFER TO THE LINE OF SECTION MAP FOR ACTUAL LOCATIONS.

REFERENCES

1. EXISTING GRADE FROM USGS 7.5 MINUTE QUADRANGLE; EAST JULIETTE, 2011.
2. MONITORING WELL AND PIEZOMETER LOCATIONS PROVIDED BY JORDAN ENGINEERING. BORING LOCATIONS PROVIDED BY GEORGIA POWER COMPANY.
3. GEOLOGIC UNITS TAKEN FROM PETROLOGIC SOLUTIONS INC'S MAPPING PRESENTED IN THE GEOLOGIC AND HYDROGEOLOGIC SUMMARY REPORT (NOVEMBER 2018).

0 150 300
1" = 300' FEET

5X VERTICAL EXAGGERATION

CLIENT
GEORGIA POWER COMPANY
PLANT SCHERER

Georgia Power

CONSULTANT
GOLDER

YYYY-MM-DD	2022-03-02
DESIGNED	DLP
PREPARED	DJC
CHECKED	DLP
REVIEW/APPROVED	RPK

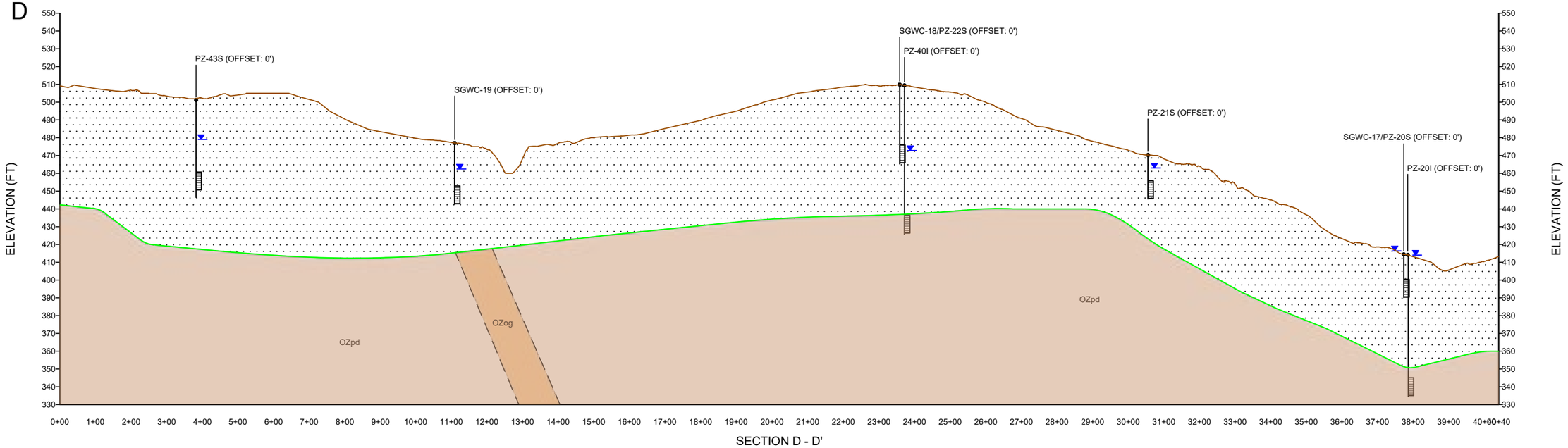
PROJECT
ASSESSMENT OF CORRECTIVE MEASURES
PLANT SCHERER ASH POND 1 (AP-1)

TITLE
GEOLOGIC AND HYDROGEOLOGIC CROSS SECTIONS SCHEMATIC C-C'

PROJECT NO.	CONTROL	REV.	FIGURE
GL166235021	1662350H002.dwg	0	3C

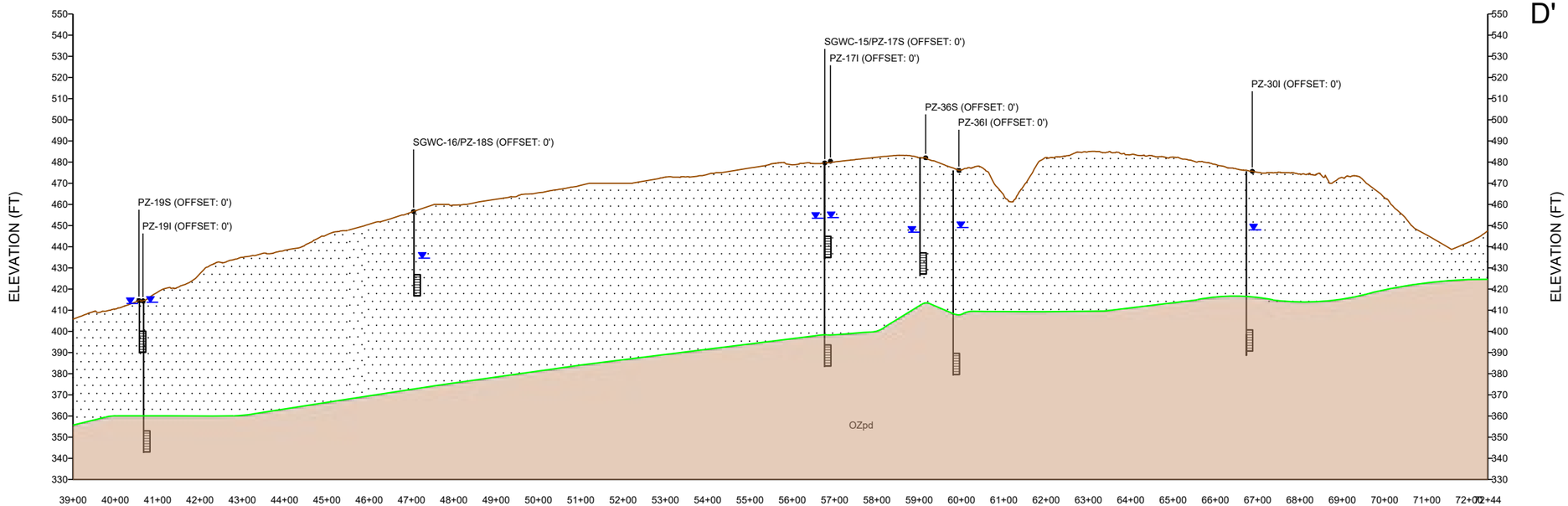
IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B
0 1 in

D



SECTION D - D'

D'



SECTION D - D'

LEGEND

- EXISTING GRADE
- ESTIMATED TOP OF ROCK SURFACE
- OVERBURDEN/RESIDUUM
- OZog - BIOTITE GNEISS
- OZpd - B-DIORITE (PORPHYRITIC) (ESTIMATED)
- GROUNDWATER ELEVATION (MEASURED AUGUST 16, 2021)

REFERENCES

1. EXISTING GRADE FROM USGS 7.5 MINUTE QUADRANGLE; EAST JULIETTE, 2011.
2. MONITORING WELL AND PIEZOMETER LOCATIONS PROVIDED BY JORDAN ENGINEERING. BORING LOCATIONS PROVIDED BY GEORGIA POWER COMPANY.
3. GEOLOGIC UNITS TAKEN FROM PETROLOGIC SOLUTIONS INC'S MAPPING PRESENTED IN THE GEOLOGIC AND HYDROGEOLOGIC SUMMARY REPORT (NOVEMBER 2018).

0 150 300
1" = 300' FEET

5X VERTICAL EXAGGERATION

CLIENT
GEORGIA POWER COMPANY
PLANT SCHERER

CONSULTANT
GOLDER

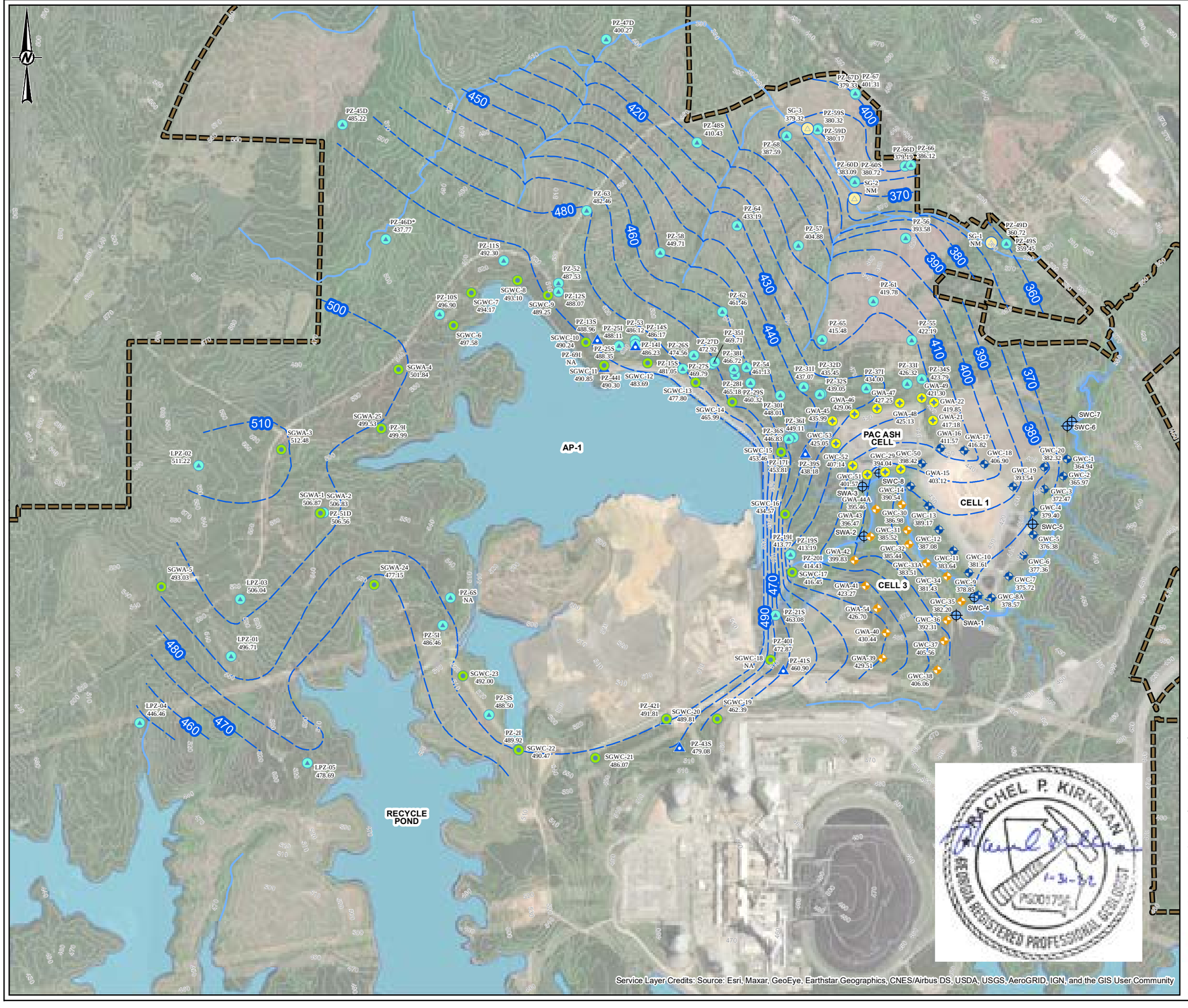
YYYY-MM-DD	2022-04-07
DESIGNED	DLP
PREPARED	DJC
CHECKED	DLP
REVIEW/APPROVED	RPK

PROJECT
ASSESSMENT OF CORRECTIVE MEASURES
PLANT SCHERER ASH POND 1 (AP-1)

TITLE
GEOLOGIC AND HYDROGEOLOGIC CROSS SECTIONS SCHEMATIC D-D'

PROJECT NO.	CONTROL	REV.	FIGURE
166235021	1662350H002.dwg	0	3D

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B
1 in
0



LEGEND

- SCHERER ASH POND-CCR MONITORING WELL
- CELL 1 MONITORING WELL
- PAC ASH MONITORING WELL
- CELL 3 MONITORING WELL
- PIEZOMETER
- SURFACE WATER SAMPLING LOCATION
- STREAM GAUGE LOCATION
- ASSESSMENT WELL LOCATION
- INFERRED POTENTIOMETRIC SURFACE CONTOUR (FT-NAVD 88)
- STREAM
- PROPERTY BOUNDARY
- PONDS

NA WATER LEVEL ELEVATION NOT AVAILABLE. WATER LEVEL AT SGWC-18 WAS BELOW THE TOP OF THE PUMP. WATER LEVELS AT GWA-33A AND GWA-41 WERE NOT RECORDED; THESE LOCATIONS WERE INACCESSIBLE AT THE TIME OF RECORDING DUE TO CONSTRUCTION ACTIVITIES. PZ-69I WAS INSTALLED IN JANUARY 2022.

NOTES

1. GROUNDWATER ELEVATION MEASUREMENTS OBTAINED AUGUST 16, 2021 BY GOLDER ASSOCIATES.
2. GROUNDWATER ELEVATIONS DISPLAYED IN FEET-NORTH AMERICAN VERTICAL DATUM (FT-NAVD 88).
3. DEEP AND INTERMEDIATE WELL GROUNDWATER ELEVATIONS WERE NOT USED TO GENERATE GROUNDWATER CONTOURS.
4. PZ-50D IS NOT SHOWN; ITS LOCATION IS BEYOND THE MAPPED LIMITS.

REFERENCE

1. COORDINATE SYSTEM: NAD 1983 STATE PLAN GEORGIA WEST (U.S. FEET).
2. MONITORING WELL/PIEZOMETER LOCATIONS PROVIDED BY JORDAN ENGINEERING.

1500 750 0 1500
Feet

RACHEL P. KIRKMAN
GEORGIA REGISTERED PROFESSIONAL GEOLOGIST
PG001756
1-31-22

CLIENT
GEORGIA POWER COMPANY
PLANT SCHERER

Georgia Power

PROJECT
ASSESSMENT OF CORRECTIVE MEASURES
PLANT SCHERER ASH POND 1 (AP-1)

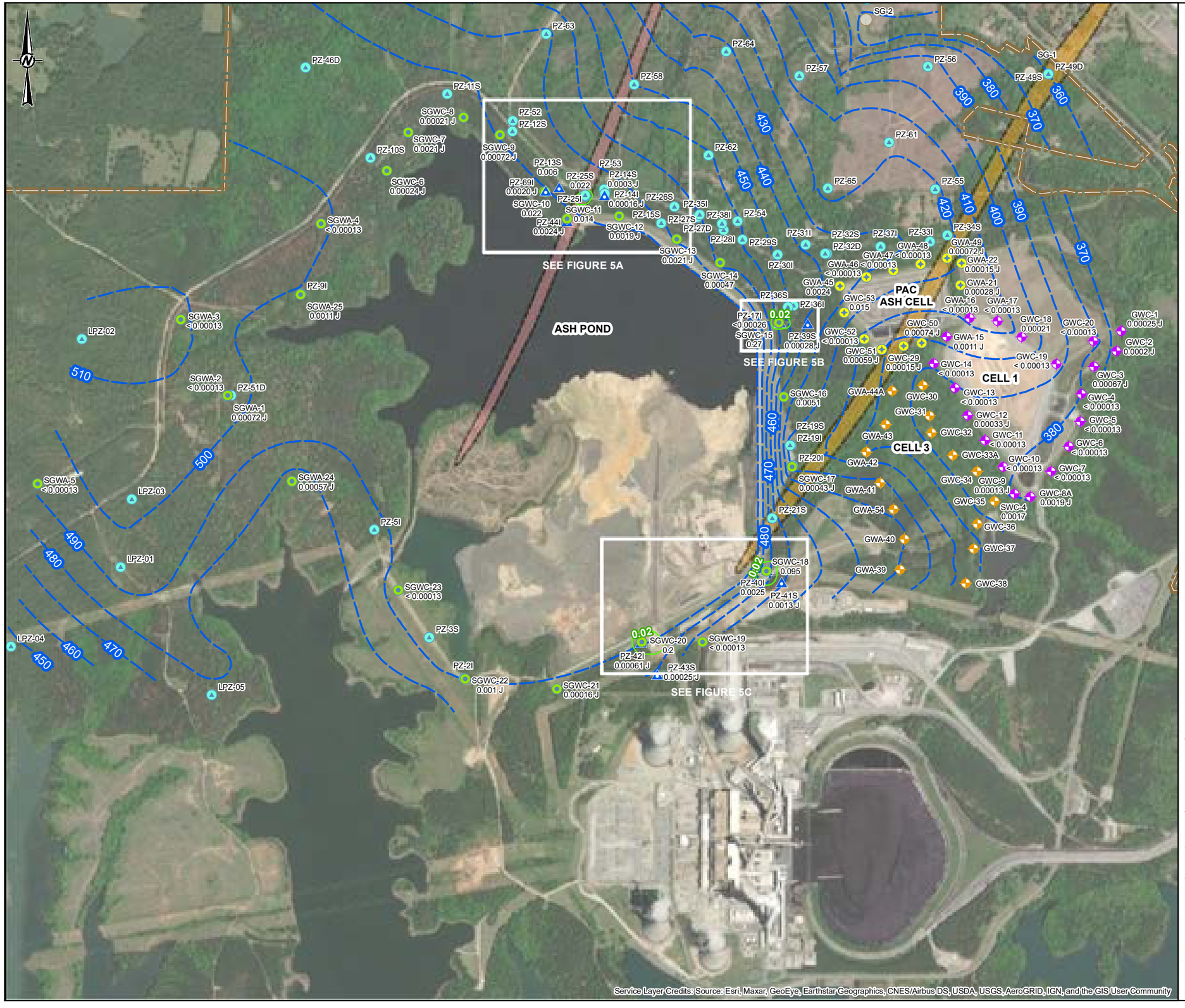
TITLE
POTENTIOMETRIC SURFACE MAP - AUGUST 16, 2021

CONSULTANT
GOLDER

YYYY-MM-DD	2022-03-02
PREPARED	DJC
DESIGN	DLP
CHECKED	DLP
REVIEWED/APPROVED	RPK

PROJECT No. GL166235021 | CONTROL GL166235021D005-GIS.mxd | Rev. 0 | FIGURE 4

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET HAS BEEN MODIFIED FROM: ANSI B



LEGEND

- GROUNDWATER ELEVATION CONTOUR (FT. NAVD) - (AUGUST 2021)
- 0.02 ISOCONCENTRATION CONTOUR
- ASSESSMENT WELL
- PIEZOMETER
- SCHERER ASH POND-CCR MONITORING WELL
- PAC ASH CELL MONITORING WELL
- CELL 1 LANDFILL MONITORING WELL
- CELL 3 LANDFILL MONITORING WELL
- DIORITE DIKE (OZpd)
- DIABASE (Td)

ANALYTE	UNITS	SCREENING / TARGET LEVELS			
		RSL	MCL	SITE-SPECIFIC BACKGROUND (UPPER TOLERANCE LIMIT)	GWPS
COBALT, TOTAL	mg/L	0.006	N/R	0.02	0.02

RSL = REGIONAL SCREENING LEVEL
MCL = MAXIMUM CONTAMINANT LEVEL
GWPS = GROUNDWATER PROTECTION STANDARD
N/R = NOT REPORTED

NOTES
1. ALL LOCATIONS AND BOUNDARIES ARE APPROXIMATE.

2. THE GREEN ISOCONTOUR IS THE APPROXIMATE EXTENT OF COBALT ABOVE 0.02 MG/L IN GROUNDWATER AND IS BASED ON THE AVAILABLE DATA FROM SURROUNDING WELLS AND PIEZOMETERS SHOWN ON THE FIGURE.

3. CONCENTRATIONS REPORTED IN MILLIGRAMS PER LITER (MG/L), SAMPLED IN AUGUST 2021. REPORTED CONCENTRATION FOR PZ-17I, PZ-40I, PZ-42I, PZ-44I, AND PZ-69I SAMPLED IN FEBRUARY 2022.

REFERENCE
1. COORDINATE SYSTEM: NAD 1983 STATE PLAN GEORGIA WEST (U.S. FEET).

2. MONITORING WELL/PIEZOMETER LOCATIONS SURVEYED BY JORDAN ENGINEERING, INC.

1250 625 0 1250
Feet

CLIENT
GEORGIA POWER COMPANY
PLANT SCHERER

PROJECT
ASSESSMENT OF CORRECTIVE MEASURES
PLANT SCHERER ASH POND 1 (AP-1)

TITLE
COBALT ISOCONCENTRATION MAP
AUGUST 2021

CONSULTANT
GOLDER

YYYY-MM-DD	2022-03-01
PREPARED	DJC
DESIGN	DLP
REVIEW	DLP
APPROVED	RPK

PROJECT No.	CONTROL	Rev.	FIGURE
GL166235021	GL166235021D001-GIS.mxd	0	5

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET HAS BEEN MODIFIED FROM: ANSI B

LEGEND

- GROUNDWATER ELEVATION CONTOUR (FT. NAVD) - (AUGUST 2021)
- 0.02 ISOCONCENTRATION CONTOUR
- ASSESSMENT WELL
- PIEZOMETER
- SCHERER ASH POND-CCR MONITORING WELL
- DIABASE (Td)

ANALYTE	UNITS	SCREENING / TARGET LEVELS			
		RSL	MCL	SITE-SPECIFIC BACKGROUND (UPPER TOLERANCE LIMIT)	GWPS
COBALT, TOTAL	mg/L	0.006	N/R	0.02	0.02

RSL = REGIONAL SCREENING LEVEL
MCL = MAXIMUM CONTAMINANT LEVEL
GWPS = GROUNDWATER PROTECTION STANDARD
N/R = NOT REPORTED

NOTES

1. ALL LOCATIONS AND BOUNDARIES ARE APPROXIMATE.

2. THE GREEN ISOCONTOUR IS THE APPROXIMATE EXTENT OF COBALT ABOVE 0.02 MG/L IN GROUNDWATER AND IS BASED ON THE AVAILABLE DATA FROM SURROUNDING WELLS AND PIEZOMETERS SHOWN ON THE FIGURE.

3. CONCENTRATIONS REPORTED IN MILLIGRAMS PER LITER (MG/L), SAMPLED IN AUGUST 2021. REPORTED CONCENTRATION FOR PZ-44I AND PZ-69I SAMPLED IN FEBRUARY 2022.

REFERENCE

1. COORDINATE SYSTEM: NAD 1983 STATE PLAN GEORGIA WEST (U.S. FEET).

2. MONITORING WELL/PIEZOMETER LOCATIONS SURVEYED BY JORDAN ENGINEERING, INC.

200 100 0 200
Feet

CLIENT
GEORGIA POWER COMPANY
PLANT SCHERER

PROJECT
ASSESSMENT OF CORRECTIVE MEASURES
PLANT SCHERER ASH POND 1 (AP-1)

TITLE
INSET A COBALT ISOCONCENTRATION MAP
AUGUST 2021

CONSULTANT
GOLDER

YYYY-MM-DD	2022-03-02
PREPARED	DJC
DESIGN	DLP
CHECKED	DLP
REVIEW/APPROVED	RPK

PROJECT No. GL166235021 | CONTROL GL166235021D002-GIS.mxd | Rev. 0 | FIGURE **5A**

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET HAS BEEN MODIFIED FROM: ANSI B

LEGEND

- GROUNDWATER ELEVATION CONTOUR (FT. NAVD) - (AUGUST 2021)
- 0.02 ISOCONCENTRATION CONTOUR
- ASSESSMENT WELL
- PIEZOMETER
- SCHERER ASH POND-CCR MONITORING WELL

ANALYTE	UNITS	SCREENING / TARGET LEVELS			
		RSL	MCL	SITE-SPECIFIC BACKGROUND (UPPER TOLERANCE LIMIT)	GWPS
COBALT, TOTAL	mg/L	0.006	N/R	0.02	0.02

RSL = REGIONAL SCREENING LEVEL
MCL = MAXIMUM CONTAMINANT LEVEL
GWPS = GROUNDWATER PROTECTION STANDARD
N/R = NOT REPORTED

NOTES
1. ALL LOCATIONS AND BOUNDARIES ARE APPROXIMATE.

2. THE GREEN ISOCONTOUR IS THE APPROXIMATE EXTENT OF COBALT ABOVE 0.02 MG/L IN GROUNDWATER AND IS BASED ON THE AVAILABLE DATA FROM SURROUNDING WELLS AND PIEZOMETERS SHOWN ON THE FIGURE.

3. CONCENTRATIONS REPORTED IN MILLIGRAMS PER LITER (MG/L), SAMPLED IN AUGUST 2021. REPORTED CONCENTRATION FOR PZ-17I SAMPLED IN FEBRUARY 2022.

REFERENCE
1. COORDINATE SYSTEM: NAD 1983 STATE PLAN GEORGIA WEST (U.S. FEET).

2. MONITORING WELL/PIEZOMETER LOCATIONS SURVEYED BY JORDAN ENGINEERING, INC.

100 50 0 100
Feet

CLIENT
GEORGIA POWER COMPANY
PLANT SCHERER

PROJECT
ASSESSMENT OF CORRECTIVE MEASURES
PLANT SCHERER ASH POND 1 (AP-1)

TITLE
INSET B COBALT ISOCONCENTRATION MAP
AUGUST 2021

CONSULTANT
GOLDER

YYYY-MM-DD	2022-03-01
PREPARED	DJC
DESIGN	DLP
CHECKED	DLP
REVIEW/APPROVED	RPK

PROJECT No.	CONTROL	Rev.	FIGURE
GL166235021	GL166235021D003-GIS.mxd	0	**5B**

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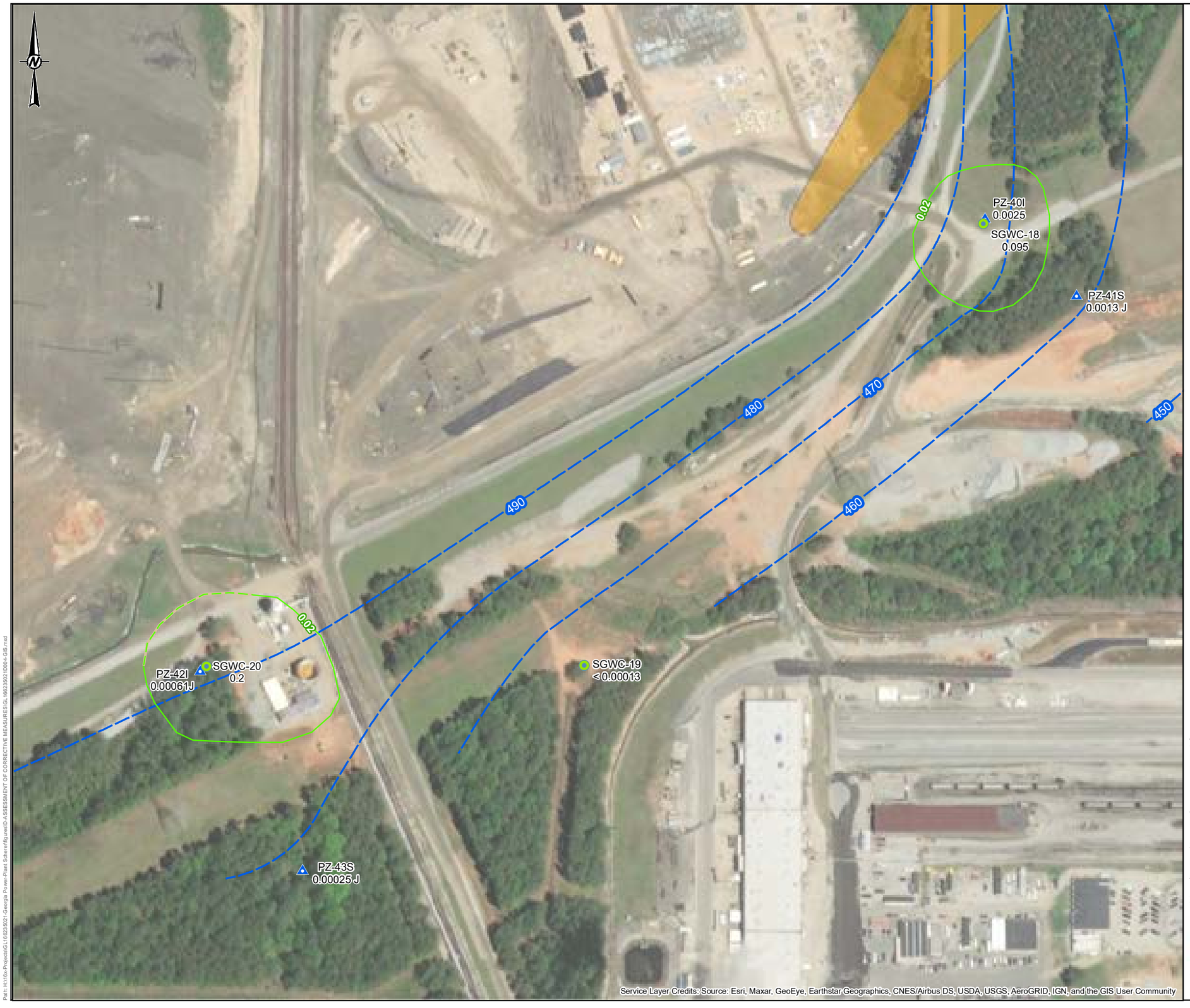

LEGEND

- GROUNDWATER ELEVATION CONTOUR (FT. NAVD) - (AUGUST 2021)
- 0.02 ISOCONCENTRATION CONTOUR
- ASSESSMENT WELL
- SCHERER ASH POND-CCR MONITORING WELL
- DIORITE DIKE (OZpd)

ANALYTE	UNITS	SCREENING / TARGET LEVELS			
		RSL	MCL	SITE-SPECIFIC BACKGROUND (UPPER TOLERANCE LIMIT)	GWPS
COBALT, TOTAL	mg/L	0.006	N/R	0.02	0.02

RSL = REGIONAL SCREENING LEVEL
MCL = MAXIMUM CONTAMINANT LEVEL
GWPS = GROUNDWATER PROTECTION STANDARD
N/R = NOT REPORTED

NOTES
1. ALL LOCATIONS AND BOUNDARIES ARE APPROXIMATE.

2. THE GREEN ISOCONTOUR IS THE APPROXIMATE EXTENT OF COBALT ABOVE 0.02 MG/L IN GROUNDWATER AND IS BASED ON THE AVAILABLE DATA FROM SURROUNDING WELLS AND PIEZOMETERS SHOWN ON THE FIGURE.

3. CONCENTRATIONS REPORTED IN MILLIGRAMS PER LITER (MG/L), SAMPLED IN AUGUST 2021. REPORTED CONCENTRATION FOR PZ-40I AND PZ-42I SAMPLED IN FEBRUARY 2022.

REFERENCE
1. COORDINATE SYSTEM: NAD 1983 STATE PLAN GEORGIA WEST (U.S. FEET).

2. MONITORING WELL/PIEZOMETER LOCATIONS SURVEYED BY JORDAN ENGINEERING, INC.

200 100 0 200
Feet

CLIENT
GEORGIA POWER COMPANY
PLANT SCHERER

PROJECT
ASSESSMENT OF CORRECTIVE MEASURES
PLANT SCHERER ASH POND 1 (AP-1)

TITLE
INSET C COBALT ISOCONCENTRATION MAP
AUGUST 2021

CONSULTANT
GOLDER

YYYY-MM-DD	2022-03-02
PREPARED	DJC
DESIGN	DLP
REVIEW	DLP
APPROVED	RPK

PROJECT No. GL166235021 | CONTROL GL166235021D004-GIS.mxd | Rev. 0 | FIGURE **5C**

Path: H:\16x-Projects\GL166235021-Georgia Power-Plant Scherer\figures\D-ASSESSMENT OF CORRECTIVE MEASURES\GL166235021D004-GIS.mxd

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET HAS BEEN MODIFIED FROM: ANSI B

APPENDIX A

Risk Evaluation Report

RISK EVALUATION REPORT

PLANT SCHERER ASH POND 1
JULIETTE, GEORGIA

Prepared for

Georgia Power
241 Ralph McGill Boulevard
Atlanta, Georgia 30308

Prepared by

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1075 Big Shanty Road NW, #100
Kennesaw, Georgia 30144

Project Number 6123-20-1472

January 2021

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LIST OF ACRONYMS AND ABBREVIATIONS

ASD	Alternate Source Demonstration
AP	Ash Pond
CCR	Coal Combustion Residual
CEM	Conceptual Exposure Model
CFR	Code Federal Regulations
COI	Constituent of Interest
COPI	Constituent of Potential Interest
cm/sec	centimeters per second
EPC	Exposure Point Concentration
EPD	[Georgia] Environmental Protection Division
ft/day	feet per day
ft/year	fee per year
GWPS	Groundwater Protection Standard
HQ	Hazard Quotient
HSRA	Hazardous Waste Response Act
ISWQC	In-stream Water Quality Criteria
LPZ	[water] level gauging piezometers
MCL	Maximum Contaminant Level
mg/L	Milligrams per liter
pCi/L	Picocuries per Liter
PZ	Piezometer
RAGS	Risk Assessment Guidance for Superfund
RME	Reasonable Maximum Exposure
RRS	Risk Reduction Standards
RSL	Regional Screening Level
SSL	Statistically Significant Level
UCL	Upper Confidence Limit
UTL	Upper Tolerance Limit
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
VRP	Voluntary Remediation Program

EXECUTIVE SUMMARY

Georgia Power's Plant Scherer (site) is a four-unit, coal-fired, electric-generating facility located approximately five miles south of Juliette in Monroe County, Georgia. Plant Scherer began operations in 1982 and can produce nearly 3,720 megawatts of electricity that can supply power for over 2 million homes annually. Coal combustion residual (CCR) material resulting from such power generation has historically been transferred and stored at Ash Pond-1 (AP-1) in compliance with applicable regulations.

Georgia Power is currently in the permitting process to close AP-1 by consolidating the CCR material to a smaller footprint with placement of a final impermeable cover system in accordance with the Federal CCR Rule, 40 Code of Federal Regulations (CFR) Part 257 Subpart D - Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments and the State CCR Rule, Georgia Environmental Protection Division (EPD) Coal Combustion Residuals Rule 391-3-4-.10. Various other factors have been certified which under the CCR rules mitigate potential risk as it relates to groundwater. Specifically, these factors include the following: AP-1 is not located in or near wetlands or other unstable areas and the structural and geotechnical design has been demonstrated to be stable. Additionally, per CCR rules, semi-annual groundwater monitoring and reporting is required to complete the closure process for at least 30 years following closure. CCR-related constituents from AP-1 are not expected to pose a risk to human health or the environment based on this risk evaluation report, which presents a human health and ecological risk evaluation for CCR constituents.

This report presents the results of a human health and ecological risk evaluation for CCR constituents in groundwater at the site and the closest surface water body, Berry Creek, using methods consistent with United States Environmental Protection Agency (USEPA) guidance. The predominant surface water drainage at AP-1, based on topography, is east-southeast toward the Ocmulgee River. Berry Creek is the closest eastward-flowing surface water body downgradient of the site as Lake Juliette is approximately 5,000 feet south of the southernmost CCR permit boundary. The risk evaluation relies on recent groundwater data (including Appendix IV constituents [antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, fluoride, lead, lithium, mercury, molybdenum, selenium, thallium, and radium 226/228 combined] plus boron) collected by Georgia Power in compliance with the Federal and State CCR Rules, as well as surface water data for select constituents of potential interest (COPIs) in groundwater collected as part of Plant Scherer's landfill monitoring requirements. For the purposes of the risk evaluation, a conservative, health-protective approach was used that is consistent with Georgia Environmental Protection Division (EPD) regulations and guidance, USEPA guidance, relevant industry standards and accepted practices for risk assessment in the State of Georgia.

Consistent with USEPA guidance, this risk evaluation used a tiered approach to evaluate potential risks, which included the following steps:

1. Development of a conceptual exposure model (CEM) for AP-1.
2. Initial groundwater risk screening: Comparison of CCR-related concentrations in groundwater to conservative, health-protective criteria and/or background concentrations to assess whether constituents pose a risk to human health.
3. Refined groundwater risk evaluation: Performance of a more refined groundwater analysis for COPIs that were retained in the initial groundwater risk screening in order to evaluate the potential risks to human health due to groundwater exposure.
4. Surface water risk screening: Comparison of surface water concentrations for those constituents identified as groundwater COPIs to conservative, health-protective criteria to assess whether those constituents pose a risk to human health or the environment as an additional line of evidence.
5. Refined surface water risk evaluation: Performance of a more refined surface water analysis for those constituents that were retained in the initial surface water risk screening in order to evaluate the potential risks to human health or the environment as an additional line of evidence.
6. Development of risk conclusions and identification of associated uncertainties.

Using this health-protective approach that includes multiple conservative assumptions, concentrations of CCR-related constituents in potable wells (on-site) and groundwater wells/piezometers around the perimeter and downgradient of AP-1 (on-site or within the road right-of-way) are not expected to pose a risk to human health. In addition, surface water concentrations in Berry Creek for those constituents identified as groundwater COPIs are not expected to pose a risk to human health or the environment.

In summation, based on this risk evaluation, CCR-related constituents from AP-1 are not expected to pose a risk to human health or the environment; therefore, further risk evaluation of groundwater or surface water is not warranted. Nevertheless, it is worth noting that compliance groundwater monitoring for AP-1 under the Federal and State CCR Rules will continue. Georgia Power will proactively evaluate the data and update this evaluation, if necessary.

1 INTRODUCTION

This report summarizes a risk evaluation of AP-1 located at Georgia Power Plant Scherer in Juliette, Georgia (**Figure 1**). This evaluation provides additional technical review of the human health and environmental protectiveness associated with the planned closure of AP-1 and relies on a conservative, health-protective approach that is consistent with the risk evaluation approaches outlined in the Georgia EPD Voluntary Remediation Program (Georgia Voluntary Remediation Act, OCGA 12-8-100) and the USEPA Regional Screening Levels (RSLs) User's Guide (USEPA, 2020a). This evaluation also incorporates principles and assumptions consistent with the Federal CCR Rule (USEPA, 2020b) [1] and State CCR Rule (EPD, 2018a).

The risk evaluation includes the development of a site-specific CEM for AP-1 and a stepwise screening process for CCR-related exposures to site groundwater and nearby surface water. The constituents[2] evaluated include those described in 40 CFR Appendix IV to Part 257 "Constituents for Assessment Monitoring" (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, fluoride, lead, lithium, mercury, molybdenum, selenium, thallium, and radium 226/228 combined) and boron from 40 CFR Appendix III to Part 257 "Constituents for Detection Monitoring". Boron was originally listed as an Appendix III constituent in the Federal CCR rule. Subsequently, USEPA recently proposed to add boron to the Appendix IV list (USEPA, 2018a); therefore, boron was included in the risk evaluation as an additional measure of conservatism. Based on the results of the risk evaluation, a site-specific recommended path forward is provided.

The remainder of the report is organized as follows:

- ***Section 2, Basis and Background for the Development of the Conceptual Exposure Model*** – Presents site-specific information related to the site history, monitoring network, topography and surface hydrology, geology and hydrogeology, potential transport pathways, and receptors that could potentially be exposed.
- ***Section 3, Risk Evaluation Screening*** – Describes the process for the initial risk-based screening of groundwater data to identify constituents of potential interest (COPI).
- ***Section 4, Refined Risk Evaluation*** – Describes refinements to the risk screening process for constituents with groundwater concentrations that

[1] The full citation for the Federal CCR Rule is: 40 C.F.R. § 257, Subpart D – *Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments*. The rule was finalized with an effective date of October 14, 2015 and last amended August 28, 2020 with an effective date of September 28, 2020 (USEPA, 2020b).

[2] The constituents included in the risk evaluation also occur naturally in the site geologic setting.

exceed screening levels, including consideration of exposure point concentrations (EPCs) and analysis of concentration trends over time.

- ***Section 5, Uncertainty Assessment*** – Describes the uncertainties associated with the risk screening and risk refinement processes.
- ***Section 6, Conclusions*** – Presentation of the conclusions of the screening and refined risk evaluation.
- ***Section 7, References*** – Provides reference information for the sources cited in this document.

2 BASIS AND BACKGROUND FOR THE DEVELOPMENT OF THE CONCEPTUAL EXPOSURE MODEL

This section provides a brief overview of the site location and operational history, site regulatory status, and geology/hydrogeology.

A CEM representing the site-specific processes and conditions that are relevant to the potential migration of groundwater and potential CCR-related exposures has been developed for Plant Scherer. The CEM was developed based on a review and compilation of information previously presented in Plant Scherer AP-1 documents, including the *Initial Written Closure Plan* (Georgia Power, 2016a), *History of Construction* (Georgia Power, 2016b), *Hydrogeologic Assessment Report* (Golder Associates Inc., 2020a), and *2019 Annual Groundwater Monitoring & Corrective Action Report* (Golder Associates Inc., 2020b). The CEM includes a conservative evaluation of assumed potential transport pathways, potential exposure pathways, and potential human and ecological receptors.

2.1 Site Description

Plant Scherer is a four-unit, coal-fired, electric-generating facility located approximately five miles south of Juliette in Monroe County, Georgia. The area around Plant Scherer is mostly rural, and the site is bordered by mainly agricultural and residential properties. Plant Scherer occupies approximately 13,000 acres and is situated north of Lake Juliette, a 3,600-acre manmade lake constructed in conjunction with the plant in the early 1980s (**Figures 1 and 2**).

As detailed in the Plant Scherer – Ash Pond 1 (AP-1) Closure Engineering Report (AECOM, 2018), AP-1 was commissioned in 1980 and has been in operation since the plant became commercially operational in 1982. Georgia Power is currently in the permitting process to close AP-1 at Plant Scherer by consolidating the CCR within the 550-acre impoundment to a smaller footprint with placement of a final impermeable cover system in accordance with 40 CFR 257.102(b)(1)(iii). The proposed closure footprint will consist of two primary regions within the existing AP-1 footprint; a closure-by-removal area located to the north, and the consolidated closure-in-place footprint.

Per the State CCR Rule, a permit application for AP-1 was submitted to the Georgia EPD in November 2018 and is currently under review. Although a permit has not yet been issued for AP-1, semiannual groundwater monitoring and reporting for Plant Scherer is performed in accordance with the monitoring program requirements of the Georgia EPD Chapter 391-3-4 Solid Waste Management Program and the USEPA CCR Rule 40 CFR § 257.91. The Groundwater Monitoring Plan for Plant Scherer AP-1 was prepared by Golder Associates Inc.

In accordance with 40 CFR § 257.91, a groundwater monitoring network was installed to monitor groundwater quality both upgradient and downgradient of AP-1. The certified

monitoring well network consists of 7 upgradient monitoring wells and 18 downgradient monitoring wells as shown in **Figure 2.** Both upgradient and downgradient wells are screened in the uppermost aquifer along the zone of groundwater flow. Pertinent construction details for the AP-1 monitoring well network are included in the *Hydrogeologic Assessment Report* (Golder Associates Inc., 2020a).

The certified compliance well network is supported by a network of 70 piezometers (PZs), and 5 water level gauging piezometers (LPZs) that serve to improve the characterization of groundwater flow conditions downgradient of AP-1 and to horizontally and vertically delineate groundwater detections above Groundwater Protection Standards (GWPS) and/or risk-based screening levels at AP-1. The locations of the piezometers of AP-1 are shown on **Figure 2** and the pertinent construction details for the piezometers are also provided in the *Hydrogeologic Assessment Report* (Golder Associates Inc., 2020a).

Four on-site potable wells or process wells (CW-1, CW-3, PW-2, and PW-5) are also shown on **Figure 2**. Water from these wells is used for the sanitary facilities and for the central water supply at Plant Scherer.

2.1.1 Topography and Surface Hydrology

The site is located within the Piedmont Physiographic Province of central Georgia, which is characterized by gently rolling hills and narrow valleys, with locally pronounced linear ridges. Plant Scherer AP-1 is located within the Berry Creek Watershed (HUC 12 – 030701031307), which encompasses 21,145 acres and is part of the larger Upper Ocmulgee Watershed (HUC 12 - 03070103). The pond itself has a 776 acre drainage basin (Georgia Power, 2016b).

The following presents a brief summary from the *Hydrogeologic Assessment Report* (Golder Associates Inc., 2020a):

> *Overall, the property slopes gently south towards Lake Juliette and east toward the Ocmulgee River. AP-1 is located in a topographically high area on the property, with several relatively small, intermittent and perennial creeks and streams surrounding the pond, creating radial surface water drainage downslope of the pond. Some of these creeks and streams join Berry Creek north and east of the pond, which ultimately discharges into the Ocmulgee River. Other creeks and streams generally flow south and west, ultimately discharging into Lake Juliette. Recycle Pond is a man-made pond located upgradient of Lake Juliette and downgradient of AP-1. Several topographically isolated hilltops occur west of the pond and represent topographic high points on the site. Topographic relief across the site is greater than 200 feet, with a natural topographic high of over 570 feet above mean sea level (ft msl) occurring along the ridge west of AP-1, and a*

topographic low of less than 380 ft msl in the eastern portion of the site near Berry Creek.

Overall, the property slopes gently south towards Lake Juliette and east toward the Ocmulgee River. AP-1 is located in a topographically high area on the property, with several relatively small, intermittent and perennial creeks and streams surrounding the pond, creating radial surface water drainage downslope of the pond. Some of these creeks and streams join Berry Creek north and east of the pond, which ultimately discharges into the Ocmulgee River. Other creeks and streams generally flow south and west, ultimately discharging into Lake Juliette. Recycle Pond is a man-made settling pond located upgradient of Lake Juliette and downgradient of AP-1. Several topographically isolated hilltops occur west of the pond and represent topographic high points on the site. Topographic relief across the site is greater than 200 feet, with a natural topographic high of over 570 feet above mean sea level (ft msl) occurring along the ridge west of AP-1, and a topographic low of less than 380 ft msl in the eastern portion of the site near Berry Creek.

The predominant surface water drainage at AP-1, based on topography, is east-southeast toward the Ocmulgee River. Berry Creek is the primary eastward-flowing surface water body downgradient of the site. Since Berry Creek may be a hydraulic discharge boundary for site groundwater based on water level measurements in site wells, piezometers, and water level measurements near the outflow of Berry Creek, a conservative assumption for this assessment was made that groundwater from the site flows to the downgradient surface water bodies. In further support of this assumption, the Ocmulgee River may represent a regional hydraulic discharge boundary for groundwater flow in the upper aquifer from the nearby region (**Figure 3**).

2.1.2 Geology and Hydrogeology

The geologic and hydrogeologic characteristics of the site have been extensively evaluated and compiled in previous reports. The following presents a brief summary of this information from the AP-1 2019 Annual Groundwater Monitoring & Corrective Action Report (Golder Associates Inc., 2020b):

The metamorphic and igneous rocks that underlie the area have been subjected to physical and chemical weathering, which has created a landscape dissected by creeks and streams forming a dendritic drainage pattern. These rocks are deeply weathered due to the humid climate and bedrock is typically overlain by a variably thick blanket of residual soils and saprolite. The overall depth of weathering in the Piedmont/Blue Ridge is generally about 20 to 60 feet; however, the depth of weathering along discontinuities and/or very

feldspathic rock units may extend to depths greater than 100 feet. Because of such variations in rock types and structure, the depth of weathering can vary significantly over short horizontal distances.

Near surface conditions were determined based upon available boring and monitoring well installation logs. Based on review of this information, residual soils, consisting of primarily sandy silt, silty sand, sandy clay and silty clay, occur as a variably thick blanket overlying bedrock across most of the site. The thickness of the residual soil encountered in the borings is variable, ranging from approximately 17 feet to 168 feet, with an average residual soil thickness of about 57 feet. Saprolitic soils and/or saprolitic rock vary in thickness across the site but were generally encountered at or near ground surface. Saprolitic rock is considered to be partially weathered rock (PWR) as defined by blow counts, where available. Material overlying the top of rock surface,including residual soils, saprolite, and saprolitic rock, is collectively referred to as overburden or regolith.

Field hydraulic conductivity tests (i.e., slug tests) performed in a variety of geologic materials onsite indicate an average horizontal hydraulic conductivity on the order of 10-4 centimeters per second (cm/s). Site data include 58 slug test measurements across the site with an average of 2.36 feet/day (ft/day); median 1.31 ft/day. This hydraulic conductivity is generally consistent with regional measurements within Piedmont overburden (Heath, 1982). In general, groundwater flow is potentially faster through the transitionally weathered zone; however, the magnitude of difference is nominal enough to not be considered relevant at this site.

The potentiometric surface elevation contours for May 2020 and pertinent hydrogeologic information from the AP-1 *Hydrogeologic Assessment Report* (Golder Associates Inc., 2020a) are presented below and in **Figure 3**:

The potentiometric surface for the uppermost aquifer is generally around the topographic high containing AP-1 with localized influences of topography and the effects of mounding. AP-1 pool level maintains a higher head on all sides of AP-1 except the western edge, including the knob. Thus, the groundwater surrounding AP-1 (with the exception to the west of AP-1) is elevated compared to areas further away from AP-1. Local groundwater mounding effects may induce gradients towards AP-1. However, in general, groundwater flow is from the western higher terrains towards the pond but eventually flows to the north, east, and south.

Groundwater in the uppermost aquifer appears to be supporting base flow of creeks on site (many groundwater contours cross topographic contours of similar elevation at headwaters of creek).

2.2 Potential Transport Pathways

A variety of geologic, hydrogeologic, and geochemical mechanisms can occur in the subsurface and serve to attenuate constituent concentrations in groundwater such as soil or rock characteristics, the local geology and hydrogeology, and the distance the groundwater must travel before reaching a potential receptor. A summary of the potential transport pathways is discussed below and shown on the CEM in **Figure 4**.

2.2.1 Groundwater

The site is underlain by a regolith-bedrock aquifer. Groundwater flows in the regolith through weathered zones in the saprolitic material and into the underlying fractures in the bedrock through a transitionally weathered zone. Recharge occurs in topographic highs and discharge at topographic lows. Variability in grain size distribution, discontinuities in the saprolite and fractured bedrock affects the groundwater flow and constituent transport through the uppermost aquifer. In addition, lithological characteristics and geochemical conditions in the aquifer would either enhance or retard the migration of dissolved metals along the groundwater flow paths.

2.2.2 Surface Water

Berry Creek and the Ocmulgee River are present near the site (**Figure 5**). The predominant surface water drainage, based on topography, is east-southeast toward the Ocmulgee River. Berry Creek is the closest surface water body downgradient of the site. Berry Creek and its tributaries were sampled as the nearest surface water bodies and was considered a conservative sampling location to represent surface water concentrations as Lake Juliette is approximately 5,000 feet south of the southernmost CCR permit boundary. A conservative assumption for this assessment was made that all the groundwater from the site flows to the downgradient surface water bodies. In further support of this assumption, the Ocmulgee River represents a regional hydraulic discharge boundary for groundwater flow in the upper aquifer from the nearby region. Available surface water data for those constituents identified as groundwater COPIs were evaluated and screened against health-protective levels.

2.3 Potential Exposure Pathways and Receptors

The exposure pathways for groundwater and surface water, assumed to be complete as a conservative measure for the purposes of this risk evaluation, were used to identify potential receptors and estimate potential risk. The CEM (**Figure 4)** depicts these

potential exposure pathways and receptors included in the risk evaluation, which are discussed below.

2.3.1 Potential Groundwater Exposure Pathway

The potential for groundwater exposure to current and future on-site industrial workers and hypothetical off-site residential receptors was evaluated. Groundwater exposure pathways were considered complete and evaluated if human receptors are or could be exposed to groundwater at the site.

Potential exposure was considered to occur through ingestion and dermal contact with groundwater. Appendix IV constituents and boron are not volatile with the exception of mercury; therefore, inhalation of vapors while showering/bathing was considered an incomplete exposure pathway and was not evaluated. Mercury is the only constituent evaluated with the potential to volatilize to any appreciable degree under normal household conditions. USEPA's *Human and Ecological Risk Assessment of Coal Combustion Residuals* (2014a) eliminated the showering exposure pathway, and therefore, this pathway was not evaluated further in this assessment.

In summary, the results of the groundwater screening for current and future on-site industrial workers (Section 3.2.1) and hypothetical off-site residential receptors (Section 4) indicated concentrations were below health-protective screening levels. None of the groundwater COPIs are expected to pose a risk to human receptors.

2.3.1.1 On-Site Industrial Workers

There are approximately 400 employees who work at Plant Scherer. Potable water at Plant Scherer is provided by four on-site potable wells (CW-1, PW-2, CW-3, and PW-5). These wells are located east of the plant as shown on **Figure 2**. Water from these wells is used for the sanitary facilities and for the central water supply at Plant Scherer. The risk evaluation screening conservatively assumed that plant workers may have daily exposure to the maximum concentrations of detected constituents in these four on-site potable wells through potable water use, including ingestion and dermal contact.

The potential for on-site construction worker exposure through direct contact with groundwater was conservatively addressed through evaluation of the on-site industrial worker (i.e., the on-site industrial workers were surrogates for the on-site construction workers). Health-protective screening levels for industrial workers would be more conservative than construction worker screening levels.

In addition, the potential for off-site industrial/construction worker exposure through direct contact with groundwater was addressed qualitatively through the evaluation of hypothetical off-site residential receptors. Health-protective screening levels for

residential receptors would be more conservative than industrial and construction worker screening levels.

2.3.1.2 Off-Site Residential Receptors

Plant Scherer is zoned Industrial District. There is no residential use on-site under current site conditions and future residential use of the site is considered unlikely. Land use surrounding the site is zoned Agricultural/Rural District with the exception of some Commercial zoning adjacent to the southeast corner of the site (Monroe County, 2020). Beyond the Ocmulgee River to the east, land use is predominantly zoned Agriculture/Forestry with some scattered Residential land use also present (Jones County and the City of Gray, 2017).

A well survey of potential groundwater wells within a three-mile radius of AP-1 was conducted in 2019 and consisted of reviewing publicly available federal, state, and county records as well as a windshield survey of the area (NewFields, 2020). The well survey is included as **Appendix A**. Results of the off-site survey are presented on **Figure 6**. Approximately 20-25 private wells have been identified to the east-southeast (downgradient) of AP-1 within the three-mile radius. These wells are located west of the Ocmulgee River, between AP-1 and the river. The distance from AP-1 ranges from 0.8 – 2.3 miles (4,200 ft – 12,300 ft). Another 20-30 parcels have been identified in the same area as likely to contain drinking water wells.

Municipal water is not available within a three-mile radius around the site at the time of this evaluation. One small community water system serving 26 residents is operating a public well approximately 1.8 miles to the west from AP-1. A restaurant in downtown Juliette 1.7 miles to the northeast from AP-1 operates a public well that is serving a transient population of around 150 people (i.e., the population changes and the system is not regularly serving the same people). Since no municipal water is available in the investigated area, any improved parcels (i.e., parcels containing structures) are assumed to be on a private well.

Detected constituents in groundwater monitoring wells/piezometers have been delineated on-site or within the road right-of-way, which bisects the Georgia Power property, by concentrations below health-protective screening criteria (Section 4). The piezometers that define delineation are located on the upgradient side (i.e., south side) of Luther Smith Road on the same side of the road as AP-1. The delineation is then confirmed by the numerous wells/piezometers on the north side (i.e., downgradient) of Luther Smith Road. Accordingly, piezometers in the right-of-way of Luther Smith Road were included in the risk evaluation for completeness.

Georgia Power owns the property on both sides of the right-of-way, which is located well within the overall site boundary and approximately one mile from the next nearest downgradient property boundary. It is unlikely that drinking water wells would be

installed in the road right-of-way. Thus, the potential for hypothetical off-site residential exposure to groundwater in the road right-of-way for drinking water purposes is considered an incomplete exposure pathway.

As a conservative measure, hypothetical off-site residential exposure was evaluated using groundwater wells/piezometers around the perimeter and downgradient of AP-1 (on-site or within the road right-of-way) because groundwater flows semi-radially away from AP-1. The groundwater monitoring wells and piezometers included in the evaluation are depicted with yellow well labels on **Figure 2**. This comparison makes the conservative assumption that on-site groundwater may potentially migrate to off-site drinking water wells, through advective transport in groundwater without any attenuation within the aquifer media through factors such as dilution, dispersion, or adsorption. The risk evaluation screening conservatively assumed that hypothetical off-site residential receptors could be exposed to the maximum concentrations of constituents in groundwater through its use as a potable water supply. Exposure was considered to occur through ingestion and dermal contact with groundwater.

2.3.2 Potential Surface Water Exposure Pathway

The potential for exposure to surface water was evaluated for Berry Creek, the closest surface water body downgradient of AP-1, that flows into the Ocmulgee River. The potential for exposure to Berry Creek surface water was evaluated for recreational receptors and ecological receptors.

The results of the surface water screening for human and ecological receptors indicated surface water exposure is not expected to pose a risk to receptors (Section 3.4).

2.3.2.1 Human Receptors

Surface water exposure to recreational receptors was evaluated for Berry Creek. Routes of exposure include ingestion of aquatic organisms (mainly fish) and potential incidental ingestion and dermal contact with surface water by adult and child recreational receptors. The surface water screening evaluation is described in further detail in Section 3.4.

No surface water intakes have been identified for public water supplies within three miles downgradient of the site. Domestic use of surface water for human receptors is an incomplete exposure pathway; therefore, drinking water exposure assumptions for surface water do not apply.

2.3.2.2 Ecological Receptors

The surface water risk evaluation also assesses the potential for exposure to Berry Creek surface water by ecological receptors. Potential routes of exposure include direct contact to surface water by aquatic receptors as well as ingestion.

3 RISK EVALUATION SCREENING

The CEM developed in Section 2 was used to identify the assumed potentially complete exposure pathways to human and ecological receptors that should be considered in the risk evaluation. The initial step in the risk evaluation is the comparison of constituent concentrations in groundwater and surface water to health-protective levels for potentially complete exposure pathways. The approach used is consistent with the Georgia EPD regulations and guidance, USEPA guidance, and industry standards and practice for risk assessment in the State of Georgia. The Georgia EPD allows for the site-specific evaluation of risk in programs such as the Voluntary Remediation Program (VRP) (EPD, 2009).

The initial risk evaluation screenings were performed for the assumed complete exposure pathways by comparing the concentrations of the Appendix IV constituents and boron in site groundwater to established applicable regulatory standards and appropriate health-protective screening criteria. In addition, surface water screening was performed for Berry Creek by comparing the concentrations of the identified groundwater COPIs to health-protective human and ecological surface water screening criteria. These criteria included the risk reduction standards (RRS) established under the Hazardous Site Response Act (HSRA) for drinking water, site-specific background concentrations, chronic Georgia Instream Water Quality Criteria (ISWQC) for the protection of human health and/or aquatic life, and other criteria applicable to potentially complete exposure pathways. Identified exposure pathways and receptors are dependent on the media of interest and potential receptors for each unit. If the maximum concentration of a constituent exceeded the screening criterion, the constituent was identified as a COPI for further evaluation in the refined risk evaluation. The methodology and screening criteria used for each receptor and medium have been identified in accordance with regulatory guidance and standard risk assessment practices using an approach designed to conservatively overestimate possible exposures and risks, providing an additional level of confidence in the conclusions. The methodology is summarized on **Figure 7** and **Figure 8** and discussed in more detail below.

3.1 Data Used in Risk Evaluation Screening

This section provides information on the groundwater and surface water datasets used in the risk evaluation screening and refined risk evaluation.

3.1.1 Groundwater Data

Groundwater data for the four potable wells on-site (CW-1, PW-2, CW-3, and PW-5) collected between 2015-2020 were used in the screening evaluation for on-site industrial worker exposure. The potable water data for lead were supplemented with on-site tap water samples. The potable wells are located east of the plant as shown on **Figure 2**. The

groundwater dataset used in the risk evaluation is presented in **Appendix B-1** for the on-site potable water wells.

Groundwater data from samples collected between 2016-2019 from the certified monitoring well network downgradient of AP-1, as well as samples collected from downgradient piezometers of AP-1 during the same timeframe, were used in the screening evaluation for hypothetical off-site residential exposure. Additional groundwater data from 2020 were included in the screening evaluation to allow for the assessment of lithium and boron concentrations under current conditions at the following locations: PZ-14I , PZ-25I, PZ-44I for lithium, and PZ-41S for boron. Groundwater data used in the screening level evaluation were collected from the uppermost aquifer and are considered to be representative of groundwater conditions at the site. The groundwater data are presented in **Appendix B-2.** Method detection limits for the groundwater datasets used in the risk evaluation were reviewed and confirmed to be less than the screening levels.

The perimeter and downgradient wells/piezometers of AP-1 used to assess hypothetical off-site residential exposure include (**Figure 2**):

On-Site			**Road Right-of-Way**
SGWC-6	SGWC-21	PZ-40I	PZ-12S
SGWC-7	SGWC-22	PZ-41S	PZ-13S
SGWC-8	SGWC-23	PZ-42I	PZ-14I
SGWC-9	PZ-11S	PZ-43S	PZ-14S
SGWC-10	PZ-17I	PZ-44I	PZ-25I
SGWC-11	PZ-26S		PZ-25S
SGWC-12	PZ-27S		PZ-35I
SGWC-13	PZ-28I		PZ-38I
SGWC-14	PZ-29S		
SGWC-15	PZ-30I		
SGWC-16	PZ-31I		
SGWC-17	PZ-32S		
SGWC-18	PZ-36S		
SGWC-19	PZ-37I		
SGWC-20	PZ-39S		

3.1.2 Background Groundwater Quality

Statistical analysis of Appendix IV groundwater monitoring data are performed at Plant Scherer pursuant to §257.93-95 following the established statistical method for AP-1; background values are routinely updated under the program. Seven monitoring wells in the certified monitoring well network are designated as upgradient (background) locations, including SGWA-1 through SWGA-5, SWGA-24 and SWGA-25. The statistical analyses performed on the groundwater data were described in the 2019 Annual

Groundwater Monitoring & Corrective Action Report (Golder Associates Inc., 2020b) and excerpts from that document are presented below.

> *The selected statistical method for AP-1 was developed in accordance with § 257.93(f) using methodology presented in Statistical Analysis of Groundwater Data at RCRA Facilities, Unified Guidance, March 2009, USEPA 530/R-09-007 (Unified Guidance). 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 Unified Guidance (2009) document.*
>
> *Parametric tolerance limits were used to calculate site specific background limits from pooled upgradient well data with a target of 95 percent confidence and 95 percent coverage. The confidence and coverage levels for nonparametric tolerance limits were dependent upon the number of background samples. The background limits were then used for determining the groundwater protection standard (GWPS) under 40 CFR §257.95(h) and Georgia EPD Rule 391-3-4-.10(6)(a).*

Naturally occurring or site-specific background concentrations can exceed health-protective screening criteria. Therefore, site-specific background values were used as the groundwater screening values for COPIs with background concentrations greater than the groundwater screening values (i.e., cobalt) as further described in Section 3.2.

3.1.3 Surface Water Data

The surface water sampling program at Plant Scherer has consisted of eight sampling locations in Berry Creek downgradient of AP-1 and within the site boundary, including SWA-1 through SWA-3 and SWC-4 through SWC-8. Surface water data were only compiled for the COPIs identified in the groundwater screening (i.e., boron, cobalt, and lithium). Surface water data are available for lithium from one event in 2017. Cobalt surface water data are available for one event in 2016 and two events per year in 2017 through 2019. Surface water data are available for boron from two events in 2017, three events in 2018, and two events in 2019. The surface water sample locations are shown on **Figure 5**. Berry Creek surfaces immediately downgradient of AP-1, and therefore, an upstream sampling location was not available for use as a background surface water location. The surface water dataset used in the risk evaluation is presented in **Appendix B-3**.

3.2 Groundwater Screening Evaluation

The process of screening constituents detected in groundwater against human health screening levels for groundwater is discussed below and presented in **Figure 7**. The HSRA RRS evaluated under the VRP approach presented herein included Type 1 and Type 2 standards for off-site residential receptors and Type 3 and Type 4 standards for on-site industrial workers. The Hazardous Site Response Rule 391-3-19.07(1) notes that "*[a]ll risk reduction standards will, when implemented, provide adequate protection of human health and the environment.*"

In accordance with industry standards and methodologies approved by the Georgia EPD, the screening level hierarchy for the constituents is as follows:

- The higher of the Type 3 and Type 4 RRS for industrial worker exposure, which are considered protective of human health for those constituents regulated under HSRA. The risk-based Type 3 and Type 4 RRS were calculated using USEPA's RSL calculator (USEPA, 2020a) assuming a target cancer risk of 1×10^{-5} and a target hazard quotient (HQ) of 1, consistent with Georgia EPD guidance (EPD, 2018b). The derivation of groundwater RRS for industrial workers is presented in **Appendix C**.

- The higher of the Type 1 or Type 2 RRS for hypothetical off-site residential exposure, which are considered protective of human health for those constituents regulated under HSRA (i.e., antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, fluoride, lead, mercury [as mercuric chloride], radium 226/228 [Ra226 & Ra228 combined] , selenium, and thallium). The risk-based Type 2 RRS were calculated using USEPA's RSL calculator (USEPA, 2020a) assuming a target cancer risk of 1×10^{-5} and a target HQ of 1, consistent with Georgia EPD guidance (EPD, 2018b). The calculation of risk-based groundwater RRS for residential receptors is presented in **Appendix D**.

- Calculated site-specific screening levels for those chemical constituents not regulated under HSRA (i.e., boron, lithium, and molybdenum) were based on either industrial worker or residential exposure assumptions consistent with the HSRA rules (EPD, 2018b).

- MCL of 5 picocuries per liter (pCi/L) for radium 226/228 as presented in the National Primary Drinking Water Regulations (USEPA, 2020c). Radium 226/228 are reportable constituents under HSRA, but RRS are not available for these constituents.

- If site-specific background concentrations are greater than the criteria described above, then the site-specific background concentration is used as the screening

level in accordance with the CCR methodology for development of groundwater protection standards (USEPA, 2020b).

3.2.1 On-Site Potable Well Water Screening Evaluation

Groundwater data from the four potable wells were screened for industrial worker exposure by assuming the use of groundwater as potable water. The on-site potable well screening criteria are identified below:

- Type 3 RRS are the Georgia drinking water standards presented in Appendix III, Table 1 of the HSRA rule (EPD, 2018b) and were used for arsenic, chromium, cobalt, lead, and thallium. For the HSRA-regulated chemical constituents not listed in Appendix III, Table 1 (cobalt and fluoride), the Type 3 values were derived using the default exposure factors for industrial workers and the methodology found in Appendix III of the HSRA rule (EPD, 2018b).

- Type 4 RRS were derived for antimony, barium, beryllium, cadmium, fluoride, mercury, and selenium using the default exposure factors for industrial workers and the methodology found in Appendix III of the HSRA rule (EPD, 2018b). For constituents with both cancer and non-cancer endpoints, the lower of the calculated carcinogenic and non-carcinogenic values were selected. The methodology used to calculate these values under HSRA is consistent with that used to calculate industrial worker screening levels in the USEPA RSL calculator (USEPA, 2020a).

- Calculated site-specific screening levels were used for boron, lithium, and molybdenum using the same assumptions and methodologies used to calculate the risk-based Type 3 and Type 4 RRSs.

- Background concentrations were not used as screening criteria for the on-site potable wells.

The calculation of screening levels as described above are presented in **Appendix C**.

Table 1 presents the maximum detected concentration of each constituent in the identified on-site potable groundwater wells used for comparison to the selected screening levels for industrial workers. As noted in **Table 1**, eight of the constituents were below the laboratory detection limits for the constituents and below the health-protective screening criteria in groundwater collected from the potable wells. No constituents were detected at concentrations that exceeded the respective screening levels. The laboratory practical quantitation limits (PQLs) of the constituents are up to two orders of magnitude lower than the screening criteria, except for lithium. Although the maximum laboratory PQL for lithium exceeded the screening criterion, the method detection limit was below. Since the detected constituents were present at concentrations below screening levels,

there are no COPIs identified in groundwater from the potable water wells and no further evaluation is necessary.

As a conservative measure, on-site potable well data were also screened against off-site residential screening criteria. Constituents were either non-detect or detected at concentrations below the off-site residential screening criteria.

Exposure to on-site potable water is not expected to pose a risk to human health.

3.2.2 Downgradient Groundwater Screening Evaluation

Groundwater data collected from the identified on-site downgradient groundwater wells (i.e., the certified set of downgradient wells for the unit and additional on-site piezometers) were compared to residential receptor screening criteria in order to protect hypothetical off-site receptors. The downgradient groundwater screening criteria are identified below:

- Type 1 RRS are the Georgia drinking water criteria presented in Appendix III, Table 1 of the HSRA rule (EPD, 2018b) and were used for arsenic, chromium, fluoride, lead, and thallium.

- Type 2 RRS were derived for antimony, barium, beryllium, cadmium, mercury, and selenium using the default exposure factors for residential receptors and the methodology found in Appendix III of the HSRA rule (EPD, 2018b). For constituents with both cancer and non-cancer endpoints, the lower of the calculated carcinogenic and non-carcinogenic values were selected. The methodology used to calculate these values under HSRA is consistent with that used to calculate residential screening levels in the USEPA RSL calculator (USEPA, 2020a).

- Calculated site-specific screening levels for those chemical constituents not regulated under HSRA (i.e., boron, lithium, and molybdenum) were based on residential exposure assumptions consistent with the HSRA rules (EPD, 2018b) and are equivalent to the USEPA tapwater RSLs. These screening levels for lithium and molybdenum have been adopted by USEPA as the risk-based levels for the CCR rule (USEPA, 2020b).

- The site-specific background value for cobalt was used as the groundwater screening values because it was greater than the applicable health-protective groundwater screening value and cobalt is naturally occurring at the site (Golder Associates Inc., 2019).

The calculation of screening levels as described above are presented in **Appendix D**.

Table 2 presents the maximum detected concentration of each constituent in the identified on-site, downgradient groundwater wells/piezometers used to represent potential off-site groundwater quality for screening compared to the selected screening levels for hypothetical off-site residential receptors (health- or background-based). As noted in **Table 2**, maximum concentrations of antimony, arsenic, barium, beryllium, cadmium, chromium, fluoride, lead, mercury, molybdenum, selenium, thallium, and radium 226/228 combined were below the conservative screening criteria. Three constituents were detected at concentrations that exceeded the respective screening levels, including boron, cobalt, and lithium. An alternate source demonstration (ASD) has been developed for cobalt and submitted to Georgia EPD for review and approval (as discussed in more detail in Section 3.3). Although detected concentrations of cobalt at AP-1 were determined to be unrelated to the CCR unit, cobalt was retained as a COPI for further evaluation in the refined risk evaluation for completeness. Boron and lithium were also identified as COPIs and retained for further evaluation in the refined risk evaluation.

3.3 Alternate Source Demonstration

In accordance with 40 CFR §257.95, an ASD was prepared for cobalt at AP-1 (Golder Associates Inc., 2019). There are multiple lines of evidence that support the conclusion that the SSLs of cobalt present in compliance monitoring wells are not the result of impact by AP-1, but rather are from an alternate, naturally occurring source. The following lines of evidence support an ASD for concentrations of cobalt in groundwater downgradient of AP-1:

- Absence of cobalt in porewater samples collected from AP-1.
- Presence of naturally occurring cobalt in soils/sediment, saprolite, and bedrock at Plant Scherer.
- Occurrence of cobalt in on-site upgradient groundwater at concentrations above the risk-based screening level of 0.006 mg/L.
- Natural dissolution of cobalt into groundwater at low pH under natural aquifer environment based on site-specific mineralogical data and geochemical conditions.
- Published sources of naturally occurring cobalt in regional groundwater.

Review of groundwater quality data since monitoring began at AP-1 in 2016 demonstrate a spatial variability in cobalt concentrations across the site including upgradient of AP-1. The ASD demonstrates that concentrations of cobalt in groundwater are naturally occurring downgradient of AP-1. However, for completeness, cobalt was carried forward into the refined risk evaluation.

3.4 Surface Water Screening Evaluation

A surface water screening evaluation was conducted for Berry Creek for the groundwater COPIs (i.e. boron, cobalt, and lithium) identified in the downgradient groundwater residential receptor screening evaluation.

Both human and ecological receptors have the potential to come into contact with surface water. There is low to no potential for ecological receptors to be directly exposed to constituents that may be present in groundwater. Thus, surface water screening was performed using surface water data for those constituents identified as groundwater COPIs. The surface water screening process for the COPIs identified in groundwater (boron, cobalt, and lithium) is discussed below and presented in **Figure 8**.

3.4.1 Human Health Screening

Surface water human health screening values for the groundwater COPIs were selected from the following order of hierarchy:

- Georgia ISWQC for human health (EPD, 2015), when available.
- National ambient water quality criteria (USEPA, 2015a) for human health, ingestion of water and organisms. When there is no numerical value for a constituent in surface water, USEPA (2015a) states that EPA has issued an MCL which may be more stringent than the NAWQC for these constituents suggesting the use of the MCL for surface water screening. This is a conservative approach.
- In accordance with industry standards and practice using methodologies approved by the Georgia EPD, the higher of the residential groundwater screening levels described in Section 3.2.2 for the remaining constituents due to lack of human health surface water screening levels for these constituents, which is a conservative approach.

For boron, cobalt, and lithium, the higher of the residential groundwater screening levels described in Section 3.2.2 was used because of the lack of human health surface water screening levels for Georgia ISWQC for human health (EPD, 2015) and national ambient water quality criteria (USEPA, 2015a). The use of drinking water screening levels for surface water exposure is a conservative approach as Berry Creek is not a drinking water source and, therefore, domestic use of Berry Creek surface water for human receptors is an incomplete exposure pathway.

The surface water human health screening level was compared to the maximum detected concentration for each COPI in surface water, as shown in **Table 3**. The maximum detected cobalt concentration of 0.0064 mg/L was marginally above the surface water human health screening level of 0.006 mg/L. This one concentration above the screening

level was the only sample out of 52 surface water samples collected and analyzed for cobalt. Cobalt was retained as a human health COPI in surface water for further evaluation for completeness. Boron was not detected at concentrations above the surface water human health screening level. Lithium was non-detect in surface water at a laboratory PQL one order of magnitude lower than the screening criterion. Therefore, boron and lithium were not retained as human health COPIs for further evaluation in surface water and exposure is not expected to pose a risk to human health.

3.4.2 Ecological Screening

Surface water screening values for aquatic ecological receptors were selected from the following order of hierarchy for the COPIs:

- Chronic freshwater Georgia ISWQC (EPD, 2015), when available.
- USEPA Region 4 chronic freshwater screening levels (USEPA, 2018b).

The ISWQC and the Region 4 freshwater screening levels are hardness-dependent for select metals and assume a hardness of 50 mg/L as calcium carbonate ($CaCO_3$).

The ISWQC and the Region 4 surface water screening levels include screening levels based on total and/or dissolved concentrations. For those constituents with only a dissolved screening level, the screening level was converted using the constituent-specific total to dissolved conversion factor found in Appendix A of the USEPA National Recommended Water Quality Criteria (USEPA, 2006). If no conversion factor is available, then it was assumed that the total and dissolved screening criteria were equivalent (i.e., a conversion factor of 1).

For boron, cobalt, and lithium, the USEPA Region 4 chronic freshwater screening levels for total concentrations (USEPA, 2018b) were used in the screening. The ecological surface water screening levels were compared to the maximum detected concentrations in surface water, as shown in **Table 4**. Boron and cobalt were not detected at concentrations above the ecological surface water screening levels. Lithium was non-detect in surface water at a laboratory PQL two orders of magnitude lower than the screening criterion. Therefore, boron, cobalt, and lithium were not retained as ecological COPIs for further evaluation in surface water and exposure is not expected to pose a risk to ecological receptors.

3.5 Screening Summary

Based on the results of the groundwater screening, boron, cobalt, and lithium were identified as COPIs in groundwater and were retained for further evaluation in the refined risk evaluation. The ASD for cobalt demonstrates that concentrations of cobalt in

groundwater downgradient of AP-1 are naturally occurring. However, for completeness, cobalt was carried forward into the refined risk evaluation.

Boron and lithium were not detected in surface water at concentrations above the ecological or human health surface water screening levels. The maximum detected cobalt concentration of 0.0064 mg/L was marginally above the surface water human health screening level of 0.006 mg/L. Therefore, for completeness, cobalt was retained as a human health COPI in surface water for further evaluation.

The refined risk evaluation determined the most appropriate exposure point concentration to represent potential exposure (i.e., the 95 percent upper confidence limit (UCL) on the arithmetic mean [95 UCL]) for these constituents for the purposes of assessing potential risk to human receptors for groundwater and surface water.

4 REFINED RISK EVALUATION

A refined risk evaluation was conducted for the three identified groundwater COPIs (boron, cobalt and lithium) and one surface water COPI (cobalt) that exceeded the health-protective screening criteria. The refined risk evaluation identified an EPC for potential exposure to these COPIs for the purposes of characterizing potential risk to human receptors.

4.1 Refined Groundwater Risk Evaluation

Potential risk associated with exposure to COPIs in groundwater by hypothetical off-site residential receptors was refined using the methodology described in the HSRA and VRP guidance (EPD, 2018b; EPD, 2009) and is presented in the following section and on **Figure 9**.

4.1.1 Groundwater Exposure Point Calculation

The refined risk evaluation of COPIs included development of an EPC. The EPC is a conservative estimate of potential exposure that is selected to address uncertainty and variability in the dataset (USEPA, 2002). Consistent with EPA recommended approach for groundwater EPCs, 95 percent upper confidence limits of the arithmetic mean (UCLs) were calculated using USEPA ProUCL 5.1 software (ProUCL) (USEPA, 2016) and ProUCL user's guide (USEPA, 2015b), and are in agreement with the USEPA Memorandum for Determining Groundwater Exposure Point Concentrations (USEPA, 2014b). For the refined risk evaluation, the UCLs for the COPIs in groundwater were calculated for the following specific datasets:

- UCLs were calculated for the individual well(s)/piezometer(s) in the same hydraulically downgradient direction with exceedance(s);
- UCLs were calculated based on combined data from the well(s)/piezometer(s) with exceedance(s) and other wells/piezometers in the general vicinity to include additional downgradient monitoring wells/piezometers that represent groundwater flow in the same hydraulically downgradient direction; and
- UCLs were calculated based on the combined data from the farthest downgradient well(s)/piezometer(s) that are hydraulically downgradient of the well/piezometer with exceedance(s).

Other assumptions made in the calculation of the UCLs include:

- Primary samples (no duplicates) were used to calculate EPCs as duplicate samples were analyzed for quality assurance purposes.

- For datasets with less than five samples, the maximum detected concentration was used as the EPC. This is a conservative approach and is consistent with the ProUCL User's Guide.

- If the calculated UCL exceeded the maximum detected concentration, then the maximum detected concentration was used as the EPC.

ProUCL software calculates multiple UCLs and provides a recommended UCL that was selected as the EPC. If there were multiple UCLs recommended by ProUCL, the maximum UCL value was selected. **Appendix E-1** provides a detailed summary of the UCLs calculated using the methods described above, and **Appendix E-2** presents figures showing the wells used in the calculation of the EPCs for each groundwater COPI. **Appendix E-3** provides the input and output files associated with the ProUCL software.

Table 5 summarizes the groundwater EPCs selected for the COPIs. This table shows the number of samples, the maximum detected concentration, the UCL recommended by ProUCL software, and the selected EPC.

4.1.2 COPI Concentration Trend Analysis

Concentration trends over time were evaluated as one line of evidence in the refined risk evaluation for the groundwater COPIs. Boron was detected in only one monitoring well, SGWC-18, at concentrations above the groundwater screening level for off-site residential receptors of 4.0 mg/L. The Mann-Kendall trend test and the Theil-Sen line test were conducted on the data from SGWC-18 to evaluate the trend in boron concentrations over time. The tests were conducted using the USEPA ProUCL 5.1 software (2016). The graph of the data, presented in **Appendix E-4**, shows that boron concentrations in this well appear to be increasing over time. The Mann-Kendall and Theil-Sen test results indicate there is a statistically significant increasing trend in boron concentrations over time at SWGC-18.

Cobalt was detected in six monitoring wells (SGWC-7, SGWC-10, SGWC-11, SGWC-15, SGWC-18, and SGWC-20) and one piezometer (PZ-25S) at concentrations above the groundwater screening level for off-site residential receptors of 0.020 mg/L. The Mann-Kendall trend test and the Theil-Sen line test were conducted on the data from these wells to evaluate the trend in cobalt concentrations over time, as presented in **Appendix E-4.** The Mann-Kendall and Theil-Sen test results indicate the following:

- There is a statistically significant decreasing trend in cobalt concentrations over time at SGWC-7, SGWC-11, and SGWC-20; and

- There is no trend in cobalt concentrations over time at SGWC-10, SGWC-15, and SGWC-18.

A concentration trend graph was not developed for cobalt at PZ-25S because there is only one sample detected at 0.026 mg/L, which just marginally exceeds the groundwater screening level of 0.020 mg/L for off-site residential receptors.

A concentration trend graph was not developed for lithium, which was only detected in 1 out of 2 groundwater samples from piezometer PZ-44I at a concentration that exceeded the groundwater screening level for off-site residential receptors. The initial detection of lithium at PZ-44I in 2018 was 0.069 mg/L, which exceeded but was within the same order of magnitude as the screening level for off-site residential receptors of 0.04 mg/L. However, the sample collected from PZ-44I in 2020, which is representative of current conditions at AP-1, indicated that lithium is non-detect (less than the reporting limit of 0.005 mg/L) at this location.

4.1.3 Refined Risk Evaluation Results - Groundwater

In the refined groundwater evaluation, comparison of the calculated EPCs to the screening levels was used to identify constituents of interest (COIs) that may pose a potential risk to hypothetical off-site residential receptors exposed through the use of groundwater as potable water. If the EPC from the farthest downgradient well(s)/piezometer(s) is greater than the respective screening levels, then the constituent is identified as having the potential for risk that warrants additional evaluation.

Boron

Boron was detected in only one monitoring well, SGWC-18, at concentrations above the screening level. More specifically, boron was detected in 7 out of 14 samples at this location at concentrations that exceeded the groundwater screening level for off-site residential receptors. For the refined risk evaluation, the following EPCs were calculated for boron using the monitoring wells/piezometers shown in **Appendices E-1** and **E-2a**:

- Data from SGWC-18 were combined to represent groundwater exposure for the UCL (EPC Step 1 in **Appendix E-1**).

- Data from SGWC-18 and the piezometers PZ-40I and PZ-41S were combined to represent groundwater exposure in the same hydraulically downgradient direction (EPC Step 2 in **Appendix E-1**).

- Data from PZ-41S were combined to represent groundwater exposure using the piezometer that is the farthest hydraulically downgradient of well SGCW-18 (EPC Step 3 in **Appendix E-1**).

The UCL for SGWC-18 of 4.5 mg/L and the EPC for the combined dataset from SGWC-18, PZ-40I and PZ-41S of 4.4 mg/L both slightly exceed the groundwater screening level of 4.0 mg/L. The EPC of 3.5 mg/L is based on the maximum detected concentration (based on two samples) from PZ-41S, which is the farthest well hydraulically

downgradient of SGWC-18; this EPC is less than the screening level of 4.0 mg/L. In addition, the distance from SGWC-18 to the nearest property boundary within the potential groundwater flow direction is approximately one mile.

Table 6 presents the results of the refined screening comparing the farthest hydraulically downgradient EPC from **Table 5** to the screening criterion. Boron was not identified as a groundwater COI for hypothetical off-site residential receptors and is not expected to pose a risk to human health through potable water use.

Cobalt

Cobalt was detected in six monitoring wells (SGWC-7, SGWC-10, SGWC-11, SGWC-15, SGWC-18, and SGWC-20) and one piezometer (PZ-25S) at concentrations above the screening level. Groundwater flow exposure units were identifed for use in the calculation of cobalt EPCs in the refined risk evaluation due to semi-radial flow away from AP-1 as noted in the *Hydrogeologic Assessment Report* (Golder Associates Inc., 2020a). For the refined risk evaluation, the following EPCs were calculated for cobalt using the monitoring wells/piezometers shown in **Appendices E-1** and **E-2b**:

Northwest Exposure Unit

- Data from SGWC-7 were combined to represent groundwater exposure for the UCL (EPC Step 1 in **Appendix E-1**), as well as the EPCs for Steps 2 and 3 because there are not hydraulically downgradient wells from SGWC-7.

The one exceedance from SGWC-7 of 0.021 mg/L is from 2017 and only marginally exceeded the screening level of 0.020 mg/L. The EPC for SGWC-7 of 0.012 mg/L is less than the groundwater screening level for off-site residential receptors. In addition, the distance from SGWC-7 to the nearest property boundary within the potential groundwater flow direction is over one mile.

Northeast Exposure Unit 1

- Data from SGWC-10 were combined to represent groundwater exposure for the UCL (EPC Step 1 in **Appendix E-1**).

- Data from SGWC-10 and the piezometer PZ-13S were combined to represent groundwater exposure in the same hydraulically downgradient direction (EPC Step 2 in **Appendix E-1**).

- Data from PZ-13S were used to represent groundwater exposure using the piezometer that is the farthest hydraulically downgradient of well SGCW-10 (EPC Step 3 in **Appendix E-1**).

The UCL for SGWC-10 of 0.032 mg/L and the EPC for the combined dataset from SGWC-10 and PZ-13S of 0.031 mg/L both exceed the groundwater screening level of 0.020 mg/L. The EPC of 0.0057 mg/L based on one sample from PZ-13S, which is the farthest well hydraulically downgradient of SGWC-10, is less than the screening level of 0.020 mg/L. Outside of the road right-of-way, the distance from SGWC-10 to the nearest property boundary within the potential groundwater flow direction is approximately one mile.

Northeast Exposure Unit 2

- Data from SGWC-11 and PZ-25S were combined to represent groundwater exposure for the UCL because both have concentrations above screening criteria and are in the same hyrologically downgradient flow direction (EPC Step 1 in **Appendix E-1**).

- Data from SGWC-11 and PZ-25S and the piezometers including PZ-14I, PZ-14S, PZ-25I and PZ-44I were combined to represent groundwater exposure in the same hydraulically downgradient direction (EPC Step 2 in **Appendix E-1**).

- Data from PZ-14I and PZ-14S were combined to represent groundwater exposure using the piezometers that are the farthest hydraulically downgradient of SGWC-11 and PZ-25S (EPC Step 3 in **Appendix E-1**).

The UCL for SGWC-11 and PZ-25S of 0.030 mg/L and the EPC for the combined dataset from SGWC-11, PZ-25S, PZ-14I, PZ-14S, PZ-25I and PZ-44I of 0.034 mg/L both exceed the groundwater screening level of 0.020 mg/L. The two samples collected from PZ-14I and PZ-14S, which are the farthest wells hydraulically downgradient of SGWC-11 and PZ-25S, were non-detect at a PQL of 0.0005 mg/L and were less than the groundwater screening level. Outside of the road right-of-way, the distance from SGWC-11 and PZ-25S to the nearest property boundary within the potential groundwater flow direction is approximately 5,000 ft and 4,700 ft, respectively .

East Exposure Unit

- Data from SGWC-15 were combined to represent groundwater exposure for the UCL (EPC Step 1 in **Appendix E-1**).

- Data from SGWC-15 and the piezometers PZ-17I and PZ-39S were combined to represent groundwater exposure in the same hydraulically downgradient direction (EPC Step 2 in **Appendix E-1**).

- Data from PZ-39S were used to represent groundwater exposure using the piezometer that is the farthest hydraulically downgradient of well SGCW-15 (EPC Step 3 in **Appendix E-1**).

The UCL for SGWC-15 of 0.28 mg/L and the EPC for the combined dataset from SGWC-15,PZ-17I, and PZ-39S of 0.28 mg/L both exceed the groundwater screening level of 0.020 mg/L. The EPC of 0.00051 mg/L based on one sample from PZ-39S, which is the farthest well hydraulically downgradient of SGWC-15, is less than the screening level of 0.020 mg/L. In addition, the distance from SGWC-15 to the nearest property boundary within the potential groundwater flow direction is over one mile.

Southeast Exposure Unit 1

- Data from SGWC-18 were combined to represent groundwater exposure for the UCL (EPC Step 1 in **Appendix E-1**).

- Data from SGWC-18 and the piezometers PZ-40I and PZ-41S were combined to represent groundwater exposure in the same hydraulically downgradient direction (EPC Step 2 in **Appendix E-1**).

- Data from PZ-41S were used to represent groundwater exposure using the piezometer that is the farthest hydraulically downgradient of well SGCW-18 (EPC Step 3 in **Appendix E-1**).

The UCL for SGWC-18 of 0.16 mg/L and the EPC for the combined dataset from SGWC-18 and PZ-40I and PZ-41S of 0.15 mg/L both exceed the groundwater screening level of 0.020 mg/L. The EPC of 0.0092 mg/L based on one sample from PZ-41S, which is the farthest well hydraulically downgradient of SGWC-18; is less than the screening level of 0.020 mg/L. In addition, the distance from SGWC-18 to the nearest property boundary within the potential groundwater flow direction is over one mile.

Southeast Exposure Unit 2

- Data from SGWC-20 were combined to represent groundwater exposure for the UCL (EPC Step 1 in **Appendix E-1**).

- Data from SGWC-20 and the piezometers PZ-42I and PZ-43S were combined to represent groundwater exposure in the same hydraulically downgradient direction (EPC Step 2 in **Appendix E-1**).

- Data from PZ-43S were used to represent groundwater exposure using the piezometer that is the farthest hydraulically downgradient of well SGCW-20 (EPC Step 3 in **Appendix E-1**).

The UCL for SGWC-20 of 0.23 mg/L and the EPC for the combined dataset from SGWC-20, PZ-42I, and PZ-43S of 0.22 mg/L both exceed the groundwater screening level of 0.020 mg/L. The EPC of 0.0086 mg/L based on the one sample result from PZ-43S, which is the farthest well hydraulically downgradient of SGWC-20; is less than the screening level of 0.020 mg/L. In addition, the distance from SGWC-20 to the nearest property boundary within the potential groundwater flow direction is over 1.5-miles.

Table 6 presents the results of the refined screening comparing the farthest hydraulically downgradient EPC for each groundwater flow exposure unit from **Table 5** to the screening level of 0.020 mg/L. Cobalt was not identified as a groundwater COI for hypothetical off-site residential receptors and is not expected to pose a risk to human health through potable water use.

Lithium

Lithium was detected in 1 out of 2 groundwater samples from piezometer PZ-44I at concentrations that exceeded the off-site groundwater screening level for residential receptors. For the refined risk evaluation, the following EPCs were calculated for lithium using the monitoring wells/piezometers shown in **Appendices E-1** and **E-2c**:

- Data from PZ-44I were combined to represent groundwater exposure for the UCL (EPC Step 1 in **Appendix E-1**).

- Data from PZ-44I and the piezometers/well including PZ-14I, PZ-14S, PZ-25S, PZ-25I and SGWC-11 were combined to represent groundwater exposure in the same hydraulically downgradient direction (EPC Step 2 in **Appendix E-1**).

- Data from PZ-14I and PZ-14S were combined to represent groundwater exposure using the piezometers that are the farthest hydraulically downgradient of piezometer PZ-44I (EPC Step 3 in **Appendix E-1**).

The UCL for PZ-44I is represented by the maximum detection of 0.069 mg/L based on two samples, which exceeded but was within the same order of magnitude as the groundwater screening level of 0.04 mg/L. This maximum detection represents the first data point collected from this well and repeated development and purging appears to have stabilized well conditions, because the second data point collected in March 2020 was reported as non-detect at 0.005 mg/L. The EPC for the combined dataset from PZ-44I, PZ-14I, PZ-14S, PZ-25S, PZ-25I, and SGWC-11 of 0.019 mg/L and the EPC representing the farthest hydraulically downgradient locations of PZ-14I and PZ-14S of non-detect at a PQL of 0.005 mg/L are both less than the groundwater screening level for off-site residential receptors of 0.04 mg/L. In addition, the distance from PZ-44I to the nearest property boundary within the potential groundwater flow direction is over one mile.

Table 6 presents the results of the refined screening comparing the farthest hydraulically downgradient EPC from **Table 5** to the screening criterion. Lithium was not identified as a groundwater COI for hypothetical off-site residential receptors and is not expected to pose a risk to human health through potable water use.

4.2 Refined Surface Water Risk Evaluation

Potential risk associated with exposure to cobalt in surface water was retained for assessment as a conservative approach for human receptors and was assessed using the refined methodology described in the HSRA and VRP guidance (EPD, 2018b; EPD, 2009) and is presented in the following section and on **Figure 10**.

4.2.1 Surface Water Exposure Point Calculation

A UCL for cobalt was calculated using the same assumptions as those presented in Section 4.1.1. **Appendix E-3** provides the input and output files associated with the ProUCL software.

Table 7 summarizes the surface water EPC for cobalt. This table shows the number of samples, the maximum detected concentration, the UCL recommended by ProUCL software, and the selected EPC.

4.2.2 Refined Risk Evaluation Results – Surface Water

In the refined surface water evaluation, comparison of the calculated EPC for cobalt to the surface water screening level was used to identify if cobalt may pose a potential risk to hypothetical recreational receptors exposed to surface water in Berry Creek. If the cobalt EPC is greater than the screening level, then cobalt is identified as a COI having the potential for risk that warrants additional evaluation.

Table 8 presents the results of the refined surface water screening comparing the cobalt surface water EPC from **Table 7** of 0.0025 mg/L to the screening level of 0.006 mg/L. Cobalt was not identified as a surface water COI for hypothetical recreational receptors and is not expected to pose a risk to human health through surface water exposure.

4.3 Refined Risk Evaluation Summary and Conclusions

Detections of boron at only one location (SGWC-18), cobalt at seven locations (SGWC-7, SGWC-10, SGWC-11, SGWC-15, SGWC-18, and SGWC-20, and PZ-25S), and one detection of lithium (PZ-44I) were reported at concentrations above the corresponding groundwater screening levels. The results of the refined risk evaluation for groundwater and surface water indicate the following:

- The EPC for boron of 3.5 mg/L, which is based on data from the farthest piezometer hydraulically downgradient of SGWC-18 (i.e., PZ-41S), is less than the screening level of 4.0 mg/L. Therefore, boron was not identified as a

groundwater COI for hypothetical off-site residential receptors and boron is not expected to pose a risk to human health.

- The EPCs for cobalt calculated from the farthest hydraulically downgradient well(s)/piezometer(s) for each of the groundwater flow direction exposure units are below the screening level of 0.020 mg/L. Therefore, cobalt was not identified as a groundwater COI for hypothetical off-site residential receptors and is not expected to pose a risk to human health.

- The EPC for lithium was non-detect at a PQL of 0.005 mg/L, which is based on data from PZ-14I and PZ-14S to represent the farthest wells hydraulically downgradient of PZ-44I, and is less than the screening level of 0.04 mg/L. Therefore, lithium was not identified as a groundwater COI for hypothetical off-site residential receptors. Lithium is not expected to pose a risk to human health.

- None of the individual data points used to calculate the boron or lithium EPCs to represent groundwater exposure based on the farthest hydraulically downgradient piezometers of AP-1 were above the health-protective screening levels. Only one data point out of fourteen used to calculate the cobalt EPC for the Northwest groundwater flow direction exposure unit was marginally above the health-protective screening level. The calculated EPC for the farthest hydraulically downgradient well (PZ-13S) was below the health-protective screening level.

- The wells with screening level exceedances for boron, cobalt, and lithium are located upgradient of the private wells and parcels identified to the east-southeast based on the water well survey. However, the wells with screening level exceedances have additional nearby, on-site or within the road right-of-way downgradient wells that do not have exceedances for the same metals, indicating that these three COPIs have been delineated by concentrations not exceeding screening criteria.

- This risk evaluation indicates that concentrations of boron, cobalt, and lithium in groundwater downgradient of AP-1 on-site or within the road right-of-way are below corresponding risk-based screening criteria protective of human health. Boron, cobalt, and lithium are not expected to pose a risk to human health.

- The EPC for cobalt in surface water is 0.0025 mg/L and is less than the screening level of 0.006 mg/L. Therefore, cobalt was not identified as a surface water COI for hypothetical recreational receptors and is not expected to pose a risk to human health through surface water exposure.

Therefore, based on the multiple lines of evidence, further risk evaluation for groundwater and surface water is not warranted. It is worth noting that compliance

groundwater monitoring under the Federal and State CCR Rules will continue. The following AP-1 piezometers should also continue to be monitored for at least two consecutive sampling events for the presence of cobalt (PZ-25S) and lithium (PZ-44I) because these piezometers have exceedances of the screening levels and are not part of the current groundwater monitoring network. In addition, the following AP-1 piezometers should also continue to be monitored for the presence of boron (PZ-41S), cobalt (PZ-13S, PZ-14I, PZ-14S, PZ-39S, PZ-41S, and PZ-43S), and lithium (PZ-14I, and PZ-14S) to assure concentrations remain below screening levels for at least two consecutive sampling events. Although further evaluation of boron in Berry Creek is not warranted based on the results of the risk evaluation, surface water samples being collected on a semi-annual basis should continue to analyze for the presence of boron and cobalt in Berry Creek in accordance with the landfill monitoring requirements. Further evaluation of lithium in Berry Creek is not warranted based on the results of the risk evaluation and the landfill monitoring requirements.

5 UNCERTAINTY ASSESSMENT

USEPA guidance stresses the importance of providing an analysis of uncertainties so that risk managers are better informed when evaluating risk assessment conclusions (USEPA, 1989). The uncertainty assessment provides a better understanding of the key uncertainties that are most likely to affect the risk assessment results and conclusions. Conservative assumptions were used in the risk evaluation, likely resulting in overestimates of potential exposures and risks. The potential uncertainties associated with the risk evaluation are as follows:

Health-Protective Screening Criteria Uncertainties:

- In accordance with industry standards and methodologies approved by the Georgia EPD, the higher of the Type 1 or Type 2 standard and the higher of the Type 3 or Type 4 standard were selected for screening criteria. Selection of the screening criteria per industry standards is considered appropriate for risk quantification for AP-1. The Hazardous Site Response Act Rule 391-3-19.07(1) notes that "*[a]ll risk reduction standards will, when implemented, provide adequate protection of human health and the environment*". Thus, this approach is unlikely to underestimate potential risks for hypothetical off-site receptors and is an appropriate health-protective methodology.

- Assumptions about the chemical form of constituents evaluated were made when selecting screening levels including:

    - Chromium – HSRA RRS and the federal MCL for chromium (0.1 mg/L) are based on total chromium but were developed based on chromium-6 which adds an additional level of conservatism to the standard for chromium. USEPA (2020c) states, "In order to ensure that the greatest potential risk is addressed, EPA's regulation assumes that a measurement of total chromium is 100 percent chromium-6." Based on the composition of total chromium, this is a conservative assumption that likely overestimates potential risk from exposure to total chromium in groundwater.

    - Mercury – For the purposes of calculating screening levels, it was assumed that mercury exists in the form of mercuric chloride, the most likely form of mercury in groundwater. Mercury is the only constituent evaluated with the potential to volatilize to any appreciable degree under normal household conditions. USEPA's *Human and Ecological Risk Assessment of Coal Combustion Residuals* (2014a) eliminated the showering exposure pathway, and therefore, this pathway was not evaluated further in this assessment. The evaluation of mercury as

mercuric chloride is not expected to underestimate potential risk associated with AP-1 conditions.

- Screening criteria based on RRSs, including the two groundwater COPIs (boron and lithium), represent the reasonable maximum exposure (RME). The RME is defined as "the highest exposure that is reasonably expected to occur at a site but that is still within the range of possible exposures" (USEPA, 1989). USEPA (1989) states that the “intent of the RME is to estimate a conservative exposure case (i.e., well above the average case) that is still within the range of possible exposures.” Potential receptors will likely have lower exposures than those presented in this risk evaluation (i.e., a majority of the site concentrations will be less than the UCL), and therefore, potential exposures are likely overestimated.

- In the surface water screening, the higher of the residential groundwater screening levels was used for boron, cobalt, and lithium because of the lack of human health surface water screening levels within the Georgia ISWQC for human health (EPD, 2015) and national ambient water quality criteria (USEPA, 2015a). The use of drinking water screening levels for surface water screening is a conservative approach likely to overestimate exposure as domestic use of Berry Creek surface water for human receptors is an incomplete exposure pathway.

Exposure Uncertainties:

- The maximum detected concentrations of Appendix IV constituents (plus boron) were compared to conservative risk-based screening criteria to identify the COPIs. Use of the maximum detected concentration is consistent with industry standards and practice; however, use of the maximum detected concentration for exposure likely overestimates potential risk.

- The COPIs identifed in groundwater occur naturally in the site geologic setting. Although background concentrations were evaluated and used in the screening process, contributions to exposure and risk were assumed to be entirely CCR-related and natural background sources were not quantified. Furthermore, the ASD demonstrates that concentrations of cobalt in groundwater are naturally occurring downgradient of AP-1. However, for completeness, cobalt was carried forward into the refined risk evaluation. Thus, CCR-related exposures were likely overestimated.

- As a conservative measure, on-site potable well data were also screened against off-site residential screening criteria. Lithium was non-detect at a method detection limit of 0.15 m/L, which is above the off-site residential screening

criterion (0.04 mg/L). Residential receptors are not present on-site and evaluation of this exposure pathway was conservative. The refined assessment demonstrated that lithium concentrations are not expected to pose a risk to human health for hypothetical off-site residential receptors. As such, the uncertainty associated with the method detection limit is not expected to affect the risk evaluation conclusions.

- Hypothetical off-site residential exposure was evaluated using on-site groundwater data from wells around the perimeter and downgradient of AP-1. This comparison makes the conservative assumption that on-site groundwater may potentially migrate to off-site drinking water wells, through advective transport in groundwater without any attenuation within the aquifer media through factors such as dilution, dispersion, or adsorption, overestimating potential exposure and risk to hypothetical off-site receptors.

- EPCs for metals in groundwater were assumed to be 100 percent bioavailable by ingestion and dermal contact. This assumption may tend to overestimate risk.

- For the refined groundwater risk evaluation, the EPCs based on the farthest hydraulically downgradient well(s)/piezometer(s) were based on datasets of less than five samples, except for one groundwater flow exposure unit for cobalt. The farthest hydraulically downgradient datasets for boron, cobalt, and lithium are limited.

- The maximum detected concentration was used as the boron EPC. This is a conservative approach that likely results in overestimates of exposure and potential risk for boron.

- A well survey of potential groundwater wells within a three-mile radius of AP-1 was conducted by NewFields in 2019 and consisted of reviewing publicly available federal, state, and county records as well as a windshield survey of the area (**Appendix A)**. Wood relied on the data collected by NewFields.

  The evaluation used on-site groundwater data to represent hypothetical off-site exposure, which is a conservative approach that likely results in overestimation of assumed exposure and assumed potential risk. Although off-site potable wells identified in the well survey were not included in the risk evaluation, the presence of these wells do not appear to change the conclusions of the risk evaluation because concentrations of COPIs are delineated on-site or within the road right-of-way south of Luther Smith Road.

Toxicity Uncertainties:

- Toxicity factors used to calculate health-protective criteria are established at conservative levels to account for uncertainties and often result in criteria that are many times lower than the levels observed to cause effects in human or animal studies. Therefore, a screening level exceedance does not necessarily equate to an adverse effect.

6 CONCLUSIONS

This human health and ecological risk evaluation for CCR constituents in groundwater at the site and the closest surface water body, Berry Creek, was conducted using methods consistent with Georgia EPD and USEPA guidance and included multiple conservative assumptions. Constituents evaluated from AP-1 are not expected to pose a risk to human health or the environment.

Accordingly, no further risk evaluation of groundwater or surface water is warranted. It is worth noting that Georgia Power is currently in the permitting process to close AP-1 by consolidating the CCR material to a smaller footprint with a final impermeable cover system and that compliance groundwater monitoring for AP-1 under the Federal and State CCR Rules will continue. Georgia Power will proactively evaluate the data and update this evaluation, if necessary.

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TABLES

Table 1
On-Site Potable Well Groundwater Screening[1]
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

CCR Rule Designation	Constituent	CAS No.	Detection Frequency	Exceedance Frequency[2]	Maximum Concentration (mg/L)	Screening Level (mg/L)	Source	Site-Specific Background (mg/L)	COPI? (Y/N)	Rationale[3]
Appendix III	Boron	7440-42-8	1 / 5	0 / 5	0.48	23	Site-Specific	<23[4]	N	BSL
Appendix IV	Antimony	7440-36-0	0 / 8	0 / 8	ND (0.0030)	0.046	Type 4 RRS[5]	0.0021	N	ND/BSL
	Arsenic	7440-38-2	0 / 8	0 / 8	ND (0.0050)	0.010	Type 3 RRS	0.0025	N	ND/BSL
	Barium	7440-39-3	4 / 8	0 / 8	0.076	23	Type 4 RRS	0.064	N	BSL
	Beryllium	7440-41-7	0 / 8	0 / 8	ND (0.0020)	0.18	Type 4 RRS	0.0015	N	ND/BSL
	Cadmium[6]	7440-43-9	0 / 8	0 / 8	ND (0.0025)	0.056	Type 4 RRS	0.00125	N	ND/BSL
	Chromium	7440-47-3	3 / 8	0 / 8	0.0075	0.10	Type 3 RRS	0.019	N	BSL
	Cobalt	7440-48-4	0 / 4	0 / 4	ND (0.001)	0.035	Type 3 RRS	0.020	N	ND/BSL
	Fluoride[7]	16984-48-8	4 / 8	0 / 8	0.17	4.7	Type 4 RRS	0.15	N	BSL
	Lead	7439-92-1	3 / 14	0 / 14	0.0033	0.015	Type 3 RRS	0.0025	N	BSL
	Lithium	7439-93-2	0 / 4	0 / 4	ND (0.15)[8]	0.23	Site-Specific	0.025	N	ND/BSL
	Mercury	7439-97-6	0 / 8	0 / 8	ND (0.00020)	0.034	Type 4 RRS	0.00025	N	ND/BSL
	Molybdenum	7439-98-7	1 / 4	0 / 4	0.0017	0.58	Site-Specific	0.0075	N	BSL
	Selenium	7782-49-2	1 / 8	0 / 8	0.0036	0.58	Type 4 RRS	0.005	N	BSL
	Thallium	7440-28-0	0 / 8	0 / 8	ND (0.0010)	0.0020	Type 3 RRS	0.0005	N	ND/BSL
	Radium 226+228[9]	7440-14-4	4 / 4	0 / 4	0.829	5.0	MCL	1.2	N	BSL

Notes:

[1] Evaluation includes 2015, 2016, 2018, and 2020 groundwater analytical data from potable wells CW-1, CW-3, PW-2, PW-5 and on-site tap water (lead only).

[2] Exceedance frequency is for the specific constituent that exceeds the screening level.

[3] Rationale for classification of constituent as a COPI or exclusion as a COPI:

ASL = Above respective screening level
BSL = Equal to or below respective screening level
ND = Not detected (maximum practical quantitation limit [PQL])

[4] No background level for boron is available. Based on a review of upgradient wells, background levels of boron do not exceed the boron screening level.

[5] The Type 4 RRSs are calculated by the EPA RSL calculator using industrial exposure factor inputs from HSRA Appendix III, Table 3.

[6] The Type 4 RRS for cadmium was selected as the cadmium (water) option in the EPA RSL calculator.

[7] Fluoride is listed in Appendix III and Appendix IV of the federal CCR Rule, but is shown in this table only in the Appendix IV list to avoid repetition.

[8] The lithium method detection limit is 0.15 mg/L.

[9] The units for radium 226+228 are pCi/L.

Definitions:

CAS = Chemical Abstract Service
CCR = Coal Combustion Residuals
COPI = Constituent of Potential Interest
EPA = United States Environmental Protection Agency
RRS = Risk Reduction Standard
MCL = Maximum Contaminant Level
mg/L = milligrams per Liter
pCi/L = picocuries per Liter
J = Estimated value less than the reporting limit but greater than the method detection limit

Prepared by/Date: NSR 09/28/20
Checked by/Date: SBM 09/28/20

Table 2
Downgradient Groundwater Screening[1, 2]
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

CCR Rule Designation	Constituent	CAS No.	Detection Frequency	Exceedance Frequency[3]	Maximum Concentration (mg/L)	Screening Level (mg/L)	Source	Site-Specific Background (mg/L)	COPI? (Y/N)	Rationale[4]
Appendix III	Boron	7440-42-8	223 / 267	7 / 267	5.3	4.0	Site-Specific	<4.0[5]	Y	ASL
Appendix IV	Antimony	7440-36-0	4 / 209	0 / 209	0.0014 J	0.0078	Type 2 RRS[6]	0.0021	N	BSL
	Arsenic	7440-38-2	94 / 282	0 / 282	0.004 J	0.010	Type 1 RRS	0.0025	N	BSL
	Barium	7440-39-3	278 / 278	0 / 278	0.36	3.8	Type 2 RRS	0.064	N	BSL
	Beryllium	7440-41-7	33 / 278	0 / 278	0.00093 J	0.025	Type 2 RRS	0.0015	N	BSL
	Cadmium[7]	7440-43-9	14 / 249	0 / 249	0.00044 J	0.0092	Type 2 RRS	0.00125	N	BSL
	Chromium	7440-47-3	112 / 278	0 / 278	0.038	0.10	Type 1 RRS	0.019	N	BSL
	Cobalt	7440-48-4	219 / 279	68 / 279	0.30	0.020	Background[8]	0.020	Y	ASL; ASD[9]
	Fluoride[10]	16984-48-8	131 / 296	0 / 296	0.58	4.0	Type 1 RRS	0.15	N	BSL
	Lead	7439-92-1	11 / 278	0 / 278	0.00085	0.015	Type 1 RRS	0.0025	N	BSL
	Lithium	7439-93-2	89 / 281	1 / 281	0.069	0.040	Site-Specific	0.025	Y	ASL
	Mercury	7439-97-6	42 / 281	0 / 281	0.00028	0.0057	Type 2 RRS	0.00025	N	BSL
	Molybdenum	7439-98-7	22 / 250	0 / 250	0.0034	0.10	Site-Specific	0.0075	N	BSL
	Selenium	7782-49-2	51 / 278	0 / 278	0.027	0.10	Type 2 RRS	0.005	N	BSL
	Thallium	7440-28-0	36 / 278	0 / 278	0.00025 J	0.0020	Type 1 RRS	0.0005	N	BSL
	Radium 226+228[11]	7440-14-4	251 / 274	0 / 274	3.0	5.0	MCL	1.2	N	BSL

Notes:

[1] As a conservative measure, potential off-site residential exposure was evaluated using on-site groundwater wells around the perimeter and downgradient of AP-1.

[2] Evaluation includes 2016 - 2019 groundwater analytical data from downgradient wells SGWC-6, SGWC-7, SGWC-8, SGWC-9, SGWC-10, SGWC-11, SGWC-12, SGWC-13, SGWC-14, SGWC-15, SGWC-16, SGWC-17, SGWC-18, SGWC-19, SGWC-20, SGWC-21, SGWC-22, SGWC-23, PZ-11S, PZ-12S, PZ-14I, PZ-14S, PZ-17I, PZ-25I, PZ-25S, PZ-26S, PZ-27S, PZ-28, PZ-29S, PZ-30S, PZ-31I, PZ-32S, PZ-35I, PZ-36S, PZ-37S, PZ-38I, PZ-39S, PZ-40I, PZ-41S, PZ-42I, PZ-43S, PZ-44I. Additional groundwater data from 2020 were included for PZ-14I, PZ-25I, and PZ-44I (lithium); PZ-41S (boron); and PZ-13S (cobalt).

[3] Exceedance frequency is for the specific constituent that exceeds the screening level.

[4] Rationale for classification of constituent as a COPI or exclusion as a COPI:

ASL = Above respective screening level
BSL = Equal to or below respective screening level
ND = Not detected (maximum practical quantitation limit [PQL])
ASD = Alternate Source Demonstration

[5] No background level for boron is available. Based on a review of upgradient wells, background levels of boron do not exceed the boron screening level.

[6] The Type 2 RRSs are calculated by the EPA RSL calculator using residential exposure factor inputs from HSRA Appendix III, Table 3.

[7] The Type 2 RRS for cadmium was selected as the cadmium (water) option in the EPA RSL calculator.

[8] For sites with site-specific background concentrations greater than applicable screening values, the site-specific background value was used as the screening value.

[9] The localized naturally occurring cobalt concentrations are attributed to subsurface aquifer materials (Alternate Source Demonstration, Georgia Power Company Plant Scherer AP-1, Golder Associates, Inc., January 14, 2019). Although detected concentrations of cobalt at AP-1 were determined to be unrelated to the CCR unit, cobalt was retained as a COPI for further evaluation in the refined risk evaluation for completeness.

[10] Fluoride is listed in Appendix III and Appendix IV of the federal CCR Rule, but is shown in this table only in the Appendix IV list to avoid repetition.

[11] The units for radium 226+228 are pCi/L.

Boron exceedances located at SGWC-18 (7/14; '16 & '18-'19).

Cobalt exceedances of the background limit of 0.020 mg/L are located at PZ-25S (1/1; '18), SGWC-7 (1/14; '17), SGWC-10 (9/14; '16-'19), SGWC-11 (14/14; '16-'19), SGWC-15 (14/14; '16-'19), SGWC-18 (14/14; '16-'19), and SGWC-20 (14/14; '16-'19).

Lithium exceedances located at PZ-44I (1/2; '18).

Definitions:

CAS = Chemical Abstract Service
CCR = Coal Combustion Residuals
COPI = Constituent of Potential Interest
EPA = United States Environmental Protection Agency
RRS = Risk Reduction Standard
MCL = Maximum Contaminant Level
mg/L = milligrams per Liter
pCi/L = picocuries per Liter
J = Estimated value less than the reporting limit but greater than the method detection limit

Prepared by/Date: NSR 09/28/20
Checked by/Date: SBM 09/28/20

Table 3
Human Health Surface Water Screening - Berry Creek[1]
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

CCR Rule Designation	Constituents (Total Recoverable Fractions)	CAS No.	Detection Frequency	Exceedance Frequency[2]	Maximum Concentration (mg/L)	Screening Level (mg/L)	Source[3, 4]	Site-Specific Background (mg/L)	COPI? (Y/N)	Rationale[5]
Appendix III	Boron	7440-42-8	40 / 45	0 / 45	2.1	4	Site-specific	--	N	BSL
Appendix IV	Cobalt	7440-48-4	42 / 52	1 / 52	0.0064	0.006	Type 2 RRS	--	Y	ASL
	Lithium	7439-93-2	0 / 8	0 / 8	ND (0.005)	0.04	Site-specific	--	N	ND/BSL

Notes:
[1] Evaluation includes 2016-2019 surface water data from Berry Creek at SWA-1, SWA-2, SWA-3, SWC-4, SWC-5, SWC-6, SWC-7, and SWC-8.
[2] Exceedance frequency is for the specific constituent that exceeds the screening level.
- The hierarchy of screening levels is GA ISWQC > NRWQC > Selected residential groundwater screening level if no surface water screening level available.
- For sites with site-specific background concentrations greater than all applicable screening levels, the site-specific background value was used as the screening level.

[3] The Site-specific and Type 2 RRSs were calculated by the EPA RSL calculator using residential exposure factor inputs from HSRA Appendix III, Table 3.
[4] These residential groundwater screening levels were used because no human health surface water screening levels were available. The use of drinking water screening levels for surface water exposure is a conservative approach as domestic use of Berry Creek surface water for human receptors is an incomplete exposure pathway.
[5] Rationale for classification of constituent as a COPI or exclusion as a COPI:
ASL = Above respective screening level;
BSL = Below respective screening level;
ND = Not detected (maximum practical quantitation limit [PQL])

Prepared by/Date: SBM 09/15/20
Checked by/Date: NSR 09/16/20

Definitions:
-- = Not applicable, no data available
CAS = Chemical Abstract Service
CCR = Coal Combustion Residuals
COPI = Constituent of Potential Interest
EPA = United States Environmental Protection Agency
GA ISWQC = Georgia Instream Water Quality Criteria
NRWQC = National Recommended Water Quality Criteria
RRS = Risk Reduction Standard
mg/L = milligrams per Liter

Table 4
Ecological Surface Water Screening - Berry Creek[1]
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

CCR Rule Designation	Constituents (Total Recoverable Fractions)	CAS No.	Detection Frequency	Exceedance Frequency[2]	Maximum Concentration (mg/L)	Screening Value (mg/L) (Total)	Hardness Dependent? (Y/N)	Source[3]	Site-Specific Background (mg/L)	COPI (Y/N)	Rationale[4]
Appendix III	Boron	7440-42-8	40 / 45	0 / 45	2.1	7.2	N	EPA Reg. 4	--	N	BSL
Appendix IV	Cobalt	7440-48-4	42 / 52	0 / 52	0.0064	0.019	N	EPA Reg. 4	--	N	BSL
	Lithium	7439-93-2	0 / 8	0 / 8	ND (0.005)	0.44	N	EPA Reg. 4	--	N	ND/BSL

Notes:

[1] Evaluation includes 2016-2019 surface water data from Berry Creek at SWA-1, SWA-2, SWA-3, SWC-4, SWC-5, SWC-6, SWC-7, and SWC-8.

[2] Exceedance frequency is for the specific constituent that exceeds the screening level.

- The hierarchy of screening level sources is GA ISWQC > EPA Region 4.
- For sites with site-specific background concentrations greater than all applicable screening levels, the site-specific background value was used as the screening level.

[3] Screening values from GA ISWQC were not available from GA Administrative Code 391-3-6-.0 (5)(e)(iii; values selected from Table 1a of the *Region 4 Ecological Risk Assessment Supplemental Guidance* (EPA, 2018).

[4] Rationale for classification of constituent as a COPI or exclusion as a COPI:

ASL = Above respective screening level;
BSL = Below respective screening level;
ND = Not detected (maximum practical quantitation limit [PQL])

Definitions:

-- = Not applicable, no data available
CAS = Chemical Abstract Service
CCR = Coal Combustion Residuals
COPI = Constituent of Potential Interest
EPA = United States Environmental Protection Agency
GA ISWQC = Georgia Instream Water Quality Criteria
mg/L = milligrams per Liter

Prepared by/Date: SBM 09/15/20
Checked by/Date: NSR 09/16/20

Table 5
Groundwater Exposure Point Concentration Summary
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

Ash Pond	CCR Rule Designation	Constituent	Exposure Unit	CAS No.	Detection Frequency	Maximum Concentration (mg/L)	95% UCL (mg/L)	Recommended UCL Method	Selected EPC[1] (mg/L)
AP-1	Appendix III	Boron	Southeast	7440-42-8	2 / 2	3.5	NA[2]	NA	3.5
	Appendix IV	Cobalt	Northwest	7440-48-4	14 / 14	0.021	0.0117	95% Student's-t UCL	0.0117
			Northeast 1		1 / 1	0.0057	NA[2]	NA	0.0057
			Northeast 2		0 / 2	ND (<0.0005)	NA[2]	NA	ND (<0.0005)
			East		1 / 1	0.00051	NA[2]	NA	0.00051
			Southeast 1		1 / 1	0.0092	NA[2]	NA	0.0092
			Southeast 2		1 / 1	0.0086	NA[2]	NA	0.0086
		Lithium	Northeast	7439-93-2	0 / 3	ND (<0.005)	NA[2]	NA	ND (<0.005)

Notes:
[1] EPCs calculated in accordance with USEPA, 2014. Memorandum for Determining Groundwater Exposure Point Concentrations, Supplemental Guidance. OSWER Directive 9283.1-42, February 2014. Located at https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=236917.

Selected EPC used in the refined groundwater risk screening presented in Table 6. For further detail on the selected EPC, refer to Appendix E.
[2] NA = Not available. 95% UCL not calculated because dataset had fewer than 5 values.

Definitions:
CAS = Chemical Abstract Service
CCR = Coal Combustion Residuals
mg/L = milligrams per liter
95% UCL = 95 percent upper confidence limit
EPC = Exposure Point Concentration
NA = Not applicable
ND = Not detected (maximum practical quantitation limit [PQL])

Prepared by/Date: NSR 09/28/20
Checked by/Date: SBM 09/28/20

Table 6
Downgradient Groundwater Refined Screening[1]
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

Ash Pond	CCR Rule Designation	Constituent	Exposure Unit	CAS No.	Detection Frequency	Exceedance Frequency[2]	Selected EPC[3] (mg/L)	Screening Level (mg/L)	Source	Site-Specific Background (mg/L)	COI? (Y/N)	Rationale[4]
AP-1	Appendix III	Boron	Southeast	7440-42-8	2 / 2	0 / 2	3.5	4	Site-Specific[5]	<4.0[6]	N	BSL
	Appendix IV	Cobalt	Northwest	7440-48-4	14 / 14	1 / 14	0.0117	0.020	Background[7]	0.020	N	BSL
			Northeast 1		1 / 1	0 / 1	0.0057				N	BSL
			Northeast 2		0 2	0 / 2	ND (<0.0005)				N	BSL
			East		1 / 1	0 / 1	0.00051				N	BSL
			Southeast 1		1 / 1	0 / 1	0.0092				N	BSL
			Southeast 2		1 / 1	0 / 1	0.0086				N	BSL
		Lithium	Northeast	7439-93-2	0 / 3	0 / 3	ND (<0.005)	0.040	Site-Specific	0.005	N	BSL

Notes:

[1] As a conservative measure, potential off-site residential exposure was evaluated using on-site groundwater wells around the perimeter and downgradient of AP-1.

[2] The exceedance frequency is based on the number of samples with detected concentrations that exceed the screening level.

[3] EPCs calculated in accordance with USEPA, 2014. Memorandum for Determining Groundwater Exposure Point Concentrations, Supplemental Guidance. OSWER Directive 9283.1-42, February 2014. Located at https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=236917. For further detail on the selected EPC, refer to Appendix E.

[4] Rationale for classification of constituent as a COI or exclusion as a COI:

ASL = Above respective screening level

BSL = Below respective screening level

[5] Site-Specific values were calculated by the EPA RSL calculator using residential exposure factor inputs from HSRA Appendix III, Table 3.

[6] No background level for boron is available. Based on a review of upgradient wells, background levels of boron do not exceed the boron screening level.

[7] For sites with site-specific background concentrations greater than applicable screening values, the site-specific background value was used as the screening value.

Definitions:

CAS = Chemical Abstract Service
CCR = Coal Combustion Residuals
COI = Constituent of Interest
mg/L = milligrams per liter
EPC = Exposure Point Concentration
ND = Not detected (maximum practical quantitation limit [PQL])

Prepared by/Date: NSR 09/28/20
Checked by/Date: SBM 09/28/20

Table 7
Surface Water Exposure Point Concentration Summary - Berry Creek
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

Ash Pond	CCR Rule Designation	Constituent	CAS No.	Detection Frequency	Maximum Concentration (mg/L)	95% UCL (mg/L)	Recommended UCL Method	Selected EPC[1] (mg/L)
AP-1	Appendix IV	Cobalt	7440-48-4	42 / 52	0.0064	0.0025	95% KM Approximate Gamma UCL	0.0025

Notes:
[1] EPCs calculated in accordance with USEPA, 2014. Memorandum for Determining Groundwater Exposure Point Concentrations, Supplemental Guidance. OSWER Directive 9283.1-42, February 2014. Located at https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=236917.

Selected EPC used in refined surface water screening presented in Table 8. For further detail on the selected EPC, refer to Appendix E.

Definitions:
CAS = Chemical Abstract Service
CCR = Coal Combustion Residuals
mg/L = milligrams per liter
95% UCL = 95 percent upper confidence limit
EPC = Exposure Point Concentration

Prepared by/Date: SBM 09/16/20
Checked by/Date: NSR 09/16/20

Table 8
Human Health Refined Surface Water Screening - Berry Creek
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

Ash Pond	CCR Rule Designation	Constituent	CAS No.	Detection Frequency	Exceedance Frequency[1]	Selected EPC[2] (mg/L)	Screening Level (mg/L)	Source	Site-Specific Background (mg/L)	COI? (Y/N)	Rationale[3]
AP-1	Appendix IV	Cobalt	7440-48-4	42 / 52	1 / 52	0.0025	0.006	Type 2 RRS[4, 5]	--	N	BSL

Notes:

[1] Exceedance frequency is for the specific constituent that exceeds the screening level.

- The hierarchy of screening levels is GA ISWQC > NRWQC > Selected residential groundwater screening level if no surface water screening level available.
- For sites with site-specific background concentrations greater than all applicable screening levels, the site-specific background value was used as the screening level.

[2] EPCs calculated in accordance with USEPA, 2014. Memorandum for Determining Groundwater Exposure Point Concentrations, Supplemental Guidance. OSWER Directive 9283.1-42, February 2014. Located at https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=236917. For further detail on the selected EPC, refer to Appendix E.

[3] Rationale for classification of constituent as a COI or exclusion as a COI:

ASL = Above respective screening level

BSL = Below respective screening level

[4] The Type 2 RRS was calculated by the EPA RSL calculator using residential exposure factor inputs from HSRA Appendix III, Table 3.

[5] This residential groundwater screening level was used because no human health surface water screening level was available. The use of drinking water screening levels for surface water exposure is a conservative approach as domestic use of Berry Creek surface water for human receptors is an incomplete exposure pathway.

Definitions:

CAS = Chemical Abstract Service
CCR = Coal Combustion Residuals
COI = Constituent of Interest
mg/L = milligrams per liter
EPC = Exposure Point Concentration

Prepared by/Date: SBM 09/16/20
Checked by/Date: NSR 09/16/20

FIGURES

N

PAC Ash Landfill

Gypsum Cell 1

Cell 3

Ash Pond 1

Settling
(Recycling)
Pond

Lake Juliette

Ocmulgee River

Ash Pond Permit Boundary

Approximate Property Boundary

0 0.5 1 2 Miles

Service Layer Credits: USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names

Document Path: G:\ProjectEX\Scherer\MXDs\Site Location.mxd

Plant Scherer AP-1
Site Location

Prepared By-Date: JCD - 10/27/2020	wood.	Figure: 1
Checked By-Date: NSR - 10/27/2020		
Project Number: 6123201472		

- Cell 1 Ash Landfill Monitoring Well
- Cell 3 Ash Landfill Monitoring Well
- PAC Ash Landfill Monitoring Well
- Piezometer
- Scherer Ash Pond CCR Monitoring Well
- Potable Well
- Streams
- Ash Pond Permit Boundary
- Approximate Property Boundary
- SGWC-7 Downgradient Location Used in Risk Evaluation
- SGWA-3 Upgradient Well in Certified Network

N

0 500 1,000 2,000 Feet

Scoggins Creek

Berry Creek

Luther Smith Road

Ash Pond 1

PAC Ash Cell

Gypsum Cell

Cell 3

Settling (Recycling Pond)

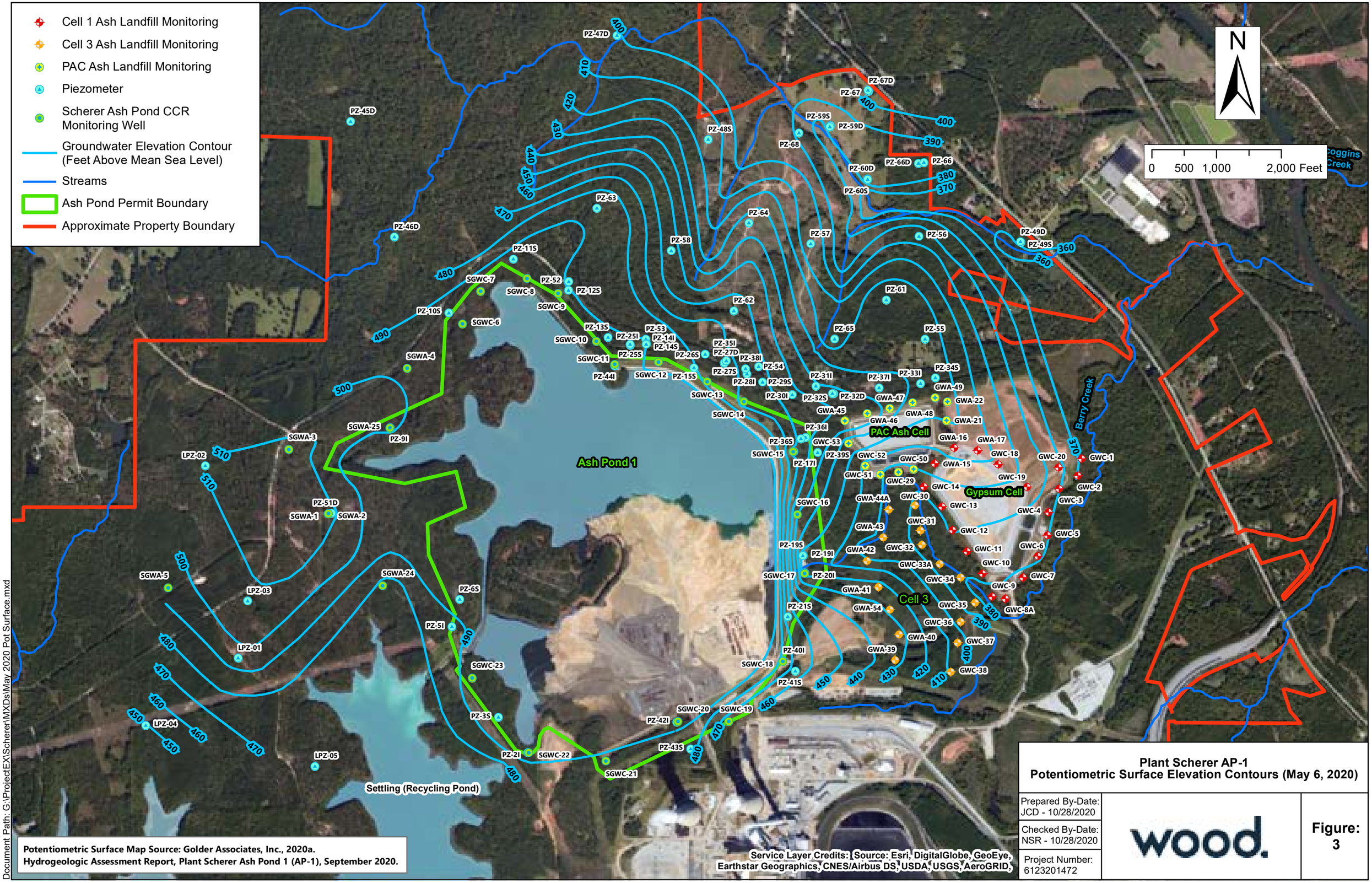
PZ-47D PZ-45D PZ-48S PZ-67D PZ-67 PZ-59S PZ-59D PZ-68 PZ-66D PZ-66 PZ-60D PZ-60S PZ-63 PZ-64 PZ-46D PZ-58 PZ-57 PZ-56 PZ-49D PZ-49S PZ-11S PZ-62 PZ-61 PZ-10S PZ-52 PZ-12S PZ-65 PZ-55 SGWC-7 SGWC-8 SGWC-9 SGWC-6 PZ-13S PZ-53 PZ-25I PZ-14I PZ-35I SGWC-10 PZ-14S PZ-27D PZ-38I SGWA-4 PZ-25S PZ-26S PZ-54 SGWC-11 PZ-27S PZ-31I PZ-44I SGWC-12 PZ-15S PZ-28I PZ-29S PZ-37I PZ-33I PZ-34S GWA-49 PZ-30I PZ-32S PZ-32D GWA-47 GWA-22 SGWC-13 GWA-45 GWA-48 SGWC-14 GWA-46 GWA-21 SGWA-25 PZ-91 PZ-36I GWA-16 GWA-17 SGWA-3 PZ-36S GWC-53 GWC-18 GWC-20 GWC-1 LPZ-02 SGWC-15 PZ-39S GWC-52 GWC-50 GWA-15 PZ-17I GWC-51 GWC-29 GWC-14 GWC-19 GWC-2 PZ-51D SGWA-1 SGWA-2 SGWC-16 GWA-44A GWC-30 GWC-13 GWC-4 GWC-3 GWC-31 GWA-43 GWC-12 GWC-5 PZ-19S PZ-19I GWA-42 GWC-32 GWC-11 GWC-6 SGWA-5 SGWA-24 PZ-65 LPZ-03 GWC-33A GWC-10 SGWC-17 PZ-20I GWC-34 GWC-7 GWA-41 GWC-9 PZ-51 PZ-21S GWA-54 GWC-35 GWC-8A GWC-36 LPZ-01 GWA-40 GWC-37 PZ-40I GWA-39 SGWC-23 SGWC-18 GWC-38 PZ-41S CW-1 LPZ-04 PZ-35 SGWC-20 SGWC-19 CW-3 PZ-42I PZ-21 SGWC-22 PZ-43S LPZ-05 SGWC-21 PW-5 PW-2

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID,

Document Path: G:\ProjectEX\Scherer\MXDs\Site Plan.mxd

Plant Scherer AP-1
Site Layout and Monitoring Well Network

Prepared By-Date: JCD - 11/3/2020	wood.	Figure: 2
Checked By-Date: NSR - 11/3/2020		
Project Number: 6123201472		



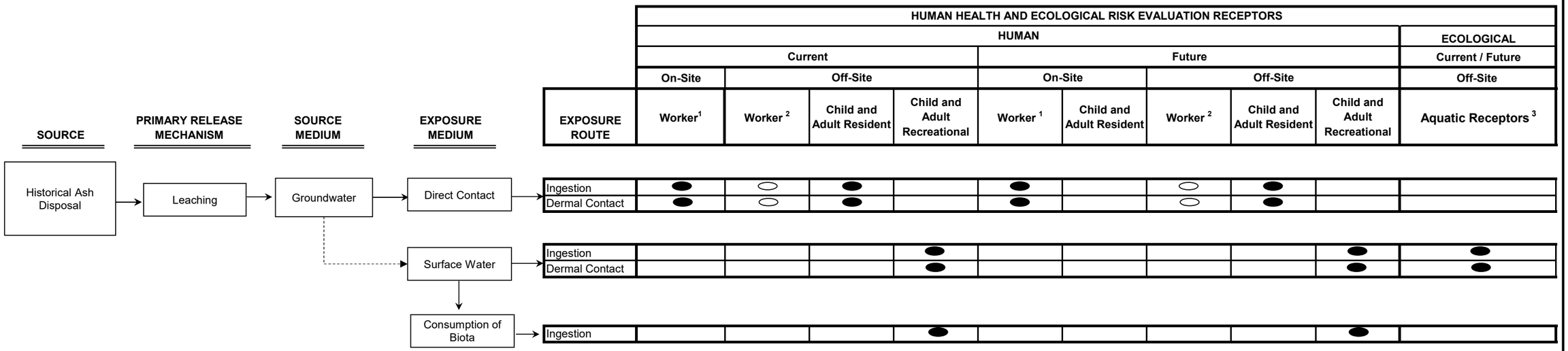
Potentiometric Surface Map Source: Golder Associates, Inc., 2020a. Hydrogeologic Assessment Report, Plant Scherer Ash Pond 1 (AP-1), September 2020.

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID,

Document Path: G:\Project\EX\Scherer\MXDs\May 2020 Pot Surface.mxd

Plant Scherer AP-1
Potentiometric Surface Elevation Contours (May 6, 2020)

Prepared By-Date: JCD - 10/28/2020	wood.	Figure: 3
Checked By-Date: NSR - 10/28/2020		
Project Number: 6123201472		



Legend

A conservative assumption for this assessment was made that groundwater from the site flows to the downgradient surface water.

Indicates potentially complete pathway, which is evaluated quantitatively.

Indicates potentially complete pathway, which is evaluated qualitatively.

Footnotes

1. Industrial worker was considered complete because of the on-site potable wells. On-site construction workers would be expected to have little to no direct contact with on-site groundwater due to safety procedures outlined in their site-specific health and safety plans.
2. Off-site industrial/construction worker addressed through the evaluation of hypothetical off-site residential receptors as health-protective screening levels for residential receptors would be more conservative than industrial and construction worker screening levels.
3. Generalized receptor for ecological health risk evaluation.

Plant Scherer AP-1
Conceptual Exposure Model

Figure 4

Project Number
6123201472.01

Prepared by/Date: RMB 11/02/20
Checked by/Date: NSR 11/02/20

Surface Water Sample Location
Approximate Property Boundary
Streams
Ash Pond Permit Boundary

N

0 500 1,000 2,000 Feet

Ocmulgee River

Scoggins Creek

SWC-7
SWC-6
SWC-8
SWA-3
SWA-2
SWC-5
Berry Creek
SWC-4
SWA-1

Settling (Recycling) Pond

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Document Path: G:\Project\EX\Scherer\MXDs\SW and GW Stations 3 Mile.mxd

Plant Scherer AP-1
Surface Water Sampling Locations

Prepared By-Date: JCD - 10/27/2020	wood.	Figure: 5
Checked By-Date: NSR - 10/27/2020		
Project Number: 6123201472		

Monitoring Well
Private Drinking Well
Public Drinking Well
Ash Pond Permit Boundary
Approximate Property Boundary

N

Champion Creek
White Oak Spring Branch
Briar Branch
Juliette
Little Falling Creek
Piedmont National Wildlife Refuge
Scoggins Creek
Falling Creek
PAC Ash Landfill
Ash Pond 1
Berry Creek
Gypsum Cell 1
Cell 3
Ocmulgee River
Settling (Recycling) Pond
Lake Juliette
Jones
Monroe

0 0.5 1 2 Miles

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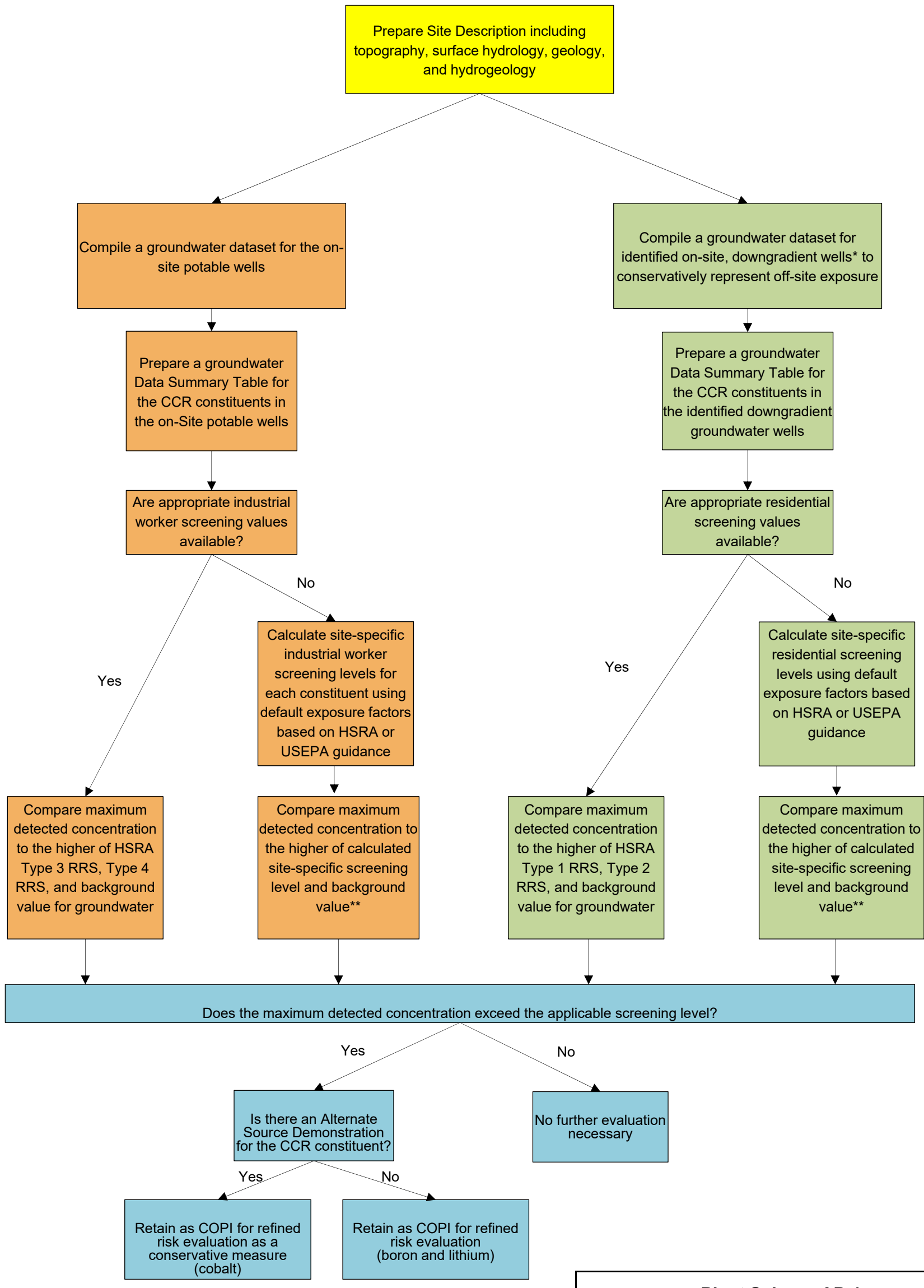
Plant Scherer AP-1
Off-site Well Survey Results

Prepared By-Date: JCD - 10/27/2020	wood.	Figure: 6
Checked By-Date: NSR - 10/27/2020		
Project Number: 6123201472		

Risk Screening Approach (Groundwater) for AP-1



* Includes the certified set of downgradient wells for AP-1 and downgradient piezometers.
** MCL used as screening level for radium.

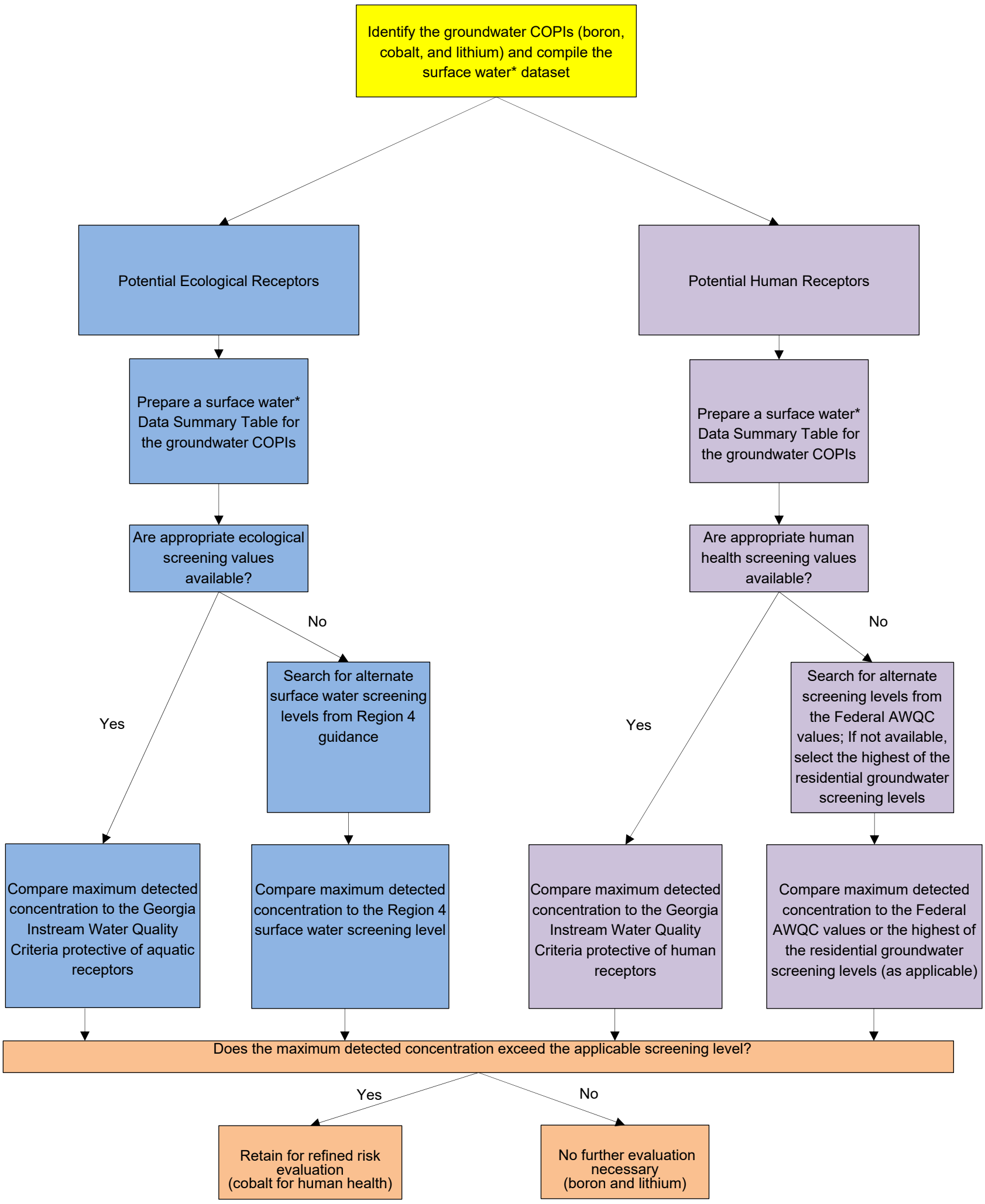
Plant Scherer AP-1
Groundwater Risk Screening Approach

Figure 7

Project Number
6123201472.01

Prepared by/Date: NSR 009/28/20
Checked by/Date: EFC 09/28/20

Risk Screening Approach (Surface Water) for AP-1



* Surface water dataset includes data collected as part of landfill surface water sampling program for Berry Creek.

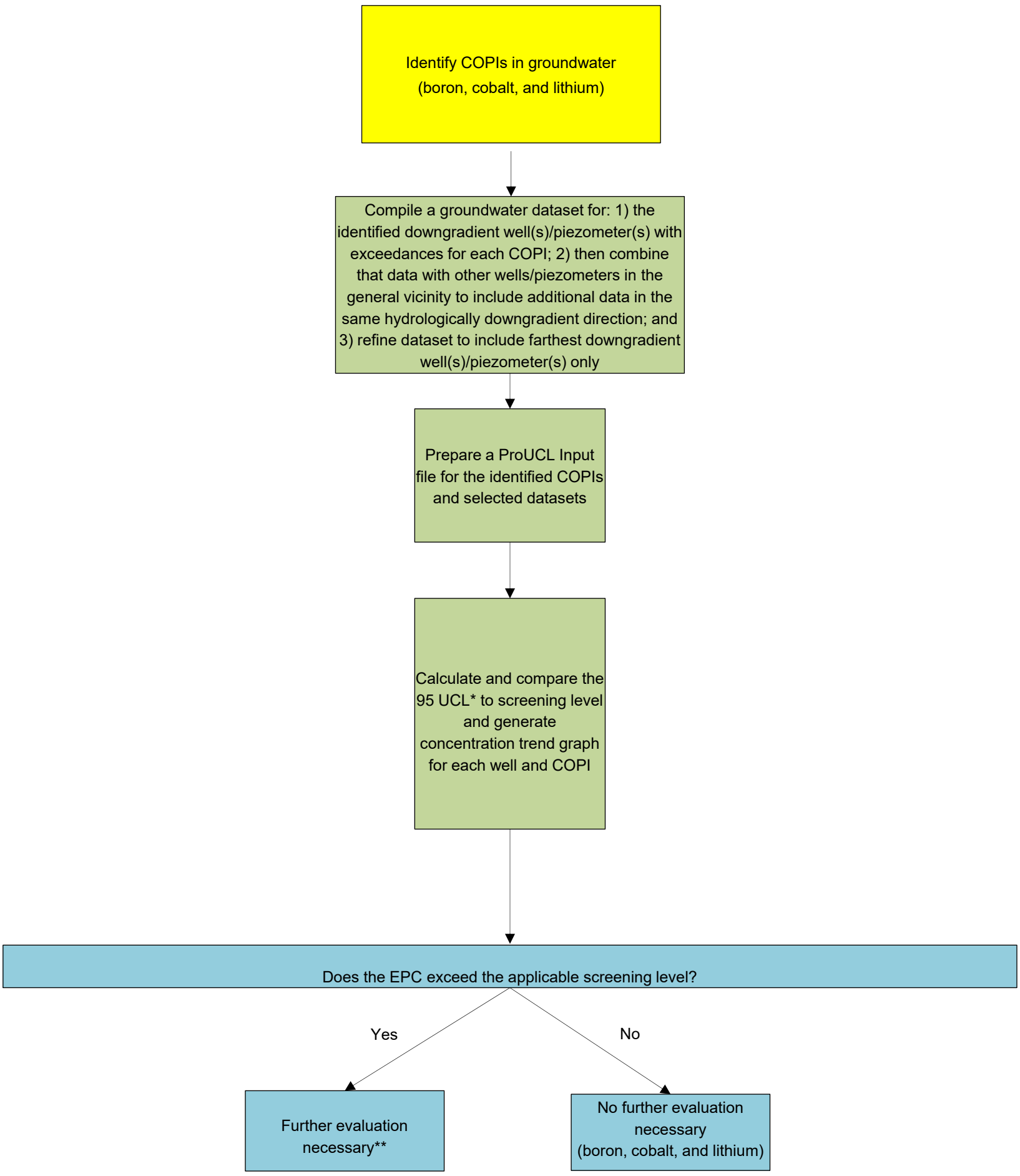
Plant Scherer AP-1
Surface Water Risk Screening Approach

Figure 8

Project Number
6123201472.01

Prepared by/Date: NSR 09/28/20
Checked by/Date: EFC 09/28/20

Approach for Refined Risk Evaluation (Groundwater) for AP-1



*Use the maximum concentration if the 95% UCL cannot be calculated because the dataset has fewer than 5 values.

** This approach was not needed for AP-1.

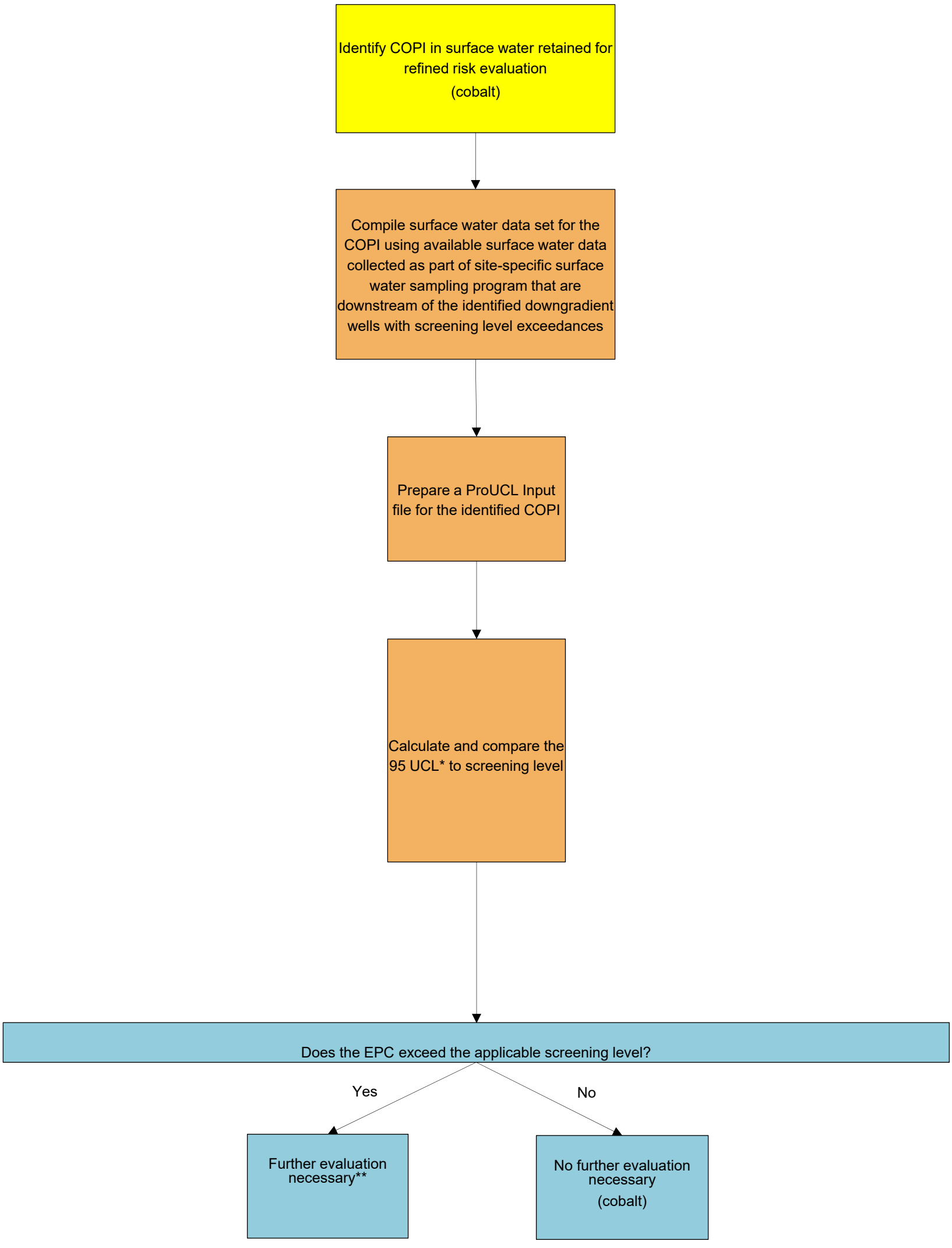
Plant Scherer AP-1
Approach for Refined Groundwater Risk Evaluation

Figure 9

Project Number
6123201472.01

Prepared by/Date: NSR 09/28/20
Checked by/Date: EFC 09/28/20

Approach for Refined Risk Evaluation (Surface Water) for AP-1



*If the 95 UCL exceeds the maximum concentration, use the maximum as the EPC. Use the maximum concentration if the 95% UCL could not be calculated because the dataset had fewer than 5 values.

** This approach was not needed for AP-1.

Plant Scherer AP-1
Approach for Refined Surface Water Risk Evaluation

Figure 10

Project Number
6123201472.01

Prepared by/Date: IMR 09/28/20
Checked by/Date: NRB 09/28/20

APPENDIX A

Plant Scherer Well Survey

Well Survey

Plant Scherer

Ash Pond 1

Juliette, GA

Prepared for

Georgia Power Company

241 Ralph McGill Blvd., Atlanta, GA 30308

Prepared by

NewFields

1349 W. Peachtree Street, Suite 2000

Atlanta, GA 30309

January 21, 2020

Introduction

Plant Scherer is located at 10986 Georgia 87 in Juliette, Georgia and is situated on the north banks of the 3,600-acre Lake Juliette.

Plant Scherer operates a Coal Combustion Residual (CCR) ash pond designated as Ash Pond 1 (AP-1). NewFields conducted a well survey of potential drinking water wells within a three-mile radius of AP-1 ("Investigated Area"). The Investigated Area is shown on Figure 1.

As part of this survey of the Investigated Area, NewFields accessed and reviewed information from a number of Federal, State, and County records and online sources, as well as a windshield survey of the investigated area. Information from each identified well was then compiled into a geographic information system (GIS) database.

Information Collection

This section summarizes the sources utilities to identify potential drinking water wells within the Investigated Area.

1. Federal Sources
    a. **United States Geological Survey (USGS).** USGS maintains an inventory database of wells sampled by a USGS-affiliated program for ground-water levels and/or water quality parameters at any time in the past.[1] Well information and coordinates were downloaded for the state of Georgia and compiled into the GIS database. Wells in this database are labelled 'human drinking water' (to distinguish them from wells for livestock, none of which are located in this area) or 'monitoring wells'. Many of the monitoring wells appear to be co-located with drinking water wells and may in fact be private drinking water wells utilized for monitoring purposes by USGS, and so were assumed to be likely drinking water wells in this survey. Some listings in this database are over 50 years old and may be inactive.

    b. **The Safe Drinking Water Information System (SDWIS).** This EPA database has listings of public water systems but does not have well location information. SDWIS information was used to help identify the suppliers of public water in the vicinity of the facility. Public water in Monroe County is provided by the Monroe County Water System and the City of Forsyth water system.

2. State Sources
    a. Georgia Environmental Protection Division (EPD)

i. **Drinking Water Branch.** EPD maintains records about municipal and industrial wells, whose presence or absence within a radius of a site can be ascertained by contacting the agency. NewFields contacted Michael Gillis of EPD on October 23rd, 2019 requesting information about wells in the Investigated Area. EPD replied that there were three systems operating wells within a three mile radius. One of the public water systems is the non-community non-transient water listed as 'active' at Plant Scherer. Another system is the one operating at Whispering Pines Mobile Home Park, which was identified during the windshield survey. The well is located approximately 1.8 miles west of Ash Pond 1 and serves a population of 26. The final public water system is a transient non-community well at the Whistle Stop Cafe, a restaurant in downtown Juliette about 1.7 miles to the northeast of Ash Pond 1. This system serves approximately 150 people.

ii. **EPD Pesticide Project.** From 2000 to 2004, EPD undertook a project to sample private drinking water wells for pesticides. EPD solicited volunteers state-wide to participate in the well sampling program. The final report includes the list of private water wells sampled, their coordinates, and depths when available.[2] Information about wells within the Investigated Area were compiled into the GIS database.

iii. **Hazardous Site Inventory (HSI).** EPD maintains files for Hazardous Site Inventory sites which are undergoing state-led corrective action. These files usually contain groundwater data and well surveys. There are no HSI sites within the Investigated Area.

iv. **Hazardous Site Response Act (HSRA) notifications.** EPD maintains non-HSI HSRA notification reports (i.e., notifications submitted after releases of reportable substances). NewFields reviewed reports associated with sites in Monroe and Jones counties were reviewed. No wells were identified in the Investigated Area.

b. **Agricultural and Environmental Services Laboratory (AESL).** The University of Georgia's AESL Laboratory tests drinking water samples submitted by private individuals to their local county extension service. Maps of these sampling results can viewed online.[3] Precise coordinates for sampling locations are not available, but NewFields was able to use online images to find approximate locations.

3. County Sources
   a. **Monroe County Health Department (DOH).** Monroe DOH maintains records of the permits for "on-site sewage management systems" (septic tanks). These permits indicate whether

[3] http://aesl.ces.uga.edu/water/map/

the permittee has private or public water supply, and often identify the exact location of the well on a map. NewFields was able to search permits older than 2016 only, due to changes in filing procedures. A large number of permits identified wells, which were geolocated based on address and added to the GIS database.

b. **Water Departments.** NewFields met with Jeff Dorough with the Monroe County Water Department as well as Barry Walker with the City of Forsyth Water Department, who both described the extent of public water infrastructure in the county. Municipal water is not available to any part of the Investigated Area.
c. Monroe County Tax Assessor's office provided tax parcel shape and improvement data in January 2019.

4. Windshield Survey
    a. A windshield survey of the Investigated Area was conducted on October 17th, 2019. During the survey a number of wells were visually identified, which were subsequently compiled into the GIS database. The majority of wells identified during the survey were near residences.

Summary

Municipal water is not available in the surveyed area. One small community water system serving 26 residents is operating a public well approximately 1.8 miles to the east from Ash Pond 1. The Whistle Stop Café restaurant in downtown Juliette 1.7 miles to the northeast from Ash Pond 1 operates a public well that is serving a transient population of around 150 people (i.e., the population changes and the system is not regularly serving the same people). There is also a non-community non-transient public drinking water well at Plant Scherer.

In addition to identifying specific wells from the above listed sources, NewFields used a combination of parcel data and information about the presence and age of public water infrastructure to identify parcels that are likely to be using well water as their drinking water source. Many of these parcels may be sharing wells, so a well might not exist for each identified parcel.

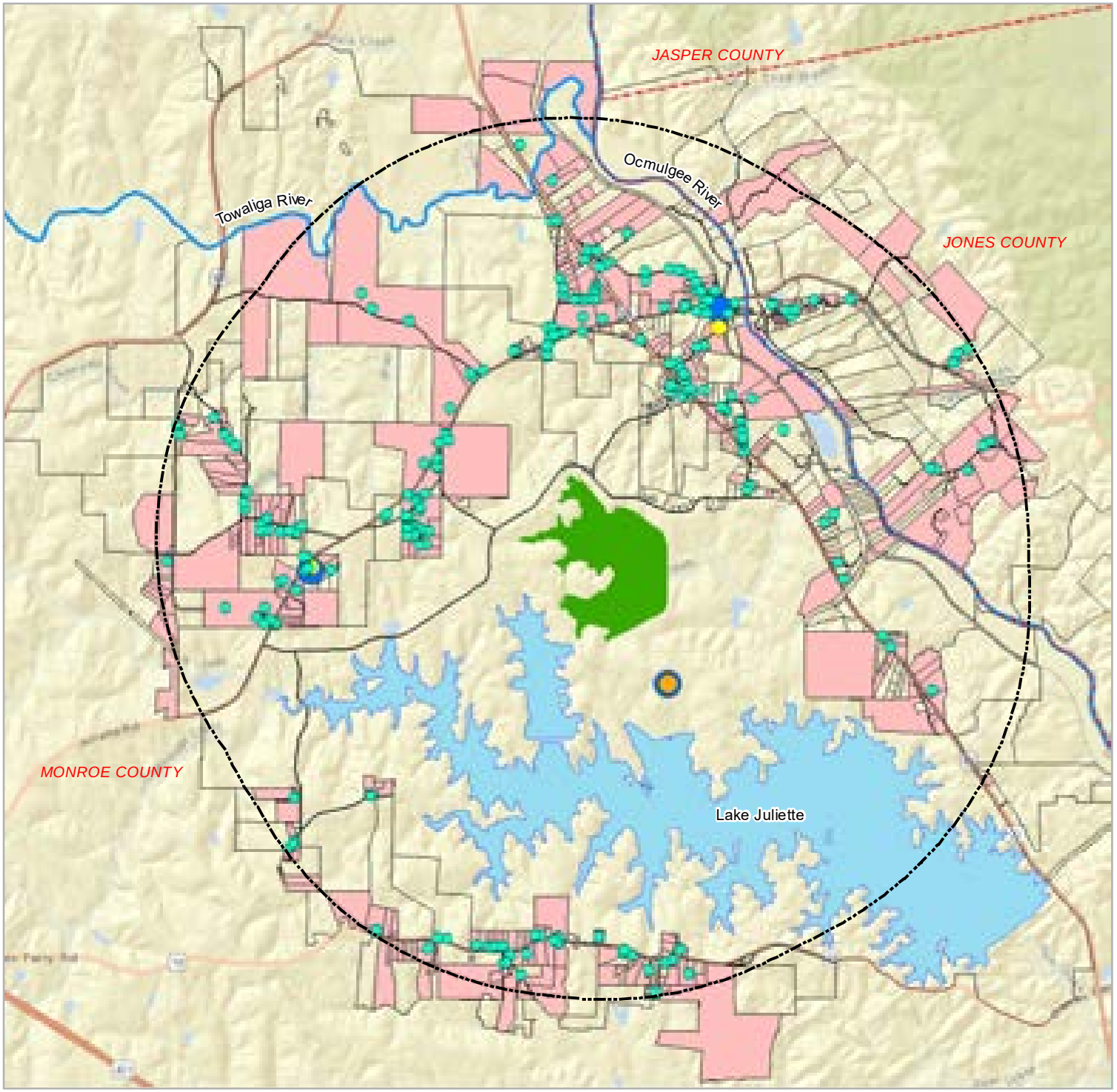
Since no municipal water is available in the Investigated Area, NewFields assumed that any improved parcels (i.e., parcels containing structures) were associated with a well. NewFields used parcel data to identify improved parcels within Monroe County, as these parcels are likely to be associated with a well. Improvement data was not available in Jones County, which is located on the other side of the Ocmulgee River, so wells in the Jones County portion of the Investigated Area could not be identified solely by parcel data.

Combining well data from all sources with parcel data, NewFields identified 475 total parcels likely to be associated with private well within the Investigated Area. This includes wells that were labelled 'monitoring wells' in the USGS database. Wells may or may not be active. Of these, 429 parcels were identified using parcel data. Eighty wells were identified using septic tank permits. Seventy-three (73) wells were seen during the windshield surveys. Five wells were identified using USGS sources, two from

the EPD's Pesticide Sampling Project, and 61 from UGA's Cooperative Extension Sampling program. Many wells were identified by multiple sources.[4]

Figure 1 shows points for identified wells, and shades parcels that were identified from parcel data as likely to contain drinking water wells within the Investigated Area. When viewed as a PDF file, the figure is interactive, and wells identified using different sources can be turned on and off.

[4] Septic records and the AESL Laboratory testing results indicated several wells on formerly residential property that now belongs to Georgia Power. These wells were assumed to have been taken out of service and omitted. USGS monitoring wells located on Georgia Power property were also considered not to be drinking water wells and omitted.



N
W E
S

Private Well
Monitoring Well
Industrial Well
Public Drinking Water Well
Parcels identified as likely containing a well
Ash Pond 1
3-Mile Radius
Parcels
Rivers
Lakes & Ponds
County Border

0 2,875 5,750 11,500
Feet

Title	Plant Scherer – Ash Pond
Project	GPC Plants Georgia
NewFields	Two Midtown Plaza 1349 W. Peachtree St, #2000 Atlanta, Georgia 30309 Tel: 404-347-9050
Date	02/04/2020
Rev. No.	00
MXD	GPC_SCHERER_01
Figure No.	01

APPENDIX B
Data Used in Risk Evaluation

Appendix B-1

Potable Well Data

Appendix B-1
Scherer Risk Evaluation Report
Risk Assessment Data Set - Potable Well Data
Scherer AP-1
Plant Scherer, Juliette, GA

Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
CW-1	11/12/2015	7440-36-0	Antimony	mg/L		ND	n/a	0.003
CW-1	11/12/2015	7440-38-2	Arsenic	mg/L		ND	n/a	0.005
CW-1	11/12/2015	7440-39-3	Barium	mg/L		ND	n/a	0.05
CW-1	11/12/2015	7440-41-7	Beryllium	mg/L		ND	n/a	0.002
CW-1	11/12/2015	7440-43-9	Cadmium	mg/L		ND	n/a	0.0025
CW-1	11/12/2015	7440-47-3	Chromium	mg/L		ND	n/a	0.025
CW-1	11/12/2015	16984-48-8	Fluoride	mg/L		ND	n/a	0.2
CW-1	11/12/2015	7439-97-6	Mercury	mg/L		ND	n/a	0.0002
CW-1	11/12/2015	7782-49-2	Selenium	mg/L		ND	n/a	0.025
CW-1	11/12/2015	7440-28-0	Thallium	mg/L		ND	n/a	0.001
CW-1	6/7/2016	7440-42-8	Boron	mg/L		ND	n/a	0.05
CW-1	12/27/2018	7440-36-0	Antimony	mg/L		ND	n/a	0.003
CW-1	12/27/2018	7440-38-2	Arsenic	mg/L		ND	n/a	0.005
CW-1	12/27/2018	7440-39-3	Barium	mg/L		ND	n/a	0.05
CW-1	12/27/2018	7440-41-7	Beryllium	mg/L		ND	n/a	0.002
CW-1	12/27/2018	7440-43-9	Cadmium	mg/L		ND	n/a	0.0025
CW-1	12/27/2018	7440-47-3	Chromium	mg/L		ND	n/a	0.025
CW-1	12/27/2018	16984-48-8	Fluoride	mg/L		ND	n/a	0.2
CW-1	12/27/2018	7439-97-6	Mercury	mg/L		ND	n/a	0.0002
CW-1	12/27/2018	7782-49-2	Selenium	mg/L		ND	n/a	0.025
CW-1	12/27/2018	7440-28-0	Thallium	mg/L		ND	n/a	0.001
CW-1	1/30/2020	7440-36-0	Antimony	mg/L		ND	n/a	0.001
CW-1	1/30/2020	7440-38-2	Arsenic	mg/L		ND	n/a	0.001
CW-1	1/30/2020	7440-39-3	Barium	mg/L		ND	n/a	0.01
CW-1	1/30/2020	7440-41-7	Beryllium	mg/L		ND	n/a	0.0001
CW-1	1/30/2020	7440-42-8	Boron	mg/L		ND	n/a	0.05
CW-1	1/30/2020	7440-43-9	Cadmium	mg/L		ND	n/a	0.0002
CW-1	1/30/2020	7440-47-3	Chromium	mg/L		ND	n/a	0.001
CW-1	1/30/2020	7440-48-4	Cobalt	mg/L		ND	n/a	0.001
CW-1	1/30/2020	7440-14-4	Combined Radium 226 + 228	pCi/L	0.0572		n/a	n/a
CW-1	1/30/2020	16984-48-8	Fluoride	mg/L	0.17		n/a	0.05
CW-1	1/30/2020	7439-92-1	Lead	mg/L		ND	n/a	0.001
CW-1	1/30/2020	7439-93-2	Lithium	mg/L		ND	0.15	0.5
CW-1	1/30/2020	7439-97-6	Mercury	mg/L		ND	n/a	0.0002
CW-1	1/30/2020	7439-98-7	Molybdenum	mg/L	0.0017		n/a	0.001
CW-1	1/30/2020	7782-49-2	Selenium	mg/L		ND	n/a	0.001
CW-1	1/30/2020	7440-28-0	Thallium	mg/L		ND	n/a	0.001
CW-3	4/7/2016	7440-36-0	Antimony	mg/L		ND	n/a	0.003
CW-3	4/7/2016	7440-38-2	Arsenic	mg/L		ND	n/a	0.005
CW-3	4/7/2016	7440-39-3	Barium	mg/L	0.076		n/a	0.05
CW-3	4/7/2016	7440-41-7	Beryllium	mg/L		ND	n/a	0.002
CW-3	4/7/2016	7440-43-9	Cadmium	mg/L		ND	n/a	0.0025
CW-3	4/7/2016	7440-47-3	Chromium	mg/L		ND	n/a	0.025
CW-3	4/7/2016	16984-48-8	Fluoride	mg/L		ND	n/a	0.2
CW-3	4/7/2016	7439-97-6	Mercury	mg/L		ND	n/a	0.0002
CW-3	4/7/2016	7782-49-2	Selenium	mg/L		ND	n/a	0.025
CW-3	4/7/2016	7440-28-0	Thallium	mg/L		ND	n/a	0.001
CW-3	1/30/2020	7440-36-0	Antimony	mg/L		ND	n/a	0.001

Appendix B-1
Scherer Risk Evaluation Report
Risk Assessment Data Set - Potable Well Data
Scherer AP-1
Plant Scherer, Juliette, GA

Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
CW-3	1/30/2020	7440-38-2	Arsenic	mg/L		ND	n/a	0.001
CW-3	1/30/2020	7440-39-3	Barium	mg/L	0.071		n/a	0.01
CW-3	1/30/2020	7440-41-7	Beryllium	mg/L		ND	n/a	0.0001
CW-3	1/30/2020	7440-42-8	Boron	mg/L	0.48		n/a	0.05
CW-3	1/30/2020	7440-43-9	Cadmium	mg/L		ND	n/a	0.0002
CW-3	1/30/2020	7440-47-3	Chromium	mg/L	0.0075		n/a	0.001
CW-3	1/30/2020	7440-48-4	Cobalt	mg/L		ND	n/a	0.001
CW-3	1/30/2020	7440-14-4	Combined Radium 226 + 228	pCi/L	0.829		n/a	n/a
CW-3	1/30/2020	16984-48-8	Fluoride	mg/L	0.06		n/a	0.05
CW-3	1/30/2020	7439-92-1	Lead	mg/L		ND	n/a	0.001
CW-3	1/30/2020	7439-93-2	Lithium	mg/L		ND	0.15	0.5
CW-3	1/30/2020	7439-97-6	Mercury	mg/L		ND	n/a	0.0002
CW-3	1/30/2020	7439-98-7	Molybdenum	mg/L		ND	n/a	0.001
CW-3	1/30/2020	7782-49-2	Selenium	mg/L	0.0036		n/a	0.001
CW-3	1/30/2020	7440-28-0	Thallium	mg/L		ND	n/a	0.001
on-site tap	7/7/2015	7439-92-1	Lead	mg/L		ND	n/a	0.001
on-site tap	7/7/2015	7439-92-1	Lead	mg/L	0.003		n/a	0.001
on-site tap	7/7/2015	7439-92-1	Lead	mg/L	0.0033		n/a	0.001
on-site tap	7/7/2015	7439-92-1	Lead	mg/L		ND	n/a	0.001
on-site tap	7/7/2015	7439-92-1	Lead	mg/L	0.0032		n/a	0.001
on-site tap	10/10/2018	7439-92-1	Lead	mg/L		ND	n/a	0.001
on-site tap	10/10/2018	7439-92-1	Lead	mg/L		ND	n/a	0.001
on-site tap	10/10/2018	7439-92-1	Lead	mg/L		ND	n/a	0.001
on-site tap	10/10/2018	7439-92-1	Lead	mg/L		ND	n/a	0.001
on-site tap	10/10/2018	7439-92-1	Lead	mg/L		ND	n/a	0.001
PW-2	4/7/2016	7440-36-0	Antimony	mg/L		ND	n/a	0.003
PW-2	4/7/2016	7440-38-2	Arsenic	mg/L		ND	n/a	0.005
PW-2	4/7/2016	7440-39-3	Barium	mg/L		ND	n/a	0.05
PW-2	4/7/2016	7440-41-7	Beryllium	mg/L		ND	n/a	0.002
PW-2	4/7/2016	7440-43-9	Cadmium	mg/L		ND	n/a	0.0025
PW-2	4/7/2016	7440-47-3	Chromium	mg/L		ND	n/a	0.025
PW-2	4/7/2016	16984-48-8	Fluoride	mg/L		ND	n/a	0.2
PW-2	4/7/2016	7439-97-6	Mercury	mg/L		ND	n/a	0.0002
PW-2	4/7/2016	7782-49-2	Selenium	mg/L		ND	n/a	0.025
PW-2	4/7/2016	7440-28-0	Thallium	mg/L		ND	n/a	0.001
PW-2	1/30/2020	7440-36-0	Antimony	mg/L		ND	n/a	0.001
PW-2	1/30/2020	7440-38-2	Arsenic	mg/L		ND	n/a	0.001
PW-2	1/30/2020	7440-39-3	Barium	mg/L	0.018		n/a	0.01
PW-2	1/30/2020	7440-41-7	Beryllium	mg/L		ND	n/a	0.0001
PW-2	1/30/2020	7440-42-8	Boron	mg/L		ND	n/a	0.05
PW-2	1/30/2020	7440-43-9	Cadmium	mg/L		ND	n/a	0.0002
PW-2	1/30/2020	7440-47-3	Chromium	mg/L	0.0023		n/a	0.001
PW-2	1/30/2020	7440-48-4	Cobalt	mg/L		ND	n/a	0.001
PW-2	1/30/2020	7440-14-4	Combined Radium 226 + 228	pCi/L	0.357		n/a	n/a
PW-2	1/30/2020	16984-48-8	Fluoride	mg/L	0.083		n/a	0.05
PW-2	1/30/2020	7439-92-1	Lead	mg/L		ND	n/a	0.001
PW-2	1/30/2020	7439-93-2	Lithium	mg/L		ND	0.15	0.5
PW-2	1/30/2020	7439-97-6	Mercury	mg/L		ND	n/a	0.0002

Appendix B-1
Scherer Risk Evaluation Report
Risk Assessment Data Set - Potable Well Data
Scherer AP-1
Plant Scherer, Juliette, GA

Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
PW-2	1/30/2020	7439-98-7	Molybdenum	mg/L		ND	n/a	0.001
PW-2	1/30/2020	7782-49-2	Selenium	mg/L		ND	n/a	0.001
PW-2	1/30/2020	7440-28-0	Thallium	mg/L		ND	n/a	0.001
PW-5	1/30/2020	7440-36-0	Antimony	mg/L		ND	n/a	0.001
PW-5	1/30/2020	7440-38-2	Arsenic	mg/L		ND	n/a	0.001
PW-5	1/30/2020	7440-39-3	Barium	mg/L	0.017		n/a	0.01
PW-5	1/30/2020	7440-41-7	Beryllium	mg/L		ND	n/a	0.0001
PW-5	1/30/2020	7440-42-8	Boron	mg/L		ND	n/a	0.05
PW-5	1/30/2020	7440-43-9	Cadmium	mg/L		ND	n/a	0.0002
PW-5	1/30/2020	7440-47-3	Chromium	mg/L	0.0023		n/a	0.001
PW-5	1/30/2020	7440-48-4	Cobalt	mg/L		ND	n/a	0.001
PW-5	1/30/2020	7440-14-4	Combined Radium 226 + 228	pCi/L	0.405		n/a	n/a
PW-5	1/30/2020	16984-48-8	Fluoride	mg/L	0.082		n/a	0.05
PW-5	1/30/2020	7439-92-1	Lead	mg/L		ND	n/a	0.001
PW-5	1/30/2020	7439-93-2	Lithium	mg/L		ND	0.15	0.5
PW-5	1/30/2020	7439-97-6	Mercury	mg/L		ND	n/a	0.0002
PW-5	1/30/2020	7439-98-7	Molybdenum	mg/L		ND	n/a	0.001
PW-5	1/30/2020	7782-49-2	Selenium	mg/L		ND	n/a	0.001
PW-5	1/30/2020	7440-28-0	Thallium	mg/L		ND	n/a	0.001

Notes:
mg/L = milligrams per liter
ND = not detected
MDL = method detection limit
PQL = practical quantitation limit
CAS = Chemical Abstract Service
pCi/L = picocuries per Liter

Prepared by/Date: LO 04/06/20
Checked by/Date: RMB 04/06/20

Appendix B-2

Downgradient Groundwater Data

Appendix B-2
Scherer Risk Evaluation Report
Data Used in Risk Evaluation - Downgradient Groundwater Data (2016-2019)
Scherer AP-1
Plant Scherer, Juliette, GA

Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
PZ-11S	1/10/2019	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
PZ-11S	1/10/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
PZ-11S	1/10/2019	7440-39-3	Barium	mg/L	0.11		0.00037	0.01
PZ-11S	1/10/2019	7440-41-7	Beryllium	mg/L		ND	0.000057	0.001
PZ-11S	1/10/2019	7440-42-8	Boron	mg/L	0.1		0.03	0.08
PZ-11S	1/10/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.001
PZ-11S	1/10/2019	7440-47-3	Chromium	mg/L		ND	0.00063	0.002
PZ-11S	1/10/2019	7440-48-4	Cobalt	mg/L		ND	0.000075	0.0005
PZ-11S	1/10/2019	16984-48-8	Fluoride	mg/L	0.13		0.026	0.1
PZ-11S	1/10/2019	7439-92-1	Lead	mg/L		ND	0.000094	0.001
PZ-11S	1/10/2019	7439-93-2	Lithium	mg/L		ND	0.0026	0.005
PZ-11S	1/10/2019	7439-97-6	Mercury	mg/L		ND	0.000065	0.0002
PZ-11S	1/10/2019	7439-98-7	Molybdenum	mg/L		ND	0.00047	0.005
PZ-11S	1/10/2019	7782-49-2	Selenium	mg/L		ND	0.00081	0.005
PZ-11S	1/10/2019	7440-28-0	Thallium	mg/L		ND	0.000063	0.001
PZ-12S	1/10/2019	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
PZ-12S	1/10/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
PZ-12S	1/10/2019	7440-39-3	Barium	mg/L	0.098		0.00037	0.01
PZ-12S	1/10/2019	7440-41-7	Beryllium	mg/L		ND	0.000057	0.001
PZ-12S	1/10/2019	7440-42-8	Boron	mg/L	1.3		0.03	0.08
PZ-12S	1/10/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.001
PZ-12S	1/10/2019	7440-47-3	Chromium	mg/L		ND	0.00063	0.002
PZ-12S	1/10/2019	7440-48-4	Cobalt	mg/L		ND	0.000075	0.0005
PZ-12S	1/10/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.1
PZ-12S	1/10/2019	7439-92-1	Lead	mg/L		ND	0.000094	0.001
PZ-12S	1/10/2019	7439-93-2	Lithium	mg/L		ND	0.0026	0.005
PZ-12S	1/10/2019	7439-97-6	Mercury	mg/L		ND	0.000065	0.0002
PZ-12S	1/10/2019	7439-98-7	Molybdenum	mg/L		ND	0.00047	0.005
PZ-12S	1/10/2019	7782-49-2	Selenium	mg/L		ND	0.00081	0.005
PZ-12S	1/10/2019	7440-28-0	Thallium	mg/L		ND	0.000063	0.001
PZ-14I	1/10/2019	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
PZ-14I	1/10/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
PZ-14I	1/10/2019	7440-39-3	Barium	mg/L	0.046		0.00037	0.01
PZ-14I	1/10/2019	7440-41-7	Beryllium	mg/L		ND	0.000057	0.001
PZ-14I	1/10/2019	7440-42-8	Boron	mg/L		ND	0.03	0.08
PZ-14I	1/10/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.001
PZ-14I	1/10/2019	7440-47-3	Chromium	mg/L	0.003		0.00063	0.002
PZ-14I	1/10/2019	7440-48-4	Cobalt	mg/L		ND	0.000075	0.0005
PZ-14I	1/10/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.1
PZ-14I	1/10/2019	7439-92-1	Lead	mg/L		ND	0.000094	0.001
PZ-14I	1/10/2019	7439-93-2	Lithium	mg/L		ND	0.0026	0.005
PZ-14I	1/10/2019	7439-97-6	Mercury	mg/L		ND	0.000065	0.0002
PZ-14I	1/10/2019	7439-98-7	Molybdenum	mg/L		ND	0.00047	0.005
PZ-14I	1/10/2019	7782-49-2	Selenium	mg/L		ND	0.00081	0.005
PZ-14I	1/10/2019	7440-28-0	Thallium	mg/L		ND	0.000063	0.001
PZ-14I	3/2/2020	7439-93-2	Lithium	mg/L		ND	0.0034	0.005
PZ-14S	1/10/2019	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
PZ-14S	1/10/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
PZ-14S	1/10/2019	7440-39-3	Barium	mg/L	0.032		0.00037	0.01
PZ-14S	1/10/2019	7440-41-7	Beryllium	mg/L		ND	0.000057	0.001
PZ-14S	1/10/2019	7440-42-8	Boron	mg/L		ND	0.03	0.08
PZ-14S	1/10/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.001
PZ-14S	1/10/2019	7440-47-3	Chromium	mg/L	0.0029		0.00063	0.002
PZ-14S	1/10/2019	7440-48-4	Cobalt	mg/L		ND	0.000075	0.0005
PZ-14S	1/10/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.1
PZ-14S	1/10/2019	7439-92-1	Lead	mg/L		ND	0.000094	0.001

Appendix B-2
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
PZ-14S	1/10/2019	7439-93-2	Lithium	mg/L		ND	0.0026	0.005
PZ-14S	1/10/2019	7439-97-6	Mercury	mg/L		ND	0.000065	0.0002
PZ-14S	1/10/2019	7439-98-7	Molybdenum	mg/L		ND	0.00047	0.005
PZ-14S	1/10/2019	7782-49-2	Selenium	mg/L		ND	0.00081	0.005
PZ-14S	1/10/2019	7440-28-0	Thallium	mg/L		ND	0.000063	0.001
PZ-17I	10/18/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
PZ-17I	10/18/2018	7440-39-3	Barium	mg/L	0.055		0.00049	0.0025
PZ-17I	10/18/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
PZ-17I	10/18/2018	7440-42-8	Boron	mg/L	0.067		0.021	0.05
PZ-17I	10/18/2018	7440-47-3	Chromium	mg/L	0.0049		0.0011	0.0025
PZ-17I	10/18/2018	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
PZ-17I	10/18/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.882		0.725	5
PZ-17I	10/18/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
PZ-17I	10/18/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
PZ-17I	10/18/2018	7439-93-2	Lithium	mg/L	0.0017	J	0.0011	0.005
PZ-17I	10/18/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
PZ-17I	10/18/2018	7782-49-2	Selenium	mg/L	0.00047	J	0.00024	0.0013
PZ-17I	10/18/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
PZ-25I	10/17/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
PZ-25I	10/17/2018	7440-39-3	Barium	mg/L	0.07		0.00049	0.0025
PZ-25I	10/17/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
PZ-25I	10/17/2018	7440-42-8	Boron	mg/L		ND	0.021	0.05
PZ-25I	10/17/2018	7440-47-3	Chromium	mg/L	0.0041		0.0011	0.0025
PZ-25I	10/17/2018	7440-48-4	Cobalt	mg/L	0.0073		0.0004	0.0025
PZ-25I	10/17/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.989	U	1.07	5
PZ-25I	10/17/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
PZ-25I	10/17/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
PZ-25I	10/17/2018	7439-93-2	Lithium	mg/L	0.0037	J	0.0011	0.005
PZ-25I	10/17/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
PZ-25I	10/17/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
PZ-25I	10/17/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
PZ-25I	2/11/2020	7439-93-2	Lithium	mg/L	0.0038	J	0.0034	0.0050
PZ-25S	10/16/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
PZ-25S	10/16/2018	7440-39-3	Barium	mg/L	0.022		0.00049	0.0025
PZ-25S	10/16/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
PZ-25S	10/16/2018	7440-42-8	Boron	mg/L		ND	0.021	0.05
PZ-25S	10/16/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
PZ-25S	10/16/2018	7440-48-4	Cobalt	mg/L	0.026		0.0004	0.0025
PZ-25S	10/16/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.64		0.463	5
PZ-25S	10/16/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
PZ-25S	10/16/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
PZ-25S	10/16/2018	7439-93-2	Lithium	mg/L	0.0068		0.0011	0.005
PZ-25S	10/16/2018	7439-97-6	Mercury	mg/L	0.000086	J	0.00007	0.0002
PZ-25S	10/16/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
PZ-25S	10/16/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
PZ-26S	1/8/2019	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
PZ-26S	1/8/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
PZ-26S	1/8/2019	7440-39-3	Barium	mg/L	0.052		0.00037	0.0025
PZ-26S	1/8/2019	7440-41-7	Beryllium	mg/L		ND	0.000057	0.0025
PZ-26S	1/8/2019	7440-42-8	Boron	mg/L		ND	0.03	0.05
PZ-26S	1/8/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
PZ-26S	1/8/2019	7440-47-3	Chromium	mg/L		ND	0.00063	0.0025
PZ-26S	1/8/2019	7440-48-4	Cobalt	mg/L		ND	0.000075	0.0025
PZ-26S	1/8/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.422		0.321	5
PZ-26S	1/8/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.2
PZ-26S	1/8/2019	7439-92-1	Lead	mg/L		ND	0.000094	0.001

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
PZ-26S	1/8/2019	7439-93-2	Lithium	mg/L	0.0029		0.002	0.0026
PZ-26S	1/8/2019	7439-97-6	Mercury	mg/L		ND	0.000065	0.0002
PZ-26S	1/8/2019	7439-98-7	Molybdenum	mg/L		ND	0.00047	0.015
PZ-26S	1/8/2019	7782-49-2	Selenium	mg/L		ND	0.00081	0.0013
PZ-26S	1/8/2019	7440-28-0	Thallium	mg/L		ND	0.000063	0.0005
PZ-27S	6/7/2016	7440-42-8	Boron	mg/L	0.153		0.0044	0.1
PZ-27S	6/10/2016	7440-42-8	Boron	mg/L	0.169		0.0044	0.1
PZ-28	6/7/2016	7440-42-8	Boron	mg/L	0.323		0.0044	0.1
PZ-28	6/10/2016	7440-42-8	Boron	mg/L	0.337		0.0044	0.1
PZ-29	6/7/2016	7440-42-8	Boron	mg/L		ND	0.0044	0.1
PZ-29S	1/8/2019	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
PZ-29S	1/8/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
PZ-29S	1/8/2019	7440-39-3	Barium	mg/L	0.021		0.00037	0.0025
PZ-29S	1/8/2019	7440-41-7	Beryllium	mg/L		ND	0.000057	0.0025
PZ-29S	1/8/2019	7440-42-8	Boron	mg/L		ND	0.03	0.05
PZ-29S	1/8/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
PZ-29S	1/8/2019	7440-47-3	Chromium	mg/L		ND	0.00063	0.0025
PZ-29S	1/8/2019	7440-48-4	Cobalt	mg/L		ND	0.000075	0.0025
PZ-29S	1/8/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.158	U	0.322	5
PZ-29S	1/8/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.2
PZ-29S	1/8/2019	7439-92-1	Lead	mg/L		ND	0.000094	0.001
PZ-29S	1/8/2019	7439-93-2	Lithium	mg/L		ND	0.002	0.0026
PZ-29S	1/8/2019	7439-97-6	Mercury	mg/L		ND	0.000065	0.0002
PZ-29S	1/8/2019	7439-98-7	Molybdenum	mg/L		ND	0.00047	0.015
PZ-29S	1/8/2019	7782-49-2	Selenium	mg/L		ND	0.00081	0.0013
PZ-29S	1/8/2019	7440-28-0	Thallium	mg/L		ND	0.000063	0.0005
PZ-30	6/7/2016	7440-42-8	Boron	mg/L		ND	0.0044	0.1
PZ-30S	1/3/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.786	U		5
PZ-30S	1/3/2019	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
PZ-30S	1/3/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
PZ-30S	1/3/2019	7440-39-3	Barium	mg/L	0.062		0.00037	0.0025
PZ-30S	1/3/2019	7440-41-7	Beryllium	mg/L		ND	0.000057	0.0025
PZ-30S	1/3/2019	7440-42-8	Boron	mg/L		ND	0.03	0.05
PZ-30S	1/3/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
PZ-30S	1/3/2019	7440-47-3	Chromium	mg/L	0.0072		0.00063	0.0025
PZ-30S	1/3/2019	7440-48-4	Cobalt	mg/L		ND	0.000075	0.0025
PZ-30S	1/3/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.2
PZ-30S	1/3/2019	7439-92-1	Lead	mg/L		ND	0.000094	0.001
PZ-30S	1/3/2019	7439-93-2	Lithium	mg/L		ND	0.002	0.0026
PZ-30S	1/3/2019	7439-97-6	Mercury	mg/L		ND	0.000065	0.0002
PZ-30S	1/3/2019	7439-98-7	Molybdenum	mg/L		ND	0.00047	0.015
PZ-30S	1/3/2019	7782-49-2	Selenium	mg/L		ND	0.00081	0.0013
PZ-30S	1/3/2019	7440-28-0	Thallium	mg/L		ND	0.000063	0.0005
PZ-31	6/7/2016	7440-42-8	Boron	mg/L		ND	0.0044	0.1
PZ-31I	1/10/2019	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
PZ-31I	1/10/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
PZ-31I	1/10/2019	7440-39-3	Barium	mg/L	0.069		0.00037	0.01
PZ-31I	1/10/2019	7440-41-7	Beryllium	mg/L		ND	0.000057	0.001
PZ-31I	1/10/2019	7440-42-8	Boron	mg/L		ND	0.03	0.08
PZ-31I	1/10/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.001
PZ-31I	1/10/2019	7440-47-3	Chromium	mg/L	0.016		0.00063	0.002
PZ-31I	1/10/2019	7440-48-4	Cobalt	mg/L	0.0013		0.000075	0.0005
PZ-31I	1/10/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.1
PZ-31I	1/10/2019	7439-92-1	Lead	mg/L		ND	0.000094	0.001
PZ-31I	1/10/2019	7439-93-2	Lithium	mg/L		ND	0.0026	0.005
PZ-31I	1/10/2019	7439-97-6	Mercury	mg/L		ND	0.000065	0.0002

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
PZ-31I	1/10/2019	7439-98-7	Molybdenum	mg/L		ND	0.00047	0.005
PZ-31I	1/10/2019	7782-49-2	Selenium	mg/L		ND	0.00081	0.005
PZ-31I	1/10/2019	7440-28-0	Thallium	mg/L		ND	0.000063	0.001
PZ-32S	6/7/2016	7440-42-8	Boron	mg/L		ND	0.0044	0.1
PZ-32S	1/3/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.00235	U		5
PZ-32S	1/3/2019	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
PZ-32S	1/3/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
PZ-32S	1/3/2019	7440-39-3	Barium	mg/L	0.023		0.00037	0.0025
PZ-32S	1/3/2019	7440-41-7	Beryllium	mg/L		ND	0.000057	0.0025
PZ-32S	1/3/2019	7440-42-8	Boron	mg/L		ND	0.03	0.05
PZ-32S	1/3/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
PZ-32S	1/3/2019	7440-47-3	Chromium	mg/L		ND	0.00063	0.0025
PZ-32S	1/3/2019	7440-48-4	Cobalt	mg/L		ND	0.000075	0.0025
PZ-32S	1/3/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.2
PZ-32S	1/3/2019	7439-92-1	Lead	mg/L		ND	0.000094	0.001
PZ-32S	1/3/2019	7439-93-2	Lithium	mg/L		ND	0.002	0.0026
PZ-32S	1/3/2019	7439-97-6	Mercury	mg/L		ND	0.000065	0.0002
PZ-32S	1/3/2019	7439-98-7	Molybdenum	mg/L		ND	0.00047	0.015
PZ-32S	1/3/2019	7782-49-2	Selenium	mg/L		ND	0.00081	0.0013
PZ-32S	1/3/2019	7440-28-0	Thallium	mg/L		ND	0.000063	0.0005
PZ-35I	1/2/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.812	U		5
PZ-35I	1/2/2019	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
PZ-35I	1/2/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
PZ-35I	1/2/2019	7440-39-3	Barium	mg/L	0.11		0.00037	0.0025
PZ-35I	1/2/2019	7440-41-7	Beryllium	mg/L		ND	0.000057	0.0025
PZ-35I	1/2/2019	7440-42-8	Boron	mg/L	0.2		0.03	0.05
PZ-35I	1/2/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
PZ-35I	1/2/2019	7440-47-3	Chromium	mg/L		ND	0.00063	0.0025
PZ-35I	1/2/2019	7440-48-4	Cobalt	mg/L		ND	0.000075	0.0025
PZ-35I	1/2/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.2
PZ-35I	1/2/2019	7439-92-1	Lead	mg/L		ND	0.000094	0.001
PZ-35I	1/2/2019	7439-93-2	Lithium	mg/L	0.0033		0.002	0.0026
PZ-35I	1/2/2019	7439-97-6	Mercury	mg/L		ND	0.000065	0.0002
PZ-35I	1/2/2019	7439-98-7	Molybdenum	mg/L		ND	0.00047	0.015
PZ-35I	1/2/2019	7782-49-2	Selenium	mg/L		ND	0.00081	0.0013
PZ-35I	1/2/2019	7440-28-0	Thallium	mg/L		ND	0.000063	0.0005
PZ-36S	10/17/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
PZ-36S	10/17/2018	7440-39-3	Barium	mg/L	0.03		0.00049	0.0025
PZ-36S	10/17/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
PZ-36S	10/17/2018	7440-42-8	Boron	mg/L	0.15		0.021	0.05
PZ-36S	10/17/2018	7440-47-3	Chromium	mg/L	0.0011	J	0.0011	0.0025
PZ-36S	10/17/2018	7440-48-4	Cobalt	mg/L	0.0021	J	0.0004	0.0025
PZ-36S	10/17/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.648		0.455	5
PZ-36S	10/17/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
PZ-36S	10/17/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
PZ-36S	10/17/2018	7439-93-2	Lithium	mg/L	0.0019	J	0.0011	0.005
PZ-36S	10/17/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
PZ-36S	10/17/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
PZ-36S	10/17/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
PZ-37S	1/3/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	1.03	U		5
PZ-37S	1/3/2019	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
PZ-37S	1/3/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
PZ-37S	1/3/2019	7440-39-3	Barium	mg/L	0.052		0.00037	0.0025
PZ-37S	1/3/2019	7440-41-7	Beryllium	mg/L		ND	0.000057	0.0025
PZ-37S	1/3/2019	7440-42-8	Boron	mg/L		ND	0.03	0.05
PZ-37S	1/3/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025

Appendix B-2
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
PZ-37S	1/3/2019	7440-47-3	Chromium	mg/L		ND	0.00063	0.0025
PZ-37S	1/3/2019	7440-48-4	Cobalt	mg/L		ND	0.000075	0.0025
PZ-37S	1/3/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.2
PZ-37S	1/3/2019	7439-92-1	Lead	mg/L		ND	0.000094	0.001
PZ-37S	1/3/2019	7439-93-2	Lithium	mg/L		ND	0.002	0.0026
PZ-37S	1/3/2019	7439-97-6	Mercury	mg/L		ND	0.000065	0.0002
PZ-37S	1/3/2019	7439-98-7	Molybdenum	mg/L		ND	0.00047	0.015
PZ-37S	1/3/2019	7782-49-2	Selenium	mg/L		ND	0.00081	0.0013
PZ-37S	1/3/2019	7440-28-0	Thallium	mg/L		ND	0.000063	0.0005
PZ-38I	1/2/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.168	U		5
PZ-38I	1/2/2019	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
PZ-38I	1/2/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
PZ-38I	1/2/2019	7440-39-3	Barium	mg/L	0.11		0.00037	0.0025
PZ-38I	1/2/2019	7440-41-7	Beryllium	mg/L		ND	0.000057	0.0025
PZ-38I	1/2/2019	7440-42-8	Boron	mg/L	0.48		0.03	0.05
PZ-38I	1/2/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
PZ-38I	1/2/2019	7440-47-3	Chromium	mg/L	0.0027		0.00063	0.0025
PZ-38I	1/2/2019	7440-48-4	Cobalt	mg/L		ND	0.000075	0.0025
PZ-38I	1/2/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.2
PZ-38I	1/2/2019	7439-92-1	Lead	mg/L		ND	0.000094	0.001
PZ-38I	1/2/2019	7439-93-2	Lithium	mg/L	0.0026		0.002	0.0026
PZ-38I	1/2/2019	7439-97-6	Mercury	mg/L		ND	0.000065	0.0002
PZ-38I	1/2/2019	7439-98-7	Molybdenum	mg/L		ND	0.00047	0.015
PZ-38I	1/2/2019	7782-49-2	Selenium	mg/L		ND	0.00081	0.0013
PZ-38I	1/2/2019	7440-28-0	Thallium	mg/L		ND	0.000063	0.0005
PZ-39S	10/17/2018	7440-38-2	Arsenic	mg/L	0.0011	J	0.00046	0.0013
PZ-39S	10/17/2018	7440-38-2	Arsenic	mg/L	0.0019		0.00046	0.0013
PZ-39S	10/17/2018	7440-39-3	Barium	mg/L	0.02		0.00049	0.0025
PZ-39S	10/17/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
PZ-39S	10/17/2018	7440-42-8	Boron	mg/L		ND	0.021	0.05
PZ-39S	10/17/2018	7440-47-3	Chromium	mg/L	0.0027		0.0011	0.0025
PZ-39S	10/17/2018	7440-48-4	Cobalt	mg/L	0.00051	J	0.0004	0.0025
PZ-39S	10/17/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.0623	U	0.484	5
PZ-39S	10/17/2018	16984-48-8	Fluoride	mg/L	0.087	J	0.082	0.2
PZ-39S	10/17/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
PZ-39S	10/17/2018	7439-93-2	Lithium	mg/L	0.0027	J	0.0011	0.005
PZ-39S	10/17/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
PZ-39S	10/17/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
PZ-39S	10/17/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
PZ-40I	10/18/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
PZ-40I	10/18/2018	7440-39-3	Barium	mg/L	0.089		0.00049	0.0025
PZ-40I	10/18/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
PZ-40I	10/18/2018	7440-42-8	Boron	mg/L	3.8		0.11	0.25
PZ-40I	10/18/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
PZ-40I	10/18/2018	7440-48-4	Cobalt	mg/L	0.0076		0.0004	0.0025
PZ-40I	10/18/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	1.59		0.599	5
PZ-40I	10/18/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
PZ-40I	10/18/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
PZ-40I	10/18/2018	7439-93-2	Lithium	mg/L	0.015		0.0011	0.005
PZ-40I	10/18/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
PZ-40I	10/18/2018	7782-49-2	Selenium	mg/L	0.00059	J	0.00024	0.0013
PZ-40I	10/18/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
PZ-41S	10/18/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
PZ-41S	10/18/2018	7440-39-3	Barium	mg/L	0.059		0.00049	0.0025
PZ-41S	10/18/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
PZ-41S	10/18/2018	7440-42-8	Boron	mg/L	3.5		0.11	0.25

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
PZ-41S	10/18/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
PZ-41S	10/18/2018	7440-48-4	Cobalt	mg/L	0.0092		0.0004	0.0025
PZ-41S	10/18/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.698		0.457	5
PZ-41S	10/18/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
PZ-41S	10/18/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
PZ-41S	10/18/2018	7439-93-2	Lithium	mg/L	0.0029	J	0.0011	0.005
PZ-41S	10/18/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
PZ-41S	10/18/2018	7782-49-2	Selenium	mg/L	0.0045		0.00024	0.0013
PZ-41S	10/18/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
PZ-41S	2/13/2020	7440-42-8	Boron	mg/L	3.4		0.039	0.08
PZ-42I	10/18/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
PZ-42I	10/18/2018	7440-39-3	Barium	mg/L	0.1		0.00049	0.0025
PZ-42I	10/18/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
PZ-42I	10/18/2018	7440-42-8	Boron	mg/L	2.6		0.11	0.25
PZ-42I	10/18/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
PZ-42I	10/18/2018	7440-48-4	Cobalt	mg/L	0.0064		0.0004	0.0025
PZ-42I	10/18/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.188	U	0.409	5
PZ-42I	10/18/2018	16984-48-8	Fluoride	mg/L	0.083	J	0.082	0.2
PZ-42I	10/18/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
PZ-42I	10/18/2018	7439-93-2	Lithium	mg/L	0.004	J	0.0011	0.005
PZ-42I	10/18/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
PZ-42I	10/18/2018	7782-49-2	Selenium	mg/L	0.00026	J	0.00024	0.0013
PZ-42I	10/18/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
PZ-43S	10/18/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
PZ-43S	10/18/2018	7440-39-3	Barium	mg/L	0.12		0.00049	0.0025
PZ-43S	10/18/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
PZ-43S	10/18/2018	7440-42-8	Boron	mg/L	0.82		0.021	0.05
PZ-43S	10/18/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
PZ-43S	10/18/2018	7440-48-4	Cobalt	mg/L	0.0086		0.0004	0.0025
PZ-43S	10/18/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	1.64		0.56	5
PZ-43S	10/18/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
PZ-43S	10/18/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
PZ-43S	10/18/2018	7439-93-2	Lithium	mg/L	0.0015	J	0.0011	0.005
PZ-43S	10/18/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
PZ-43S	10/18/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
PZ-43S	10/18/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
PZ-44I	10/16/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
PZ-44I	10/16/2018	7440-39-3	Barium	mg/L	0.014		0.00049	0.0025
PZ-44I	10/16/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
PZ-44I	10/16/2018	7440-42-8	Boron	mg/L		ND	0.021	0.05
PZ-44I	10/16/2018	7440-47-3	Chromium	mg/L	0.0046		0.0011	0.0025
PZ-44I	10/16/2018	7440-48-4	Cobalt	mg/L	0.0021	J	0.0004	0.0025
PZ-44I	10/16/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.551	U	0.632	5
PZ-44I	10/16/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
PZ-44I	10/16/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
PZ-44I	10/16/2018	7439-93-2	Lithium	mg/L	0.069		0.0011	0.005
PZ-44I	10/16/2018	7439-97-6	Mercury	mg/L	0.000084	J	0.00007	0.0002
PZ-44I	10/16/2018	7782-49-2	Selenium	mg/L	0.00046	J	0.00024	0.0013
PZ-44I	10/16/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
PZ-44I	3/3/2020	7439-93-2	Lithium	mg/L		ND	0.0034	0.005
SGWC-10	5/11/2016	7440-36-0	Antimony	mg/L		ND	0.0006	0.003
SGWC-10	5/11/2016	7440-38-2	Arsenic	mg/L		ND	0.001	0.005
SGWC-10	5/11/2016	7440-39-3	Barium	mg/L	0.0294		0.002	0.01
SGWC-10	5/11/2016	7440-41-7	Beryllium	mg/L		ND	0.0006	0.003
SGWC-10	5/11/2016	7440-42-8	Boron	mg/L	0.0275	J	0.02	0.1
SGWC-10	5/11/2016	7440-43-9	Cadmium	mg/L		ND	0.0001	0.001

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-10	5/11/2016	7440-47-3	Chromium	mg/L		ND	0.002	0.01
SGWC-10	5/11/2016	7440-48-4	Cobalt	mg/L	0.0191		0.002	0.01
SGWC-10	5/11/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.26	U	n/a	5
SGWC-10	5/11/2016	16984-48-8	Fluoride	mg/L	0.019	J	0.01	0.3
SGWC-10	5/11/2016	7439-92-1	Lead	mg/L		ND	0.001	0.005
SGWC-10	5/11/2016	7439-93-2	Lithium	mg/L		ND	0.01	0.05
SGWC-10	5/11/2016	7439-97-6	Mercury	mg/L		ND	0.00025	0.0005
SGWC-10	5/11/2016	7439-98-7	Molybdenum	mg/L		ND	0.002	0.01
SGWC-10	5/11/2016	7782-49-2	Selenium	mg/L		ND	0.002	0.01
SGWC-10	5/11/2016	7440-28-0	Thallium	mg/L		ND	0.0002	0.001
SGWC-10	6/28/2016	7440-36-0	Antimony	mg/L	0.0014	J	0.0002	0.003
SGWC-10	6/28/2016	7440-38-2	Arsenic	mg/L		ND	0.0007	0.005
SGWC-10	6/28/2016	7440-39-3	Barium	mg/L	0.0293		0.0003	0.01
SGWC-10	6/28/2016	7440-41-7	Beryllium	mg/L		ND	0.00009	0.003
SGWC-10	6/28/2016	7440-42-8	Boron	mg/L	0.035	J	0.0044	0.1
SGWC-10	6/28/2016	7440-43-9	Cadmium	mg/L		ND	0.0001	0.001
SGWC-10	6/28/2016	7440-47-3	Chromium	mg/L		ND	0.0004	0.01
SGWC-10	6/28/2016	7440-48-4	Cobalt	mg/L	0.0192		0.0003	0.01
SGWC-10	6/28/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	1.57		n/a	5
SGWC-10	6/28/2016	16984-48-8	Fluoride	mg/L		ND	0.02	0.3
SGWC-10	6/28/2016	7439-92-1	Lead	mg/L		ND	0.00008	0.005
SGWC-10	6/28/2016	7439-93-2	Lithium	mg/L		ND	0.0012	0.05
SGWC-10	6/28/2016	7439-97-6	Mercury	mg/L		ND	0.00013	0.0005
SGWC-10	6/28/2016	7439-98-7	Molybdenum	mg/L		ND	0.0005	0.01
SGWC-10	6/28/2016	7782-49-2	Selenium	mg/L		NDO	0.0009	0.01
SGWC-10	6/28/2016	7440-28-0	Thallium	mg/L	0.0001	J	0.00006	0.001
SGWC-10	8/17/2016	7440-36-0	Antimony	mg/L		ND	0.0010	0.0025
SGWC-10	8/17/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-10	8/17/2016	7440-39-3	Barium	mg/L	0.029		0.00049	0.0025
SGWC-10	8/17/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-10	8/17/2016	7440-42-8	Boron	mg/L	0.028	J	0.021	0.05
SGWC-10	8/17/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-10	8/17/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-10	8/17/2016	7440-48-4	Cobalt	mg/L	0.022		0.0004	0.0025
SGWC-10	8/17/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.548	U	n/a	5
SGWC-10	8/17/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-10	8/17/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-10	8/17/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-10	8/17/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-10	8/17/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-10	8/17/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-10	8/17/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-10	10/17/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-10	10/17/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-10	10/17/2016	7440-39-3	Barium	mg/L	0.027		0.00049	0.0025
SGWC-10	10/17/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-10	10/17/2016	7440-42-8	Boron	mg/L	0.032	J	0.021	0.05
SGWC-10	10/17/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-10	10/17/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-10	10/17/2016	7440-48-4	Cobalt	mg/L	0.05		0.0004	0.0025
SGWC-10	10/17/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	-0.0725	U	0.49	5
SGWC-10	10/17/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-10	10/17/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-10	10/17/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-10	10/17/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-10	10/17/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-10	10/17/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-10	10/17/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-10	12/6/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-10	12/6/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-10	12/6/2016	7440-39-3	Barium	mg/L	0.03		0.00049	0.0025
SGWC-10	12/6/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-10	12/6/2016	7440-42-8	Boron	mg/L		ND	0.021	0.05
SGWC-10	12/6/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-10	12/6/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-10	12/6/2016	7440-48-4	Cobalt	mg/L	0.04		0.0004	0.0025
SGWC-10	12/6/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.496		0.355	5
SGWC-10	12/6/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-10	12/6/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-10	12/6/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-10	12/6/2016	7439-97-6	Mercury	mg/L	0.00013	J	0.00007	0.0002
SGWC-10	12/6/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-10	12/6/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-10	12/6/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-10	2/15/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-10	2/15/2017	7440-38-2	Arsenic	mg/L	0.0005	J	0.00046	0.0013
SGWC-10	2/15/2017	7440-39-3	Barium	mg/L	0.025		0.00049	0.0025
SGWC-10	2/15/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-10	2/15/2017	7440-42-8	Boron	mg/L	0.035	J	0.021	0.05
SGWC-10	2/15/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-10	2/15/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-10	2/15/2017	7440-48-4	Cobalt	mg/L	0.038		0.0004	0.0025
SGWC-10	2/15/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.321	U	0.364	5
SGWC-10	2/15/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-10	2/15/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-10	2/15/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-10	2/15/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-10	2/15/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-10	2/15/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-10	2/15/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-10	4/12/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-10	4/12/2017	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-10	4/12/2017	7440-39-3	Barium	mg/L	0.028		0.00049	0.0025
SGWC-10	4/12/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-10	4/12/2017	7440-42-8	Boron	mg/L	0.052		0.021	0.05
SGWC-10	4/12/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-10	4/12/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-10	4/12/2017	7440-48-4	Cobalt	mg/L	0.018		0.0004	0.0025
SGWC-10	4/12/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	-0.0397	U	0.399	5
SGWC-10	4/12/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-10	4/12/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-10	4/12/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-10	4/12/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-10	4/12/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-10	4/12/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-10	4/12/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-10	6/27/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-10	6/27/2017	7440-38-2	Arsenic	mg/L	0.00074	J	0.00046	0.0013
SGWC-10	6/27/2017	7440-39-3	Barium	mg/L	0.034		0.00049	0.0025
SGWC-10	6/27/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-10	6/27/2017	7440-42-8	Boron	mg/L		ND	0.021	0.05
SGWC-10	6/27/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-10	6/27/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-10	6/27/2017	7440-48-4	Cobalt	mg/L	0.014		0.0004	0.0025
SGWC-10	6/27/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.47		0.323	5
SGWC-10	6/27/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-10	6/27/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-10	6/27/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-10	6/27/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-10	6/27/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-10	6/27/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-10	6/27/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-10	10/12/2017	7440-42-8	Boron	mg/L	0.049	J	0.021	0.05
SGWC-10	10/12/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-10	3/27/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-10	3/27/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-10	3/27/2018	7440-39-3	Barium	mg/L	0.031		0.00049	0.0025
SGWC-10	3/27/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-10	3/27/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-10	3/27/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-10	3/27/2018	7440-48-4	Cobalt	mg/L	0.026		0.0004	0.0025
SGWC-10	3/27/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.136	U	0.316	5
SGWC-10	3/27/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-10	3/27/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-10	3/27/2018	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-10	3/27/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-10	3/27/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-10	3/27/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-10	3/27/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-10	6/6/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-10	6/6/2018	7440-39-3	Barium	mg/L	0.027		0.00049	0.0025
SGWC-10	6/6/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-10	6/6/2018	7440-42-8	Boron	mg/L	0.07		0.021	0.05
SGWC-10	6/6/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-10	6/6/2018	7440-48-4	Cobalt	mg/L	0.018		0.0004	0.0025
SGWC-10	6/6/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.123	U	0.123	5
SGWC-10	6/6/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-10	6/6/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-10	6/6/2018	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-10	6/6/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-10	6/6/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-10	6/6/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-10	10/9/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-10	10/9/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-10	10/9/2018	7440-39-3	Barium	mg/L	0.032		0.00049	0.0025
SGWC-10	10/9/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-10	10/9/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-10	10/9/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-10	10/9/2018	7440-48-4	Cobalt	mg/L	0.03		0.0004	0.0025
SGWC-10	10/9/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.387		0.321	5
SGWC-10	10/9/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-10	10/9/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-10	10/9/2018	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-10	10/9/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-10	10/9/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-10	10/9/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-10	10/9/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-10	12/17/2018	7440-42-8	Boron	mg/L	0.098		0.021	0.05

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-10	2/20/2019	7440-36-0	Antimony	mg/L		ND	0.00038	0.0025
SGWC-10	2/20/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
SGWC-10	2/20/2019	7440-39-3	Barium	mg/L	0.036		0.0015	0.0025
SGWC-10	2/20/2019	7440-41-7	Beryllium	mg/L		ND	0.00016	0.0025
SGWC-10	2/20/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-10	2/20/2019	7440-47-3	Chromium	mg/L		ND	0.0015	0.0025
SGWC-10	2/20/2019	7440-48-4	Cobalt	mg/L	0.034		0.000075	0.0025
SGWC-10	2/20/2019	7440-14-4	Combined Radium 226 + 228	pCi/L		ND	0.394	5
SGWC-10	2/20/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.2
SGWC-10	2/20/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-10	2/20/2019	7439-93-2	Lithium	mg/L		ND	0.0031	0.005
SGWC-10	2/20/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-10	2/20/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-10	2/20/2019	7782-49-2	Selenium	mg/L		ND	0.00081	0.0013
SGWC-10	2/20/2019	7440-28-0	Thallium	mg/L		ND	0.000063	0.0005
SGWC-10	4/1/2019	7440-38-2	Arsenic	mg/L	0.00059	J	0.00046	0.0013
SGWC-10	4/1/2019	7440-39-3	Barium	mg/L	0.039		0.00049	0.0025
SGWC-10	4/1/2019	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-10	4/1/2019	7440-42-8	Boron	mg/L	0.16		0.021	0.05
SGWC-10	4/1/2019	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-10	4/1/2019	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-10	4/1/2019	7440-48-4	Cobalt	mg/L	0.025		0.0004	0.0025
SGWC-10	4/1/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.452		0.333	5
SGWC-10	4/1/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.2
SGWC-10	4/1/2019	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-10	4/1/2019	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-10	4/1/2019	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-10	4/1/2019	7439-98-7	Molybdenum	mg/L		ND	0.002	0.015
SGWC-10	4/1/2019	7782-49-2	Selenium	mg/L		ND	0.00071	0.0013
SGWC-10	4/1/2019	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-10	9/17/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
SGWC-10	9/17/2019	7440-39-3	Barium	mg/L	0.029		0.0016	0.01
SGWC-10	9/17/2019	7440-41-7	Beryllium	mg/L		ND	0.00018	0.0025
SGWC-10	9/17/2019	7440-42-8	Boron	mg/L	0.077		0.039	0.05
SGWC-10	9/17/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-10	9/17/2019	7440-47-3	Chromium	mg/L		ND	0.0015	0.0025
SGWC-10	9/17/2019	7440-48-4	Cobalt	mg/L	0.022		0.000075	0.0025
SGWC-10	9/17/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.226	U	0.365	5
SGWC-10	9/17/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.1
SGWC-10	9/17/2019	7439-92-1	Lead	mg/L	0.00013	J	0.00013	0.001
SGWC-10	9/17/2019	7439-93-2	Lithium	mg/L		ND	0.002	0.0034
SGWC-10	9/17/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-10	9/17/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-10	9/17/2019	7782-49-2	Selenium	mg/L		ND	0.0015	0.0025
SGWC-10	9/17/2019	7440-28-0	Thallium	mg/L		ND	0.00015	0.0005
SGWC-11	5/11/2016	7440-36-0	Antimony	mg/L		ND	0.0006	0.003
SGWC-11	5/11/2016	7440-38-2	Arsenic	mg/L	0.00103	J	0.001	0.005
SGWC-11	5/11/2016	7440-39-3	Barium	mg/L	0.038		0.002	0.01
SGWC-11	5/11/2016	7440-41-7	Beryllium	mg/L		ND	0.0006	0.003
SGWC-11	5/11/2016	7440-42-8	Boron	mg/L	0.242		0.02	0.1
SGWC-11	5/11/2016	7440-43-9	Cadmium	mg/L		ND	0.0001	0.001
SGWC-11	5/11/2016	7440-47-3	Chromium	mg/L		ND	0.002	0.01
SGWC-11	5/11/2016	7440-48-4	Cobalt	mg/L	0.0378		0.002	0.01
SGWC-11	5/11/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.182	U	n/a	5
SGWC-11	5/11/2016	16984-48-8	Fluoride	mg/L	0.033	J	0.01	0.3
SGWC-11	5/11/2016	7439-92-1	Lead	mg/L		ND	0.001	0.005

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-11	5/11/2016	7439-93-2	Lithium	mg/L		ND	0.01	0.05
SGWC-11	5/11/2016	7439-97-6	Mercury	mg/L		ND	0.00025	0.0005
SGWC-11	5/11/2016	7439-98-7	Molybdenum	mg/L		ND	0.002	0.01
SGWC-11	5/11/2016	7782-49-2	Selenium	mg/L		ND	0.002	0.01
SGWC-11	5/11/2016	7440-28-0	Thallium	mg/L		ND	0.0002	0.001
SGWC-11	6/28/2016	7440-36-0	Antimony	mg/L		ND	0.0002	0.003
SGWC-11	6/28/2016	7440-38-2	Arsenic	mg/L	0.0011	J	0.0007	0.005
SGWC-11	6/28/2016	7440-39-3	Barium	mg/L	0.0363		0.0003	0.01
SGWC-11	6/28/2016	7440-41-7	Beryllium	mg/L		ND	0.00009	0.003
SGWC-11	6/28/2016	7440-42-8	Boron	mg/L	0.245		0.0044	0.1
SGWC-11	6/28/2016	7440-43-9	Cadmium	mg/L		ND	0.0001	0.001
SGWC-11	6/28/2016	7440-47-3	Chromium	mg/L		ND	0.0004	0.01
SGWC-11	6/28/2016	7440-48-4	Cobalt	mg/L	0.0332		0.0003	0.01
SGWC-11	6/28/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.858		n/a	5
SGWC-11	6/28/2016	16984-48-8	Fluoride	mg/L	0.08	J	0.02	0.3
SGWC-11	6/28/2016	7439-92-1	Lead	mg/L		ND	0.00008	0.005
SGWC-11	6/28/2016	7439-93-2	Lithium	mg/L	0.0013	J	0.0012	0.05
SGWC-11	6/28/2016	7439-97-6	Mercury	mg/L		ND	0.00013	0.0005
SGWC-11	6/28/2016	7439-98-7	Molybdenum	mg/L		ND	0.0005	0.01
SGWC-11	6/28/2016	7782-49-2	Selenium	mg/L		ND	0.0009	0.01
SGWC-11	6/28/2016	7440-28-0	Thallium	mg/L		ND	0.00006	0.001
SGWC-11	8/17/2016	7440-36-0	Antimony	mg/L		ND	0.0010	0.0025
SGWC-11	8/17/2016	7440-38-2	Arsenic	mg/L	0.0011	J	0.00046	0.0013
SGWC-11	8/17/2016	7440-39-3	Barium	mg/L	0.033		0.00049	0.0025
SGWC-11	8/17/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-11	8/17/2016	7440-42-8	Boron	mg/L	0.26		0.021	0.05
SGWC-11	8/17/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-11	8/17/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-11	8/17/2016	7440-48-4	Cobalt	mg/L	0.03		0.0004	0.0025
SGWC-11	8/17/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.367	U	n/a	5
SGWC-11	8/17/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-11	8/17/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-11	8/17/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-11	8/17/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-11	8/17/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-11	8/17/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-11	8/17/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-11	10/17/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-11	10/17/2016	7440-38-2	Arsenic	mg/L	0.0011	J	0.00046	0.0013
SGWC-11	10/17/2016	7440-39-3	Barium	mg/L	0.035		0.00049	0.0025
SGWC-11	10/17/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-11	10/17/2016	7440-42-8	Boron	mg/L	0.25		0.021	0.05
SGWC-11	10/17/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-11	10/17/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-11	10/17/2016	7440-48-4	Cobalt	mg/L	0.032		0.0004	0.0025
SGWC-11	10/17/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.551		0.365	5
SGWC-11	10/17/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-11	10/17/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-11	10/17/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-11	10/17/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-11	10/17/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-11	10/17/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-11	10/17/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-11	12/6/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-11	12/6/2016	7440-38-2	Arsenic	mg/L	0.00072	J	0.00046	0.0013
SGWC-11	12/6/2016	7440-39-3	Barium	mg/L	0.035		0.00049	0.0025

Appendix B-2
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-11	12/6/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-11	12/6/2016	7440-42-8	Boron	mg/L	0.27		0.021	0.05
SGWC-11	12/6/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-11	12/6/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-11	12/6/2016	7440-48-4	Cobalt	mg/L	0.029		0.0004	0.0025
SGWC-11	12/6/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.438		0.348	5
SGWC-11	12/6/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-11	12/6/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-11	12/6/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-11	12/6/2016	7439-97-6	Mercury	mg/L	0.0001	J	0.00007	0.0002
SGWC-11	12/6/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-11	12/6/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-11	12/6/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-11	2/15/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-11	2/15/2017	7440-38-2	Arsenic	mg/L	0.0011	J	0.00046	0.0013
SGWC-11	2/15/2017	7440-39-3	Barium	mg/L	0.036		0.00049	0.0025
SGWC-11	2/15/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-11	2/15/2017	7440-42-8	Boron	mg/L	0.28		0.021	0.05
SGWC-11	2/15/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-11	2/15/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-11	2/15/2017	7440-48-4	Cobalt	mg/L	0.029		0.0004	0.0025
SGWC-11	2/15/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	-0.0831	U	0.403	5
SGWC-11	2/15/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-11	2/15/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-11	2/15/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-11	2/15/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-11	2/15/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-11	2/15/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-11	2/15/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-11	4/12/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-11	4/12/2017	7440-38-2	Arsenic	mg/L	0.00076	J	0.00046	0.0013
SGWC-11	4/12/2017	7440-39-3	Barium	mg/L	0.038		0.00049	0.0025
SGWC-11	4/12/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-11	4/12/2017	7440-42-8	Boron	mg/L	0.29		0.021	0.05
SGWC-11	4/12/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-11	4/12/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-11	4/12/2017	7440-48-4	Cobalt	mg/L	0.028		0.0004	0.0025
SGWC-11	4/12/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.343	U	0.359	5
SGWC-11	4/12/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-11	4/12/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-11	4/12/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-11	4/12/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-11	4/12/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-11	4/12/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-11	4/12/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-11	6/27/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-11	6/27/2017	7440-38-2	Arsenic	mg/L	0.0011	J	0.00046	0.0013
SGWC-11	6/27/2017	7440-39-3	Barium	mg/L	0.042		0.00049	0.0025
SGWC-11	6/27/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-11	6/27/2017	7440-42-8	Boron	mg/L	0.29		0.021	0.05
SGWC-11	6/27/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-11	6/27/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-11	6/27/2017	7440-48-4	Cobalt	mg/L	0.029		0.0004	0.0025
SGWC-11	6/27/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.369		0.247	5
SGWC-11	6/27/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-11	6/27/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-11	6/27/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-11	6/27/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-11	6/27/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-11	6/27/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-11	6/27/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-11	10/11/2017	7440-42-8	Boron	mg/L	0.31		0.021	0.05
SGWC-11	10/11/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-11	3/27/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-11	3/27/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-11	3/27/2018	7440-39-3	Barium	mg/L	0.039		0.00049	0.0025
SGWC-11	3/27/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-11	3/27/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-11	3/27/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-11	3/27/2018	7440-48-4	Cobalt	mg/L	0.024		0.0004	0.0025
SGWC-11	3/27/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.172	U	0.313	5
SGWC-11	3/27/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-11	3/27/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-11	3/27/2018	7439-93-2	Lithium	mg/L	0.0029	J+X	0.0011	0.005
SGWC-11	3/27/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-11	3/27/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-11	3/27/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-11	3/27/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-11	6/6/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-11	6/6/2018	7440-39-3	Barium	mg/L	0.041		0.00049	0.0025
SGWC-11	6/6/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-11	6/6/2018	7440-42-8	Boron	mg/L	0.37		0.021	0.05
SGWC-11	6/6/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-11	6/6/2018	7440-48-4	Cobalt	mg/L	0.026		0.0004	0.0025
SGWC-11	6/6/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.153	U	0.153	5
SGWC-11	6/6/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-11	6/6/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-11	6/6/2018	7439-93-2	Lithium	mg/L	0.0017	J	0.0011	0.005
SGWC-11	6/6/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-11	6/6/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-11	6/6/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-11	10/16/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-11	10/16/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-11	10/16/2018	7440-39-3	Barium	mg/L	0.037		0.00049	0.0025
SGWC-11	10/16/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-11	10/16/2018	7440-42-8	Boron	mg/L	0.35		0.021	0.05
SGWC-11	10/16/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-11	10/16/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-11	10/16/2018	7440-48-4	Cobalt	mg/L	0.023		0.0004	0.0025
SGWC-11	10/16/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	1.06		0.411	5
SGWC-11	10/16/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	1.06		0.411	5
SGWC-11	10/16/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-11	10/16/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-11	10/16/2018	7439-93-2	Lithium	mg/L	0.0031	J	0.0011	0.005
SGWC-11	10/16/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-11	10/16/2018	7439-97-6	Mercury	mg/L	0.000072	J	0.00007	0.0002
SGWC-11	10/16/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-11	10/16/2018	7782-49-2	Selenium	mg/L	0.00046	J	0.00024	0.0013
SGWC-11	10/16/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-11	2/20/2019	7440-36-0	Antimony	mg/L		ND	0.00038	0.0025
SGWC-11	2/20/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
SGWC-11	2/20/2019	7440-39-3	Barium	mg/L	0.044		0.0015	0.0025

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-11	2/20/2019	7440-41-7	Beryllium	mg/L		ND	0.00016	0.0025
SGWC-11	2/20/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-11	2/20/2019	7440-47-3	Chromium	mg/L		ND	0.0015	0.0025
SGWC-11	2/20/2019	7440-48-4	Cobalt	mg/L	0.024		0.000075	0.0025
SGWC-11	2/20/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.708		0.342	5
SGWC-11	2/20/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.2
SGWC-11	2/20/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-11	2/20/2019	7439-93-2	Lithium	mg/L	0.0031	J	0.0031	0.005
SGWC-11	2/20/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-11	2/20/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-11	2/20/2019	7782-49-2	Selenium	mg/L		ND	0.00081	0.0013
SGWC-11	2/20/2019	7440-28-0	Thallium	mg/L		ND	0.000063	0.0005
SGWC-11	4/1/2019	7440-38-2	Arsenic	mg/L	0.0011	J	0.00046	0.0013
SGWC-11	4/1/2019	7440-39-3	Barium	mg/L	0.041		0.00049	0.0025
SGWC-11	4/1/2019	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-11	4/1/2019	7440-42-8	Boron	mg/L	0.46		0.021	0.05
SGWC-11	4/1/2019	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-11	4/1/2019	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-11	4/1/2019	7440-48-4	Cobalt	mg/L	0.021		0.0004	0.0025
SGWC-11	4/1/2019	7440-14-4	Combined Radium 226 + 228	pCi/L		ND	0.308	5
SGWC-11	4/1/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.2
SGWC-11	4/1/2019	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-11	4/1/2019	7439-93-2	Lithium	mg/L	0.0017	J	0.0011	0.005
SGWC-11	4/1/2019	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-11	4/1/2019	7439-98-7	Molybdenum	mg/L		ND	0.002	0.015
SGWC-11	4/1/2019	7782-49-2	Selenium	mg/L		ND	0.00071	0.0013
SGWC-11	4/1/2019	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-11	9/16/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
SGWC-11	9/16/2019	7440-39-3	Barium	mg/L	0.045		0.0016	0.01
SGWC-11	9/16/2019	7440-41-7	Beryllium	mg/L		ND	0.00018	0.0025
SGWC-11	9/16/2019	7440-42-8	Boron	mg/L	0.39		0.039	0.05
SGWC-11	9/16/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-11	9/16/2019	7440-47-3	Chromium	mg/L		ND	0.0015	0.0025
SGWC-11	9/16/2019	7440-48-4	Cobalt	mg/L	0.022		0.000075	0.0025
SGWC-11	9/16/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.251	U	0.711	5
SGWC-11	9/16/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.1
SGWC-11	9/16/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-11	9/16/2019	7439-93-2	Lithium	mg/L		ND	0.002	0.0034
SGWC-11	9/16/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-11	9/16/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-11	9/16/2019	7782-49-2	Selenium	mg/L		ND	0.0015	0.0025
SGWC-11	9/16/2019	7440-28-0	Thallium	mg/L		ND	0.00015	0.0005
SGWC-12	5/11/2016	7440-36-0	Antimony	mg/L		ND	0.0006	0.003
SGWC-12	5/11/2016	7440-38-2	Arsenic	mg/L		ND	0.001	0.005
SGWC-12	5/11/2016	7440-39-3	Barium	mg/L	0.0324		0.002	0.01
SGWC-12	5/11/2016	7440-41-7	Beryllium	mg/L		ND	0.0006	0.003
SGWC-12	5/11/2016	7440-42-8	Boron	mg/L		ND	0.02	0.1
SGWC-12	5/11/2016	7440-43-9	Cadmium	mg/L		ND	0.0001	0.001
SGWC-12	5/11/2016	7440-47-3	Chromium	mg/L		ND	0.002	0.01
SGWC-12	5/11/2016	7440-48-4	Cobalt	mg/L	0.00648	J	0.002	0.01
SGWC-12	5/11/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.433		n/a	5
SGWC-12	5/11/2016	16984-48-8	Fluoride	mg/L	0.11	J	0.01	0.3
SGWC-12	5/11/2016	7439-92-1	Lead	mg/L		ND	0.001	0.005
SGWC-12	5/11/2016	7439-93-2	Lithium	mg/L		ND	0.01	0.05
SGWC-12	5/11/2016	7439-97-6	Mercury	mg/L		ND	0.00025	0.0005
SGWC-12	5/11/2016	7439-98-7	Molybdenum	mg/L		ND	0.002	0.01

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-12	5/11/2016	7782-49-2	Selenium	mg/L		ND	0.002	0.01
SGWC-12	5/11/2016	7440-28-0	Thallium	mg/L		ND	0.0002	0.001
SGWC-12	6/28/2016	7440-36-0	Antimony	mg/L		ND	0.0002	0.003
SGWC-12	6/28/2016	7440-38-2	Arsenic	mg/L	0.001	J	0.0007	0.005
SGWC-12	6/28/2016	7440-39-3	Barium	mg/L	0.0321		0.0003	0.01
SGWC-12	6/28/2016	7440-41-7	Beryllium	mg/L		ND	0.00009	0.003
SGWC-12	6/28/2016	7440-42-8	Boron	mg/L	0.0054	J	0.0044	0.1
SGWC-12	6/28/2016	7440-43-9	Cadmium	mg/L		ND	0.0001	0.001
SGWC-12	6/28/2016	7440-47-3	Chromium	mg/L		ND	0.0004	0.01
SGWC-12	6/28/2016	7440-48-4	Cobalt	mg/L	0.0051	J	0.0003	0.01
SGWC-12	6/28/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.435	U	n/a	5
SGWC-12	6/28/2016	16984-48-8	Fluoride	mg/L	0.18	J	0.02	0.3
SGWC-12	6/28/2016	7439-92-1	Lead	mg/L		ND	0.00008	0.005
SGWC-12	6/28/2016	7439-93-2	Lithium	mg/L		ND	0.0012	0.05
SGWC-12	6/28/2016	7439-97-6	Mercury	mg/L		ND	0.00013	0.0005
SGWC-12	6/28/2016	7439-98-7	Molybdenum	mg/L	0.0012	J	0.0005	0.01
SGWC-12	6/28/2016	7782-49-2	Selenium	mg/L		ND	0.0009	0.01
SGWC-12	6/28/2016	7440-28-0	Thallium	mg/L		ND	0.00006	0.001
SGWC-12	8/18/2016	7440-36-0	Antimony	mg/L		ND	0.0010	0.0025
SGWC-12	8/18/2016	7440-38-2	Arsenic	mg/L	0.00091	J	0.00046	0.0013
SGWC-12	8/18/2016	7440-39-3	Barium	mg/L	0.03		0.00049	0.0025
SGWC-12	8/18/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-12	8/18/2016	7440-42-8	Boron	mg/L		ND	0.021	0.05
SGWC-12	8/18/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-12	8/18/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-12	8/18/2016	7440-48-4	Cobalt	mg/L	0.0035		0.0004	0.0025
SGWC-12	8/18/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.214	U	n/a	5
SGWC-12	8/18/2016	16984-48-8	Fluoride	mg/L	0.12	J	0.082	0.2
SGWC-12	8/18/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-12	8/18/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-12	8/18/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-12	8/18/2016	7439-98-7	Molybdenum	mg/L	0.0011	J	0.00085	0.015
SGWC-12	8/18/2016	7782-49-2	Selenium	mg/L	0.00031	J	0.00024	0.0013
SGWC-12	8/18/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-12	10/17/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-12	10/17/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-12	10/17/2016	7440-39-3	Barium	mg/L	0.032		0.00049	0.0025
SGWC-12	10/17/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-12	10/17/2016	7440-42-8	Boron	mg/L		ND	0.021	0.05
SGWC-12	10/17/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-12	10/17/2016	7440-47-3	Chromium	mg/L	0.0023	J	0.0011	0.0025
SGWC-12	10/17/2016	7440-48-4	Cobalt	mg/L	0.003		0.0004	0.0025
SGWC-12	10/17/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.316	U	0.363	5
SGWC-12	10/17/2016	16984-48-8	Fluoride	mg/L	0.082	J	0.082	0.2
SGWC-12	10/17/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-12	10/17/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-12	10/17/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-12	10/17/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-12	10/17/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-12	10/17/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-12	12/6/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-12	12/6/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-12	12/6/2016	7440-39-3	Barium	mg/L	0.032		0.00049	0.0025
SGWC-12	12/6/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-12	12/6/2016	7440-42-8	Boron	mg/L		ND	0.021	0.05
SGWC-12	12/6/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-12	12/6/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-12	12/6/2016	7440-48-4	Cobalt	mg/L	0.0036		0.0004	0.0025
SGWC-12	12/6/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.0575	U	0.339	5
SGWC-12	12/6/2016	16984-48-8	Fluoride	mg/L	0.11	J	0.082	0.2
SGWC-12	12/6/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-12	12/6/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-12	12/6/2016	7439-97-6	Mercury	mg/L	0.000093	J	0.00007	0.0002
SGWC-12	12/6/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-12	12/6/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-12	12/6/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-12	2/15/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-12	2/15/2017	7440-38-2	Arsenic	mg/L	0.00076	J	0.00046	0.0013
SGWC-12	2/15/2017	7440-39-3	Barium	mg/L	0.036		0.00049	0.0025
SGWC-12	2/15/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-12	2/15/2017	7440-42-8	Boron	mg/L		ND	0.021	0.05
SGWC-12	2/15/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-12	2/15/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-12	2/15/2017	7440-48-4	Cobalt	mg/L	0.004		0.0004	0.0025
SGWC-12	2/15/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	-0.0321	U	0.383	5
SGWC-12	2/15/2017	16984-48-8	Fluoride	mg/L	0.13	J	0.082	0.2
SGWC-12	2/15/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-12	2/15/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-12	2/15/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-12	2/15/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-12	2/15/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-12	2/15/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-12	4/12/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-12	4/12/2017	7440-38-2	Arsenic	mg/L	0.00046	J	0.00046	0.0013
SGWC-12	4/12/2017	7440-39-3	Barium	mg/L	0.037		0.00049	0.0025
SGWC-12	4/12/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-12	4/12/2017	7440-42-8	Boron	mg/L		ND	0.021	0.05
SGWC-12	4/12/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-12	4/12/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-12	4/12/2017	7440-48-4	Cobalt	mg/L	0.0039		0.0004	0.0025
SGWC-12	4/12/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.00949	U	0.371	5
SGWC-12	4/12/2017	16984-48-8	Fluoride	mg/L	0.088	J	0.082	0.2
SGWC-12	4/12/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-12	4/12/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-12	4/12/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-12	4/12/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-12	4/12/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-12	4/12/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-12	6/27/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-12	6/27/2017	7440-38-2	Arsenic	mg/L	0.0011	J	0.00046	0.0013
SGWC-12	6/27/2017	7440-39-3	Barium	mg/L	0.042		0.00049	0.0025
SGWC-12	6/27/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-12	6/27/2017	7440-42-8	Boron	mg/L		ND	0.021	0.05
SGWC-12	6/27/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-12	6/27/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-12	6/27/2017	7440-48-4	Cobalt	mg/L	0.0042		0.0004	0.0025
SGWC-12	6/27/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.183	U	0.272	5
SGWC-12	6/27/2017	16984-48-8	Fluoride	mg/L	0.1	J	0.082	0.2
SGWC-12	6/27/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-12	6/27/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-12	6/27/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-12	6/27/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-12	6/27/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-12	6/27/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-12	10/11/2017	7440-42-8	Boron	mg/L		ND	0.021	0.05
SGWC-12	10/11/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-12	3/27/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-12	3/27/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-12	3/27/2018	7440-39-3	Barium	mg/L	0.043		0.00049	0.0025
SGWC-12	3/27/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-12	3/27/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-12	3/27/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-12	3/27/2018	7440-48-4	Cobalt	mg/L	0.0035		0.0004	0.0025
SGWC-12	3/27/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.445		0.385	5
SGWC-12	3/27/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-12	3/27/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-12	3/27/2018	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-12	3/27/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-12	3/27/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-12	3/27/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-12	3/27/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-12	6/6/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-12	6/6/2018	7440-39-3	Barium	mg/L	0.048		0.00049	0.0025
SGWC-12	6/6/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-12	6/6/2018	7440-42-8	Boron	mg/L		ND	0.021	0.05
SGWC-12	6/6/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-12	6/6/2018	7440-48-4	Cobalt	mg/L	0.0038		0.0004	0.0025
SGWC-12	6/6/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.0775	U	0.0775	5
SGWC-12	6/6/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-12	6/6/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-12	6/6/2018	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-12	6/6/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-12	6/6/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-12	6/6/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-12	10/8/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-12	10/8/2018	7440-38-2	Arsenic	mg/L	0.0007	J	0.00046	0.0013
SGWC-12	10/8/2018	7440-39-3	Barium	mg/L	0.049		0.00049	0.0025
SGWC-12	10/8/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-12	10/8/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-12	10/8/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-12	10/8/2018	7440-48-4	Cobalt	mg/L	0.0037		0.0004	0.0025
SGWC-12	10/8/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.865		0.323	5
SGWC-12	10/8/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-12	10/8/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-12	10/8/2018	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-12	10/8/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-12	10/8/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-12	10/8/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-12	10/8/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-12	12/14/2018	7440-42-8	Boron	mg/L		ND	0.021	0.05
SGWC-12	2/20/2019	7440-36-0	Antimony	mg/L		ND	0.00038	0.0025
SGWC-12	2/20/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
SGWC-12	2/20/2019	7440-39-3	Barium	mg/L	0.054		0.0015	0.0025
SGWC-12	2/20/2019	7440-41-7	Beryllium	mg/L		ND	0.00016	0.0025
SGWC-12	2/20/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-12	2/20/2019	7440-47-3	Chromium	mg/L		ND	0.0015	0.0025
SGWC-12	2/20/2019	7440-48-4	Cobalt	mg/L	0.0032		0.000075	0.0025
SGWC-12	2/20/2019	7440-14-4	Combined Radium 226 + 228	pCi/L		ND	0.353	5

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-12	2/20/2019	16984-48-8	Fluoride	mg/L	0.052	J	0.026	0.2
SGWC-12	2/20/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-12	2/20/2019	7439-93-2	Lithium	mg/L		ND	0.0031	0.005
SGWC-12	2/20/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-12	2/20/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-12	2/20/2019	7782-49-2	Selenium	mg/L		ND	0.00081	0.0013
SGWC-12	2/20/2019	7440-28-0	Thallium	mg/L		ND	0.000063	0.0005
SGWC-12	4/1/2019	7440-38-2	Arsenic	mg/L	0.0012	J	0.00046	0.0013
SGWC-12	4/1/2019	7440-39-3	Barium	mg/L	0.051		0.00049	0.0025
SGWC-12	4/1/2019	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-12	4/1/2019	7440-42-8	Boron	mg/L		ND	0.021	0.05
SGWC-12	4/1/2019	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-12	4/1/2019	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-12	4/1/2019	7440-48-4	Cobalt	mg/L	0.0029		0.0004	0.0025
SGWC-12	4/1/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.372		0.321	5
SGWC-12	4/1/2019	16984-48-8	Fluoride	mg/L	0.048	J	0.026	0.2
SGWC-12	4/1/2019	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-12	4/1/2019	7439-93-2	Lithium	mg/L	0.0011	J	0.0011	0.005
SGWC-12	4/1/2019	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-12	4/1/2019	7439-98-7	Molybdenum	mg/L		ND	0.002	0.015
SGWC-12	4/1/2019	7782-49-2	Selenium	mg/L		ND	0.00071	0.0013
SGWC-12	4/1/2019	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-12	9/16/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
SGWC-12	9/16/2019	7440-39-3	Barium	mg/L	0.052		0.0016	0.01
SGWC-12	9/16/2019	7440-41-7	Beryllium	mg/L		ND	0.00018	0.0025
SGWC-12	9/16/2019	7440-42-8	Boron	mg/L		ND	0.039	0.05
SGWC-12	9/16/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-12	9/16/2019	7440-47-3	Chromium	mg/L		ND	0.0015	0.0025
SGWC-12	9/16/2019	7440-48-4	Cobalt	mg/L	0.003		0.000075	0.0025
SGWC-12	9/16/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.569	U	0.633	5
SGWC-12	9/16/2019	16984-48-8	Fluoride	mg/L	0.065	J	0.026	0.1
SGWC-12	9/16/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-12	9/16/2019	7439-93-2	Lithium	mg/L		ND	0.002	0.0034
SGWC-12	9/16/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-12	9/16/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-12	9/16/2019	7782-49-2	Selenium	mg/L		ND	0.0015	0.0025
SGWC-12	9/16/2019	7440-28-0	Thallium	mg/L		ND	0.00015	0.0005
SGWC-13	5/12/2016	7440-36-0	Antimony	mg/L		ND	0.0006	0.003
SGWC-13	5/12/2016	7440-38-2	Arsenic	mg/L		ND	0.001	0.005
SGWC-13	5/12/2016	7440-39-3	Barium	mg/L	0.0198		0.002	0.01
SGWC-13	5/12/2016	7440-41-7	Beryllium	mg/L		ND	0.0006	0.003
SGWC-13	5/12/2016	7440-42-8	Boron	mg/L	0.599		0.02	0.1
SGWC-13	5/12/2016	7440-43-9	Cadmium	mg/L		ND	0.0001	0.001
SGWC-13	5/12/2016	7440-47-3	Chromium	mg/L		ND	0.002	0.01
SGWC-13	5/12/2016	7440-48-4	Cobalt	mg/L	0.0145		0.002	0.01
SGWC-13	5/12/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.0531	U	n/a	5
SGWC-13	5/12/2016	16984-48-8	Fluoride	mg/L	0.042	J	0.01	0.3
SGWC-13	5/12/2016	7439-92-1	Lead	mg/L		ND	0.001	0.005
SGWC-13	5/12/2016	7439-93-2	Lithium	mg/L		ND	0.01	0.05
SGWC-13	5/12/2016	7439-97-6	Mercury	mg/L		ND	0.00025	0.0005
SGWC-13	5/12/2016	7439-98-7	Molybdenum	mg/L		ND	0.002	0.01
SGWC-13	5/12/2016	7782-49-2	Selenium	mg/L		ND	0.002	0.01
SGWC-13	5/12/2016	7440-28-0	Thallium	mg/L		ND	0.0002	0.001
SGWC-13	6/28/2016	7440-36-0	Antimony	mg/L	0.0004	J	0.0002	0.003
SGWC-13	6/28/2016	7440-38-2	Arsenic	mg/L		ND	0.0007	0.005
SGWC-13	6/28/2016	7440-39-3	Barium	mg/L	0.0208		0.0003	0.01

Appendix B-2
Scherer Risk Evaluation Report
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Scherer AP-1
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-13	6/28/2016	7440-41-7	Beryllium	mg/L		ND	0.00009	0.003
SGWC-13	6/28/2016	7440-42-8	Boron	mg/L	0.52		0.0044	0.1
SGWC-13	6/28/2016	7440-43-9	Cadmium	mg/L		ND	0.0001	0.001
SGWC-13	6/28/2016	7440-47-3	Chromium	mg/L		ND	0.0004	0.01
SGWC-13	6/28/2016	7440-48-4	Cobalt	mg/L	0.011		0.0003	0.01
SGWC-13	6/28/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.483	U	n/a	5
SGWC-13	6/28/2016	16984-48-8	Fluoride	mg/L	0.15	J	0.02	0.3
SGWC-13	6/28/2016	7439-92-1	Lead	mg/L		ND	0.00008	0.005
SGWC-13	6/28/2016	7439-93-2	Lithium	mg/L		ND	0.0012	0.05
SGWC-13	6/28/2016	7439-97-6	Mercury	mg/L		ND	0.00013	0.0005
SGWC-13	6/28/2016	7439-98-7	Molybdenum	mg/L		ND	0.0005	0.01
SGWC-13	6/28/2016	7782-49-2	Selenium	mg/L		ND	0.0009	0.01
SGWC-13	6/28/2016	7440-28-0	Thallium	mg/L		ND	0.00006	0.001
SGWC-13	8/18/2016	7440-36-0	Antimony	mg/L		ND	0.0010	0.0025
SGWC-13	8/18/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-13	8/18/2016	7440-39-3	Barium	mg/L	0.022		0.00049	0.0025
SGWC-13	8/18/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-13	8/18/2016	7440-42-8	Boron	mg/L	0.51		0.021	0.05
SGWC-13	8/18/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-13	8/18/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-13	8/18/2016	7440-48-4	Cobalt	mg/L	0.0099		0.0004	0.0025
SGWC-13	8/18/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.286	U	n/a	5
SGWC-13	8/18/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-13	8/18/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-13	8/18/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-13	8/18/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-13	8/18/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-13	8/18/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-13	8/18/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-13	10/17/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-13	10/17/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-13	10/17/2016	7440-39-3	Barium	mg/L	0.024		0.00049	0.0025
SGWC-13	10/17/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-13	10/17/2016	7440-42-8	Boron	mg/L	0.58		0.021	0.05
SGWC-13	10/17/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-13	10/17/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-13	10/17/2016	7440-48-4	Cobalt	mg/L	0.01		0.0004	0.0025
SGWC-13	10/17/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.472		0.374	5
SGWC-13	10/17/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-13	10/17/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-13	10/17/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-13	10/17/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-13	10/17/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-13	10/17/2016	7782-49-2	Selenium	mg/L	0.0003	J	0.00024	0.0013
SGWC-13	10/17/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-13	12/6/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-13	12/6/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-13	12/6/2016	7440-39-3	Barium	mg/L	0.025		0.00049	0.0025
SGWC-13	12/6/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-13	12/6/2016	7440-42-8	Boron	mg/L	0.5		0.021	0.05
SGWC-13	12/6/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-13	12/6/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-13	12/6/2016	7440-48-4	Cobalt	mg/L	0.0079		0.0004	0.0025
SGWC-13	12/6/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.903		0.394	5
SGWC-13	12/6/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-13	12/6/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-13	12/6/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-13	12/6/2016	7439-97-6	Mercury	mg/L	0.00011	J	0.00007	0.0002
SGWC-13	12/6/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-13	12/6/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-13	12/6/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-13	2/15/2017	7440-36-0	Antimony	mg/L		NDF1	0.001	0.0025
SGWC-13	2/15/2017	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-13	2/15/2017	7440-39-3	Barium	mg/L	0.026		0.00049	0.0025
SGWC-13	2/15/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-13	2/15/2017	7440-42-8	Boron	mg/L	0.5		0.021	0.05
SGWC-13	2/15/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-13	2/15/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-13	2/15/2017	7440-48-4	Cobalt	mg/L	0.0073		0.0004	0.0025
SGWC-13	2/15/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	-0.223	U	0.451	5
SGWC-13	2/15/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-13	2/15/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-13	2/15/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-13	2/15/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-13	2/15/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-13	2/15/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-13	2/15/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-13	4/12/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-13	4/12/2017	7440-38-2	Arsenic	mg/L	0.00047	J	0.00046	0.0013
SGWC-13	4/12/2017	7440-39-3	Barium	mg/L	0.029		0.00049	0.0025
SGWC-13	4/12/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-13	4/12/2017	7440-42-8	Boron	mg/L	0.47		0.021	0.05
SGWC-13	4/12/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-13	4/12/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-13	4/12/2017	7440-48-4	Cobalt	mg/L	0.0078		0.0004	0.0025
SGWC-13	4/12/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.21	U	0.402	5
SGWC-13	4/12/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-13	4/12/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-13	4/12/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-13	4/12/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-13	4/12/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-13	4/12/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-13	4/12/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-13	6/27/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-13	6/27/2017	7440-38-2	Arsenic	mg/L	0.00088	J	0.00046	0.0013
SGWC-13	6/27/2017	7440-39-3	Barium	mg/L	0.031		0.00049	0.0025
SGWC-13	6/27/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-13	6/27/2017	7440-42-8	Boron	mg/L	0.51		0.021	0.05
SGWC-13	6/27/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-13	6/27/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-13	6/27/2017	7440-48-4	Cobalt	mg/L	0.0068		0.0004	0.0025
SGWC-13	6/27/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.0574	U	0.334	5
SGWC-13	6/27/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-13	6/27/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-13	6/27/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-13	6/27/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-13	6/27/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-13	6/27/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-13	6/27/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-13	10/11/2017	7440-42-8	Boron	mg/L	0.49		0.021	0.05
SGWC-13	10/11/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-13	3/27/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-13	3/27/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-13	3/27/2018	7440-39-3	Barium	mg/L	0.029		0.00049	0.0025
SGWC-13	3/27/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-13	3/27/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-13	3/27/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-13	3/27/2018	7440-48-4	Cobalt	mg/L	0.0035		0.0004	0.0025
SGWC-13	3/27/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.145	U	0.413	5
SGWC-13	3/27/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-13	3/27/2018	7439-92-1	Lead	mg/L	0.00039	J	0.00035	0.0013
SGWC-13	3/27/2018	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-13	3/27/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-13	3/27/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-13	3/27/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-13	3/27/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-13	6/7/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-13	6/7/2018	7440-39-3	Barium	mg/L	0.032		0.00049	0.0025
SGWC-13	6/7/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-13	6/7/2018	7440-42-8	Boron	mg/L	0.45		0.021	0.05
SGWC-13	6/7/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-13	6/7/2018	7440-48-4	Cobalt	mg/L	0.0039		0.0004	0.0025
SGWC-13	6/7/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.235	U	0.235	5
SGWC-13	6/7/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-13	6/7/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-13	6/7/2018	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-13	6/7/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-13	6/7/2018	7782-49-2	Selenium	mg/L		NDX	0.00024	0.0013
SGWC-13	6/7/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-13	10/8/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-13	10/8/2018	7440-38-2	Arsenic	mg/L	0.00069	J	0.00046	0.0013
SGWC-13	10/8/2018	7440-39-3	Barium	mg/L	0.033		0.00049	0.0025
SGWC-13	10/8/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-13	10/8/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-13	10/8/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-13	10/8/2018	7440-48-4	Cobalt	mg/L	0.0036		0.0004	0.0025
SGWC-13	10/8/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.64		0.371	5
SGWC-13	10/8/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-13	10/8/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-13	10/8/2018	7439-93-2	Lithium	mg/L	0.0014	J	0.0011	0.005
SGWC-13	10/8/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-13	10/8/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-13	10/8/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-13	10/8/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-13	12/14/2018	7440-42-8	Boron	mg/L	0.47		0.021	0.05
SGWC-13	2/20/2019	7440-36-0	Antimony	mg/L		ND	0.00038	0.0025
SGWC-13	2/20/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
SGWC-13	2/20/2019	7440-39-3	Barium	mg/L	0.041		0.0015	0.0025
SGWC-13	2/20/2019	7440-41-7	Beryllium	mg/L		ND	0.00016	0.0025
SGWC-13	2/20/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-13	2/20/2019	7440-47-3	Chromium	mg/L		ND	0.0015	0.0025
SGWC-13	2/20/2019	7440-48-4	Cobalt	mg/L	0.004		0.000075	0.0025
SGWC-13	2/20/2019	7440-14-4	Combined Radium 226 + 228	pCi/L		ND	0.362	5
SGWC-13	2/20/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.2
SGWC-13	2/20/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-13	2/20/2019	7439-93-2	Lithium	mg/L		ND	0.0031	0.005
SGWC-13	2/20/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-13	2/20/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-13	2/20/2019	7782-49-2	Selenium	mg/L		ND	0.00081	0.0013
SGWC-13	2/20/2019	7440-28-0	Thallium	mg/L		ND	0.000063	0.0005
SGWC-13	4/1/2019	7440-38-2	Arsenic	mg/L	0.0014		0.00046	0.0013
SGWC-13	4/1/2019	7440-39-3	Barium	mg/L	0.038		0.00049	0.0025
SGWC-13	4/1/2019	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-13	4/1/2019	7440-42-8	Boron	mg/L	0.57		0.021	0.05
SGWC-13	4/1/2019	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-13	4/1/2019	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-13	4/1/2019	7440-48-4	Cobalt	mg/L	0.003		0.0004	0.0025
SGWC-13	4/1/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.36		0.339	5
SGWC-13	4/1/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.2
SGWC-13	4/1/2019	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-13	4/1/2019	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-13	4/1/2019	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-13	4/1/2019	7439-98-7	Molybdenum	mg/L		ND	0.002	0.015
SGWC-13	4/1/2019	7782-49-2	Selenium	mg/L		ND	0.00071	0.0013
SGWC-13	4/1/2019	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-13	9/17/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
SGWC-13	9/17/2019	7440-39-3	Barium	mg/L	0.036		0.0016	0.01
SGWC-13	9/17/2019	7440-41-7	Beryllium	mg/L		ND	0.00018	0.0025
SGWC-13	9/17/2019	7440-42-8	Boron	mg/L	0.43		0.039	0.05
SGWC-13	9/17/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-13	9/17/2019	7440-47-3	Chromium	mg/L	0.0017	J	0.0015	0.0025
SGWC-13	9/17/2019	7440-48-4	Cobalt	mg/L	0.0024	J	0.000075	0.0025
SGWC-13	9/17/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.143	U	0.396	5
SGWC-13	9/17/2019	16984-48-8	Fluoride	mg/L	0.04	J	0.026	0.1
SGWC-13	9/17/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-13	9/17/2019	7439-93-2	Lithium	mg/L		ND	0.002	0.0034
SGWC-13	9/17/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-13	9/17/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-13	9/17/2019	7782-49-2	Selenium	mg/L		ND	0.0015	0.0025
SGWC-13	9/17/2019	7440-28-0	Thallium	mg/L		ND	0.00015	0.0005
SGWC-14	5/12/2016	7440-36-0	Antimony	mg/L		ND	0.0006	0.003
SGWC-14	5/12/2016	7440-38-2	Arsenic	mg/L		ND	0.001	0.005
SGWC-14	5/12/2016	7440-39-3	Barium	mg/L	0.067		0.002	0.01
SGWC-14	5/12/2016	7440-41-7	Beryllium	mg/L		ND	0.0006	0.003
SGWC-14	5/12/2016	7440-42-8	Boron	mg/L	1.38		0.02	0.1
SGWC-14	5/12/2016	7440-43-9	Cadmium	mg/L	0.000136	J	0.0001	0.001
SGWC-14	5/12/2016	7440-47-3	Chromium	mg/L		ND	0.002	0.01
SGWC-14	5/12/2016	7440-48-4	Cobalt	mg/L	0.00605	J	0.002	0.01
SGWC-14	5/12/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.106	U	n/a	5
SGWC-14	5/12/2016	16984-48-8	Fluoride	mg/L	0.031	J	0.01	0.3
SGWC-14	5/12/2016	7439-92-1	Lead	mg/L		ND	0.001	0.005
SGWC-14	5/12/2016	7439-93-2	Lithium	mg/L		NDO	0.01	0.05
SGWC-14	5/12/2016	7439-97-6	Mercury	mg/L		ND	0.00025	0.0005
SGWC-14	5/12/2016	7439-98-7	Molybdenum	mg/L		ND	0.002	0.01
SGWC-14	5/12/2016	7782-49-2	Selenium	mg/L		ND	0.002	0.01
SGWC-14	5/12/2016	7440-28-0	Thallium	mg/L		ND	0.0002	0.001
SGWC-14	6/28/2016	7440-36-0	Antimony	mg/L		ND	0.0002	0.003
SGWC-14	6/28/2016	7440-38-2	Arsenic	mg/L		ND	0.0007	0.005
SGWC-14	6/28/2016	7440-39-3	Barium	mg/L	0.0668		0.0003	0.01
SGWC-14	6/28/2016	7440-41-7	Beryllium	mg/L		ND	0.00009	0.003
SGWC-14	6/28/2016	7440-42-8	Boron	mg/L	1.29		0.0044	0.1
SGWC-14	6/28/2016	7440-43-9	Cadmium	mg/L		ND	0.0001	0.001
SGWC-14	6/28/2016	7440-47-3	Chromium	mg/L	0.0008	J	0.0004	0.01
SGWC-14	6/28/2016	7440-48-4	Cobalt	mg/L	0.0115		0.0003	0.01

Appendix B-2
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-14	6/28/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.735	U	n/a	5
SGWC-14	6/28/2016	16984-48-8	Fluoride	mg/L	0.03	J	0.02	0.3
SGWC-14	6/28/2016	7439-92-1	Lead	mg/L		ND	0.00008	0.005
SGWC-14	6/28/2016	7439-93-2	Lithium	mg/L		ND	0.0012	0.05
SGWC-14	6/28/2016	7439-97-6	Mercury	mg/L		ND	0.00013	0.0005
SGWC-14	6/28/2016	7439-98-7	Molybdenum	mg/L		ND	0.0005	0.01
SGWC-14	6/28/2016	7782-49-2	Selenium	mg/L		ND	0.0009	0.01
SGWC-14	6/28/2016	7440-28-0	Thallium	mg/L		ND	0.00006	0.001
SGWC-14	8/18/2016	7440-36-0	Antimony	mg/L		ND	0.0010	0.0025
SGWC-14	8/18/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-14	8/18/2016	7440-39-3	Barium	mg/L	0.06		0.00049	0.0025
SGWC-14	8/18/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-14	8/18/2016	7440-42-8	Boron	mg/L	1.3		0.021	0.05
SGWC-14	8/18/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-14	8/18/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-14	8/18/2016	7440-48-4	Cobalt	mg/L	0.011		0.0004	0.0025
SGWC-14	8/18/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.212	U	n/a	5
SGWC-14	8/18/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-14	8/18/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-14	8/18/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-14	8/18/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-14	8/18/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-14	8/18/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-14	8/18/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-14	10/17/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-14	10/17/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-14	10/17/2016	7440-39-3	Barium	mg/L	0.06		0.00049	0.0025
SGWC-14	10/17/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-14	10/17/2016	7440-42-8	Boron	mg/L	1.6		0.021	0.05
SGWC-14	10/17/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-14	10/17/2016	7440-47-3	Chromium	mg/L	0.0012	J	0.0011	0.0025
SGWC-14	10/17/2016	7440-48-4	Cobalt	mg/L	0.017		0.0004	0.0025
SGWC-14	10/17/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	-0.187	U	0.385	5
SGWC-14	10/17/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-14	10/17/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-14	10/17/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-14	10/17/2016	7439-97-6	Mercury	mg/L	0.000089	J	0.00007	0.0002
SGWC-14	10/17/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-14	10/17/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-14	10/17/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-14	12/7/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-14	12/7/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-14	12/7/2016	7440-39-3	Barium	mg/L	0.063		0.00049	0.0025
SGWC-14	12/7/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-14	12/7/2016	7440-42-8	Boron	mg/L	1.5		0.021	0.05
SGWC-14	12/7/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-14	12/7/2016	7440-47-3	Chromium	mg/L	0.0012	J	0.0011	0.0025
SGWC-14	12/7/2016	7440-48-4	Cobalt	mg/L	0.0043		0.0004	0.0025
SGWC-14	12/7/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.701		0.393	5
SGWC-14	12/7/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-14	12/7/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-14	12/7/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-14	12/7/2016	7439-97-6	Mercury	mg/L	0.00012	J	0.00007	0.0002
SGWC-14	12/7/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-14	12/7/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-14	12/7/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-14	2/15/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-14	2/15/2017	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-14	2/15/2017	7440-39-3	Barium	mg/L	0.061		0.00049	0.0025
SGWC-14	2/15/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-14	2/15/2017	7440-42-8	Boron	mg/L	1.5		0.021	0.05
SGWC-14	2/15/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-14	2/15/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-14	2/15/2017	7440-48-4	Cobalt	mg/L	0.0059		0.0004	0.0025
SGWC-14	2/15/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.155	U	0.406	5
SGWC-14	2/15/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-14	2/15/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-14	2/15/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-14	2/15/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-14	2/15/2017	7439-98-7	Molybdenum	mg/L	0.003	J	0.00085	0.015
SGWC-14	2/15/2017	7782-49-2	Selenium	mg/L	0.00066	J	0.00024	0.0013
SGWC-14	2/15/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-14	4/12/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-14	4/12/2017	7440-38-2	Arsenic	mg/L	0.00057	J	0.00046	0.0013
SGWC-14	4/12/2017	7440-39-3	Barium	mg/L	0.062		0.00049	0.0025
SGWC-14	4/12/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-14	4/12/2017	7440-42-8	Boron	mg/L	1.4		0.021	0.05
SGWC-14	4/12/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-14	4/12/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-14	4/12/2017	7440-48-4	Cobalt	mg/L	0.017		0.0004	0.0025
SGWC-14	4/12/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.233	U	0.395	5
SGWC-14	4/12/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-14	4/12/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-14	4/12/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-14	4/12/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-14	4/12/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-14	4/12/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-14	4/12/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-14	6/27/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-14	6/27/2017	7440-38-2	Arsenic	mg/L	0.00058	J	0.00046	0.0013
SGWC-14	6/27/2017	7440-39-3	Barium	mg/L	0.06		0.00049	0.0025
SGWC-14	6/27/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-14	6/27/2017	7440-42-8	Boron	mg/L	1.6		0.021	0.05
SGWC-14	6/27/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-14	6/27/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-14	6/27/2017	7440-48-4	Cobalt	mg/L	0.013		0.0004	0.0025
SGWC-14	6/27/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.302		0.274	5
SGWC-14	6/27/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-14	6/27/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-14	6/27/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-14	6/27/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-14	6/27/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-14	6/27/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-14	6/27/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-14	10/11/2017	7440-42-8	Boron	mg/L	1.5		0.021	0.05
SGWC-14	10/11/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-14	3/27/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-14	3/27/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-14	3/27/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-14	3/27/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-14	3/27/2018	7440-39-3	Barium	mg/L	0.055		0.00049	0.0025
SGWC-14	3/27/2018	7440-39-3	Barium	mg/L	0.056		0.00049	0.0025

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-14	3/27/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-14	3/27/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-14	3/27/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-14	3/27/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-14	3/27/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-14	3/27/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-14	3/27/2018	7440-48-4	Cobalt	mg/L	0.0083		0.0004	0.0025
SGWC-14	3/27/2018	7440-48-4	Cobalt	mg/L	0.0083		0.0004	0.0025
SGWC-14	3/27/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.306	U	0.404	5
SGWC-14	3/27/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-14	3/27/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-14	3/27/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-14	3/27/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-14	3/27/2018	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-14	3/27/2018	7439-93-2	Lithium	mg/L	0.0013	J+X	0.0011	0.005
SGWC-14	3/27/2018	7439-97-6	Mercury	mg/L		NDX	0.00007	0.0002
SGWC-14	3/27/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-14	3/27/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-14	3/27/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-14	3/27/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-14	3/27/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-14	3/27/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-14	3/27/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-14	6/7/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-14	6/7/2018	7440-39-3	Barium	mg/L	0.057		0.00049	0.0025
SGWC-14	6/7/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-14	6/7/2018	7440-42-8	Boron	mg/L	1.6		0.021	0.05
SGWC-14	6/7/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-14	6/7/2018	7440-48-4	Cobalt	mg/L	0.0025		0.0004	0.0025
SGWC-14	6/7/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.211	U	0.211	5
SGWC-14	6/7/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-14	6/7/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-14	6/7/2018	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-14	6/7/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-14	6/7/2018	7782-49-2	Selenium	mg/L		NDX	0.00024	0.0013
SGWC-14	6/7/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-14	10/8/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-14	10/8/2018	7440-38-2	Arsenic	mg/L	0.0007	J	0.00046	0.0013
SGWC-14	10/8/2018	7440-39-3	Barium	mg/L	0.053		0.00049	0.0025
SGWC-14	10/8/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-14	10/8/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-14	10/8/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-14	10/8/2018	7440-48-4	Cobalt	mg/L	0.0071		0.0004	0.0025
SGWC-14	10/8/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.636		0.39	5
SGWC-14	10/8/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-14	10/8/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-14	10/8/2018	7439-93-2	Lithium	mg/L	0.0011	J	0.0011	0.005
SGWC-14	10/8/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-14	10/8/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-14	10/8/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-14	10/8/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-14	12/14/2018	7440-42-8	Boron	mg/L	1.4		0.021	0.05
SGWC-14	2/20/2019	7440-36-0	Antimony	mg/L		ND	0.00038	0.0025
SGWC-14	2/20/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
SGWC-14	2/20/2019	7440-39-3	Barium	mg/L	0.053		0.0015	0.0025
SGWC-14	2/20/2019	7440-41-7	Beryllium	mg/L		ND	0.00016	0.0025

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-14	2/20/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-14	2/20/2019	7440-47-3	Chromium	mg/L	0.0016	J	0.0015	0.0025
SGWC-14	2/20/2019	7440-48-4	Cobalt	mg/L	0.011		0.000075	0.0025
SGWC-14	2/20/2019	7440-14-4	Combined Radium 226 + 228	pCi/L		ND	0.328	5
SGWC-14	2/20/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.2
SGWC-14	2/20/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-14	2/20/2019	7439-93-2	Lithium	mg/L		ND	0.0031	0.005
SGWC-14	2/20/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-14	2/20/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-14	2/20/2019	7782-49-2	Selenium	mg/L		ND	0.00081	0.0013
SGWC-14	2/20/2019	7440-28-0	Thallium	mg/L		ND	0.000063	0.0005
SGWC-14	4/1/2019	7440-38-2	Arsenic	mg/L	0.0012	J	0.00046	0.0013
SGWC-14	4/1/2019	7440-39-3	Barium	mg/L	0.054		0.00049	0.0025
SGWC-14	4/1/2019	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-14	4/1/2019	7440-42-8	Boron	mg/L	1.7		0.021	0.05
SGWC-14	4/1/2019	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-14	4/1/2019	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-14	4/1/2019	7440-48-4	Cobalt	mg/L	0.014		0.0004	0.0025
SGWC-14	4/1/2019	7440-14-4	Combined Radium 226 + 228	pCi/L		ND	0.388	5
SGWC-14	4/1/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.2
SGWC-14	4/1/2019	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-14	4/1/2019	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-14	4/1/2019	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-14	4/1/2019	7439-98-7	Molybdenum	mg/L		ND	0.002	0.015
SGWC-14	4/1/2019	7782-49-2	Selenium	mg/L		ND	0.00071	0.0013
SGWC-14	4/1/2019	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-14	9/17/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
SGWC-14	9/17/2019	7440-39-3	Barium	mg/L	0.048		0.0016	0.01
SGWC-14	9/17/2019	7440-41-7	Beryllium	mg/L		ND	0.00018	0.0025
SGWC-14	9/17/2019	7440-42-8	Boron	mg/L	1.4		0.039	0.05
SGWC-14	9/17/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-14	9/17/2019	7440-47-3	Chromium	mg/L	0.0026		0.0015	0.0025
SGWC-14	9/17/2019	7440-48-4	Cobalt	mg/L	0.0096		0.000075	0.0025
SGWC-14	9/17/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.264	U	0.374	5
SGWC-14	9/17/2019	16984-48-8	Fluoride	mg/L	0.028	J	0.026	0.1
SGWC-14	9/17/2019	7439-92-1	Lead	mg/L	0.00016	J	0.00013	0.001
SGWC-14	9/17/2019	7439-93-2	Lithium	mg/L		ND	0.002	0.0034
SGWC-14	9/17/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-14	9/17/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-14	9/17/2019	7782-49-2	Selenium	mg/L		ND	0.0015	0.0025
SGWC-14	9/17/2019	7440-28-0	Thallium	mg/L		ND	0.00015	0.0005
SGWC-15	5/12/2016	7440-36-0	Antimony	mg/L		ND	0.0006	0.003
SGWC-15	5/12/2016	7440-38-2	Arsenic	mg/L		ND	0.001	0.005
SGWC-15	5/12/2016	7440-39-3	Barium	mg/L	0.041		0.002	0.01
SGWC-15	5/12/2016	7440-41-7	Beryllium	mg/L		ND	0.0006	0.003
SGWC-15	5/12/2016	7440-42-8	Boron	mg/L	1.57		0.02	0.1
SGWC-15	5/12/2016	7440-43-9	Cadmium	mg/L	0.000265	J	0.0001	0.001
SGWC-15	5/12/2016	7440-47-3	Chromium	mg/L	0.0335		0.002	0.01
SGWC-15	5/12/2016	7440-48-4	Cobalt	mg/L	0.267		0.002	0.01
SGWC-15	5/12/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.344	U	n/a	5
SGWC-15	5/12/2016	16984-48-8	Fluoride	mg/L	0.1071	J	0.01	0.3
SGWC-15	5/12/2016	7439-92-1	Lead	mg/L		ND	0.001	0.005
SGWC-15	5/12/2016	7439-93-2	Lithium	mg/L		ND	0.01	0.05
SGWC-15	5/12/2016	7439-97-6	Mercury	mg/L		ND	0.00025	0.0005
SGWC-15	5/12/2016	7439-98-7	Molybdenum	mg/L		ND	0.002	0.01
SGWC-15	5/12/2016	7782-49-2	Selenium	mg/L	0.00965	J	0.002	0.01

Appendix B-2
Scherer Risk Evaluation Report
Data Used in Risk Evaluation - Downgradient Groundwater Data (2016-2019)
Scherer AP-1
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-15	5/12/2016	7440-28-0	Thallium	mg/L		ND	0.0002	0.001
SGWC-15	6/28/2016	7440-36-0	Antimony	mg/L		ND	0.0002	0.003
SGWC-15	6/28/2016	7440-38-2	Arsenic	mg/L	0.0026	J	0.0007	0.005
SGWC-15	6/28/2016	7440-39-3	Barium	mg/L	0.0435		0.0003	0.01
SGWC-15	6/28/2016	7440-41-7	Beryllium	mg/L	0.0003	J	0.00009	0.003
SGWC-15	6/28/2016	7440-42-8	Boron	mg/L	1.36		0.0044	0.1
SGWC-15	6/28/2016	7440-43-9	Cadmium	mg/L	0.0003	J	0.0001	0.001
SGWC-15	6/28/2016	7440-47-3	Chromium	mg/L	0.0339		0.0004	0.01
SGWC-15	6/28/2016	7440-48-4	Cobalt	mg/L	0.255		0.0003	0.01
SGWC-15	6/28/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.256	U	n/a	5
SGWC-15	6/28/2016	16984-48-8	Fluoride	mg/L	0.26	JO	0.02	0.3
SGWC-15	6/28/2016	7439-92-1	Lead	mg/L		ND	0.00008	0.005
SGWC-15	6/28/2016	7439-93-2	Lithium	mg/L	0.0024	J	0.0012	0.05
SGWC-15	6/28/2016	7439-97-6	Mercury	mg/L		ND	0.00013	0.0005
SGWC-15	6/28/2016	7439-98-7	Molybdenum	mg/L		ND	0.0005	0.01
SGWC-15	6/28/2016	7782-49-2	Selenium	mg/L	0.0101		0.0009	0.01
SGWC-15	6/28/2016	7440-28-0	Thallium	mg/L	0.00009	J	0.00006	0.001
SGWC-15	8/18/2016	7440-36-0	Antimony	mg/L		ND	0.0010	0.0025
SGWC-15	8/18/2016	7440-38-2	Arsenic	mg/L	0.0015		0.00046	0.0013
SGWC-15	8/18/2016	7440-39-3	Barium	mg/L	0.043		0.00049	0.0025
SGWC-15	8/18/2016	7440-41-7	Beryllium	mg/L	0.00037	J	0.00034	0.0025
SGWC-15	8/18/2016	7440-42-8	Boron	mg/L	1.5		0.021	0.05
SGWC-15	8/18/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-15	8/18/2016	7440-47-3	Chromium	mg/L	0.034		0.0011	0.0025
SGWC-15	8/18/2016	7440-48-4	Cobalt	mg/L	0.26		0.0004	0.0025
SGWC-15	8/18/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.503	U	n/a	5
SGWC-15	8/18/2016	16984-48-8	Fluoride	mg/L	0.14	J	0.082	0.2
SGWC-15	8/18/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-15	8/18/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-15	8/18/2016	7439-97-6	Mercury	mg/L	0.00011	J	0.00007	0.0002
SGWC-15	8/18/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-15	8/18/2016	7782-49-2	Selenium	mg/L	0.0014		0.00024	0.0013
SGWC-15	8/18/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-15	10/18/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-15	10/18/2016	7440-38-2	Arsenic	mg/L	0.0019		0.00046	0.0013
SGWC-15	10/18/2016	7440-39-3	Barium	mg/L	0.041		0.00049	0.0025
SGWC-15	10/18/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-15	10/18/2016	7440-42-8	Boron	mg/L	1.9		0.21	0.5
SGWC-15	10/18/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-15	10/18/2016	7440-47-3	Chromium	mg/L	0.033		0.0011	0.0025
SGWC-15	10/18/2016	7440-48-4	Cobalt	mg/L	0.28		0.0004	0.0025
SGWC-15	10/18/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.171	U	0.549	5
SGWC-15	10/18/2016	16984-48-8	Fluoride	mg/L	0.12	J	0.082	0.2
SGWC-15	10/18/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-15	10/18/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-15	10/18/2016	7439-97-6	Mercury	mg/L	0.00012	J	0.00007	0.0002
SGWC-15	10/18/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-15	10/18/2016	7782-49-2	Selenium	mg/L	0.0013		0.00024	0.0013
SGWC-15	10/18/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-15	12/7/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-15	12/7/2016	7440-38-2	Arsenic	mg/L	0.00079	J	0.00046	0.0013
SGWC-15	12/7/2016	7440-39-3	Barium	mg/L	0.042		0.00049	0.0025
SGWC-15	12/7/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-15	12/7/2016	7440-42-8	Boron	mg/L	1.5		0.21	0.5
SGWC-15	12/7/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-15	12/7/2016	7440-47-3	Chromium	mg/L	0.032		0.0011	0.0025

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Scherer AP-1
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-15	12/7/2016	7440-48-4	Cobalt	mg/L	0.26		0.0004	0.0025
SGWC-15	12/7/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.375	U	0.444	5
SGWC-15	12/7/2016	16984-48-8	Fluoride	mg/L	0.13	J	0.082	0.2
SGWC-15	12/7/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-15	12/7/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-15	12/7/2016	7439-97-6	Mercury	mg/L	0.00017	J	0.00007	0.0002
SGWC-15	12/7/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-15	12/7/2016	7782-49-2	Selenium	mg/L	0.0007	J	0.00024	0.0013
SGWC-15	12/7/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-15	2/15/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-15	2/15/2017	7440-38-2	Arsenic	mg/L	0.00073	J	0.00046	0.0013
SGWC-15	2/15/2017	7440-39-3	Barium	mg/L	0.038		0.00049	0.0025
SGWC-15	2/15/2017	7440-41-7	Beryllium	mg/L	0.00037	J	0.00034	0.0025
SGWC-15	2/15/2017	7440-42-8	Boron	mg/L	1.5		0.021	0.05
SGWC-15	2/15/2017	7440-43-9	Cadmium	mg/L	0.00044	J	0.00034	0.0025
SGWC-15	2/15/2017	7440-47-3	Chromium	mg/L	0.03		0.0011	0.0025
SGWC-15	2/15/2017	7440-48-4	Cobalt	mg/L	0.24		0.0004	0.0025
SGWC-15	2/15/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.0801	U	0.391	5
SGWC-15	2/15/2017	16984-48-8	Fluoride	mg/L	0.12	J	0.082	0.2
SGWC-15	2/15/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-15	2/15/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-15	2/15/2017	7439-97-6	Mercury	mg/L	0.00011	J	0.00007	0.0002
SGWC-15	2/15/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-15	2/15/2017	7782-49-2	Selenium	mg/L	0.00075	J	0.00024	0.0013
SGWC-15	2/15/2017	7440-28-0	Thallium	mg/L	0.000085	J	0.000085	0.0005
SGWC-15	4/12/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-15	4/12/2017	7440-38-2	Arsenic	mg/L	0.0009	J	0.00046	0.0013
SGWC-15	4/12/2017	7440-39-3	Barium	mg/L	0.038		0.00049	0.0025
SGWC-15	4/12/2017	7440-41-7	Beryllium	mg/L	0.00035	J	0.00034	0.0025
SGWC-15	4/12/2017	7440-42-8	Boron	mg/L	1.7		0.021	0.05
SGWC-15	4/12/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-15	4/12/2017	7440-47-3	Chromium	mg/L	0.035		0.0011	0.0025
SGWC-15	4/12/2017	7440-48-4	Cobalt	mg/L	0.28		0.0004	0.0025
SGWC-15	4/12/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.197	U	0.357	5
SGWC-15	4/12/2017	16984-48-8	Fluoride	mg/L	0.11	J	0.082	0.2
SGWC-15	4/12/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-15	4/12/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-15	4/12/2017	7439-97-6	Mercury	mg/L	0.000072	J	0.00007	0.0002
SGWC-15	4/12/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-15	4/12/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-15	4/12/2017	7440-28-0	Thallium	mg/L	0.000095	J	0.000085	0.0005
SGWC-15	6/27/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-15	6/27/2017	7440-38-2	Arsenic	mg/L	0.0011	J	0.00046	0.0013
SGWC-15	6/27/2017	7440-39-3	Barium	mg/L	0.041		0.00049	0.0025
SGWC-15	6/27/2017	7440-41-7	Beryllium	mg/L	0.0004	J	0.00034	0.0025
SGWC-15	6/27/2017	7440-42-8	Boron	mg/L	1.7		0.021	0.05
SGWC-15	6/27/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-15	6/27/2017	7440-47-3	Chromium	mg/L	0.035		0.0011	0.0025
SGWC-15	6/27/2017	7440-48-4	Cobalt	mg/L	0.29		0.0004	0.0025
SGWC-15	6/27/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.0274	U	0.263	5
SGWC-15	6/27/2017	16984-48-8	Fluoride	mg/L	0.13	J	0.082	0.2
SGWC-15	6/27/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-15	6/27/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-15	6/27/2017	7439-97-6	Mercury	mg/L	0.000084	J	0.00007	0.0002
SGWC-15	6/27/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-15	6/27/2017	7782-49-2	Selenium	mg/L	0.0013		0.00024	0.0013

Appendix B-2
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-15	6/27/2017	7440-28-0	Thallium	mg/L	0.0001	J	0.000085	0.0005
SGWC-15	10/12/2017	7440-42-8	Boron	mg/L	1.6		0.021	0.05
SGWC-15	10/12/2017	16984-48-8	Fluoride	mg/L	0.13	J	0.082	0.2
SGWC-15	3/27/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-15	3/27/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-15	3/27/2018	7440-39-3	Barium	mg/L	0.035		0.00049	0.0025
SGWC-15	3/27/2018	7440-41-7	Beryllium	mg/L	0.00041	J	0.00034	0.0025
SGWC-15	3/27/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-15	3/27/2018	7440-47-3	Chromium	mg/L	0.031		0.0011	0.0025
SGWC-15	3/27/2018	7440-48-4	Cobalt	mg/L	0.27		0.0004	0.0025
SGWC-15	3/27/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.285	U	0.379	5
SGWC-15	3/27/2018	16984-48-8	Fluoride	mg/L	0.12	J	0.082	0.2
SGWC-15	3/27/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-15	3/27/2018	7439-93-2	Lithium	mg/L	0.0034	J+X	0.0011	0.005
SGWC-15	3/27/2018	7439-97-6	Mercury	mg/L		NDX	0.00007	0.0002
SGWC-15	3/27/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-15	3/27/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-15	3/27/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-15	6/7/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-15	6/7/2018	7440-39-3	Barium	mg/L	0.035		0.00049	0.0025
SGWC-15	6/7/2018	7440-41-7	Beryllium	mg/L	0.00038	J	0.00034	0.0025
SGWC-15	6/7/2018	7440-42-8	Boron	mg/L	1.7		0.021	0.05
SGWC-15	6/7/2018	7440-47-3	Chromium	mg/L	0.032		0.0011	0.0025
SGWC-15	6/7/2018	7440-48-4	Cobalt	mg/L	0.3		0.0004	0.0025
SGWC-15	6/7/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.64		0.35	5
SGWC-15	6/7/2018	16984-48-8	Fluoride	mg/L	0.14	J	0.082	0.2
SGWC-15	6/7/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-15	6/7/2018	7439-93-2	Lithium	mg/L	0.003	J	0.0011	0.005
SGWC-15	6/7/2018	7439-97-6	Mercury	mg/L	0.00013	J	0.00007	0.0002
SGWC-15	6/7/2018	7782-49-2	Selenium	mg/L	0.0014		0.00024	0.0013
SGWC-15	6/7/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-15	10/16/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-15	10/16/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-15	10/16/2018	7440-39-3	Barium	mg/L	0.031		0.00049	0.0025
SGWC-15	10/16/2018	7440-41-7	Beryllium	mg/L	0.0004	J	0.00034	0.0025
SGWC-15	10/16/2018	7440-42-8	Boron	mg/L	1.5		0.021	0.05
SGWC-15	10/16/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-15	10/16/2018	7440-47-3	Chromium	mg/L	0.032		0.0011	0.0025
SGWC-15	10/16/2018	7440-48-4	Cobalt	mg/L	0.27		0.0004	0.0025
SGWC-15	10/16/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.731		0.532	5
SGWC-15	10/16/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.731		0.532	5
SGWC-15	10/16/2018	16984-48-8	Fluoride	mg/L		NDX	0.082	0.2
SGWC-15	10/16/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-15	10/16/2018	7439-93-2	Lithium	mg/L	0.0034	J	0.0011	0.005
SGWC-15	10/16/2018	7439-97-6	Mercury	mg/L	0.00013	J	0.00007	0.0002
SGWC-15	10/16/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-15	10/16/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-15	10/16/2018	7782-49-2	Selenium	mg/L	0.0021		0.00024	0.0013
SGWC-15	10/16/2018	7440-28-0	Thallium	mg/L	0.0001	J	0.000085	0.0005
SGWC-15	2/20/2019	7440-36-0	Antimony	mg/L		ND	0.00038	0.0025
SGWC-15	2/20/2019	7440-38-2	Arsenic	mg/L	0.00075	J	0.00032	0.0013
SGWC-15	2/20/2019	7440-39-3	Barium	mg/L	0.036		0.0015	0.0025
SGWC-15	2/20/2019	7440-41-7	Beryllium	mg/L	0.00042	J	0.00016	0.0025
SGWC-15	2/20/2019	7440-43-9	Cadmium	mg/L	0.00033	J	0.00013	0.0025
SGWC-15	2/20/2019	7440-47-3	Chromium	mg/L	0.038		0.0015	0.0025
SGWC-15	2/20/2019	7440-48-4	Cobalt	mg/L	0.26		0.000075	0.0025

Appendix B-2
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-15	2/20/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.573		0.376	5
SGWC-15	2/20/2019	16984-48-8	Fluoride	mg/L	0.33		0.026	0.2
SGWC-15	2/20/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-15	2/20/2019	7439-93-2	Lithium	mg/L	0.0038	J	0.0031	0.005
SGWC-15	2/20/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-15	2/20/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-15	2/20/2019	7782-49-2	Selenium	mg/L	0.0034		0.00081	0.0013
SGWC-15	2/20/2019	7440-28-0	Thallium	mg/L	0.000098	J	0.000063	0.0005
SGWC-15	4/1/2019	7440-38-2	Arsenic	mg/L	0.0016		0.00046	0.0013
SGWC-15	4/1/2019	7440-39-3	Barium	mg/L	0.034		0.00049	0.0025
SGWC-15	4/1/2019	7440-41-7	Beryllium	mg/L	0.00034	J	0.00034	0.0025
SGWC-15	4/1/2019	7440-42-8	Boron	mg/L	1.6		0.021	0.05
SGWC-15	4/1/2019	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-15	4/1/2019	7440-47-3	Chromium	mg/L	0.032		0.0011	0.0025
SGWC-15	4/1/2019	7440-48-4	Cobalt	mg/L	0.26		0.0004	0.0025
SGWC-15	4/1/2019	7440-14-4	Combined Radium 226 + 228	pCi/L		ND	0.343	5
SGWC-15	4/1/2019	16984-48-8	Fluoride	mg/L	0.072	J	0.026	0.2
SGWC-15	4/1/2019	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-15	4/1/2019	7439-93-2	Lithium	mg/L	0.0025	J	0.0011	0.005
SGWC-15	4/1/2019	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-15	4/1/2019	7439-98-7	Molybdenum	mg/L		ND	0.002	0.015
SGWC-15	4/1/2019	7782-49-2	Selenium	mg/L		ND	0.00071	0.0013
SGWC-15	4/1/2019	7440-28-0	Thallium	mg/L	0.000095	J	0.000085	0.0005
SGWC-15	9/17/2019	7440-38-2	Arsenic	mg/L	0.0008	J	0.00032	0.0013
SGWC-15	9/17/2019	7440-39-3	Barium	mg/L	0.034		0.0016	0.01
SGWC-15	9/17/2019	7440-41-7	Beryllium	mg/L	0.00046	J	0.00018	0.0025
SGWC-15	9/17/2019	7440-42-8	Boron	mg/L	1.4		0.039	0.05
SGWC-15	9/17/2019	7440-43-9	Cadmium	mg/L	0.00034	J	0.00013	0.0025
SGWC-15	9/17/2019	7440-47-3	Chromium	mg/L	0.037		0.0015	0.0025
SGWC-15	9/17/2019	7440-48-4	Cobalt	mg/L	0.27		0.000075	0.0025
SGWC-15	9/17/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.441	U	0.444	5
SGWC-15	9/17/2019	16984-48-8	Fluoride	mg/L	0.1		0.026	0.1
SGWC-15	9/17/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-15	9/17/2019	7439-93-2	Lithium	mg/L	0.0037		0.002	0.0034
SGWC-15	9/17/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-15	9/17/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-15	9/17/2019	7782-49-2	Selenium	mg/L		ND	0.0015	0.0025
SGWC-15	9/17/2019	7440-28-0	Thallium	mg/L	0.00016	J	0.00015	0.0005
SGWC-16	5/12/2016	7440-36-0	Antimony	mg/L		ND	0.0006	0.003
SGWC-16	5/12/2016	7440-38-2	Arsenic	mg/L		ND	0.001	0.005
SGWC-16	5/12/2016	7440-39-3	Barium	mg/L	0.0163		0.002	0.01
SGWC-16	5/12/2016	7440-41-7	Beryllium	mg/L		ND	0.0006	0.003
SGWC-16	5/12/2016	7440-42-8	Boron	mg/L	0.562		0.02	0.1
SGWC-16	5/12/2016	7440-43-9	Cadmium	mg/L		ND	0.0001	0.001
SGWC-16	5/12/2016	7440-47-3	Chromium	mg/L	0.00943	J	0.002	0.01
SGWC-16	5/12/2016	7440-48-4	Cobalt	mg/L	0.00303	J	0.002	0.01
SGWC-16	5/12/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.0196	U	n/a	5
SGWC-16	5/12/2016	16984-48-8	Fluoride	mg/L	0.011	J	0.01	0.3
SGWC-16	5/12/2016	7439-92-1	Lead	mg/L		ND	0.001	0.005
SGWC-16	5/12/2016	7439-93-2	Lithium	mg/L		ND	0.01	0.05
SGWC-16	5/12/2016	7439-97-6	Mercury	mg/L		ND	0.00025	0.0005
SGWC-16	5/12/2016	7439-98-7	Molybdenum	mg/L		ND	0.002	0.01
SGWC-16	5/12/2016	7782-49-2	Selenium	mg/L		ND	0.002	0.01
SGWC-16	5/12/2016	7440-28-0	Thallium	mg/L		ND	0.0002	0.001
SGWC-16	6/28/2016	7440-36-0	Antimony	mg/L		ND	0.0002	0.003
SGWC-16	6/28/2016	7440-38-2	Arsenic	mg/L		ND	0.0007	0.005

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-16	6/28/2016	7440-39-3	Barium	mg/L	0.0165		0.0003	0.01
SGWC-16	6/28/2016	7440-41-7	Beryllium	mg/L		ND	0.00009	0.003
SGWC-16	6/28/2016	7440-42-8	Boron	mg/L	0.546		0.0044	0.1
SGWC-16	6/28/2016	7440-43-9	Cadmium	mg/L		ND	0.0001	0.001
SGWC-16	6/28/2016	7440-47-3	Chromium	mg/L	0.0093	J	0.0004	0.01
SGWC-16	6/28/2016	7440-48-4	Cobalt	mg/L	0.0029	J	0.0003	0.01
SGWC-16	6/28/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.418	U	n/a	5
SGWC-16	6/28/2016	16984-48-8	Fluoride	mg/L	0.09	J	0.02	0.3
SGWC-16	6/28/2016	7439-92-1	Lead	mg/L		ND	0.00008	0.005
SGWC-16	6/28/2016	7439-93-2	Lithium	mg/L		ND	0.0012	0.05
SGWC-16	6/28/2016	7439-97-6	Mercury	mg/L		ND	0.00013	0.0005
SGWC-16	6/28/2016	7439-98-7	Molybdenum	mg/L		ND	0.0005	0.01
SGWC-16	6/28/2016	7782-49-2	Selenium	mg/L		ND	0.0009	0.01
SGWC-16	6/28/2016	7440-28-0	Thallium	mg/L		ND	0.00006	0.001
SGWC-16	8/18/2016	7440-36-0	Antimony	mg/L		ND	0.0010	0.0025
SGWC-16	8/18/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-16	8/18/2016	7440-39-3	Barium	mg/L	0.017		0.00049	0.0025
SGWC-16	8/18/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-16	8/18/2016	7440-42-8	Boron	mg/L	0.54		0.021	0.05
SGWC-16	8/18/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-16	8/18/2016	7440-47-3	Chromium	mg/L	0.0085		0.0011	0.0025
SGWC-16	8/18/2016	7440-48-4	Cobalt	mg/L	0.0029		0.0004	0.0025
SGWC-16	8/18/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.199	U	n/a	5
SGWC-16	8/18/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-16	8/18/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-16	8/18/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-16	8/18/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-16	8/18/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-16	8/18/2016	7782-49-2	Selenium	mg/L	0.00053	J	0.00024	0.0013
SGWC-16	8/18/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-16	10/18/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-16	10/18/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-16	10/18/2016	7440-39-3	Barium	mg/L	0.017		0.00049	0.0025
SGWC-16	10/18/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-16	10/18/2016	7440-42-8	Boron	mg/L	0.55		0.021	0.05
SGWC-16	10/18/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-16	10/18/2016	7440-47-3	Chromium	mg/L	0.0088		0.0011	0.0025
SGWC-16	10/18/2016	7440-48-4	Cobalt	mg/L	0.0034		0.0004	0.0025
SGWC-16	10/18/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.0404	U	0.463	5
SGWC-16	10/18/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-16	10/18/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-16	10/18/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-16	10/18/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-16	10/18/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-16	10/18/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-16	10/18/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-16	12/7/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-16	12/7/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-16	12/7/2016	7440-39-3	Barium	mg/L	0.017		0.00049	0.0025
SGWC-16	12/7/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-16	12/7/2016	7440-42-8	Boron	mg/L	0.56		0.021	0.05
SGWC-16	12/7/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-16	12/7/2016	7440-47-3	Chromium	mg/L	0.0079		0.0011	0.0025
SGWC-16	12/7/2016	7440-48-4	Cobalt	mg/L	0.003		0.0004	0.0025
SGWC-16	12/7/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.426		0.398	5
SGWC-16	12/7/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-16	12/7/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-16	12/7/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-16	12/7/2016	7439-97-6	Mercury	mg/L	0.000076	J	0.00007	0.0002
SGWC-16	12/7/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-16	12/7/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-16	12/7/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-16	2/16/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-16	2/16/2017	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-16	2/16/2017	7440-39-3	Barium	mg/L	0.017		0.00049	0.0025
SGWC-16	2/16/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-16	2/16/2017	7440-42-8	Boron	mg/L	0.58		0.021	0.05
SGWC-16	2/16/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-16	2/16/2017	7440-47-3	Chromium	mg/L	0.0097		0.0011	0.0025
SGWC-16	2/16/2017	7440-48-4	Cobalt	mg/L	0.0033		0.0004	0.0025
SGWC-16	2/16/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.163	U	0.338	5
SGWC-16	2/16/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-16	2/16/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-16	2/16/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-16	2/16/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-16	2/16/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-16	2/16/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-16	2/16/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-16	4/13/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-16	4/13/2017	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-16	4/13/2017	7440-39-3	Barium	mg/L	0.019		0.00049	0.0025
SGWC-16	4/13/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-16	4/13/2017	7440-42-8	Boron	mg/L	0.56		0.021	0.05
SGWC-16	4/13/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-16	4/13/2017	7440-47-3	Chromium	mg/L	0.0098		0.0011	0.0025
SGWC-16	4/13/2017	7440-48-4	Cobalt	mg/L	0.0034		0.0004	0.0025
SGWC-16	4/13/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.0522	U	0.316	5
SGWC-16	4/13/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-16	4/13/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-16	4/13/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-16	4/13/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-16	4/13/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-16	4/13/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-16	4/13/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-16	6/27/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-16	6/27/2017	7440-38-2	Arsenic	mg/L	0.00055	J	0.00046	0.0013
SGWC-16	6/27/2017	7440-39-3	Barium	mg/L	0.02	O	0.00049	0.0025
SGWC-16	6/27/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-16	6/27/2017	7440-42-8	Boron	mg/L	0.56		0.021	0.05
SGWC-16	6/27/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-16	6/27/2017	7440-47-3	Chromium	mg/L	0.0096		0.0011	0.0025
SGWC-16	6/27/2017	7440-48-4	Cobalt	mg/L	0.0037		0.0004	0.0025
SGWC-16	6/27/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.222	U	0.244	5
SGWC-16	6/27/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-16	6/27/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-16	6/27/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-16	6/27/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-16	6/27/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-16	6/27/2017	7782-49-2	Selenium	mg/L	0.001	J	0.00024	0.0013
SGWC-16	6/27/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-16	10/12/2017	7440-42-8	Boron	mg/L	0.57		0.021	0.05
SGWC-16	10/12/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-16	3/27/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-16	3/27/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-16	3/27/2018	7440-39-3	Barium	mg/L	0.021		0.00049	0.0025
SGWC-16	3/27/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-16	3/27/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-16	3/27/2018	7440-47-3	Chromium	mg/L	0.0098		0.0011	0.0025
SGWC-16	3/27/2018	7440-48-4	Cobalt	mg/L	0.0037		0.0004	0.0025
SGWC-16	3/27/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.387	U	0.399	5
SGWC-16	3/27/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-16	3/27/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-16	3/27/2018	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-16	3/27/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-16	3/27/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-16	3/27/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-16	3/27/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-16	6/7/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-16	6/7/2018	7440-39-3	Barium	mg/L	0.022		0.00049	0.0025
SGWC-16	6/7/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-16	6/7/2018	7440-42-8	Boron	mg/L	0.59		0.021	0.05
SGWC-16	6/7/2018	7440-47-3	Chromium	mg/L	0.01		0.0011	0.0025
SGWC-16	6/7/2018	7440-48-4	Cobalt	mg/L	0.0037		0.0004	0.0025
SGWC-16	6/7/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.283	U	0.283	5
SGWC-16	6/7/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-16	6/7/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-16	6/7/2018	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-16	6/7/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-16	6/7/2018	7782-49-2	Selenium	mg/L	0.0013		0.00024	0.0013
SGWC-16	6/7/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-16	10/8/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-16	10/8/2018	7440-38-2	Arsenic	mg/L	0.00054	J	0.00046	0.0013
SGWC-16	10/8/2018	7440-39-3	Barium	mg/L	0.025		0.00049	0.0025
SGWC-16	10/8/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-16	10/8/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-16	10/8/2018	7440-47-3	Chromium	mg/L	0.013		0.0011	0.0025
SGWC-16	10/8/2018	7440-48-4	Cobalt	mg/L	0.0044		0.0004	0.0025
SGWC-16	10/8/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.799		0.319	5
SGWC-16	10/8/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-16	10/8/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-16	10/8/2018	7439-93-2	Lithium	mg/L	0.0015	J	0.0011	0.005
SGWC-16	10/8/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-16	10/8/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-16	10/8/2018	7782-49-2	Selenium	mg/L		NDX	n/a	0.0014
SGWC-16	10/8/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-16	12/17/2018	7440-42-8	Boron	mg/L	0.55		0.021	0.05
SGWC-16	2/20/2019	7440-36-0	Antimony	mg/L		ND	0.00038	0.0025
SGWC-16	2/20/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
SGWC-16	2/20/2019	7440-39-3	Barium	mg/L	0.027		0.0015	0.0025
SGWC-16	2/20/2019	7440-41-7	Beryllium	mg/L		ND	0.00016	0.0025
SGWC-16	2/20/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-16	2/20/2019	7440-47-3	Chromium	mg/L	0.013		0.0015	0.0025
SGWC-16	2/20/2019	7440-48-4	Cobalt	mg/L	0.0038		0.000075	0.0025
SGWC-16	2/20/2019	7440-14-4	Combined Radium 226 + 228	pCi/L		ND	0.295	5
SGWC-16	2/20/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.2
SGWC-16	2/20/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-16	2/20/2019	7439-93-2	Lithium	mg/L		ND	0.0031	0.005
SGWC-16	2/20/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002

Appendix B-2
Scherer Risk Evaluation Report
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Scherer AP-1
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-16	2/20/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-16	2/20/2019	7782-49-2	Selenium	mg/L	0.0012	J	0.00081	0.0013
SGWC-16	2/20/2019	7440-28-0	Thallium	mg/L		ND	0.000063	0.0005
SGWC-16	4/2/2019	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-16	4/2/2019	7440-39-3	Barium	mg/L	0.023		0.00049	0.0025
SGWC-16	4/2/2019	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-16	4/2/2019	7440-42-8	Boron	mg/L	0.53		0.021	0.05
SGWC-16	4/2/2019	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-16	4/2/2019	7440-47-3	Chromium	mg/L	0.01		0.0011	0.0025
SGWC-16	4/2/2019	7440-48-4	Cobalt	mg/L	0.0041		0.0004	0.0025
SGWC-16	4/2/2019	7440-14-4	Combined Radium 226 + 228	pCi/L		ND	0.304	5
SGWC-16	4/2/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.2
SGWC-16	4/2/2019	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-16	4/2/2019	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-16	4/2/2019	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-16	4/2/2019	7439-98-7	Molybdenum	mg/L		ND	0.002	0.015
SGWC-16	4/2/2019	7782-49-2	Selenium	mg/L	0.0021		0.00071	0.0013
SGWC-16	4/2/2019	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-16	9/17/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
SGWC-16	9/17/2019	7440-39-3	Barium	mg/L	0.029		0.0016	0.01
SGWC-16	9/17/2019	7440-41-7	Beryllium	mg/L		ND	0.00018	0.0025
SGWC-16	9/17/2019	7440-42-8	Boron	mg/L	0.55		0.039	0.05
SGWC-16	9/17/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-16	9/17/2019	7440-47-3	Chromium	mg/L	0.013		0.0015	0.0025
SGWC-16	9/17/2019	7440-48-4	Cobalt	mg/L	0.0042		0.000075	0.0025
SGWC-16	9/17/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.558		0.384	5
SGWC-16	9/17/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.1
SGWC-16	9/17/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-16	9/17/2019	7439-93-2	Lithium	mg/L		ND	0.002	0.0034
SGWC-16	9/17/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-16	9/17/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-16	9/17/2019	7782-49-2	Selenium	mg/L		ND	0.0015	0.0025
SGWC-16	9/17/2019	7440-28-0	Thallium	mg/L		ND	0.00015	0.0005
SGWC-17	5/12/2016	7440-36-0	Antimony	mg/L		ND	0.0006	0.003
SGWC-17	5/12/2016	7440-38-2	Arsenic	mg/L		ND	0.001	0.005
SGWC-17	5/12/2016	7440-39-3	Barium	mg/L	0.0157		0.002	0.01
SGWC-17	5/12/2016	7440-41-7	Beryllium	mg/L		ND	0.0006	0.003
SGWC-17	5/12/2016	7440-42-8	Boron	mg/L	0.195		0.02	0.1
SGWC-17	5/12/2016	7440-43-9	Cadmium	mg/L		ND	0.0001	0.001
SGWC-17	5/12/2016	7440-47-3	Chromium	mg/L	0.0077	J	0.002	0.01
SGWC-17	5/12/2016	7440-48-4	Cobalt	mg/L		NDO	0.002	0.01
SGWC-17	5/12/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.134	U	n/a	5
SGWC-17	5/12/2016	16984-48-8	Fluoride	mg/L	0.066	J	0.01	0.3
SGWC-17	5/12/2016	7439-92-1	Lead	mg/L		ND	0.001	0.005
SGWC-17	5/12/2016	7439-93-2	Lithium	mg/L		ND	0.01	0.05
SGWC-17	5/12/2016	7439-97-6	Mercury	mg/L		ND	0.00025	0.0005
SGWC-17	5/12/2016	7439-98-7	Molybdenum	mg/L		ND	0.002	0.01
SGWC-17	5/12/2016	7782-49-2	Selenium	mg/L		ND	0.002	0.01
SGWC-17	5/12/2016	7440-28-0	Thallium	mg/L		ND	0.0002	0.001
SGWC-17	6/29/2016	7440-36-0	Antimony	mg/L		ND	0.0002	0.003
SGWC-17	6/29/2016	7440-38-2	Arsenic	mg/L		ND	0.0007	0.005
SGWC-17	6/29/2016	7440-39-3	Barium	mg/L	0.0161	J	0.0003	0.01
SGWC-17	6/29/2016	7440-41-7	Beryllium	mg/L		ND	0.00009	0.003
SGWC-17	6/29/2016	7440-42-8	Boron	mg/L	0.198	J	0.0044	0.1
SGWC-17	6/29/2016	7440-43-9	Cadmium	mg/L		ND	0.0001	0.001
SGWC-17	6/29/2016	7440-47-3	Chromium	mg/L	0.0036	J	0.0004	0.01

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Data Used in Risk Evaluation - Downgradient Groundwater Data (2016-2019)
Scherer AP-1
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-17	6/29/2016	7440-48-4	Cobalt	mg/L	0.0007	J	0.0003	0.01
SGWC-17	6/29/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.391	U	n/a	5
SGWC-17	6/29/2016	16984-48-8	Fluoride	mg/L	0.17	J	0.02	0.3
SGWC-17	6/29/2016	7439-92-1	Lead	mg/L		NDO	0.00008	0.005
SGWC-17	6/29/2016	7439-93-2	Lithium	mg/L		ND	0.0012	0.05
SGWC-17	6/29/2016	7439-97-6	Mercury	mg/L		ND	0.00013	0.0005
SGWC-17	6/29/2016	7439-98-7	Molybdenum	mg/L		ND	0.0005	0.01
SGWC-17	6/29/2016	7782-49-2	Selenium	mg/L		NDO	0.0009	0.01
SGWC-17	6/29/2016	7440-28-0	Thallium	mg/L		ND	0.00006	0.001
SGWC-17	8/18/2016	7440-36-0	Antimony	mg/L		ND	0.0010	0.0025
SGWC-17	8/18/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-17	8/18/2016	7440-39-3	Barium	mg/L	0.016		0.00049	0.0025
SGWC-17	8/18/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-17	8/18/2016	7440-42-8	Boron	mg/L	0.24		0.021	0.05
SGWC-17	8/18/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-17	8/18/2016	7440-47-3	Chromium	mg/L	0.0027		0.0011	0.0025
SGWC-17	8/18/2016	7440-48-4	Cobalt	mg/L	0.00078	J	0.0004	0.0025
SGWC-17	8/18/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.498	U	n/a	5
SGWC-17	8/18/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-17	8/18/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-17	8/18/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-17	8/18/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-17	8/18/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-17	8/18/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-17	8/18/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-17	10/19/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-17	10/19/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-17	10/19/2016	7440-38-2	Arsenic	mg/L	0.0011	J	0.00046	0.0013
SGWC-17	10/19/2016	7440-38-2	Arsenic	mg/L	0.00099	J	0.00046	0.0013
SGWC-17	10/19/2016	7440-39-3	Barium	mg/L	0.023		0.00049	0.0025
SGWC-17	10/19/2016	7440-39-3	Barium	mg/L	0.019		0.00049	0.0025
SGWC-17	10/19/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-17	10/19/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-17	10/19/2016	7440-42-8	Boron	mg/L	0.37		0.021	0.05
SGWC-17	10/19/2016	7440-42-8	Boron	mg/L	0.37		0.021	0.05
SGWC-17	10/19/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-17	10/19/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-17	10/19/2016	7440-47-3	Chromium	mg/L	0.0048		0.0011	0.0025
SGWC-17	10/19/2016	7440-47-3	Chromium	mg/L	0.0019	J	0.0011	0.0025
SGWC-17	10/19/2016	7440-48-4	Cobalt	mg/L	0.00075	J	0.0004	0.0025
SGWC-17	10/19/2016	7440-48-4	Cobalt	mg/L	0.00094	J	0.0004	0.0025
SGWC-17	10/19/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.639		0.402	5
SGWC-17	10/19/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-17	10/19/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-17	10/19/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-17	10/19/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-17	10/19/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-17	10/19/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-17	10/19/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-17	10/19/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-17	10/19/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-17	10/19/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-17	10/19/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-17	10/19/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-17	10/19/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-17	10/19/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005

Appendix B-2
Scherer Risk Evaluation Report
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-17	12/7/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-17	12/7/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-17	12/7/2016	7440-39-3	Barium	mg/L	0.018		0.00049	0.0025
SGWC-17	12/7/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-17	12/7/2016	7440-42-8	Boron	mg/L	0.4		0.021	0.05
SGWC-17	12/7/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-17	12/7/2016	7440-47-3	Chromium	mg/L	0.0027		0.0011	0.0025
SGWC-17	12/7/2016	7440-48-4	Cobalt	mg/L	0.00056	J	0.0004	0.0025
SGWC-17	12/7/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.239	U	0.48	5
SGWC-17	12/7/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-17	12/7/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-17	12/7/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-17	12/7/2016	7439-97-6	Mercury	mg/L	0.00011	J	0.00007	0.0002
SGWC-17	12/7/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-17	12/7/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-17	12/7/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-17	2/15/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-17	2/15/2017	7440-38-2	Arsenic	mg/L	0.00059	J	0.00046	0.0013
SGWC-17	2/15/2017	7440-39-3	Barium	mg/L	0.02		0.00049	0.0025
SGWC-17	2/15/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-17	2/15/2017	7440-42-8	Boron	mg/L	0.38		0.021	0.05
SGWC-17	2/15/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-17	2/15/2017	7440-47-3	Chromium	mg/L	0.0044		0.0011	0.0025
SGWC-17	2/15/2017	7440-48-4	Cobalt	mg/L	0.00069	J	0.0004	0.0025
SGWC-17	2/15/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.175	U	0.341	5
SGWC-17	2/15/2017	16984-48-8	Fluoride	mg/L	0.089	J	0.082	0.2
SGWC-17	2/15/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-17	2/15/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-17	2/15/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-17	2/15/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-17	2/15/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-17	2/15/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-17	4/13/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-17	4/13/2017	7440-38-2	Arsenic	mg/L	0.00066	J	0.00046	0.0013
SGWC-17	4/13/2017	7440-39-3	Barium	mg/L	0.019		0.00049	0.0025
SGWC-17	4/13/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-17	4/13/2017	7440-42-8	Boron	mg/L	0.34		0.021	0.05
SGWC-17	4/13/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-17	4/13/2017	7440-47-3	Chromium	mg/L	0.0047		0.0011	0.0025
SGWC-17	4/13/2017	7440-48-4	Cobalt	mg/L	0.00049	J	0.0004	0.0025
SGWC-17	4/13/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	-0.00846	U	0.355	5
SGWC-17	4/13/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-17	4/13/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-17	4/13/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-17	4/13/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-17	4/13/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-17	4/13/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-17	4/13/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-17	6/27/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-17	6/27/2017	7440-38-2	Arsenic	mg/L	0.00075	J	0.00046	0.0013
SGWC-17	6/27/2017	7440-39-3	Barium	mg/L	0.019		0.00049	0.0025
SGWC-17	6/27/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-17	6/27/2017	7440-42-8	Boron	mg/L	0.33		0.021	0.05
SGWC-17	6/27/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-17	6/27/2017	7440-47-3	Chromium	mg/L	0.0029		0.0011	0.0025
SGWC-17	6/27/2017	7440-48-4	Cobalt	mg/L	0.00041	J	0.0004	0.0025

Appendix B-2
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-17	6/27/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.186	U	0.274	5
SGWC-17	6/27/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-17	6/27/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-17	6/27/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-17	6/27/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-17	6/27/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-17	6/27/2017	7782-49-2	Selenium	mg/L	0.00024	J	0.00024	0.0013
SGWC-17	6/27/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-17	10/12/2017	7440-42-8	Boron	mg/L	0.47		0.021	0.05
SGWC-17	10/12/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-17	3/27/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-17	3/27/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-17	3/27/2018	7440-39-3	Barium	mg/L	0.02		0.00049	0.0025
SGWC-17	3/27/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-17	3/27/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-17	3/27/2018	7440-47-3	Chromium	mg/L	0.0045		0.0011	0.0025
SGWC-17	3/27/2018	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-17	3/27/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.249	U	0.313	5
SGWC-17	3/27/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-17	3/27/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-17	3/27/2018	7439-93-2	Lithium	mg/L	0.0014	J	0.0011	0.005
SGWC-17	3/27/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-17	3/27/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-17	3/27/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-17	3/27/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-17	6/7/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-17	6/7/2018	7440-39-3	Barium	mg/L	0.02		0.00049	0.0025
SGWC-17	6/7/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-17	6/7/2018	7440-42-8	Boron	mg/L	0.35		0.021	0.05
SGWC-17	6/7/2018	7440-47-3	Chromium	mg/L	0.0083		0.0011	0.0025
SGWC-17	6/7/2018	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-17	6/7/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.172	U	0.172	5
SGWC-17	6/7/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-17	6/7/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-17	6/7/2018	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-17	6/7/2018	7439-97-6	Mercury	mg/L	0.00011	J	0.00007	0.0002
SGWC-17	6/7/2018	7782-49-2	Selenium	mg/L		NDX	0.00024	0.0013
SGWC-17	6/7/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-17	10/8/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-17	10/8/2018	7440-38-2	Arsenic	mg/L	0.00075	J	0.00046	0.0013
SGWC-17	10/8/2018	7440-39-3	Barium	mg/L	0.021		0.00049	0.0025
SGWC-17	10/8/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-17	10/8/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-17	10/8/2018	7440-47-3	Chromium	mg/L	0.0055		0.0011	0.0025
SGWC-17	10/8/2018	7440-48-4	Cobalt	mg/L	0.00046	J	0.0004	0.0025
SGWC-17	10/8/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.682		0.322	5
SGWC-17	10/8/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-17	10/8/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-17	10/8/2018	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-17	10/8/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-17	10/8/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-17	10/8/2018	7782-49-2	Selenium	mg/L		NDX	n/a	0.00028
SGWC-17	10/8/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-17	12/14/2018	7440-42-8	Boron	mg/L	0.44		0.021	0.05
SGWC-17	2/20/2019	7440-36-0	Antimony	mg/L		ND	0.00038	0.0025
SGWC-17	2/20/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-17	2/20/2019	7440-39-3	Barium	mg/L	0.023		0.0015	0.0025
SGWC-17	2/20/2019	7440-41-7	Beryllium	mg/L		ND	0.00016	0.0025
SGWC-17	2/20/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-17	2/20/2019	7440-47-3	Chromium	mg/L	0.0061		0.0015	0.0025
SGWC-17	2/20/2019	7440-48-4	Cobalt	mg/L	0.00035	J	0.000075	0.0025
SGWC-17	2/20/2019	7440-14-4	Combined Radium 226 + 228	pCi/L		ND	0.369	5
SGWC-17	2/20/2019	16984-48-8	Fluoride	mg/L	0.034	J	0.026	0.2
SGWC-17	2/20/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-17	2/20/2019	7439-93-2	Lithium	mg/L		ND	0.0031	0.005
SGWC-17	2/20/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-17	2/20/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-17	2/20/2019	7782-49-2	Selenium	mg/L		ND	0.00081	0.0013
SGWC-17	2/20/2019	7440-28-0	Thallium	mg/L		ND	0.000063	0.0005
SGWC-17	4/2/2019	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-17	4/2/2019	7440-39-3	Barium	mg/L	0.02		0.00049	0.0025
SGWC-17	4/2/2019	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-17	4/2/2019	7440-42-8	Boron	mg/L	0.32		0.021	0.05
SGWC-17	4/2/2019	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-17	4/2/2019	7440-47-3	Chromium	mg/L	0.004		0.0011	0.0025
SGWC-17	4/2/2019	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-17	4/2/2019	7440-14-4	Combined Radium 226 + 228	pCi/L		ND	0.334	5
SGWC-17	4/2/2019	16984-48-8	Fluoride	mg/L	0.045	J	0.026	0.2
SGWC-17	4/2/2019	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-17	4/2/2019	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-17	4/2/2019	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-17	4/2/2019	7439-98-7	Molybdenum	mg/L		ND	0.002	0.015
SGWC-17	4/2/2019	7782-49-2	Selenium	mg/L		ND	0.00071	0.0013
SGWC-17	4/2/2019	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-17	9/17/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
SGWC-17	9/17/2019	7440-39-3	Barium	mg/L	0.025		0.0016	0.01
SGWC-17	9/17/2019	7440-41-7	Beryllium	mg/L		ND	0.00018	0.0025
SGWC-17	9/17/2019	7440-42-8	Boron	mg/L	0.43		0.039	0.05
SGWC-17	9/17/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-17	9/17/2019	7440-47-3	Chromium	mg/L	0.0078		0.0015	0.0025
SGWC-17	9/17/2019	7440-48-4	Cobalt	mg/L	0.00048	J	0.000075	0.0025
SGWC-17	9/17/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.235	U	0.355	5
SGWC-17	9/17/2019	16984-48-8	Fluoride	mg/L	0.047	J	0.026	0.1
SGWC-17	9/17/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-17	9/17/2019	7439-93-2	Lithium	mg/L		ND	0.002	0.0034
SGWC-17	9/17/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-17	9/17/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-17	9/17/2019	7782-49-2	Selenium	mg/L		ND	0.0015	0.0025
SGWC-17	9/17/2019	7440-28-0	Thallium	mg/L		ND	0.00015	0.0005
SGWC-18	5/13/2016	7440-36-0	Antimony	mg/L		ND	0.0006	0.003
SGWC-18	5/13/2016	7440-38-2	Arsenic	mg/L	0.00161	J	0.001	0.005
SGWC-18	5/13/2016	7440-39-3	Barium	mg/L	0.0138		0.002	0.01
SGWC-18	5/13/2016	7440-41-7	Beryllium	mg/L		ND	0.0006	0.003
SGWC-18	5/13/2016	7440-42-8	Boron	mg/L	3.71		0.02	0.1
SGWC-18	5/13/2016	7440-43-9	Cadmium	mg/L	0.00016	J	0.0001	0.001
SGWC-18	5/13/2016	7440-47-3	Chromium	mg/L	0.00771	J	0.002	0.01
SGWC-18	5/13/2016	7440-48-4	Cobalt	mg/L	0.116		0.002	0.01
SGWC-18	5/13/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.103	U	n/a	5
SGWC-18	5/13/2016	16984-48-8	Fluoride	mg/L	0.0343	J	0.01	0.3
SGWC-18	5/13/2016	7439-92-1	Lead	mg/L		ND	0.001	0.005
SGWC-18	5/13/2016	7439-93-2	Lithium	mg/L		ND	0.01	0.05
SGWC-18	5/13/2016	7439-97-6	Mercury	mg/L		ND	0.00025	0.0005

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-18	5/13/2016	7439-98-7	Molybdenum	mg/L		ND	0.002	0.01
SGWC-18	5/13/2016	7782-49-2	Selenium	mg/L	0.023		0.002	0.01
SGWC-18	5/13/2016	7440-28-0	Thallium	mg/L		NDO	0.0002	0.001
SGWC-18	6/30/2016	7440-36-0	Antimony	mg/L	0.0012	J	0.0002	0.003
SGWC-18	6/30/2016	7440-38-2	Arsenic	mg/L	0.004	J	0.0007	0.005
SGWC-18	6/30/2016	7440-39-3	Barium	mg/L	0.0145	J	0.0003	0.01
SGWC-18	6/30/2016	7440-41-7	Beryllium	mg/L	0.0003	J	0.00009	0.003
SGWC-18	6/30/2016	7440-42-8	Boron	mg/L	3.8		0.0044	0.1
SGWC-18	6/30/2016	7440-43-9	Cadmium	mg/L	0.0002	J	0.0001	0.001
SGWC-18	6/30/2016	7440-47-3	Chromium	mg/L	0.007	J	0.0004	0.01
SGWC-18	6/30/2016	7440-48-4	Cobalt	mg/L	0.112		0.0003	0.01
SGWC-18	6/30/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.593	U	n/a	5
SGWC-18	6/30/2016	16984-48-8	Fluoride	mg/L	0.18	J	0.02	0.3
SGWC-18	6/30/2016	7439-92-1	Lead	mg/L		ND	0.00008	0.005
SGWC-18	6/30/2016	7439-93-2	Lithium	mg/L	0.0032	J	0.0012	0.05
SGWC-18	6/30/2016	7439-97-6	Mercury	mg/L		ND	0.00013	0.0005
SGWC-18	6/30/2016	7439-98-7	Molybdenum	mg/L		ND	0.0005	0.01
SGWC-18	6/30/2016	7782-49-2	Selenium	mg/L	0.0263		0.0009	0.01
SGWC-18	6/30/2016	7440-28-0	Thallium	mg/L	0.0002	J	0.00006	0.001
SGWC-18	8/22/2016	7440-36-0	Antimony	mg/L		ND	0.0010	0.0025
SGWC-18	8/22/2016	7440-38-2	Arsenic	mg/L	0.0012	J	0.00046	0.0013
SGWC-18	8/22/2016	7440-39-3	Barium	mg/L	0.014		0.00049	0.0025
SGWC-18	8/22/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-18	8/22/2016	7440-42-8	Boron	mg/L	3.3		0.021	0.05
SGWC-18	8/22/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-18	8/22/2016	7440-47-3	Chromium	mg/L	0.007		0.0011	0.0025
SGWC-18	8/22/2016	7440-48-4	Cobalt	mg/L	0.13		0.0004	0.0025
SGWC-18	8/22/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.17	U	n/a	5
SGWC-18	8/22/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-18	8/22/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-18	8/22/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-18	8/22/2016	7439-97-6	Mercury	mg/L	0.00014	J	0.00007	0.0002
SGWC-18	8/22/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-18	8/22/2016	7782-49-2	Selenium	mg/L	0.0066		0.00024	0.0013
SGWC-18	8/22/2016	7440-28-0	Thallium	mg/L	0.00015	J	0.000085	0.0005
SGWC-18	10/19/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-18	10/19/2016	7440-38-2	Arsenic	mg/L	0.0019		0.00046	0.0013
SGWC-18	10/19/2016	7440-39-3	Barium	mg/L	0.016		0.00049	0.0025
SGWC-18	10/19/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-18	10/19/2016	7440-42-8	Boron	mg/L	4.5		0.42	1
SGWC-18	10/19/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-18	10/19/2016	7440-47-3	Chromium	mg/L	0.0064		0.0011	0.0025
SGWC-18	10/19/2016	7440-48-4	Cobalt	mg/L	0.14		0.0004	0.0025
SGWC-18	10/19/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.433		0.349	5
SGWC-18	10/19/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-18	10/19/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-18	10/19/2016	7439-93-2	Lithium	mg/L	0.0042	J	0.0032	0.005
SGWC-18	10/19/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-18	10/19/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-18	10/19/2016	7782-49-2	Selenium	mg/L	0.0057		0.00024	0.0013
SGWC-18	10/19/2016	7440-28-0	Thallium	mg/L	0.00012	J	0.000085	0.0005
SGWC-18	12/7/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-18	12/7/2016	7440-38-2	Arsenic	mg/L	0.0012	J	0.00046	0.0013
SGWC-18	12/7/2016	7440-39-3	Barium	mg/L	0.015		0.00049	0.0025
SGWC-18	12/7/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-18	12/7/2016	7440-42-8	Boron	mg/L	4.8		0.21	0.5

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-18	12/7/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-18	12/7/2016	7440-47-3	Chromium	mg/L	0.0063		0.0011	0.0025
SGWC-18	12/7/2016	7440-48-4	Cobalt	mg/L	0.11		0.0004	0.0025
SGWC-18	12/7/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.435	U	0.599	5
SGWC-18	12/7/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-18	12/7/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-18	12/7/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-18	12/7/2016	7439-97-6	Mercury	mg/L	0.00014	J	0.00007	0.0002
SGWC-18	12/7/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-18	12/7/2016	7782-49-2	Selenium	mg/L	0.006		0.00024	0.0013
SGWC-18	12/7/2016	7440-28-0	Thallium	mg/L	0.000095	J	0.000085	0.0005
SGWC-18	2/16/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-18	2/16/2017	7440-38-2	Arsenic	mg/L	0.00086	J	0.00046	0.0013
SGWC-18	2/16/2017	7440-39-3	Barium	mg/L	0.013		0.00049	0.0025
SGWC-18	2/16/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-18	2/16/2017	7440-42-8	Boron	mg/L	3.9		0.11	0.25
SGWC-18	2/16/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-18	2/16/2017	7440-47-3	Chromium	mg/L	0.007		0.0011	0.0025
SGWC-18	2/16/2017	7440-48-4	Cobalt	mg/L	0.11		0.0004	0.0025
SGWC-18	2/16/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.101	U	0.34	5
SGWC-18	2/16/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-18	2/16/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-18	2/16/2017	7439-93-2	Lithium	mg/L	0.0034	J	0.0032	0.005
SGWC-18	2/16/2017	7439-97-6	Mercury	mg/L	0.000084	J	0.00007	0.0002
SGWC-18	2/16/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-18	2/16/2017	7782-49-2	Selenium	mg/L	0.0055		0.00024	0.0013
SGWC-18	2/16/2017	7440-28-0	Thallium	mg/L	0.00013	J	0.000085	0.0005
SGWC-18	4/13/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-18	4/13/2017	7440-38-2	Arsenic	mg/L	0.00058	J	0.00046	0.0013
SGWC-18	4/13/2017	7440-39-3	Barium	mg/L	0.012		0.00049	0.0025
SGWC-18	4/13/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-18	4/13/2017	7440-42-8	Boron	mg/L	3.8		0.11	0.25
SGWC-18	4/13/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-18	4/13/2017	7440-47-3	Chromium	mg/L	0.0061		0.0011	0.0025
SGWC-18	4/13/2017	7440-48-4	Cobalt	mg/L	0.094		0.0004	0.0025
SGWC-18	4/13/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	-0.0014	U	0.363	5
SGWC-18	4/13/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-18	4/13/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-18	4/13/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-18	4/13/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-18	4/13/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-18	4/13/2017	7782-49-2	Selenium	mg/L	0.0049		0.00024	0.0013
SGWC-18	4/13/2017	7440-28-0	Thallium	mg/L	0.00012	J	0.000085	0.0005
SGWC-18	6/28/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-18	6/28/2017	7440-38-2	Arsenic	mg/L	0.0011	J	0.00046	0.0013
SGWC-18	6/28/2017	7440-39-3	Barium	mg/L	0.012		0.00049	0.0025
SGWC-18	6/28/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-18	6/28/2017	7440-42-8	Boron	mg/L	3.6		0.11	0.25
SGWC-18	6/28/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-18	6/28/2017	7440-47-3	Chromium	mg/L	0.0059		0.0011	0.0025
SGWC-18	6/28/2017	7440-48-4	Cobalt	mg/L	0.085		0.0004	0.0025
SGWC-18	6/28/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.512		0.508	5
SGWC-18	6/28/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-18	6/28/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-18	6/28/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-18	6/28/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002

Appendix B-2
Scherer Risk Evaluation Report
Data Used in Risk Evaluation - Downgradient Groundwater Data (2016-2019)
Scherer AP-1
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-18	6/28/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-18	6/28/2017	7782-49-2	Selenium	mg/L	0.0047		0.00024	0.0013
SGWC-18	6/28/2017	7440-28-0	Thallium	mg/L	0.00013	J	0.000085	0.0005
SGWC-18	10/12/2017	7440-42-8	Boron	mg/L	3.9		0.11	0.25
SGWC-18	10/12/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-18	3/28/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-18	3/28/2018	7440-38-2	Arsenic	mg/L	0.0015		0.00046	0.0013
SGWC-18	3/28/2018	7440-39-3	Barium	mg/L	0.029		0.00049	0.0025
SGWC-18	3/28/2018	7440-41-7	Beryllium	mg/L	0.00036	J	0.00034	0.0025
SGWC-18	3/28/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-18	3/28/2018	7440-47-3	Chromium	mg/L	0.0082		0.0011	0.0025
SGWC-18	3/28/2018	7440-48-4	Cobalt	mg/L	0.16		0.0004	0.0025
SGWC-18	3/28/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.428		0.317	5
SGWC-18	3/28/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-18	3/28/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-18	3/28/2018	7439-93-2	Lithium	mg/L		NDX	0.0032	0.0056
SGWC-18	3/28/2018	7439-97-6	Mercury	mg/L	0.000083	J	0.00007	0.0002
SGWC-18	3/28/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-18	3/28/2018	7782-49-2	Selenium	mg/L	0.0085		0.00024	0.0013
SGWC-18	3/28/2018	7440-28-0	Thallium	mg/L	0.00011	J	0.000085	0.0005
SGWC-18	6/8/2018	7440-38-2	Arsenic	mg/L	0.002		0.00046	0.0013
SGWC-18	6/8/2018	7440-39-3	Barium	mg/L	0.032		0.00049	0.0025
SGWC-18	6/8/2018	7440-41-7	Beryllium	mg/L	0.00035	J	0.00034	0.0025
SGWC-18	6/8/2018	7440-42-8	Boron	mg/L	4.3		0.11	0.25
SGWC-18	6/8/2018	7440-47-3	Chromium	mg/L	0.0086		0.0011	0.0025
SGWC-18	6/8/2018	7440-48-4	Cobalt	mg/L	0.19		0.0004	0.0025
SGWC-18	6/8/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.32	U	0.32	5
SGWC-18	6/8/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-18	6/8/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-18	6/8/2018	7439-93-2	Lithium	mg/L	0.0042	J	0.0011	0.005
SGWC-18	6/8/2018	7439-97-6	Mercury	mg/L	0.00014	J	0.00007	0.0002
SGWC-18	6/8/2018	7782-49-2	Selenium	mg/L	0.014		0.00024	0.0013
SGWC-18	6/8/2018	7440-28-0	Thallium	mg/L	0.00019	J	0.000085	0.0005
SGWC-18	10/18/2018	7440-38-2	Arsenic	mg/L	0.0031		0.00046	0.0013
SGWC-18	10/18/2018	7440-38-2	Arsenic	mg/L	0.0023		0.00046	0.0013
SGWC-18	10/18/2018	7440-39-3	Barium	mg/L	0.033		0.00049	0.0025
SGWC-18	10/18/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-18	10/18/2018	7440-42-8	Boron	mg/L	4.9		0.11	0.25
SGWC-18	10/18/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-18	10/18/2018	7440-47-3	Chromium	mg/L	0.009		0.0011	0.0025
SGWC-18	10/18/2018	7440-48-4	Cobalt	mg/L	0.21		0.0004	0.0025
SGWC-18	10/18/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.304	U	0.423	5
SGWC-18	10/18/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.304	U	0.423	5
SGWC-18	10/18/2018	16984-48-8	Fluoride	mg/L		ND	0.41	1
SGWC-18	10/18/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-18	10/18/2018	7439-93-2	Lithium	mg/L	0.0054		0.0011	0.005
SGWC-18	10/18/2018	7439-97-6	Mercury	mg/L	0.00021		0.00007	0.0002
SGWC-18	10/18/2018	7439-97-6	Mercury	mg/L	0.00024		0.00007	0.0002
SGWC-18	10/18/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-18	10/18/2018	7782-49-2	Selenium	mg/L	0.017		0.00024	0.0013
SGWC-18	10/18/2018	7440-28-0	Thallium	mg/L	0.00019	J	0.000085	0.0005
SGWC-18	1/2/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
SGWC-18	1/2/2019	7440-39-3	Barium	mg/L	0.027		0.00037	0.0025
SGWC-18	1/2/2019	7440-41-7	Beryllium	mg/L		ND	0.000057	0.0025
SGWC-18	1/2/2019	7440-42-8	Boron	mg/L	4.1		0.03	0.05
SGWC-18	1/2/2019	7440-47-3	Chromium	mg/L	0.0078		0.00063	0.0025

Appendix B-2
Scherer Risk Evaluation Report
Data Used in Risk Evaluation - Downgradient Groundwater Data (2016-2019)
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-18	1/2/2019	7440-48-4	Cobalt	mg/L	0.11		0.000075	0.0025
SGWC-18	1/2/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.217	U	1.96	5
SGWC-18	1/2/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.2
SGWC-18	1/2/2019	7439-92-1	Lead	mg/L		ND	0.000094	0.001
SGWC-18	1/2/2019	7439-93-2	Lithium	mg/L	0.0055		0.002	0.0026
SGWC-18	1/2/2019	7439-97-6	Mercury	mg/L	0.00024		0.000065	0.0002
SGWC-18	1/2/2019	7439-98-7	Molybdenum	mg/L		ND	0.00047	0.015
SGWC-18	1/2/2019	7782-49-2	Selenium	mg/L	0.0034		0.00081	0.0013
SGWC-18	1/2/2019	7440-28-0	Thallium	mg/L		ND	0.000063	0.0005
SGWC-18	2/20/2019	7440-36-0	Antimony	mg/L		ND	0.00038	0.0025
SGWC-18	2/20/2019	7440-38-2	Arsenic	mg/L	0.003		0.00032	0.0013
SGWC-18	2/20/2019	7440-39-3	Barium	mg/L	0.034		0.0015	0.0025
SGWC-18	2/20/2019	7440-41-7	Beryllium	mg/L	0.00033	J	0.00016	0.0025
SGWC-18	2/20/2019	7440-43-9	Cadmium	mg/L	0.00023	J	0.00013	0.0025
SGWC-18	2/20/2019	7440-47-3	Chromium	mg/L	0.011		0.0015	0.0025
SGWC-18	2/20/2019	7440-48-4	Cobalt	mg/L	0.19		0.000075	0.0025
SGWC-18	2/20/2019	7440-14-4	Combined Radium 226 + 228	pCi/L		ND	0.36	5
SGWC-18	2/20/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.2
SGWC-18	2/20/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-18	2/20/2019	7439-93-2	Lithium	mg/L	0.0054		0.0031	0.005
SGWC-18	2/20/2019	7439-97-6	Mercury	mg/L	0.00026		0.0001	0.0002
SGWC-18	2/20/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-18	2/20/2019	7782-49-2	Selenium	mg/L	0.027		0.00081	0.0013
SGWC-18	2/20/2019	7440-28-0	Thallium	mg/L	0.00021	J	0.000063	0.0005
SGWC-18	4/2/2019	7440-38-2	Arsenic	mg/L	0.0027		0.00046	0.0013
SGWC-18	4/2/2019	7440-39-3	Barium	mg/L	0.028		0.00049	0.0025
SGWC-18	4/2/2019	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-18	4/2/2019	7440-42-8	Boron	mg/L	5.3		0.21	0.5
SGWC-18	4/2/2019	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-18	4/2/2019	7440-47-3	Chromium	mg/L	0.0092		0.0011	0.0025
SGWC-18	4/2/2019	7440-48-4	Cobalt	mg/L	0.18		0.0004	0.0025
SGWC-18	4/2/2019	7440-14-4	Combined Radium 226 + 228	pCi/L		ND	0.34	5
SGWC-18	4/2/2019	16984-48-8	Fluoride	mg/L	0.05	J	0.026	0.2
SGWC-18	4/2/2019	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-18	4/2/2019	7439-93-2	Lithium	mg/L	0.0041	J	0.0011	0.005
SGWC-18	4/2/2019	7439-97-6	Mercury	mg/L	0.0002		0.00007	0.0002
SGWC-18	4/2/2019	7439-98-7	Molybdenum	mg/L		ND	0.002	0.015
SGWC-18	4/2/2019	7782-49-2	Selenium	mg/L	0.0075		0.00071	0.0013
SGWC-18	4/2/2019	7440-28-0	Thallium	mg/L	0.00016	J	0.000085	0.0005
SGWC-18	9/17/2019	7440-38-2	Arsenic	mg/L	0.0029		0.00032	0.0013
SGWC-18	9/17/2019	7440-39-3	Barium	mg/L	0.026		0.0016	0.01
SGWC-18	9/17/2019	7440-41-7	Beryllium	mg/L	0.00035	J	0.00018	0.0025
SGWC-18	9/17/2019	7440-42-8	Boron	mg/L	5		0.039	0.05
SGWC-18	9/17/2019	7440-43-9	Cadmium	mg/L	0.00018	J	0.00013	0.0025
SGWC-18	9/17/2019	7440-47-3	Chromium	mg/L	0.011		0.0015	0.0025
SGWC-18	9/17/2019	7440-48-4	Cobalt	mg/L	0.16		0.000075	0.0025
SGWC-18	9/17/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.449		0.395	5
SGWC-18	9/17/2019	16984-48-8	Fluoride	mg/L	0.034	J	0.026	0.1
SGWC-18	9/17/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-18	9/17/2019	7439-93-2	Lithium	mg/L	0.005		0.002	0.0034
SGWC-18	9/17/2019	7439-97-6	Mercury	mg/L	0.00014	J	0.0001	0.0002
SGWC-18	9/17/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-18	9/17/2019	7782-49-2	Selenium	mg/L	0.0036		0.0015	0.0025
SGWC-18	9/17/2019	7440-28-0	Thallium	mg/L	0.00025	J	0.00015	0.0005
SGWC-19	5/13/2016	7440-36-0	Antimony	mg/L		ND	0.0006	0.003
SGWC-19	5/13/2016	7440-38-2	Arsenic	mg/L		ND	0.001	0.005

Appendix B-2
Scherer Risk Evaluation Report
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-19	5/13/2016	7440-39-3	Barium	mg/L	0.0507		0.002	0.01
SGWC-19	5/13/2016	7440-41-7	Beryllium	mg/L		ND	0.0006	0.003
SGWC-19	5/13/2016	7440-42-8	Boron	mg/L	1.87		0.02	0.1
SGWC-19	5/13/2016	7440-43-9	Cadmium	mg/L		ND	0.0001	0.001
SGWC-19	5/13/2016	7440-47-3	Chromium	mg/L	0.0151		0.002	0.01
SGWC-19	5/13/2016	7440-48-4	Cobalt	mg/L		ND	0.002	0.01
SGWC-19	5/13/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	-0.115	U	n/a	5
SGWC-19	5/13/2016	16984-48-8	Fluoride	mg/L	0.0126	J	0.01	0.3
SGWC-19	5/13/2016	7439-92-1	Lead	mg/L		ND	0.001	0.005
SGWC-19	5/13/2016	7439-93-2	Lithium	mg/L		ND	0.01	0.05
SGWC-19	5/13/2016	7439-97-6	Mercury	mg/L		ND	0.00025	0.0005
SGWC-19	5/13/2016	7439-98-7	Molybdenum	mg/L		ND	0.002	0.01
SGWC-19	5/13/2016	7782-49-2	Selenium	mg/L		ND	0.002	0.01
SGWC-19	5/13/2016	7440-28-0	Thallium	mg/L		ND	0.0002	0.001
SGWC-19	6/29/2016	7440-36-0	Antimony	mg/L		ND	0.0002	0.003
SGWC-19	6/29/2016	7440-38-2	Arsenic	mg/L		ND	0.0007	0.005
SGWC-19	6/29/2016	7440-39-3	Barium	mg/L	0.0485		0.0003	0.01
SGWC-19	6/29/2016	7440-41-7	Beryllium	mg/L	0.0002	J	0.00009	0.003
SGWC-19	6/29/2016	7440-42-8	Boron	mg/L	1.67		0.0044	0.1
SGWC-19	6/29/2016	7440-43-9	Cadmium	mg/L		ND	0.0001	0.001
SGWC-19	6/29/2016	7440-47-3	Chromium	mg/L	0.0141		0.0004	0.01
SGWC-19	6/29/2016	7440-48-4	Cobalt	mg/L	0.0006	J	0.0003	0.01
SGWC-19	6/29/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.396	U	n/a	5
SGWC-19	6/29/2016	16984-48-8	Fluoride	mg/L	0.18	J	0.02	0.3
SGWC-19	6/29/2016	7439-92-1	Lead	mg/L		ND	0.00008	0.005
SGWC-19	6/29/2016	7439-93-2	Lithium	mg/L		ND	0.0012	0.05
SGWC-19	6/29/2016	7439-97-6	Mercury	mg/L		ND	0.00013	0.0005
SGWC-19	6/29/2016	7439-98-7	Molybdenum	mg/L		ND	0.0005	0.01
SGWC-19	6/29/2016	7782-49-2	Selenium	mg/L		ND	0.0009	0.01
SGWC-19	6/29/2016	7440-28-0	Thallium	mg/L		ND	0.00006	0.001
SGWC-19	8/22/2016	7440-36-0	Antimony	mg/L		ND	0.0010	0.0025
SGWC-19	8/22/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-19	8/22/2016	7440-39-3	Barium	mg/L	0.044		0.00049	0.0025
SGWC-19	8/22/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-19	8/22/2016	7440-42-8	Boron	mg/L	1.7		0.021	0.05
SGWC-19	8/22/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-19	8/22/2016	7440-47-3	Chromium	mg/L	0.015		0.0011	0.0025
SGWC-19	8/22/2016	7440-48-4	Cobalt	mg/L	0.00066	J	0.0004	0.0025
SGWC-19	8/22/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	-0.102	U	n/a	5
SGWC-19	8/22/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-19	8/22/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-19	8/22/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-19	8/22/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-19	8/22/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-19	8/22/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-19	8/22/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-19	10/18/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-19	10/18/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-19	10/18/2016	7440-39-3	Barium	mg/L	0.042		0.00049	0.0025
SGWC-19	10/18/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-19	10/18/2016	7440-42-8	Boron	mg/L	2.1		0.21	0.5
SGWC-19	10/18/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-19	10/18/2016	7440-47-3	Chromium	mg/L	0.013		0.0011	0.0025
SGWC-19	10/18/2016	7440-48-4	Cobalt	mg/L	0.00095	J	0.0004	0.0025
SGWC-19	10/18/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.352	U	0.37	5
SGWC-19	10/18/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2

Appendix B-2
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Scherer AP-1
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-19	10/18/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-19	10/18/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-19	10/18/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-19	10/18/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-19	10/18/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-19	10/18/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-19	12/8/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-19	12/8/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-19	12/8/2016	7440-39-3	Barium	mg/L	0.045		0.00049	0.0025
SGWC-19	12/8/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-19	12/8/2016	7440-42-8	Boron	mg/L	1.7		0.21	0.5
SGWC-19	12/8/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-19	12/8/2016	7440-47-3	Chromium	mg/L	0.013		0.0011	0.0025
SGWC-19	12/8/2016	7440-48-4	Cobalt	mg/L	0.00078	J	0.0004	0.0025
SGWC-19	12/8/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.431	U	0.478	5
SGWC-19	12/8/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-19	12/8/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-19	12/8/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-19	12/8/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-19	12/8/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-19	12/8/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-19	12/8/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-19	2/16/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-19	2/16/2017	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-19	2/16/2017	7440-39-3	Barium	mg/L	0.04		0.00049	0.0025
SGWC-19	2/16/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-19	2/16/2017	7440-42-8	Boron	mg/L	2.3		0.11	0.25
SGWC-19	2/16/2017	7440-43-9	Cadmium	mg/L	0.00036	J	0.00034	0.0025
SGWC-19	2/16/2017	7440-47-3	Chromium	mg/L	0.015		0.0011	0.0025
SGWC-19	2/16/2017	7440-48-4	Cobalt	mg/L	0.00049	J	0.0004	0.0025
SGWC-19	2/16/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.146	U	0.376	5
SGWC-19	2/16/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-19	2/16/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-19	2/16/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-19	2/16/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-19	2/16/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-19	2/16/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-19	2/16/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-19	4/13/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-19	4/13/2017	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-19	4/13/2017	7440-39-3	Barium	mg/L	0.037		0.00049	0.0025
SGWC-19	4/13/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-19	4/13/2017	7440-42-8	Boron	mg/L	1.9		0.11	0.25
SGWC-19	4/13/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-19	4/13/2017	7440-47-3	Chromium	mg/L	0.016		0.0011	0.0025
SGWC-19	4/13/2017	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-19	4/13/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.127	U	0.379	5
SGWC-19	4/13/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-19	4/13/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-19	4/13/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-19	4/13/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-19	4/13/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-19	4/13/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-19	4/13/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-19	6/28/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-19	6/28/2017	7440-38-2	Arsenic	mg/L	0.00068	J	0.00046	0.0013

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-19	6/28/2017	7440-39-3	Barium	mg/L	0.04		0.00049	0.0025
SGWC-19	6/28/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-19	6/28/2017	7440-42-8	Boron	mg/L	1.9		0.11	0.25
SGWC-19	6/28/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-19	6/28/2017	7440-47-3	Chromium	mg/L	0.016		0.0011	0.0025
SGWC-19	6/28/2017	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-19	6/28/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.11	U	0.36	5
SGWC-19	6/28/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-19	6/28/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-19	6/28/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-19	6/28/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-19	6/28/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-19	6/28/2017	7782-49-2	Selenium	mg/L	0.00096	J	0.00024	0.0013
SGWC-19	6/28/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-19	10/12/2017	7440-42-8	Boron	mg/L	1.9		0.11	0.25
SGWC-19	10/12/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-19	3/28/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-19	3/28/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-19	3/28/2018	7440-39-3	Barium	mg/L	0.034		0.00049	0.0025
SGWC-19	3/28/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-19	3/28/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-19	3/28/2018	7440-47-3	Chromium	mg/L	0.014		0.0011	0.0025
SGWC-19	3/28/2018	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-19	3/28/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.247	U	0.318	5
SGWC-19	3/28/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-19	3/28/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-19	3/28/2018	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-19	3/28/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-19	3/28/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-19	3/28/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-19	3/28/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-19	6/8/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-19	6/8/2018	7440-39-3	Barium	mg/L	0.035		0.00049	0.0025
SGWC-19	6/8/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-19	6/8/2018	7440-42-8	Boron	mg/L	1.8		0.11	0.25
SGWC-19	6/8/2018	7440-47-3	Chromium	mg/L	0.015		0.0011	0.0025
SGWC-19	6/8/2018	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-19	6/8/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.0462	U	0.0462	5
SGWC-19	6/8/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-19	6/8/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-19	6/8/2018	7439-93-2	Lithium	mg/L	0.0022	J	0.0011	0.005
SGWC-19	6/8/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-19	6/8/2018	7782-49-2	Selenium	mg/L		NDX	0.00024	0.0013
SGWC-19	6/8/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-19	10/9/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-19	10/9/2018	7440-38-2	Arsenic	mg/L	0.00058	J	0.00046	0.0013
SGWC-19	10/9/2018	7440-39-3	Barium	mg/L	0.037		0.00049	0.0025
SGWC-19	10/9/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-19	10/9/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-19	10/9/2018	7440-47-3	Chromium	mg/L	0.017		0.0011	0.0025
SGWC-19	10/9/2018	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-19	10/9/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.584		0.324	5
SGWC-19	10/9/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-19	10/9/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-19	10/9/2018	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-19	10/9/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-19	10/9/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-19	10/9/2018	7782-49-2	Selenium	mg/L		NDX	n/a	0.0005
SGWC-19	10/9/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-19	12/17/2018	7440-42-8	Boron	mg/L	1.8		0.11	0.25
SGWC-19	2/20/2019	7440-36-0	Antimony	mg/L		ND	0.00038	0.0025
SGWC-19	2/20/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
SGWC-19	2/20/2019	7440-39-3	Barium	mg/L	0.036		0.0015	0.0025
SGWC-19	2/20/2019	7440-41-7	Beryllium	mg/L	0.00016	J	0.00016	0.0025
SGWC-19	2/20/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-19	2/20/2019	7440-47-3	Chromium	mg/L	0.017		0.0015	0.0025
SGWC-19	2/20/2019	7440-48-4	Cobalt	mg/L	0.00012	J	0.000075	0.0025
SGWC-19	2/20/2019	7440-14-4	Combined Radium 226 + 228	pCi/L		ND	0.369	5
SGWC-19	2/20/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.2
SGWC-19	2/20/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-19	2/20/2019	7439-93-2	Lithium	mg/L		ND	0.0031	0.005
SGWC-19	2/20/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-19	2/20/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-19	2/20/2019	7782-49-2	Selenium	mg/L		ND	0.00081	0.0013
SGWC-19	2/20/2019	7440-28-0	Thallium	mg/L		ND	0.000063	0.0005
SGWC-19	4/2/2019	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-19	4/2/2019	7440-39-3	Barium	mg/L	0.03		0.00049	0.0025
SGWC-19	4/2/2019	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-19	4/2/2019	7440-42-8	Boron	mg/L	2		0.11	0.25
SGWC-19	4/2/2019	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-19	4/2/2019	7440-47-3	Chromium	mg/L	0.014		0.0011	0.0025
SGWC-19	4/2/2019	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-19	4/2/2019	7440-14-4	Combined Radium 226 + 228	pCi/L		ND	0.354	5
SGWC-19	4/2/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.2
SGWC-19	4/2/2019	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-19	4/2/2019	7439-93-2	Lithium	mg/L	0.0021	J	0.0011	0.005
SGWC-19	4/2/2019	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-19	4/2/2019	7439-98-7	Molybdenum	mg/L		ND	0.002	0.015
SGWC-19	4/2/2019	7782-49-2	Selenium	mg/L		ND	0.00071	0.0013
SGWC-19	4/2/2019	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-19	9/17/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
SGWC-19	9/17/2019	7440-39-3	Barium	mg/L	0.035		0.0016	0.01
SGWC-19	9/17/2019	7440-41-7	Beryllium	mg/L		ND	0.00018	0.0025
SGWC-19	9/17/2019	7440-42-8	Boron	mg/L	1.8		0.039	0.05
SGWC-19	9/17/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-19	9/17/2019	7440-47-3	Chromium	mg/L	0.017		0.0015	0.0025
SGWC-19	9/17/2019	7440-48-4	Cobalt	mg/L	0.00013	J	0.000075	0.0025
SGWC-19	9/17/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.302	U	0.455	5
SGWC-19	9/17/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.1
SGWC-19	9/17/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-19	9/17/2019	7439-93-2	Lithium	mg/L		ND	0.002	0.0034
SGWC-19	9/17/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-19	9/17/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-19	9/17/2019	7782-49-2	Selenium	mg/L		ND	0.0015	0.0025
SGWC-19	9/17/2019	7440-28-0	Thallium	mg/L		ND	0.00015	0.0005
SGWC-20	5/12/2016	7440-36-0	Antimony	mg/L		ND	0.0006	0.003
SGWC-20	5/12/2016	7440-38-2	Arsenic	mg/L		ND	0.001	0.005
SGWC-20	5/12/2016	7440-39-3	Barium	mg/L	0.0436		0.002	0.01
SGWC-20	5/12/2016	7440-41-7	Beryllium	mg/L	0.000742	J	0.0006	0.003
SGWC-20	5/12/2016	7440-42-8	Boron	mg/L	1.99		0.02	0.1
SGWC-20	5/12/2016	7440-43-9	Cadmium	mg/L	0.000108	J	0.0001	0.001
SGWC-20	5/12/2016	7440-47-3	Chromium	mg/L		ND	0.002	0.01

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-20	5/12/2016	7440-48-4	Cobalt	mg/L	0.261		0.002	0.01
SGWC-20	5/12/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.556		n/a	5
SGWC-20	5/12/2016	16984-48-8	Fluoride	mg/L	0.259	J	0.01	0.3
SGWC-20	5/12/2016	7439-92-1	Lead	mg/L		ND	0.001	0.005
SGWC-20	5/12/2016	7439-93-2	Lithium	mg/L		NDO	0.01	0.05
SGWC-20	5/12/2016	7439-97-6	Mercury	mg/L		ND	0.00025	0.0005
SGWC-20	5/12/2016	7439-98-7	Molybdenum	mg/L		ND	0.002	0.01
SGWC-20	5/12/2016	7782-49-2	Selenium	mg/L	0.00396	J	0.002	0.01
SGWC-20	5/12/2016	7440-28-0	Thallium	mg/L		NDO	0.0002	0.001
SGWC-20	6/29/2016	7440-36-0	Antimony	mg/L		ND	0.0002	0.003
SGWC-20	6/29/2016	7440-38-2	Arsenic	mg/L	0.0018	J	0.0007	0.005
SGWC-20	6/29/2016	7440-39-3	Barium	mg/L	0.0466		0.0003	0.01
SGWC-20	6/29/2016	7440-41-7	Beryllium	mg/L	0.0007	J	0.00009	0.003
SGWC-20	6/29/2016	7440-42-8	Boron	mg/L	1.88		0.0044	0.1
SGWC-20	6/29/2016	7440-43-9	Cadmium	mg/L	0.0001	J	0.0001	0.001
SGWC-20	6/29/2016	7440-47-3	Chromium	mg/L	0.0009	J	0.0004	0.01
SGWC-20	6/29/2016	7440-48-4	Cobalt	mg/L	0.23		0.0003	0.01
SGWC-20	6/29/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.162	U	n/a	5
SGWC-20	6/29/2016	16984-48-8	Fluoride	mg/L	0.45		0.02	0.3
SGWC-20	6/29/2016	7439-92-1	Lead	mg/L	0.0005	J	0.00008	0.005
SGWC-20	6/29/2016	7439-93-2	Lithium	mg/L	0.0043	J	0.0012	0.05
SGWC-20	6/29/2016	7439-97-6	Mercury	mg/L		ND	0.00013	0.0005
SGWC-20	6/29/2016	7439-98-7	Molybdenum	mg/L		ND	0.0005	0.01
SGWC-20	6/29/2016	7782-49-2	Selenium	mg/L	0.0053	J	0.0009	0.01
SGWC-20	6/29/2016	7440-28-0	Thallium	mg/L	0.0002	J	0.00006	0.001
SGWC-20	8/22/2016	7440-36-0	Antimony	mg/L		ND	0.0010	0.0025
SGWC-20	8/22/2016	7440-38-2	Arsenic	mg/L	0.001	J	0.00046	0.0013
SGWC-20	8/22/2016	7440-39-3	Barium	mg/L	0.038		0.00049	0.0025
SGWC-20	8/22/2016	7440-41-7	Beryllium	mg/L	0.00074	J	0.00034	0.0025
SGWC-20	8/22/2016	7440-42-8	Boron	mg/L	2		0.021	0.05
SGWC-20	8/22/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-20	8/22/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-20	8/22/2016	7440-48-4	Cobalt	mg/L	0.25		0.0004	0.0025
SGWC-20	8/22/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.433	U	n/a	5
SGWC-20	8/22/2016	16984-48-8	Fluoride	mg/L	0.33		0.082	0.2
SGWC-20	8/22/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-20	8/22/2016	7439-93-2	Lithium	mg/L	0.0051		0.0032	0.005
SGWC-20	8/22/2016	7439-97-6	Mercury	mg/L	0.000073	J	0.00007	0.0002
SGWC-20	8/22/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-20	8/22/2016	7782-49-2	Selenium	mg/L	0.0012	J	0.00024	0.0013
SGWC-20	8/22/2016	7440-28-0	Thallium	mg/L	0.00018	J	0.000085	0.0005
SGWC-20	10/18/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-20	10/18/2016	7440-38-2	Arsenic	mg/L	0.00085	J	0.00046	0.0013
SGWC-20	10/18/2016	7440-39-3	Barium	mg/L	0.039		0.00049	0.0025
SGWC-20	10/18/2016	7440-41-7	Beryllium	mg/L	0.00075	J	0.00034	0.0025
SGWC-20	10/18/2016	7440-42-8	Boron	mg/L	2.5		0.21	0.5
SGWC-20	10/18/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-20	10/18/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-20	10/18/2016	7440-48-4	Cobalt	mg/L	0.26		0.0004	0.0025
SGWC-20	10/18/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.741		0.41	5
SGWC-20	10/18/2016	16984-48-8	Fluoride	mg/L	0.26		0.082	0.2
SGWC-20	10/18/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-20	10/18/2016	7439-93-2	Lithium	mg/L	0.0038	J	0.0032	0.005
SGWC-20	10/18/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-20	10/18/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-20	10/18/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013

Appendix B-2
Scherer Risk Evaluation Report
Data Used in Risk Evaluation - Downgradient Groundwater Data (2016-2019)
Scherer AP-1
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-20	10/18/2016	7440-28-0	Thallium	mg/L	0.00016	J	0.000085	0.0005
SGWC-20	12/8/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-20	12/8/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-20	12/8/2016	7440-39-3	Barium	mg/L	0.038		0.00049	0.0025
SGWC-20	12/8/2016	7440-41-7	Beryllium	mg/L	0.00093	J	0.00034	0.0025
SGWC-20	12/8/2016	7440-42-8	Boron	mg/L	1.9		0.21	0.5
SGWC-20	12/8/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-20	12/8/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-20	12/8/2016	7440-48-4	Cobalt	mg/L	0.26		0.0004	0.0025
SGWC-20	12/8/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	1.06		0.612	5
SGWC-20	12/8/2016	16984-48-8	Fluoride	mg/L	0.28		0.082	0.2
SGWC-20	12/8/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-20	12/8/2016	7439-93-2	Lithium	mg/L	0.0043	J	0.0032	0.005
SGWC-20	12/8/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-20	12/8/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-20	12/8/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-20	12/8/2016	7440-28-0	Thallium	mg/L	0.0001	J	0.000085	0.0005
SGWC-20	2/16/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-20	2/16/2017	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-20	2/16/2017	7440-39-3	Barium	mg/L	0.034		0.00049	0.0025
SGWC-20	2/16/2017	7440-41-7	Beryllium	mg/L	0.00091	J	0.00034	0.0025
SGWC-20	2/16/2017	7440-42-8	Boron	mg/L	2.3		0.11	0.25
SGWC-20	2/16/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-20	2/16/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-20	2/16/2017	7440-48-4	Cobalt	mg/L	0.23		0.0004	0.0025
SGWC-20	2/16/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.382	U	0.429	5
SGWC-20	2/16/2017	16984-48-8	Fluoride	mg/L	0.28		0.082	0.2
SGWC-20	2/16/2017	7439-92-1	Lead	mg/L	0.00035	J	0.00035	0.0013
SGWC-20	2/16/2017	7439-93-2	Lithium	mg/L	0.0047	J	0.0032	0.005
SGWC-20	2/16/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-20	2/16/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-20	2/16/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-20	2/16/2017	7440-28-0	Thallium	mg/L	0.00014	J	0.000085	0.0005
SGWC-20	4/13/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-20	4/13/2017	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-20	4/13/2017	7440-39-3	Barium	mg/L	0.028		0.00049	0.0025
SGWC-20	4/13/2017	7440-41-7	Beryllium	mg/L	0.00065	J	0.00034	0.0025
SGWC-20	4/13/2017	7440-42-8	Boron	mg/L	2		0.11	0.25
SGWC-20	4/13/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-20	4/13/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-20	4/13/2017	7440-48-4	Cobalt	mg/L	0.19		0.0004	0.0025
SGWC-20	4/13/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.189	U	0.434	5
SGWC-20	4/13/2017	16984-48-8	Fluoride	mg/L	0.2		0.082	0.2
SGWC-20	4/13/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-20	4/13/2017	7439-93-2	Lithium	mg/L	0.004	J	0.0032	0.005
SGWC-20	4/13/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-20	4/13/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-20	4/13/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-20	4/13/2017	7440-28-0	Thallium	mg/L	0.00021	J	0.000085	0.0005
SGWC-20	6/28/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-20	6/28/2017	7440-38-2	Arsenic	mg/L	0.00094	J	0.00046	0.0013
SGWC-20	6/28/2017	7440-39-3	Barium	mg/L	0.03		0.00049	0.0025
SGWC-20	6/28/2017	7440-41-7	Beryllium	mg/L	0.00073	J	0.00034	0.0025
SGWC-20	6/28/2017	7440-42-8	Boron	mg/L	2.3		0.11	0.25
SGWC-20	6/28/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-20	6/28/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025

Appendix B-2
Scherer Risk Evaluation Report
Data Used in Risk Evaluation - Downgradient Groundwater Data (2016-2019)
Scherer AP-1
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-20	6/28/2017	7440-48-4	Cobalt	mg/L	0.19		0.0004	0.0025
SGWC-20	6/28/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.84		0.369	5
SGWC-20	6/28/2017	16984-48-8	Fluoride	mg/L	0.22		0.082	0.2
SGWC-20	6/28/2017	7439-92-1	Lead	mg/L	0.00041	J	0.00035	0.0013
SGWC-20	6/28/2017	7439-93-2	Lithium	mg/L	0.0032	J	0.0032	0.005
SGWC-20	6/28/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-20	6/28/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-20	6/28/2017	7782-49-2	Selenium	mg/L	0.00064	J	0.00024	0.0013
SGWC-20	6/28/2017	7440-28-0	Thallium	mg/L	0.00018	J	0.000085	0.0005
SGWC-20	10/12/2017	7440-42-8	Boron	mg/L	2.6		0.11	0.25
SGWC-20	10/12/2017	16984-48-8	Fluoride	mg/L	0.18	J	0.082	0.2
SGWC-20	3/28/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-20	3/28/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-20	3/28/2018	7440-39-3	Barium	mg/L	0.027		0.00049	0.0025
SGWC-20	3/28/2018	7440-41-7	Beryllium	mg/L	0.00079	J	0.00034	0.0025
SGWC-20	3/28/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-20	3/28/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-20	3/28/2018	7440-48-4	Cobalt	mg/L	0.18		0.0004	0.0025
SGWC-20	3/28/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.334	U	0.335	5
SGWC-20	3/28/2018	16984-48-8	Fluoride	mg/L	0.19	J	0.082	0.2
SGWC-20	3/28/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-20	3/28/2018	7439-93-2	Lithium	mg/L		NDX	0.0032	0.0053
SGWC-20	3/28/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-20	3/28/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-20	3/28/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-20	3/28/2018	7440-28-0	Thallium	mg/L	0.00009	J	0.000085	0.0005
SGWC-20	6/7/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-20	6/7/2018	7440-39-3	Barium	mg/L	0.029		0.00049	0.0025
SGWC-20	6/7/2018	7440-41-7	Beryllium	mg/L	0.00086	J	0.00034	0.0025
SGWC-20	6/7/2018	7440-42-8	Boron	mg/L	2.1		0.11	0.25
SGWC-20	6/7/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-20	6/7/2018	7440-48-4	Cobalt	mg/L	0.21		0.0004	0.0025
SGWC-20	6/7/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.235	U	0.235	5
SGWC-20	6/7/2018	16984-48-8	Fluoride	mg/L	0.21		0.082	0.2
SGWC-20	6/7/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-20	6/7/2018	7439-93-2	Lithium	mg/L	0.0038	J	0.0011	0.005
SGWC-20	6/7/2018	7439-97-6	Mercury	mg/L	0.000082	J	0.00007	0.0002
SGWC-20	6/7/2018	7782-49-2	Selenium	mg/L		NDX	0.00024	0.0013
SGWC-20	6/7/2018	7440-28-0	Thallium	mg/L	0.00014	J	0.000085	0.0005
SGWC-20	10/18/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-20	10/18/2018	7440-39-3	Barium	mg/L	0.027		0.00049	0.0025
SGWC-20	10/18/2018	7440-41-7	Beryllium	mg/L	0.00079	J	0.00034	0.0025
SGWC-20	10/18/2018	7440-42-8	Boron	mg/L	2.3		0.11	0.25
SGWC-20	10/18/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-20	10/18/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-20	10/18/2018	7440-48-4	Cobalt	mg/L	0.16		0.0004	0.0025
SGWC-20	10/18/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.399		0.388	5
SGWC-20	10/18/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.399		0.388	5
SGWC-20	10/18/2018	16984-48-8	Fluoride	mg/L		NDX	0.082	0.23
SGWC-20	10/18/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-20	10/18/2018	7439-93-2	Lithium	mg/L	0.0062		0.0011	0.005
SGWC-20	10/18/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-20	10/18/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-20	10/18/2018	7782-49-2	Selenium	mg/L	0.00049	J	0.00024	0.0013
SGWC-20	10/18/2018	7440-28-0	Thallium	mg/L	0.00018	J	0.000085	0.0005
SGWC-20	2/20/2019	7440-36-0	Antimony	mg/L		ND	0.00038	0.0025

Appendix B-2
Scherer Risk Evaluation Report
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-20	2/20/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
SGWC-20	2/20/2019	7440-39-3	Barium	mg/L	0.03		0.0015	0.0025
SGWC-20	2/20/2019	7440-41-7	Beryllium	mg/L	0.00077	J	0.00016	0.0025
SGWC-20	2/20/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-20	2/20/2019	7440-47-3	Chromium	mg/L		ND	0.0015	0.0025
SGWC-20	2/20/2019	7440-48-4	Cobalt	mg/L	0.18		0.000075	0.0025
SGWC-20	2/20/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.353		0.335	5
SGWC-20	2/20/2019	16984-48-8	Fluoride	mg/L	0.2		0.026	0.2
SGWC-20	2/20/2019	7439-92-1	Lead	mg/L	0.00027	J	0.00013	0.001
SGWC-20	2/20/2019	7439-93-2	Lithium	mg/L	0.0048	J	0.0031	0.005
SGWC-20	2/20/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-20	2/20/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-20	2/20/2019	7782-49-2	Selenium	mg/L	0.0011	J	0.00081	0.0013
SGWC-20	2/20/2019	7440-28-0	Thallium	mg/L	0.00018	J	0.000063	0.0005
SGWC-20	4/2/2019	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-20	4/2/2019	7440-39-3	Barium	mg/L	0.023		0.00049	0.0025
SGWC-20	4/2/2019	7440-41-7	Beryllium	mg/L	0.00043	J	0.00034	0.0025
SGWC-20	4/2/2019	7440-42-8	Boron	mg/L	2		0.11	0.25
SGWC-20	4/2/2019	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-20	4/2/2019	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-20	4/2/2019	7440-48-4	Cobalt	mg/L	0.13		0.0004	0.0025
SGWC-20	4/2/2019	7440-14-4	Combined Radium 226 + 228	pCi/L		ND	0.291	5
SGWC-20	4/2/2019	16984-48-8	Fluoride	mg/L	0.15	J	0.026	0.2
SGWC-20	4/2/2019	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-20	4/2/2019	7439-93-2	Lithium	mg/L	0.0046	J	0.0011	0.005
SGWC-20	4/2/2019	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-20	4/2/2019	7439-98-7	Molybdenum	mg/L		ND	0.002	0.015
SGWC-20	4/2/2019	7782-49-2	Selenium	mg/L		ND	0.00071	0.0013
SGWC-20	4/2/2019	7440-28-0	Thallium	mg/L	0.00017	J	0.000085	0.0005
SGWC-20	9/17/2019	7440-38-2	Arsenic	mg/L	0.00037	J	0.00032	0.0013
SGWC-20	9/17/2019	7440-39-3	Barium	mg/L	0.025		0.0016	0.01
SGWC-20	9/17/2019	7440-41-7	Beryllium	mg/L	0.00057	J	0.00018	0.0025
SGWC-20	9/17/2019	7440-42-8	Boron	mg/L	1.8		0.039	0.05
SGWC-20	9/17/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-20	9/17/2019	7440-47-3	Chromium	mg/L	0.0022	J	0.0015	0.0025
SGWC-20	9/17/2019	7440-48-4	Cobalt	mg/L	0.13		0.000075	0.0025
SGWC-20	9/17/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.591		0.468	5
SGWC-20	9/17/2019	16984-48-8	Fluoride	mg/L	0.14		0.026	0.1
SGWC-20	9/17/2019	7439-92-1	Lead	mg/L	0.00025	J	0.00013	0.001
SGWC-20	9/17/2019	7439-93-2	Lithium	mg/L	0.0042		0.002	0.0034
SGWC-20	9/17/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-20	9/17/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-20	9/17/2019	7782-49-2	Selenium	mg/L		ND	0.0015	0.0025
SGWC-20	9/17/2019	7440-28-0	Thallium	mg/L	0.00021	J	0.00015	0.0005
SGWC-21	5/12/2016	7440-36-0	Antimony	mg/L		ND	0.0006	0.003
SGWC-21	5/12/2016	7440-38-2	Arsenic	mg/L		ND	0.001	0.005
SGWC-21	5/12/2016	7440-39-3	Barium	mg/L	0.0914		0.002	0.01
SGWC-21	5/12/2016	7440-41-7	Beryllium	mg/L		ND	0.0006	0.003
SGWC-21	5/12/2016	7440-42-8	Boron	mg/L	1.4		0.02	0.1
SGWC-21	5/12/2016	7440-43-9	Cadmium	mg/L		ND	0.0001	0.001
SGWC-21	5/12/2016	7440-47-3	Chromium	mg/L		ND	0.002	0.01
SGWC-21	5/12/2016	7440-48-4	Cobalt	mg/L		ND	0.002	0.01
SGWC-21	5/12/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.216	U	n/a	5
SGWC-21	5/12/2016	16984-48-8	Fluoride	mg/L	0.079	J	0.01	0.3
SGWC-21	5/12/2016	7439-92-1	Lead	mg/L		ND	0.001	0.005
SGWC-21	5/12/2016	7439-93-2	Lithium	mg/L		ND	0.01	0.05

Appendix B-2
Scherer Risk Evaluation Report
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Scherer AP-1
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-21	5/12/2016	7439-97-6	Mercury	mg/L		ND	0.00025	0.0005
SGWC-21	5/12/2016	7439-98-7	Molybdenum	mg/L		ND	0.002	0.01
SGWC-21	5/12/2016	7782-49-2	Selenium	mg/L		ND	0.002	0.01
SGWC-21	5/12/2016	7440-28-0	Thallium	mg/L		ND	0.0002	0.001
SGWC-21	6/29/2016	7440-36-0	Antimony	mg/L		ND	0.0002	0.003
SGWC-21	6/29/2016	7440-38-2	Arsenic	mg/L		ND	0.0007	0.005
SGWC-21	6/29/2016	7440-39-3	Barium	mg/L	0.0933		0.0003	0.01
SGWC-21	6/29/2016	7440-41-7	Beryllium	mg/L		ND	0.00009	0.003
SGWC-21	6/29/2016	7440-42-8	Boron	mg/L	1.25		0.0044	0.1
SGWC-21	6/29/2016	7440-43-9	Cadmium	mg/L		ND	0.0001	0.001
SGWC-21	6/29/2016	7440-47-3	Chromium	mg/L	0.0012	J	0.0004	0.01
SGWC-21	6/29/2016	7440-48-4	Cobalt	mg/L		ND	0.0003	0.01
SGWC-21	6/29/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.253	U	n/a	5
SGWC-21	6/29/2016	16984-48-8	Fluoride	mg/L	0.15	J	0.02	0.3
SGWC-21	6/29/2016	7439-92-1	Lead	mg/L	0.00009	J	0.00008	0.005
SGWC-21	6/29/2016	7439-93-2	Lithium	mg/L		ND	0.0012	0.05
SGWC-21	6/29/2016	7439-97-6	Mercury	mg/L		ND	0.00013	0.0005
SGWC-21	6/29/2016	7439-98-7	Molybdenum	mg/L		ND	0.0005	0.01
SGWC-21	6/29/2016	7782-49-2	Selenium	mg/L		ND	0.0009	0.01
SGWC-21	6/29/2016	7440-28-0	Thallium	mg/L		ND	0.00006	0.001
SGWC-21	8/22/2016	7440-36-0	Antimony	mg/L		ND	0.0010	0.0025
SGWC-21	8/22/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-21	8/22/2016	7440-39-3	Barium	mg/L	0.086		0.00049	0.0025
SGWC-21	8/22/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-21	8/22/2016	7440-42-8	Boron	mg/L	1.3		0.021	0.05
SGWC-21	8/22/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-21	8/22/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-21	8/22/2016	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-21	8/22/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.115	U	n/a	5
SGWC-21	8/22/2016	16984-48-8	Fluoride	mg/L	0.083	J	0.082	0.2
SGWC-21	8/22/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-21	8/22/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-21	8/22/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-21	8/22/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-21	8/22/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-21	8/22/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-21	10/18/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-21	10/18/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-21	10/18/2016	7440-39-3	Barium	mg/L	0.093		0.00049	0.0025
SGWC-21	10/18/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-21	10/18/2016	7440-42-8	Boron	mg/L	1.7		0.21	0.5
SGWC-21	10/18/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-21	10/18/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-21	10/18/2016	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-21	10/18/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.593		0.484	5
SGWC-21	10/18/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-21	10/18/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-21	10/18/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-21	10/18/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-21	10/18/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-21	10/18/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-21	10/18/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-21	12/7/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-21	12/7/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-21	12/7/2016	7440-39-3	Barium	mg/L	0.096		0.00049	0.0025
SGWC-21	12/7/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-21	12/7/2016	7440-42-8	Boron	mg/L	1.3		0.21	0.5
SGWC-21	12/7/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-21	12/7/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-21	12/7/2016	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-21	12/7/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.897		0.428	5
SGWC-21	12/7/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-21	12/7/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-21	12/7/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-21	12/7/2016	7439-97-6	Mercury	mg/L	0.0001	J	0.00007	0.0002
SGWC-21	12/7/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-21	12/7/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-21	12/7/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-21	2/16/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-21	2/16/2017	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-21	2/16/2017	7440-39-3	Barium	mg/L	0.091		0.00049	0.0025
SGWC-21	2/16/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-21	2/16/2017	7440-42-8	Boron	mg/L	1.4		0.021	0.05
SGWC-21	2/16/2017	7440-43-9	Cadmium	mg/L	0.00039	J	0.00034	0.0025
SGWC-21	2/16/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-21	2/16/2017	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-21	2/16/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.132	U	0.371	5
SGWC-21	2/16/2017	16984-48-8	Fluoride	mg/L	0.12	J	0.082	0.2
SGWC-21	2/16/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-21	2/16/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-21	2/16/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-21	2/16/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-21	2/16/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-21	2/16/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-21	4/13/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-21	4/13/2017	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-21	4/13/2017	7440-39-3	Barium	mg/L	0.088		0.00049	0.0025
SGWC-21	4/13/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-21	4/13/2017	7440-42-8	Boron	mg/L	1.4		0.021	0.05
SGWC-21	4/13/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-21	4/13/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-21	4/13/2017	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-21	4/13/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.287	U	0.35	5
SGWC-21	4/13/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-21	4/13/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-21	4/13/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-21	4/13/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-21	4/13/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-21	4/13/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-21	4/13/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-21	6/28/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-21	6/28/2017	7440-38-2	Arsenic	mg/L	0.00076	J	0.00046	0.0013
SGWC-21	6/28/2017	7440-39-3	Barium	mg/L	0.094		0.00049	0.0025
SGWC-21	6/28/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-21	6/28/2017	7440-42-8	Boron	mg/L	1.4		0.021	0.05
SGWC-21	6/28/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-21	6/28/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-21	6/28/2017	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-21	6/28/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.143	U	0.318	5
SGWC-21	6/28/2017	16984-48-8	Fluoride	mg/L	0.1	J	0.082	0.2
SGWC-21	6/28/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-21	6/28/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005

Appendix B-2
Scherer Risk Evaluation Report
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Scherer AP-1
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-21	6/28/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-21	6/28/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-21	6/28/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-21	6/28/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-21	10/12/2017	7440-42-8	Boron	mg/L	1.4		0.021	0.05
SGWC-21	10/12/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-21	3/28/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-21	3/28/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-21	3/28/2018	7440-39-3	Barium	mg/L	0.09		0.00049	0.0025
SGWC-21	3/28/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-21	3/28/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-21	3/28/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-21	3/28/2018	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-21	3/28/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.38		0.308	5
SGWC-21	3/28/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-21	3/28/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-21	3/28/2018	7439-93-2	Lithium	mg/L		NDX	0.0032	0.005
SGWC-21	3/28/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-21	3/28/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-21	3/28/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-21	3/28/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-21	6/7/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-21	6/7/2018	7440-39-3	Barium	mg/L	0.092		0.00049	0.0025
SGWC-21	6/7/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-21	6/7/2018	7440-42-8	Boron	mg/L	1.4		0.021	0.05
SGWC-21	6/7/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-21	6/7/2018	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-21	6/7/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.514		0.33	5
SGWC-21	6/7/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-21	6/7/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-21	6/7/2018	7439-93-2	Lithium	mg/L	0.0013	J	0.0011	0.005
SGWC-21	6/7/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-21	6/7/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-21	6/7/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-21	10/8/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-21	10/8/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-21	10/8/2018	7440-39-3	Barium	mg/L	0.092		0.00049	0.0025
SGWC-21	10/8/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-21	10/8/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-21	10/8/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-21	10/8/2018	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-21	10/8/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.374		0.33	5
SGWC-21	10/8/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-21	10/8/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-21	10/8/2018	7439-93-2	Lithium	mg/L	0.0019	J	0.0011	0.005
SGWC-21	10/8/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-21	10/8/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-21	10/8/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-21	10/8/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-21	12/17/2018	7440-42-8	Boron	mg/L	1.2		0.021	0.05
SGWC-21	2/20/2019	7440-36-0	Antimony	mg/L		ND	0.00038	0.0025
SGWC-21	2/20/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
SGWC-21	2/20/2019	7440-39-3	Barium	mg/L	0.1		0.0015	0.0025
SGWC-21	2/20/2019	7440-41-7	Beryllium	mg/L		ND	0.00016	0.0025
SGWC-21	2/20/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-21	2/20/2019	7440-47-3	Chromium	mg/L	0.0015	J	0.0015	0.0025

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-21	2/20/2019	7440-48-4	Cobalt	mg/L	0.00011	J	0.000075	0.0025
SGWC-21	2/20/2019	7440-14-4	Combined Radium 226 + 228	pCi/L		ND	0.321	5
SGWC-21	2/20/2019	16984-48-8	Fluoride	mg/L	0.051	J	0.026	0.2
SGWC-21	2/20/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-21	2/20/2019	7439-93-2	Lithium	mg/L		ND	0.0031	0.005
SGWC-21	2/20/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-21	2/20/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-21	2/20/2019	7782-49-2	Selenium	mg/L		ND	0.00081	0.0013
SGWC-21	2/20/2019	7440-28-0	Thallium	mg/L		ND	0.000063	0.0005
SGWC-21	4/2/2019	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-21	4/2/2019	7440-39-3	Barium	mg/L	0.087		0.00049	0.0025
SGWC-21	4/2/2019	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-21	4/2/2019	7440-42-8	Boron	mg/L	1.2		0.021	0.05
SGWC-21	4/2/2019	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-21	4/2/2019	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-21	4/2/2019	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-21	4/2/2019	7440-14-4	Combined Radium 226 + 228	pCi/L		ND	0.346	5
SGWC-21	4/2/2019	16984-48-8	Fluoride	mg/L	0.066	J	0.026	0.2
SGWC-21	4/2/2019	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-21	4/2/2019	7439-93-2	Lithium	mg/L	0.0027	J	0.0011	0.005
SGWC-21	4/2/2019	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-21	4/2/2019	7439-98-7	Molybdenum	mg/L		ND	0.002	0.015
SGWC-21	4/2/2019	7782-49-2	Selenium	mg/L		ND	0.00071	0.0013
SGWC-21	4/2/2019	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-21	9/17/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
SGWC-21	9/17/2019	7440-39-3	Barium	mg/L	0.097		0.0016	0.01
SGWC-21	9/17/2019	7440-41-7	Beryllium	mg/L		ND	0.00018	0.0025
SGWC-21	9/17/2019	7440-42-8	Boron	mg/L	1.1		0.039	0.05
SGWC-21	9/17/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-21	9/17/2019	7440-47-3	Chromium	mg/L	0.0016	J	0.0015	0.0025
SGWC-21	9/17/2019	7440-48-4	Cobalt	mg/L	0.000087	J	0.000075	0.0025
SGWC-21	9/17/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	-0.04	U	0.431	5
SGWC-21	9/17/2019	16984-48-8	Fluoride	mg/L	0.077	J	0.026	0.1
SGWC-21	9/17/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-21	9/17/2019	7439-93-2	Lithium	mg/L		ND	0.002	0.0034
SGWC-21	9/17/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-21	9/17/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-21	9/17/2019	7782-49-2	Selenium	mg/L		ND	0.0015	0.0025
SGWC-21	9/17/2019	7440-28-0	Thallium	mg/L		ND	0.00015	0.0005
SGWC-22	5/12/2016	7440-36-0	Antimony	mg/L		ND	0.0006	0.003
SGWC-22	5/12/2016	7440-38-2	Arsenic	mg/L		ND	0.001	0.005
SGWC-22	5/12/2016	7440-39-3	Barium	mg/L	0.1		0.002	0.01
SGWC-22	5/12/2016	7440-41-7	Beryllium	mg/L		ND	0.0006	0.003
SGWC-22	5/12/2016	7440-42-8	Boron	mg/L	0.411		0.02	0.1
SGWC-22	5/12/2016	7440-43-9	Cadmium	mg/L		ND	0.0001	0.001
SGWC-22	5/12/2016	7440-47-3	Chromium	mg/L		ND	0.002	0.01
SGWC-22	5/12/2016	7440-48-4	Cobalt	mg/L	0.00619	J	0.002	0.01
SGWC-22	5/12/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.285	U	n/a	5
SGWC-22	5/12/2016	16984-48-8	Fluoride	mg/L	0.029	J	0.01	0.3
SGWC-22	5/12/2016	7439-92-1	Lead	mg/L		ND	0.001	0.005
SGWC-22	5/12/2016	7439-93-2	Lithium	mg/L		ND	0.01	0.05
SGWC-22	5/12/2016	7439-97-6	Mercury	mg/L		ND	0.00025	0.0005
SGWC-22	5/12/2016	7439-98-7	Molybdenum	mg/L		ND	0.002	0.01
SGWC-22	5/12/2016	7782-49-2	Selenium	mg/L		ND	0.002	0.01
SGWC-22	5/12/2016	7440-28-0	Thallium	mg/L		ND	0.0002	0.001
SGWC-22	6/29/2016	7440-36-0	Antimony	mg/L		ND	0.0002	0.003

Appendix B-2
Scherer Risk Evaluation Report
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Scherer AP-1
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-22	6/29/2016	7440-38-2	Arsenic	mg/L		ND	0.0007	0.005
SGWC-22	6/29/2016	7440-39-3	Barium	mg/L	0.0991		0.0003	0.01
SGWC-22	6/29/2016	7440-41-7	Beryllium	mg/L		ND	0.00009	0.003
SGWC-22	6/29/2016	7440-42-8	Boron	mg/L	0.373	J	0.0044	0.1
SGWC-22	6/29/2016	7440-43-9	Cadmium	mg/L		ND	0.0001	0.001
SGWC-22	6/29/2016	7440-47-3	Chromium	mg/L	0.0007	J	0.0004	0.01
SGWC-22	6/29/2016	7440-48-4	Cobalt	mg/L	0.0051	J	0.0003	0.01
SGWC-22	6/29/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	1.1	O	n/a	5
SGWC-22	6/29/2016	16984-48-8	Fluoride	mg/L	0.04	J	0.02	0.3
SGWC-22	6/29/2016	7439-92-1	Lead	mg/L		ND	0.00008	0.005
SGWC-22	6/29/2016	7439-93-2	Lithium	mg/L		ND	0.0012	0.05
SGWC-22	6/29/2016	7439-97-6	Mercury	mg/L		ND	0.00013	0.0005
SGWC-22	6/29/2016	7439-98-7	Molybdenum	mg/L		ND	0.0005	0.01
SGWC-22	6/29/2016	7782-49-2	Selenium	mg/L		ND	0.0009	0.01
SGWC-22	6/29/2016	7440-28-0	Thallium	mg/L		ND	0.00006	0.001
SGWC-22	8/19/2016	7440-36-0	Antimony	mg/L		ND	0.0010	0.0025
SGWC-22	8/19/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-22	8/19/2016	7440-39-3	Barium	mg/L	0.096		0.00049	0.0025
SGWC-22	8/19/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-22	8/19/2016	7440-42-8	Boron	mg/L	0.37		0.021	0.05
SGWC-22	8/19/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-22	8/19/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-22	8/19/2016	7440-48-4	Cobalt	mg/L	0.0045		0.0004	0.0025
SGWC-22	8/19/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.367	U	n/a	5
SGWC-22	8/19/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-22	8/19/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-22	8/19/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-22	8/19/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-22	8/19/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-22	8/19/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-22	8/19/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-22	10/18/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-22	10/18/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-22	10/18/2016	7440-39-3	Barium	mg/L	0.096		0.00049	0.0025
SGWC-22	10/18/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-22	10/18/2016	7440-42-8	Boron	mg/L	0.41		0.021	0.05
SGWC-22	10/18/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-22	10/18/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-22	10/18/2016	7440-48-4	Cobalt	mg/L	0.0043		0.0004	0.0025
SGWC-22	10/18/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.276	U	0.343	5
SGWC-22	10/18/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-22	10/18/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-22	10/18/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-22	10/18/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-22	10/18/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-22	10/18/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-22	10/18/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-22	12/7/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-22	12/7/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-22	12/7/2016	7440-39-3	Barium	mg/L	0.09		0.00049	0.0025
SGWC-22	12/7/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-22	12/7/2016	7440-42-8	Boron	mg/L	0.36		0.021	0.05
SGWC-22	12/7/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-22	12/7/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-22	12/7/2016	7440-48-4	Cobalt	mg/L	0.0034		0.0004	0.0025
SGWC-22	12/7/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.318	U	0.423	5

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-22	12/7/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-22	12/7/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-22	12/7/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-22	12/7/2016	7439-97-6	Mercury	mg/L	0.000099	J	0.00007	0.0002
SGWC-22	12/7/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-22	12/7/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-22	12/7/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-22	2/16/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-22	2/16/2017	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-22	2/16/2017	7440-39-3	Barium	mg/L	0.091		0.00049	0.0025
SGWC-22	2/16/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-22	2/16/2017	7440-42-8	Boron	mg/L	0.38	J	0.021	0.38
SGWC-22	2/16/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-22	2/16/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-22	2/16/2017	7440-48-4	Cobalt	mg/L	0.0031		0.0004	0.0025
SGWC-22	2/16/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.168	U	0.401	5
SGWC-22	2/16/2017	16984-48-8	Fluoride	mg/L	0.1	J	0.082	0.2
SGWC-22	2/16/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-22	2/16/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-22	2/16/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-22	2/16/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-22	2/16/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-22	2/16/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-22	4/13/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-22	4/13/2017	7440-38-2	Arsenic	mg/L	0.0006	J	0.00046	0.0013
SGWC-22	4/13/2017	7440-39-3	Barium	mg/L	0.091		0.00049	0.0025
SGWC-22	4/13/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-22	4/13/2017	7440-42-8	Boron	mg/L	0.4		0.021	0.05
SGWC-22	4/13/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-22	4/13/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-22	4/13/2017	7440-48-4	Cobalt	mg/L	0.0031		0.0004	0.0025
SGWC-22	4/13/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.3	U	0.478	5
SGWC-22	4/13/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-22	4/13/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-22	4/13/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-22	4/13/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-22	4/13/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-22	4/13/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-22	4/13/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-22	6/28/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-22	6/28/2017	7440-38-2	Arsenic	mg/L	0.00089	J	0.00046	0.0013
SGWC-22	6/28/2017	7440-39-3	Barium	mg/L	0.1		0.00049	0.0025
SGWC-22	6/28/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-22	6/28/2017	7440-42-8	Boron	mg/L	0.35		0.021	0.05
SGWC-22	6/28/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-22	6/28/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-22	6/28/2017	7440-48-4	Cobalt	mg/L	0.0029		0.0004	0.0025
SGWC-22	6/28/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.0844	U	0.287	5
SGWC-22	6/28/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-22	6/28/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-22	6/28/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-22	6/28/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-22	6/28/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-22	6/28/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-22	6/28/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-22	10/12/2017	7440-42-8	Boron	mg/L	0.4		0.021	0.05

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Scherer AP-1
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-22	10/12/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-22	3/28/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-22	3/28/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-22	3/28/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-22	3/28/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-22	3/28/2018	7440-39-3	Barium	mg/L	0.085		0.00049	0.0025
SGWC-22	3/28/2018	7440-39-3	Barium	mg/L	0.084		0.00049	0.0025
SGWC-22	3/28/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-22	3/28/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-22	3/28/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-22	3/28/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-22	3/28/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-22	3/28/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-22	3/28/2018	7440-48-4	Cobalt	mg/L	0.0021	J	0.0004	0.0025
SGWC-22	3/28/2018	7440-48-4	Cobalt	mg/L	0.0022	J	0.0004	0.0025
SGWC-22	3/28/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.0661	U	0.348	5
SGWC-22	3/28/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-22	3/28/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-22	3/28/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-22	3/28/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-22	3/28/2018	7439-93-2	Lithium	mg/L		NDX	0.0032	0.005
SGWC-22	3/28/2018	7439-93-2	Lithium	mg/L		NDX	0.0032	0.005
SGWC-22	3/28/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-22	3/28/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-22	3/28/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-22	3/28/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-22	3/28/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-22	3/28/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-22	3/28/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-22	3/28/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-22	6/7/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-22	6/7/2018	7440-39-3	Barium	mg/L	0.084		0.00049	0.0025
SGWC-22	6/7/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-22	6/7/2018	7440-42-8	Boron	mg/L	0.41		0.021	0.05
SGWC-22	6/7/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-22	6/7/2018	7440-48-4	Cobalt	mg/L	0.0022	J	0.0004	0.0025
SGWC-22	6/7/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.222	U	0.222	5
SGWC-22	6/7/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-22	6/7/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-22	6/7/2018	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-22	6/7/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-22	6/7/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-22	6/7/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-22	10/8/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-22	10/8/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-22	10/8/2018	7440-39-3	Barium	mg/L	0.084		0.00049	0.0025
SGWC-22	10/8/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-22	10/8/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-22	10/8/2018	7440-47-3	Chromium	mg/L	0.0012	J	0.0011	0.0025
SGWC-22	10/8/2018	7440-48-4	Cobalt	mg/L	0.0021	J	0.0004	0.0025
SGWC-22	10/8/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.499		0.352	5
SGWC-22	10/8/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-22	10/8/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-22	10/8/2018	7439-93-2	Lithium	mg/L	0.0011	J	0.0011	0.005
SGWC-22	10/8/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-22	10/8/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015

Appendix B-2
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Scherer AP-1
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-22	10/8/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-22	10/8/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-22	12/17/2018	7440-42-8	Boron	mg/L	0.4		0.021	0.05
SGWC-22	2/19/2019	7440-36-0	Antimony	mg/L		ND	0.00038	0.0025
SGWC-22	2/19/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
SGWC-22	2/19/2019	7440-39-3	Barium	mg/L	0.075		0.0015	0.0025
SGWC-22	2/19/2019	7440-41-7	Beryllium	mg/L		ND	0.00016	0.0025
SGWC-22	2/19/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-22	2/19/2019	7440-47-3	Chromium	mg/L		ND	0.0015	0.0025
SGWC-22	2/19/2019	7440-48-4	Cobalt	mg/L	0.0018	J	0.000075	0.0025
SGWC-22	2/19/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.532		0.42	5
SGWC-22	2/19/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.2
SGWC-22	2/19/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-22	2/19/2019	7439-93-2	Lithium	mg/L		ND	0.0031	0.005
SGWC-22	2/19/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-22	2/19/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-22	2/19/2019	7782-49-2	Selenium	mg/L		ND	0.000081	0.0013
SGWC-22	2/19/2019	7440-28-0	Thallium	mg/L		ND	0.000063	0.0005
SGWC-22	4/2/2019	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-22	4/2/2019	7440-39-3	Barium	mg/L	0.076		0.00049	0.0025
SGWC-22	4/2/2019	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-22	4/2/2019	7440-42-8	Boron	mg/L	0.44		0.021	0.05
SGWC-22	4/2/2019	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-22	4/2/2019	7440-47-3	Chromium	mg/L	0.0012	J	0.0011	0.0025
SGWC-22	4/2/2019	7440-48-4	Cobalt	mg/L	0.0018	J	0.0004	0.0025
SGWC-22	4/2/2019	7440-14-4	Combined Radium 226 + 228	pCi/L		ND	0.43	5
SGWC-22	4/2/2019	16984-48-8	Fluoride	mg/L		ND	0.026	0.2
SGWC-22	4/2/2019	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-22	4/2/2019	7439-93-2	Lithium	mg/L	0.0026	J	0.0011	0.005
SGWC-22	4/2/2019	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-22	4/2/2019	7439-98-7	Molybdenum	mg/L		ND	0.002	0.015
SGWC-22	4/2/2019	7782-49-2	Selenium	mg/L		ND	0.00071	0.0013
SGWC-22	4/2/2019	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-22	9/18/2019	7440-38-2	Arsenic	mg/L	0.00035	J	0.00032	0.0013
SGWC-22	9/18/2019	7440-39-3	Barium	mg/L	0.078		0.0016	0.01
SGWC-22	9/18/2019	7440-41-7	Beryllium	mg/L		ND	0.00018	0.0025
SGWC-22	9/18/2019	7440-42-8	Boron	mg/L	0.52		0.039	0.05
SGWC-22	9/18/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-22	9/18/2019	7440-47-3	Chromium	mg/L	0.0024	J	0.0015	0.0025
SGWC-22	9/18/2019	7440-48-4	Cobalt	mg/L	0.002	J	0.000075	0.0025
SGWC-22	9/18/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.101	U	0.419	5
SGWC-22	9/18/2019	16984-48-8	Fluoride	mg/L	0.028	J	0.026	0.1
SGWC-22	9/18/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-22	9/18/2019	7439-93-2	Lithium	mg/L		ND	0.002	0.0034
SGWC-22	9/18/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-22	9/18/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-22	9/18/2019	7782-49-2	Selenium	mg/L		ND	0.0015	0.0025
SGWC-22	9/18/2019	7440-28-0	Thallium	mg/L		ND	0.00015	0.0005
SGWC-23	5/12/2016	7440-36-0	Antimony	mg/L		ND	0.0006	0.003
SGWC-23	5/12/2016	7440-38-2	Arsenic	mg/L		ND	0.001	0.005
SGWC-23	5/12/2016	7440-39-3	Barium	mg/L	0.0959		0.002	0.01
SGWC-23	5/12/2016	7440-41-7	Beryllium	mg/L		ND	0.0006	0.003
SGWC-23	5/12/2016	7440-42-8	Boron	mg/L	0.691		0.02	0.1
SGWC-23	5/12/2016	7440-43-9	Cadmium	mg/L		ND	0.0001	0.001
SGWC-23	5/12/2016	7440-47-3	Chromium	mg/L		NDO	0.002	0.01
SGWC-23	5/12/2016	7440-48-4	Cobalt	mg/L		ND	0.002	0.01

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-23	5/12/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.801		n/a	5
SGWC-23	5/12/2016	16984-48-8	Fluoride	mg/L	0.0341	J	0.01	0.3
SGWC-23	5/12/2016	7439-92-1	Lead	mg/L		ND	0.001	0.005
SGWC-23	5/12/2016	7439-93-2	Lithium	mg/L		NDO	0.01	0.05
SGWC-23	5/12/2016	7439-97-6	Mercury	mg/L		ND	0.00025	0.0005
SGWC-23	5/12/2016	7439-98-7	Molybdenum	mg/L		ND	0.002	0.01
SGWC-23	5/12/2016	7782-49-2	Selenium	mg/L		ND	0.002	0.01
SGWC-23	5/12/2016	7440-28-0	Thallium	mg/L		ND	0.0002	0.001
SGWC-23	6/29/2016	7440-36-0	Antimony	mg/L		ND	0.0002	0.003
SGWC-23	6/29/2016	7440-38-2	Arsenic	mg/L		ND	0.0007	0.005
SGWC-23	6/29/2016	7440-39-3	Barium	mg/L	0.0957		0.0003	0.01
SGWC-23	6/29/2016	7440-41-7	Beryllium	mg/L		ND	0.00009	0.003
SGWC-23	6/29/2016	7440-42-8	Boron	mg/L	0.557		0.0044	0.1
SGWC-23	6/29/2016	7440-43-9	Cadmium	mg/L		ND	0.0001	0.001
SGWC-23	6/29/2016	7440-47-3	Chromium	mg/L	0.0013	J	0.0004	0.01
SGWC-23	6/29/2016	7440-48-4	Cobalt	mg/L		NDO	0.0003	0.01
SGWC-23	6/29/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.423	U	n/a	5
SGWC-23	6/29/2016	16984-48-8	Fluoride	mg/L	0.04	J	0.02	0.3
SGWC-23	6/29/2016	7439-92-1	Lead	mg/L	0.00009	J	0.00008	0.005
SGWC-23	6/29/2016	7439-93-2	Lithium	mg/L	0.0027	J	0.0012	0.05
SGWC-23	6/29/2016	7439-97-6	Mercury	mg/L		ND	0.00013	0.0005
SGWC-23	6/29/2016	7439-98-7	Molybdenum	mg/L		ND	0.0005	0.01
SGWC-23	6/29/2016	7782-49-2	Selenium	mg/L		ND	0.0009	0.01
SGWC-23	6/29/2016	7440-28-0	Thallium	mg/L		ND	0.00006	0.001
SGWC-23	8/19/2016	7440-36-0	Antimony	mg/L		ND	0.0010	0.0025
SGWC-23	8/19/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-23	8/19/2016	7440-39-3	Barium	mg/L	0.093		0.00049	0.0025
SGWC-23	8/19/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-23	8/19/2016	7440-42-8	Boron	mg/L	0.58		0.021	0.05
SGWC-23	8/19/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-23	8/19/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-23	8/19/2016	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-23	8/19/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.869		n/a	5
SGWC-23	8/19/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-23	8/19/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-23	8/19/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-23	8/19/2016	7439-97-6	Mercury	mg/L	0.000071	J	0.00007	0.0002
SGWC-23	8/19/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-23	8/19/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-23	8/19/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-23	10/18/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-23	10/18/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-23	10/18/2016	7440-39-3	Barium	mg/L	0.093		0.00049	0.0025
SGWC-23	10/18/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-23	10/18/2016	7440-42-8	Boron	mg/L	0.68		0.021	0.05
SGWC-23	10/18/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-23	10/18/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-23	10/18/2016	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-23	10/18/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.881		0.456	5
SGWC-23	10/18/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-23	10/18/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-23	10/18/2016	7439-93-2	Lithium	mg/L	0.0032	J	0.0032	0.005
SGWC-23	10/18/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-23	10/18/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-23	10/18/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-23	10/18/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-23	12/7/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-23	12/7/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-23	12/7/2016	7440-39-3	Barium	mg/L	0.09		0.00049	0.0025
SGWC-23	12/7/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-23	12/7/2016	7440-42-8	Boron	mg/L	0.6		0.021	0.05
SGWC-23	12/7/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-23	12/7/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-23	12/7/2016	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-23	12/7/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.455		0.423	5
SGWC-23	12/7/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-23	12/7/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-23	12/7/2016	7439-93-2	Lithium	mg/L	0.0043	J	0.0032	0.005
SGWC-23	12/7/2016	7439-97-6	Mercury	mg/L	0.00011	J	0.00007	0.0002
SGWC-23	12/7/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-23	12/7/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-23	12/7/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-23	2/15/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-23	2/15/2017	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-23	2/15/2017	7440-39-3	Barium	mg/L	0.09		0.00049	0.0025
SGWC-23	2/15/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-23	2/15/2017	7440-42-8	Boron	mg/L	0.82		0.021	0.05
SGWC-23	2/15/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-23	2/15/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-23	2/15/2017	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-23	2/15/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.635		0.346	5
SGWC-23	2/15/2017	16984-48-8	Fluoride	mg/L	0.092	J	0.082	0.2
SGWC-23	2/15/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-23	2/15/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-23	2/15/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-23	2/15/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-23	2/15/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-23	2/15/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-23	4/13/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-23	4/13/2017	7440-38-2	Arsenic	mg/L	0.00061	J	0.00046	0.0013
SGWC-23	4/13/2017	7440-39-3	Barium	mg/L	0.081		0.00049	0.0025
SGWC-23	4/13/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-23	4/13/2017	7440-42-8	Boron	mg/L	0.54		0.021	0.05
SGWC-23	4/13/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-23	4/13/2017	7440-47-3	Chromium	mg/L	0.0014	J	0.0011	0.0025
SGWC-23	4/13/2017	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-23	4/13/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.413		0.347	5
SGWC-23	4/13/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-23	4/13/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-23	4/13/2017	7439-93-2	Lithium	mg/L	0.0036	J	0.0032	0.005
SGWC-23	4/13/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-23	4/13/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-23	4/13/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-23	4/13/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-23	6/28/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-23	6/28/2017	7440-38-2	Arsenic	mg/L	0.00079	J	0.00046	0.0013
SGWC-23	6/28/2017	7440-39-3	Barium	mg/L	0.085		0.00049	0.0025
SGWC-23	6/28/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-23	6/28/2017	7440-42-8	Boron	mg/L	0.59		0.021	0.05
SGWC-23	6/28/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-23	6/28/2017	7440-47-3	Chromium	mg/L	0.0025		0.0011	0.0025
SGWC-23	6/28/2017	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-23	6/28/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.331	U	0.349	5
SGWC-23	6/28/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-23	6/28/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-23	6/28/2017	7439-93-2	Lithium	mg/L	0.0032	J	0.0032	0.005
SGWC-23	6/28/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-23	6/28/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-23	6/28/2017	7782-49-2	Selenium	mg/L	0.00033	J	0.00024	0.0013
SGWC-23	6/28/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-23	10/12/2017	7440-42-8	Boron	mg/L	0.54		0.021	0.05
SGWC-23	10/12/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-23	3/27/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-23	3/27/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-23	3/27/2018	7440-39-3	Barium	mg/L	0.076		0.00049	0.0025
SGWC-23	3/27/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-23	3/27/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-23	3/27/2018	7440-47-3	Chromium	mg/L	0.0012	J	0.0011	0.0025
SGWC-23	3/27/2018	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-23	3/27/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.61	UX	0.61	5
SGWC-23	3/27/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-23	3/27/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-23	3/27/2018	7439-93-2	Lithium	mg/L	0.005	J+X	0.0011	0.005
SGWC-23	3/27/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-23	3/27/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-23	3/27/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-23	3/27/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-23	6/7/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-23	6/7/2018	7440-39-3	Barium	mg/L	0.082		0.00049	0.0025
SGWC-23	6/7/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-23	6/7/2018	7440-42-8	Boron	mg/L	0.71		0.021	0.05
SGWC-23	6/7/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-23	6/7/2018	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-23	6/7/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.64		0.31	5
SGWC-23	6/7/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-23	6/7/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-23	6/7/2018	7439-93-2	Lithium	mg/L	0.0027	J	0.0011	0.005
SGWC-23	6/7/2018	7439-97-6	Mercury	mg/L	0.00028		0.00007	0.0002
SGWC-23	6/7/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-23	6/7/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-23	10/8/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-23	10/8/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-23	10/8/2018	7440-39-3	Barium	mg/L	0.077		0.00049	0.0025
SGWC-23	10/8/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-23	10/8/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-23	10/8/2018	7440-47-3	Chromium	mg/L	0.0017	J	0.0011	0.0025
SGWC-23	10/8/2018	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-23	10/8/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.437		0.314	5
SGWC-23	10/8/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-23	10/8/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-23	10/8/2018	7439-93-2	Lithium	mg/L	0.0035	J	0.0011	0.005
SGWC-23	10/8/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-23	10/8/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-23	10/8/2018	7782-49-2	Selenium	mg/L		NDX	n/a	0.00026
SGWC-23	10/8/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-23	12/17/2018	7440-42-8	Boron	mg/L	0.6		0.021	0.05
SGWC-23	2/19/2019	7440-36-0	Antimony	mg/L		ND	0.00038	0.0025
SGWC-23	2/19/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013

Appendix B-2
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-23	2/19/2019	7440-39-3	Barium	mg/L	0.064		0.0015	0.0025
SGWC-23	2/19/2019	7440-41-7	Beryllium	mg/L		ND	0.00016	0.0025
SGWC-23	2/19/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-23	2/19/2019	7440-47-3	Chromium	mg/L		ND	0.0015	0.0025
SGWC-23	2/19/2019	7440-48-4	Cobalt	mg/L		ND	0.000075	0.0025
SGWC-23	2/19/2019	7440-14-4	Combined Radium 226 + 228	pCi/L		ND	0.433	5
SGWC-23	2/19/2019	16984-48-8	Fluoride	mg/L	0.055	J	0.026	0.2
SGWC-23	2/19/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-23	2/19/2019	7439-93-2	Lithium	mg/L		ND	0.0031	0.005
SGWC-23	2/19/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-23	2/19/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-23	2/19/2019	7782-49-2	Selenium	mg/L	0.00021	J	0.000081	0.0013
SGWC-23	2/19/2019	7440-28-0	Thallium	mg/L		ND	0.000063	0.0005
SGWC-23	4/2/2019	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-23	4/2/2019	7440-39-3	Barium	mg/L	0.068		0.00049	0.0025
SGWC-23	4/2/2019	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-23	4/2/2019	7440-42-8	Boron	mg/L	0.52		0.021	0.05
SGWC-23	4/2/2019	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-23	4/2/2019	7440-47-3	Chromium	mg/L	0.0011	J	0.0011	0.0025
SGWC-23	4/2/2019	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-23	4/2/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.516		0.387	5
SGWC-23	4/2/2019	16984-48-8	Fluoride	mg/L	0.036	J	0.026	0.2
SGWC-23	4/2/2019	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-23	4/2/2019	7439-93-2	Lithium	mg/L	0.0041	J	0.0011	0.005
SGWC-23	4/2/2019	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-23	4/2/2019	7439-98-7	Molybdenum	mg/L		ND	0.002	0.015
SGWC-23	4/2/2019	7782-49-2	Selenium	mg/L		ND	0.00071	0.0013
SGWC-23	4/2/2019	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-23	9/18/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
SGWC-23	9/18/2019	7440-39-3	Barium	mg/L	0.068		0.0016	0.01
SGWC-23	9/18/2019	7440-41-7	Beryllium	mg/L		ND	0.00018	0.0025
SGWC-23	9/18/2019	7440-42-8	Boron	mg/L	0.54		0.039	0.05
SGWC-23	9/18/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-23	9/18/2019	7440-47-3	Chromium	mg/L	0.0024	J	0.0015	0.0025
SGWC-23	9/18/2019	7440-48-4	Cobalt	mg/L	0.00013	J	0.000075	0.0025
SGWC-23	9/18/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.285	U	0.459	5
SGWC-23	9/18/2019	16984-48-8	Fluoride	mg/L	0.044	J	0.026	0.1
SGWC-23	9/18/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-23	9/18/2019	7439-93-2	Lithium	mg/L	0.0043		0.002	0.0034
SGWC-23	9/18/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-23	9/18/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-23	9/18/2019	7782-49-2	Selenium	mg/L		ND	0.0015	0.0025
SGWC-23	9/18/2019	7440-28-0	Thallium	mg/L		ND	0.00015	0.0005
SGWC-6	5/11/2016	7440-36-0	Antimony	mg/L		ND	0.0006	0.003
SGWC-6	5/11/2016	7440-38-2	Arsenic	mg/L		ND	0.001	0.005
SGWC-6	5/11/2016	7440-39-3	Barium	mg/L	0.0933		0.002	0.01
SGWC-6	5/11/2016	7440-41-7	Beryllium	mg/L		ND	0.0006	0.003
SGWC-6	5/11/2016	7440-42-8	Boron	mg/L		ND	0.02	0.1
SGWC-6	5/11/2016	7440-43-9	Cadmium	mg/L		ND	0.0001	0.001
SGWC-6	5/11/2016	7440-47-3	Chromium	mg/L		ND	0.002	0.01
SGWC-6	5/11/2016	7440-48-4	Cobalt	mg/L		ND	0.002	0.01
SGWC-6	5/11/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.0394	U	n/a	5
SGWC-6	5/11/2016	16984-48-8	Fluoride	mg/L	0.133	J	0.01	0.3
SGWC-6	5/11/2016	7439-92-1	Lead	mg/L		ND	0.001	0.005
SGWC-6	5/11/2016	7439-93-2	Lithium	mg/L		ND	0.01	0.05
SGWC-6	5/11/2016	7439-97-6	Mercury	mg/L		ND	0.00025	0.0005

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-6	5/11/2016	7439-98-7	Molybdenum	mg/L		ND	0.002	0.01
SGWC-6	5/11/2016	7782-49-2	Selenium	mg/L		ND	0.002	0.01
SGWC-6	5/11/2016	7440-28-0	Thallium	mg/L		ND	0.0002	0.001
SGWC-6	6/27/2016	7440-36-0	Antimony	mg/L		ND	0.0002	0.003
SGWC-6	6/27/2016	7440-38-2	Arsenic	mg/L		ND	0.0007	0.005
SGWC-6	6/27/2016	7440-39-3	Barium	mg/L	0.101		0.0003	0.01
SGWC-6	6/27/2016	7440-41-7	Beryllium	mg/L		ND	0.00009	0.003
SGWC-6	6/27/2016	7440-42-8	Boron	mg/L	0.0051	J	0.0044	0.1
SGWC-6	6/27/2016	7440-43-9	Cadmium	mg/L		ND	0.0001	0.001
SGWC-6	6/27/2016	7440-47-3	Chromium	mg/L		ND	0.0004	0.01
SGWC-6	6/27/2016	7440-48-4	Cobalt	mg/L	0.002	J	0.0003	0.01
SGWC-6	6/27/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.624	U	n/a	5
SGWC-6	6/27/2016	16984-48-8	Fluoride	mg/L	0.21	J	0.02	0.3
SGWC-6	6/27/2016	7439-92-1	Lead	mg/L		ND	0.00008	0.005
SGWC-6	6/27/2016	7439-93-2	Lithium	mg/L		ND	0.0012	0.05
SGWC-6	6/27/2016	7439-97-6	Mercury	mg/L		ND	0.00013	0.0005
SGWC-6	6/27/2016	7439-98-7	Molybdenum	mg/L	0.0007	J	0.0005	0.01
SGWC-6	6/27/2016	7782-49-2	Selenium	mg/L		ND	0.0009	0.01
SGWC-6	6/27/2016	7440-28-0	Thallium	mg/L		ND	0.00006	0.001
SGWC-6	8/17/2016	7440-36-0	Antimony	mg/L		ND	0.0010	0.0025
SGWC-6	8/17/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-6	8/17/2016	7440-39-3	Barium	mg/L	0.094		0.00049	0.0025
SGWC-6	8/17/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-6	8/17/2016	7440-42-8	Boron	mg/L		ND	0.021	0.05
SGWC-6	8/17/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-6	8/17/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-6	8/17/2016	7440-48-4	Cobalt	mg/L	0.0018	J	0.0004	0.0025
SGWC-6	8/17/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.572		n/a	5
SGWC-6	8/17/2016	16984-48-8	Fluoride	mg/L	0.14	J	0.082	0.2
SGWC-6	8/17/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-6	8/17/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-6	8/17/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-6	8/17/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-6	8/17/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-6	8/17/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-6	10/17/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-6	10/17/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-6	10/17/2016	7440-39-3	Barium	mg/L	0.11		0.00049	0.0025
SGWC-6	10/17/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-6	10/17/2016	7440-42-8	Boron	mg/L		ND	0.021	0.05
SGWC-6	10/17/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-6	10/17/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-6	10/17/2016	7440-48-4	Cobalt	mg/L	0.0016	J	0.0004	0.0025
SGWC-6	10/17/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.307	U	0.403	5
SGWC-6	10/17/2016	16984-48-8	Fluoride	mg/L	0.11	J	0.082	0.2
SGWC-6	10/17/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-6	10/17/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-6	10/17/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-6	10/17/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-6	10/17/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-6	10/17/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-6	12/6/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-6	12/6/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-6	12/6/2016	7440-39-3	Barium	mg/L	0.11		0.00049	0.0025
SGWC-6	12/6/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-6	12/6/2016	7440-42-8	Boron	mg/L		ND	0.021	0.05

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-6	12/6/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-6	12/6/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-6	12/6/2016	7440-48-4	Cobalt	mg/L	0.0012	J	0.0004	0.0025
SGWC-6	12/6/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.122	U	0.359	5
SGWC-6	12/6/2016	16984-48-8	Fluoride	mg/L	0.14	J	0.082	0.2
SGWC-6	12/6/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-6	12/6/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-6	12/6/2016	7439-97-6	Mercury	mg/L	0.00011	J	0.00007	0.0002
SGWC-6	12/6/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-6	12/6/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-6	12/6/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-6	2/14/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-6	2/14/2017	7440-38-2	Arsenic	mg/L	0.0006	J	0.00046	0.0013
SGWC-6	2/14/2017	7440-39-3	Barium	mg/L	0.056		0.00049	0.0025
SGWC-6	2/14/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-6	2/14/2017	7440-42-8	Boron	mg/L		ND	0.021	0.05
SGWC-6	2/14/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-6	2/14/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-6	2/14/2017	7440-48-4	Cobalt	mg/L	0.0022	J	0.0004	0.0025
SGWC-6	2/14/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.166	U	0.321	5
SGWC-6	2/14/2017	16984-48-8	Fluoride	mg/L	0.2		0.082	0.2
SGWC-6	2/14/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-6	2/14/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-6	2/14/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-6	2/14/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-6	2/14/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-6	2/14/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-6	4/12/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-6	4/12/2017	7440-38-2	Arsenic	mg/L	0.00046	J	0.00046	0.0013
SGWC-6	4/12/2017	7440-39-3	Barium	mg/L	0.048		0.00049	0.0025
SGWC-6	4/12/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-6	4/12/2017	7440-42-8	Boron	mg/L		ND	0.021	0.05
SGWC-6	4/12/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-6	4/12/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-6	4/12/2017	7440-48-4	Cobalt	mg/L	0.0023	J	0.0004	0.0025
SGWC-6	4/12/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.355	U	0.395	5
SGWC-6	4/12/2017	16984-48-8	Fluoride	mg/L	0.089	J	0.082	0.2
SGWC-6	4/12/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-6	4/12/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-6	4/12/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-6	4/12/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-6	4/12/2017	7782-49-2	Selenium	mg/L	0.00034	J	0.00024	0.0013
SGWC-6	4/12/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-6	6/27/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-6	6/27/2017	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-6	6/27/2017	7440-39-3	Barium	mg/L	0.058		0.00049	0.0025
SGWC-6	6/27/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-6	6/27/2017	7440-42-8	Boron	mg/L		ND	0.021	0.05
SGWC-6	6/27/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-6	6/27/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-6	6/27/2017	7440-48-4	Cobalt	mg/L	0.0045		0.0004	0.0025
SGWC-6	6/27/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.0783	U	0.34	5
SGWC-6	6/27/2017	16984-48-8	Fluoride	mg/L	0.085	J	0.082	0.2
SGWC-6	6/27/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-6	6/27/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-6	6/27/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002

Appendix B-2
Scherer Risk Evaluation Report
Data Used in Risk Evaluation - Downgradient Groundwater Data (2016-2019)
Scherer AP-1
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-6	6/27/2017	7439-98-7	Molybdenum	mg/L	0.00099	J	0.00085	0.015
SGWC-6	6/27/2017	7782-49-2	Selenium	mg/L	0.00057	J	0.00024	0.0013
SGWC-6	6/27/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-6	10/11/2017	7440-42-8	Boron	mg/L		ND	0.021	0.05
SGWC-6	10/11/2017	16984-48-8	Fluoride	mg/L	0.089	J	0.082	0.2
SGWC-6	3/27/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-6	3/27/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-6	3/27/2018	7440-39-3	Barium	mg/L	0.021		0.00049	0.0025
SGWC-6	3/27/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-6	3/27/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-6	3/27/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-6	3/27/2018	7440-48-4	Cobalt	mg/L	0.004		0.0004	0.0025
SGWC-6	3/27/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.0443	U	0.395	5
SGWC-6	3/27/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-6	3/27/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-6	3/27/2018	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-6	3/27/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-6	3/27/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-6	3/27/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-6	3/27/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-6	6/6/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-6	6/6/2018	7440-39-3	Barium	mg/L	0.014		0.00049	0.0025
SGWC-6	6/6/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-6	6/6/2018	7440-42-8	Boron	mg/L		ND	0.021	0.05
SGWC-6	6/6/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-6	6/6/2018	7440-48-4	Cobalt	mg/L	0.0021	J	0.0004	0.0025
SGWC-6	6/6/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.127	U	0.127	5
SGWC-6	6/6/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-6	6/6/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-6	6/6/2018	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-6	6/6/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-6	6/6/2018	7782-49-2	Selenium	mg/L		NDX	0.00024	0.0013
SGWC-6	6/6/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-6	10/8/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-6	10/8/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-6	10/8/2018	7440-39-3	Barium	mg/L	0.069		0.00049	0.0025
SGWC-6	10/8/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-6	10/8/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-6	10/8/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-6	10/8/2018	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-6	10/8/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.77		0.433	5
SGWC-6	10/8/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-6	10/8/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-6	10/8/2018	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-6	10/8/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-6	10/8/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-6	10/8/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-6	10/8/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-6	12/14/2018	7440-42-8	Boron	mg/L		ND	0.021	0.05
SGWC-6	2/20/2019	7440-36-0	Antimony	mg/L		ND	0.00038	0.0025
SGWC-6	2/20/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
SGWC-6	2/20/2019	7440-39-3	Barium	mg/L	0.052		0.0015	0.0025
SGWC-6	2/20/2019	7440-41-7	Beryllium	mg/L		ND	0.00016	0.0025
SGWC-6	2/20/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-6	2/20/2019	7440-47-3	Chromium	mg/L		ND	0.0015	0.0025
SGWC-6	2/20/2019	7440-48-4	Cobalt	mg/L	0.00011	J	0.000075	0.0025

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-6	2/20/2019	7440-14-4	Combined Radium 226 + 228	pCi/L		ND	0.336	5
SGWC-6	2/20/2019	16984-48-8	Fluoride	mg/L	0.092	J	0.026	0.2
SGWC-6	2/20/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-6	2/20/2019	7439-93-2	Lithium	mg/L		ND	0.0031	0.005
SGWC-6	2/20/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-6	2/20/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-6	2/20/2019	7782-49-2	Selenium	mg/L		ND	0.00081	0.0013
SGWC-6	2/20/2019	7440-28-0	Thallium	mg/L		ND	0.000063	0.0005
SGWC-6	4/2/2019	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-6	4/2/2019	7440-39-3	Barium	mg/L	0.069		0.00049	0.0025
SGWC-6	4/2/2019	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-6	4/2/2019	7440-42-8	Boron	mg/L		ND	0.021	0.05
SGWC-6	4/2/2019	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-6	4/2/2019	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-6	4/2/2019	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-6	4/2/2019	7440-14-4	Combined Radium 226 + 228	pCi/L		ND	0.385	5
SGWC-6	4/2/2019	16984-48-8	Fluoride	mg/L	0.1	J	0.026	0.2
SGWC-6	4/2/2019	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-6	4/2/2019	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-6	4/2/2019	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-6	4/2/2019	7439-98-7	Molybdenum	mg/L		ND	0.002	0.015
SGWC-6	4/2/2019	7782-49-2	Selenium	mg/L		ND	0.00071	0.0013
SGWC-6	4/2/2019	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-6	9/16/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
SGWC-6	9/16/2019	7440-39-3	Barium	mg/L	0.13		0.0016	0.01
SGWC-6	9/16/2019	7440-41-7	Beryllium	mg/L		ND	0.00018	0.0025
SGWC-6	9/16/2019	7440-42-8	Boron	mg/L	0.04	J	0.039	0.05
SGWC-6	9/16/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-6	9/16/2019	7440-47-3	Chromium	mg/L		ND	0.0015	0.0025
SGWC-6	9/16/2019	7440-48-4	Cobalt	mg/L	0.00013	J	0.000075	0.0025
SGWC-6	9/16/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.0805	U	0.594	5
SGWC-6	9/16/2019	16984-48-8	Fluoride	mg/L	0.099	J	0.026	0.1
SGWC-6	9/16/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-6	9/16/2019	7439-93-2	Lithium	mg/L		ND	0.002	0.0034
SGWC-6	9/16/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-6	9/16/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-6	9/16/2019	7782-49-2	Selenium	mg/L		ND	0.0015	0.0025
SGWC-6	9/16/2019	7440-28-0	Thallium	mg/L		ND	0.00015	0.0005
SGWC-7	5/11/2016	7440-36-0	Antimony	mg/L		ND	0.0006	0.003
SGWC-7	5/11/2016	7440-38-2	Arsenic	mg/L		ND	0.001	0.005
SGWC-7	5/11/2016	7440-39-3	Barium	mg/L	0.295		0.002	0.01
SGWC-7	5/11/2016	7440-41-7	Beryllium	mg/L		ND	0.0006	0.003
SGWC-7	5/11/2016	7440-42-8	Boron	mg/L	0.0359	J	0.02	0.1
SGWC-7	5/11/2016	7440-43-9	Cadmium	mg/L		ND	0.0001	0.001
SGWC-7	5/11/2016	7440-47-3	Chromium	mg/L		ND	0.002	0.01
SGWC-7	5/11/2016	7440-48-4	Cobalt	mg/L	0.0116		0.002	0.01
SGWC-7	5/11/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.214	U	n/a	5
SGWC-7	5/11/2016	16984-48-8	Fluoride	mg/L	0.245	J	0.01	0.3
SGWC-7	5/11/2016	7439-92-1	Lead	mg/L		ND	0.001	0.005
SGWC-7	5/11/2016	7439-93-2	Lithium	mg/L		NDO	0.01	0.05
SGWC-7	5/11/2016	7439-97-6	Mercury	mg/L		ND	0.00025	0.0005
SGWC-7	5/11/2016	7439-98-7	Molybdenum	mg/L	0.00343	J	0.002	0.01
SGWC-7	5/11/2016	7782-49-2	Selenium	mg/L		ND	0.002	0.01
SGWC-7	5/11/2016	7440-28-0	Thallium	mg/L		ND	0.0002	0.001
SGWC-7	6/27/2016	7440-36-0	Antimony	mg/L	0.0004	J	0.0002	0.003
SGWC-7	6/27/2016	7440-38-2	Arsenic	mg/L	0.0009	J	0.0007	0.005

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-7	6/27/2016	7440-39-3	Barium	mg/L	0.353		0.0003	0.01
SGWC-7	6/27/2016	7440-41-7	Beryllium	mg/L		ND	0.00009	0.003
SGWC-7	6/27/2016	7440-42-8	Boron	mg/L	0.0354	J	0.0044	0.1
SGWC-7	6/27/2016	7440-43-9	Cadmium	mg/L		ND	0.0001	0.001
SGWC-7	6/27/2016	7440-47-3	Chromium	mg/L		ND	0.0004	0.01
SGWC-7	6/27/2016	7440-48-4	Cobalt	mg/L	0.0143		0.0003	0.01
SGWC-7	6/27/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.581	U	n/a	5
SGWC-7	6/27/2016	16984-48-8	Fluoride	mg/L	0.23	J	0.02	0.3
SGWC-7	6/27/2016	7439-92-1	Lead	mg/L		ND	0.00008	0.005
SGWC-7	6/27/2016	7439-93-2	Lithium	mg/L	0.0031	J	0.0012	0.05
SGWC-7	6/27/2016	7439-97-6	Mercury	mg/L		ND	0.00013	0.0005
SGWC-7	6/27/2016	7439-98-7	Molybdenum	mg/L	0.0033	J	0.0005	0.01
SGWC-7	6/27/2016	7782-49-2	Selenium	mg/L		ND	0.0009	0.01
SGWC-7	6/27/2016	7440-28-0	Thallium	mg/L		ND	0.00006	0.001
SGWC-7	8/17/2016	7440-36-0	Antimony	mg/L		ND	0.0010	0.0025
SGWC-7	8/17/2016	7440-38-2	Arsenic	mg/L	0.0006	J	0.00046	0.0013
SGWC-7	8/17/2016	7440-39-3	Barium	mg/L	0.29		0.00049	0.0025
SGWC-7	8/17/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-7	8/17/2016	7440-42-8	Boron	mg/L	0.039	J	0.021	0.05
SGWC-7	8/17/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-7	8/17/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-7	8/17/2016	7440-48-4	Cobalt	mg/L	0.012		0.0004	0.0025
SGWC-7	8/17/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.665		n/a	5
SGWC-7	8/17/2016	16984-48-8	Fluoride	mg/L	0.22		0.082	0.2
SGWC-7	8/17/2016	7439-92-1	Lead	mg/L	0.00085	J	0.00035	0.0013
SGWC-7	8/17/2016	7439-93-2	Lithium	mg/L	0.0046	J	0.0032	0.005
SGWC-7	8/17/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-7	8/17/2016	7439-98-7	Molybdenum	mg/L	0.002	J	0.00085	0.015
SGWC-7	8/17/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-7	8/17/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-7	10/18/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-7	10/18/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-7	10/18/2016	7440-39-3	Barium	mg/L	0.29		0.00049	0.0025
SGWC-7	10/18/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-7	10/18/2016	7440-42-8	Boron	mg/L	0.039	J	0.021	0.05
SGWC-7	10/18/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-7	10/18/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-7	10/18/2016	7440-48-4	Cobalt	mg/L	0.0099		0.0004	0.0025
SGWC-7	10/18/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.453		0.398	5
SGWC-7	10/18/2016	16984-48-8	Fluoride	mg/L	0.24		0.082	0.2
SGWC-7	10/18/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-7	10/18/2016	7439-93-2	Lithium	mg/L	0.0036	J	0.0032	0.005
SGWC-7	10/18/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-7	10/18/2016	7439-98-7	Molybdenum	mg/L	0.0012	J	0.00085	0.015
SGWC-7	10/18/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-7	10/18/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-7	12/6/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-7	12/6/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-7	12/6/2016	7440-39-3	Barium	mg/L	0.31		0.00049	0.0025
SGWC-7	12/6/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-7	12/6/2016	7440-42-8	Boron	mg/L	0.03	J	0.021	0.05
SGWC-7	12/6/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-7	12/6/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-7	12/6/2016	7440-48-4	Cobalt	mg/L	0.011		0.0004	0.0025
SGWC-7	12/6/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.368	U	0.381	5
SGWC-7	12/6/2016	16984-48-8	Fluoride	mg/L	0.26		0.082	0.2

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-7	12/6/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-7	12/6/2016	7439-93-2	Lithium	mg/L	0.0043	J	0.0032	0.005
SGWC-7	12/6/2016	7439-97-6	Mercury	mg/L	0.00011	J	0.00007	0.0002
SGWC-7	12/6/2016	7439-98-7	Molybdenum	mg/L	0.0021	J	0.00085	0.015
SGWC-7	12/6/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-7	12/6/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-7	2/14/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-7	2/14/2017	7440-38-2	Arsenic	mg/L	0.00059	J	0.00046	0.0013
SGWC-7	2/14/2017	7440-39-3	Barium	mg/L	0.3		0.00049	0.0025
SGWC-7	2/14/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-7	2/14/2017	7440-42-8	Boron	mg/L	0.031	J	0.021	0.05
SGWC-7	2/14/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-7	2/14/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-7	2/14/2017	7440-48-4	Cobalt	mg/L	0.0093		0.0004	0.0025
SGWC-7	2/14/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.328	U	0.339	5
SGWC-7	2/14/2017	16984-48-8	Fluoride	mg/L	0.17	J	0.082	0.2
SGWC-7	2/14/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-7	2/14/2017	7439-93-2	Lithium	mg/L	0.0043	J	0.0032	0.005
SGWC-7	2/14/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-7	2/14/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-7	2/14/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-7	2/14/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-7	4/12/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-7	4/12/2017	7440-38-2	Arsenic	mg/L	0.00058	J	0.00046	0.0013
SGWC-7	4/12/2017	7440-39-3	Barium	mg/L	0.3		0.00049	0.0025
SGWC-7	4/12/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-7	4/12/2017	7440-42-8	Boron	mg/L	0.039	J	0.021	0.05
SGWC-7	4/12/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-7	4/12/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-7	4/12/2017	7440-48-4	Cobalt	mg/L	0.0062		0.0004	0.0025
SGWC-7	4/12/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.206	U	0.39	5
SGWC-7	4/12/2017	16984-48-8	Fluoride	mg/L	0.2		0.082	0.2
SGWC-7	4/12/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-7	4/12/2017	7439-93-2	Lithium	mg/L	0.0051		0.0032	0.005
SGWC-7	4/12/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-7	4/12/2017	7439-98-7	Molybdenum	mg/L	0.0033	J	0.00085	0.015
SGWC-7	4/12/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-7	4/12/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-7	6/27/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-7	6/27/2017	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-7	6/27/2017	7440-39-3	Barium	mg/L	0.36		0.00049	0.0025
SGWC-7	6/27/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-7	6/27/2017	7440-42-8	Boron	mg/L	0.028	J	0.021	0.05
SGWC-7	6/27/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-7	6/27/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-7	6/27/2017	7440-48-4	Cobalt	mg/L	0.021		0.0004	0.0025
SGWC-7	6/27/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.598		0.323	5
SGWC-7	6/27/2017	16984-48-8	Fluoride	mg/L	0.23		0.082	0.2
SGWC-7	6/27/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-7	6/27/2017	7439-93-2	Lithium	mg/L	0.0033	J	0.0032	0.005
SGWC-7	6/27/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-7	6/27/2017	7439-98-7	Molybdenum	mg/L	0.0021	J	0.00085	0.015
SGWC-7	6/27/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-7	6/27/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-7	10/11/2017	7440-42-8	Boron	mg/L	0.026	J	0.021	0.05
SGWC-7	10/11/2017	16984-48-8	Fluoride	mg/L	0.21		0.082	0.2

Appendix B-2
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Scherer AP-1
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-7	3/27/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-7	3/27/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-7	3/27/2018	7440-39-3	Barium	mg/L	0.27		0.00049	0.0025
SGWC-7	3/27/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-7	3/27/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-7	3/27/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-7	3/27/2018	7440-48-4	Cobalt	mg/L	0.0054		0.0004	0.0025
SGWC-7	3/27/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.546	UX	0.546	5
SGWC-7	3/27/2018	16984-48-8	Fluoride	mg/L	0.19	J	0.082	0.2
SGWC-7	3/27/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-7	3/27/2018	7439-93-2	Lithium	mg/L	0.0061	J+X	0.0011	0.005
SGWC-7	3/27/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-7	3/27/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-7	3/27/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-7	3/27/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-7	6/6/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-7	6/6/2018	7440-39-3	Barium	mg/L	0.24		0.00049	0.0025
SGWC-7	6/6/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-7	6/6/2018	7440-42-8	Boron	mg/L		ND	0.021	0.05
SGWC-7	6/6/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-7	6/6/2018	7440-48-4	Cobalt	mg/L	0.0034		0.0004	0.0025
SGWC-7	6/6/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.165	U	0.165	5
SGWC-7	6/6/2018	16984-48-8	Fluoride	mg/L	0.2		0.082	0.2
SGWC-7	6/6/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-7	6/6/2018	7439-93-2	Lithium	mg/L	0.004	J	0.0011	0.005
SGWC-7	6/6/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-7	6/6/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-7	6/6/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-7	10/9/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-7	10/9/2018	7440-38-2	Arsenic	mg/L	0.00057	J	0.00046	0.0013
SGWC-7	10/9/2018	7440-39-3	Barium	mg/L	0.28		0.00049	0.0025
SGWC-7	10/9/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-7	10/9/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-7	10/9/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-7	10/9/2018	7440-48-4	Cobalt	mg/L	0.013		0.0004	0.0025
SGWC-7	10/9/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.385		0.37	5
SGWC-7	10/9/2018	16984-48-8	Fluoride	mg/L	0.2		0.082	0.2
SGWC-7	10/9/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-7	10/9/2018	7439-93-2	Lithium	mg/L	0.0053		0.0011	0.005
SGWC-7	10/9/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-7	10/9/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-7	10/9/2018	7782-49-2	Selenium	mg/L		NDX	n/a	0.00034
SGWC-7	10/9/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-7	12/14/2018	7440-42-8	Boron	mg/L		ND	0.021	0.05
SGWC-7	2/20/2019	7440-36-0	Antimony	mg/L		ND	0.00038	0.0025
SGWC-7	2/20/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
SGWC-7	2/20/2019	7440-39-3	Barium	mg/L	0.28		0.0015	0.0025
SGWC-7	2/20/2019	7440-41-7	Beryllium	mg/L		ND	0.00016	0.0025
SGWC-7	2/20/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-7	2/20/2019	7440-47-3	Chromium	mg/L		ND	0.0015	0.0025
SGWC-7	2/20/2019	7440-48-4	Cobalt	mg/L	0.0057		0.000075	0.0025
SGWC-7	2/20/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.433		0.342	5
SGWC-7	2/20/2019	16984-48-8	Fluoride	mg/L	0.2		0.026	0.2
SGWC-7	2/20/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-7	2/20/2019	7439-93-2	Lithium	mg/L	0.006		0.0031	0.005
SGWC-7	2/20/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-7	2/20/2019	7439-98-7	Molybdenum	mg/L	0.0013	J	0.00061	0.015
SGWC-7	2/20/2019	7782-49-2	Selenium	mg/L		ND	0.00081	0.0013
SGWC-7	2/20/2019	7440-28-0	Thallium	mg/L		ND	0.000063	0.0005
SGWC-7	4/1/2019	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-7	4/1/2019	7440-39-3	Barium	mg/L	0.24		0.00049	0.0025
SGWC-7	4/1/2019	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-7	4/1/2019	7440-42-8	Boron	mg/L	0.025	J	0.021	0.05
SGWC-7	4/1/2019	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-7	4/1/2019	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-7	4/1/2019	7440-48-4	Cobalt	mg/L	0.0046		0.0004	0.0025
SGWC-7	4/1/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.675		0.434	5
SGWC-7	4/1/2019	16984-48-8	Fluoride	mg/L	0.12	J	0.026	0.2
SGWC-7	4/1/2019	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-7	4/1/2019	7439-93-2	Lithium	mg/L	0.0058		0.0011	0.005
SGWC-7	4/1/2019	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-7	4/1/2019	7439-98-7	Molybdenum	mg/L		ND	0.002	0.015
SGWC-7	4/1/2019	7782-49-2	Selenium	mg/L		ND	0.00071	0.0013
SGWC-7	4/1/2019	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-7	9/17/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
SGWC-7	9/17/2019	7440-39-3	Barium	mg/L	0.23		0.0016	0.01
SGWC-7	9/17/2019	7440-41-7	Beryllium	mg/L		ND	0.00018	0.0025
SGWC-7	9/17/2019	7440-42-8	Boron	mg/L		ND	0.039	0.05
SGWC-7	9/17/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-7	9/17/2019	7440-47-3	Chromium	mg/L		ND	0.0015	0.0025
SGWC-7	9/17/2019	7440-48-4	Cobalt	mg/L	0.0039		0.000075	0.0025
SGWC-7	9/17/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.341	U	0.412	5
SGWC-7	9/17/2019	16984-48-8	Fluoride	mg/L	0.2		0.026	0.1
SGWC-7	9/17/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-7	9/17/2019	7439-93-2	Lithium	mg/L	0.0049		0.002	0.0034
SGWC-7	9/17/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-7	9/17/2019	7439-98-7	Molybdenum	mg/L	0.0014	J	0.00061	0.015
SGWC-7	9/17/2019	7782-49-2	Selenium	mg/L		ND	0.0015	0.0025
SGWC-7	9/17/2019	7440-28-0	Thallium	mg/L		ND	0.00015	0.0005
SGWC-8	5/11/2016	7440-36-0	Antimony	mg/L		ND	0.0006	0.003
SGWC-8	5/11/2016	7440-38-2	Arsenic	mg/L		ND	0.001	0.005
SGWC-8	5/11/2016	7440-39-3	Barium	mg/L	0.251		0.002	0.01
SGWC-8	5/11/2016	7440-41-7	Beryllium	mg/L		ND	0.0006	0.003
SGWC-8	5/11/2016	7440-42-8	Boron	mg/L	0.0678	J	0.02	0.1
SGWC-8	5/11/2016	7440-43-9	Cadmium	mg/L		ND	0.0001	0.001
SGWC-8	5/11/2016	7440-47-3	Chromium	mg/L		ND	0.002	0.01
SGWC-8	5/11/2016	7440-48-4	Cobalt	mg/L	0.00265	J	0.002	0.01
SGWC-8	5/11/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	2.05		n/a	5
SGWC-8	5/11/2016	16984-48-8	Fluoride	mg/L	0.362		0.01	0.3
SGWC-8	5/11/2016	7439-92-1	Lead	mg/L		ND	0.001	0.005
SGWC-8	5/11/2016	7439-93-2	Lithium	mg/L		ND	0.01	0.05
SGWC-8	5/11/2016	7439-97-6	Mercury	mg/L		ND	0.00025	0.0005
SGWC-8	5/11/2016	7439-98-7	Molybdenum	mg/L		ND	0.002	0.01
SGWC-8	5/11/2016	7782-49-2	Selenium	mg/L		ND	0.002	0.01
SGWC-8	5/11/2016	7440-28-0	Thallium	mg/L		ND	0.0002	0.001
SGWC-8	6/27/2016	7440-36-0	Antimony	mg/L		ND	0.0002	0.003
SGWC-8	6/27/2016	7440-38-2	Arsenic	mg/L		ND	0.0007	0.005
SGWC-8	6/27/2016	7440-39-3	Barium	mg/L	0.205		0.0003	0.01
SGWC-8	6/27/2016	7440-41-7	Beryllium	mg/L		ND	0.00009	0.003
SGWC-8	6/27/2016	7440-42-8	Boron	mg/L	0.0767	J	0.0044	0.1
SGWC-8	6/27/2016	7440-43-9	Cadmium	mg/L		ND	0.0001	0.001
SGWC-8	6/27/2016	7440-47-3	Chromium	mg/L		ND	0.0004	0.01

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-8	6/27/2016	7440-48-4	Cobalt	mg/L	0.0012	J	0.0003	0.01
SGWC-8	6/27/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	2.9		n/a	5
SGWC-8	6/27/2016	16984-48-8	Fluoride	mg/L	0.45		0.02	0.3
SGWC-8	6/27/2016	7439-92-1	Lead	mg/L		ND	0.00008	0.005
SGWC-8	6/27/2016	7439-93-2	Lithium	mg/L	0.0013	J	0.0012	0.05
SGWC-8	6/27/2016	7439-97-6	Mercury	mg/L		ND	0.00013	0.0005
SGWC-8	6/27/2016	7439-98-7	Molybdenum	mg/L	0.0008	J	0.0005	0.01
SGWC-8	6/27/2016	7782-49-2	Selenium	mg/L		ND	0.0009	0.01
SGWC-8	6/27/2016	7440-28-0	Thallium	mg/L		ND	0.00006	0.001
SGWC-8	8/17/2016	7440-36-0	Antimony	mg/L		ND	0.0010	0.0025
SGWC-8	8/17/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-8	8/17/2016	7440-39-3	Barium	mg/L	0.16		0.00049	0.0025
SGWC-8	8/17/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-8	8/17/2016	7440-42-8	Boron	mg/L	0.067		0.021	0.05
SGWC-8	8/17/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-8	8/17/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-8	8/17/2016	7440-48-4	Cobalt	mg/L	0.00049	J	0.0004	0.0025
SGWC-8	8/17/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	2.57		n/a	5
SGWC-8	8/17/2016	16984-48-8	Fluoride	mg/L	0.54		0.082	0.2
SGWC-8	8/17/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-8	8/17/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-8	8/17/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-8	8/17/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-8	8/17/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-8	8/17/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-8	10/17/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-8	10/17/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-8	10/17/2016	7440-39-3	Barium	mg/L	0.17		0.00049	0.0025
SGWC-8	10/17/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-8	10/17/2016	7440-42-8	Boron	mg/L	0.059		0.021	0.05
SGWC-8	10/17/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-8	10/17/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-8	10/17/2016	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-8	10/17/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	2.08		0.419	5
SGWC-8	10/17/2016	16984-48-8	Fluoride	mg/L	0.51		0.082	0.2
SGWC-8	10/17/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-8	10/17/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-8	10/17/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-8	10/17/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-8	10/17/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-8	10/17/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-8	12/6/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-8	12/6/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-8	12/6/2016	7440-39-3	Barium	mg/L	0.16		0.00049	0.0025
SGWC-8	12/6/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-8	12/6/2016	7440-42-8	Boron	mg/L	0.054		0.021	0.05
SGWC-8	12/6/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-8	12/6/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-8	12/6/2016	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-8	12/6/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	2.25		0.366	5
SGWC-8	12/6/2016	16984-48-8	Fluoride	mg/L	0.58		0.082	0.2
SGWC-8	12/6/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-8	12/6/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-8	12/6/2016	7439-97-6	Mercury	mg/L	0.000076	J	0.00007	0.0002
SGWC-8	12/6/2016	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-8	12/6/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013

Appendix B-2
Scherer Risk Evaluation Report
Data Used in Risk Evaluation - Downgradient Groundwater Data (2016-2019)
Scherer AP-1
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-8	12/6/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-8	2/14/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-8	2/14/2017	7440-38-2	Arsenic	mg/L	0.0005	J	0.00046	0.0013
SGWC-8	2/14/2017	7440-39-3	Barium	mg/L	0.18		0.00049	0.0025
SGWC-8	2/14/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-8	2/14/2017	7440-42-8	Boron	mg/L	0.063		0.021	0.05
SGWC-8	2/14/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-8	2/14/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-8	2/14/2017	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-8	2/14/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	1.77		0.397	5
SGWC-8	2/14/2017	16984-48-8	Fluoride	mg/L	0.39		0.082	0.2
SGWC-8	2/14/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-8	2/14/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-8	2/14/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-8	2/14/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-8	2/14/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-8	2/14/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-8	4/12/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-8	4/12/2017	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-8	4/12/2017	7440-39-3	Barium	mg/L	0.18		0.00049	0.0025
SGWC-8	4/12/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-8	4/12/2017	7440-42-8	Boron	mg/L	0.068		0.021	0.05
SGWC-8	4/12/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-8	4/12/2017	7440-47-3	Chromium	mg/L	0.0011	J	0.0011	0.0025
SGWC-8	4/12/2017	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-8	4/12/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	2.72		0.365	5
SGWC-8	4/12/2017	16984-48-8	Fluoride	mg/L	0.41		0.082	0.2
SGWC-8	4/12/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-8	4/12/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-8	4/12/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-8	4/12/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-8	4/12/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-8	4/12/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-8	6/27/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-8	6/27/2017	7440-38-2	Arsenic	mg/L	0.00076	J	0.00046	0.0013
SGWC-8	6/27/2017	7440-39-3	Barium	mg/L	0.18		0.00049	0.0025
SGWC-8	6/27/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-8	6/27/2017	7440-42-8	Boron	mg/L	0.067		0.021	0.05
SGWC-8	6/27/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-8	6/27/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-8	6/27/2017	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-8	6/27/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	2.07		0.274	5
SGWC-8	6/27/2017	16984-48-8	Fluoride	mg/L	0.47		0.082	0.2
SGWC-8	6/27/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-8	6/27/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-8	6/27/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-8	6/27/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-8	6/27/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-8	6/27/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-8	10/12/2017	7440-42-8	Boron	mg/L	0.075		0.021	0.05
SGWC-8	10/12/2017	16984-48-8	Fluoride	mg/L	0.47		0.082	0.2
SGWC-8	3/27/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-8	3/27/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-8	3/27/2018	7440-39-3	Barium	mg/L	0.17		0.00049	0.0025
SGWC-8	3/27/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-8	3/27/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025

Appendix B-2
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-8	3/27/2018	7440-47-3	Chromium	mg/L	0.0012	J	0.0011	0.0025
SGWC-8	3/27/2018	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-8	3/27/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	2.3		0.327	5
SGWC-8	3/27/2018	16984-48-8	Fluoride	mg/L	0.4		0.082	0.2
SGWC-8	3/27/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-8	3/27/2018	7439-93-2	Lithium	mg/L	0.0023	J+X	0.0011	0.005
SGWC-8	3/27/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-8	3/27/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-8	3/27/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-8	3/27/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-8	6/6/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-8	6/6/2018	7440-39-3	Barium	mg/L	0.18		0.00049	0.0025
SGWC-8	6/6/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-8	6/6/2018	7440-42-8	Boron	mg/L	0.059		0.021	0.05
SGWC-8	6/6/2018	7440-47-3	Chromium	mg/L	0.0013	J	0.0011	0.0025
SGWC-8	6/6/2018	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-8	6/6/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	1.59		0.346	5
SGWC-8	6/6/2018	16984-48-8	Fluoride	mg/L	0.4		0.082	0.2
SGWC-8	6/6/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-8	6/6/2018	7439-93-2	Lithium	mg/L	0.0018	J	0.0011	0.005
SGWC-8	6/6/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-8	6/6/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-8	6/6/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-8	10/9/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-8	10/9/2018	7440-38-2	Arsenic	mg/L	0.00053	J	0.00046	0.0013
SGWC-8	10/9/2018	7440-39-3	Barium	mg/L	0.17		0.00049	0.0025
SGWC-8	10/9/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-8	10/9/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-8	10/9/2018	7440-47-3	Chromium	mg/L	0.0016	J	0.0011	0.0025
SGWC-8	10/9/2018	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-8	10/9/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	3.01		0.351	5
SGWC-8	10/9/2018	16984-48-8	Fluoride	mg/L	0.47		0.082	0.2
SGWC-8	10/9/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-8	10/9/2018	7439-93-2	Lithium	mg/L	0.002	J	0.0011	0.005
SGWC-8	10/9/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-8	10/9/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-8	10/9/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-8	10/9/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-8	12/14/2018	7440-42-8	Boron	mg/L	0.064		0.021	0.05
SGWC-8	2/20/2019	7440-36-0	Antimony	mg/L		ND	0.00038	0.0025
SGWC-8	2/20/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
SGWC-8	2/20/2019	7440-39-3	Barium	mg/L	0.2		0.0015	0.0025
SGWC-8	2/20/2019	7440-41-7	Beryllium	mg/L		ND	0.00016	0.0025
SGWC-8	2/20/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-8	2/20/2019	7440-47-3	Chromium	mg/L	0.0021	J	0.0015	0.0025
SGWC-8	2/20/2019	7440-48-4	Cobalt	mg/L	0.00014	J	0.000075	0.0025
SGWC-8	2/20/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	2.5		0.388	5
SGWC-8	2/20/2019	16984-48-8	Fluoride	mg/L	0.32		0.026	0.2
SGWC-8	2/20/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-8	2/20/2019	7439-93-2	Lithium	mg/L		ND	0.0031	0.005
SGWC-8	2/20/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-8	2/20/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-8	2/20/2019	7782-49-2	Selenium	mg/L		ND	0.00081	0.0013
SGWC-8	2/20/2019	7440-28-0	Thallium	mg/L		ND	0.000063	0.0005
SGWC-8	4/1/2019	7440-38-2	Arsenic	mg/L	0.001	J	0.00046	0.0013
SGWC-8	4/1/2019	7440-39-3	Barium	mg/L	0.19		0.00049	0.0025

Appendix B-2
Scherer Risk Evaluation Report
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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-8	4/1/2019	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-8	4/1/2019	7440-42-8	Boron	mg/L	0.076		0.021	0.05
SGWC-8	4/1/2019	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-8	4/1/2019	7440-47-3	Chromium	mg/L	0.0013	J	0.0011	0.0025
SGWC-8	4/1/2019	7440-48-4	Cobalt	mg/L		ND	0.0004	0.0025
SGWC-8	4/1/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	1.91		0.347	5
SGWC-8	4/1/2019	16984-48-8	Fluoride	mg/L	0.21		0.026	0.2
SGWC-8	4/1/2019	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-8	4/1/2019	7439-93-2	Lithium	mg/L	0.0021	J	0.0011	0.005
SGWC-8	4/1/2019	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-8	4/1/2019	7439-98-7	Molybdenum	mg/L		ND	0.002	0.015
SGWC-8	4/1/2019	7782-49-2	Selenium	mg/L		ND	0.00071	0.0013
SGWC-8	4/1/2019	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-8	9/17/2019	7440-38-2	Arsenic	mg/L	0.00035	J	0.00032	0.0013
SGWC-8	9/17/2019	7440-39-3	Barium	mg/L	0.19		0.0016	0.01
SGWC-8	9/17/2019	7440-41-7	Beryllium	mg/L	0.00019	J	0.00018	0.0025
SGWC-8	9/17/2019	7440-42-8	Boron	mg/L	0.11		0.039	0.05
SGWC-8	9/17/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-8	9/17/2019	7440-47-3	Chromium	mg/L	0.0031		0.0015	0.0025
SGWC-8	9/17/2019	7440-48-4	Cobalt	mg/L	0.00013	J	0.000075	0.0025
SGWC-8	9/17/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	2.04		0.462	5
SGWC-8	9/17/2019	16984-48-8	Fluoride	mg/L	0.47		0.026	0.1
SGWC-8	9/17/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-8	9/17/2019	7439-93-2	Lithium	mg/L		ND	0.002	0.0034
SGWC-8	9/17/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-8	9/17/2019	7439-98-7	Molybdenum	mg/L		ND	0.00061	0.015
SGWC-8	9/17/2019	7782-49-2	Selenium	mg/L		ND	0.0015	0.0025
SGWC-8	9/17/2019	7440-28-0	Thallium	mg/L	0.00023	J	0.00015	0.0005
SGWC-9	5/11/2016	7440-36-0	Antimony	mg/L		ND	0.0006	0.003
SGWC-9	5/11/2016	7440-38-2	Arsenic	mg/L		ND	0.001	0.005
SGWC-9	5/11/2016	7440-39-3	Barium	mg/L	0.0494		0.002	0.01
SGWC-9	5/11/2016	7440-41-7	Beryllium	mg/L		ND	0.0006	0.003
SGWC-9	5/11/2016	7440-42-8	Boron	mg/L	1.54		0.02	0.1
SGWC-9	5/11/2016	7440-43-9	Cadmium	mg/L		ND	0.0001	0.001
SGWC-9	5/11/2016	7440-47-3	Chromium	mg/L		ND	0.002	0.01
SGWC-9	5/11/2016	7440-48-4	Cobalt	mg/L	0.0156		0.002	0.01
SGWC-9	5/11/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.134	U	n/a	5
SGWC-9	5/11/2016	16984-48-8	Fluoride	mg/L	0.076	J	0.01	0.3
SGWC-9	5/11/2016	7439-92-1	Lead	mg/L		ND	0.001	0.005
SGWC-9	5/11/2016	7439-93-2	Lithium	mg/L		ND	0.01	0.05
SGWC-9	5/11/2016	7439-97-6	Mercury	mg/L		ND	0.00025	0.0005
SGWC-9	5/11/2016	7439-98-7	Molybdenum	mg/L		ND	0.002	0.01
SGWC-9	5/11/2016	7782-49-2	Selenium	mg/L		ND	0.002	0.01
SGWC-9	5/11/2016	7440-28-0	Thallium	mg/L		ND	0.0002	0.001
SGWC-9	6/29/2016	7440-36-0	Antimony	mg/L		ND	0.0002	0.003
SGWC-9	6/29/2016	7440-38-2	Arsenic	mg/L	0.0009	J	0.0007	0.005
SGWC-9	6/29/2016	7440-39-3	Barium	mg/L	0.0535		0.0003	0.01
SGWC-9	6/29/2016	7440-41-7	Beryllium	mg/L		ND	0.00009	0.003
SGWC-9	6/29/2016	7440-42-8	Boron	mg/L	1.52		0.0044	0.1
SGWC-9	6/29/2016	7440-43-9	Cadmium	mg/L		ND	0.0001	0.001
SGWC-9	6/29/2016	7440-47-3	Chromium	mg/L		ND	0.0004	0.01
SGWC-9	6/29/2016	7440-48-4	Cobalt	mg/L	0.0147		0.0003	0.01
SGWC-9	6/29/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.665	U	n/a	5
SGWC-9	6/29/2016	16984-48-8	Fluoride	mg/L	0.13	J	0.02	0.3
SGWC-9	6/29/2016	7439-92-1	Lead	mg/L		ND	0.00008	0.005
SGWC-9	6/29/2016	7439-93-2	Lithium	mg/L		ND	0.0012	0.05

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Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-9	6/29/2016	7439-97-6	Mercury	mg/L		ND	0.00013	0.0005
SGWC-9	6/29/2016	7439-98-7	Molybdenum	mg/L	0.0021	J	0.0005	0.01
SGWC-9	6/29/2016	7782-49-2	Selenium	mg/L		ND	0.0009	0.01
SGWC-9	6/29/2016	7440-28-0	Thallium	mg/L		ND	0.00006	0.001
SGWC-9	8/22/2016	7440-36-0	Antimony	mg/L		ND	0.0010	0.0025
SGWC-9	8/22/2016	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-9	8/22/2016	7440-39-3	Barium	mg/L	0.049		0.00049	0.0025
SGWC-9	8/22/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-9	8/22/2016	7440-42-8	Boron	mg/L	1.6		0.021	0.05
SGWC-9	8/22/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-9	8/22/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-9	8/22/2016	7440-48-4	Cobalt	mg/L	0.017		0.0004	0.0025
SGWC-9	8/22/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.391	U	n/a	5
SGWC-9	8/22/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-9	8/22/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-9	8/22/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-9	8/22/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-9	8/22/2016	7439-98-7	Molybdenum	mg/L	0.00099	J	0.00085	0.015
SGWC-9	8/22/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-9	8/22/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-9	10/18/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-9	10/18/2016	7440-38-2	Arsenic	mg/L	0.00074	J	0.00046	0.0013
SGWC-9	10/18/2016	7440-39-3	Barium	mg/L	0.049		0.00049	0.0025
SGWC-9	10/18/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-9	10/18/2016	7440-42-8	Boron	mg/L	2.4	O	0.21	0.5
SGWC-9	10/18/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-9	10/18/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-9	10/18/2016	7440-48-4	Cobalt	mg/L	0.017		0.0004	0.0025
SGWC-9	10/18/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.521		0.426	5
SGWC-9	10/18/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-9	10/18/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-9	10/18/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-9	10/18/2016	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-9	10/18/2016	7439-98-7	Molybdenum	mg/L	0.0014	J	0.00085	0.015
SGWC-9	10/18/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-9	10/18/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-9	12/7/2016	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-9	12/7/2016	7440-38-2	Arsenic	mg/L	0.00079	J	0.00046	0.0013
SGWC-9	12/7/2016	7440-39-3	Barium	mg/L	0.048		0.00049	0.0025
SGWC-9	12/7/2016	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-9	12/7/2016	7440-42-8	Boron	mg/L	1.6		0.21	0.5
SGWC-9	12/7/2016	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-9	12/7/2016	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-9	12/7/2016	7440-48-4	Cobalt	mg/L	0.014		0.0004	0.0025
SGWC-9	12/7/2016	7440-14-4	Combined Radium 226 + 228	pCi/L	0.367	U	0.642	5
SGWC-9	12/7/2016	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-9	12/7/2016	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-9	12/7/2016	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-9	12/7/2016	7439-97-6	Mercury	mg/L	0.0001	J	0.00007	0.0002
SGWC-9	12/7/2016	7439-98-7	Molybdenum	mg/L	0.001	J	0.00085	0.015
SGWC-9	12/7/2016	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-9	12/7/2016	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-9	2/16/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-9	2/16/2017	7440-38-2	Arsenic	mg/L	0.00056	J	0.00046	0.0013
SGWC-9	2/16/2017	7440-39-3	Barium	mg/L	0.056		0.00049	0.0025

Appendix B-2
Scherer Risk Evaluation Report
Data Used in Risk Evaluation - Downgradient Groundwater Data (2016-2019)
Scherer AP-1
Plant Scherer, Juliette, GA

Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-9	2/16/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-9	2/16/2017	7440-42-8	Boron	mg/L	1.6		0.021	0.05
SGWC-9	2/16/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-9	2/16/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-9	2/16/2017	7440-48-4	Cobalt	mg/L	0.014		0.0004	0.0025
SGWC-9	2/16/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.076	U	0.395	5
SGWC-9	2/16/2017	16984-48-8	Fluoride	mg/L	0.097	J	0.082	0.2
SGWC-9	2/16/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-9	2/16/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-9	2/16/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-9	2/16/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-9	2/16/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-9	2/16/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-9	4/13/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-9	4/13/2017	7440-38-2	Arsenic	mg/L	0.00079	J	0.00046	0.0013
SGWC-9	4/13/2017	7440-39-3	Barium	mg/L	0.063		0.00049	0.0025
SGWC-9	4/13/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-9	4/13/2017	7440-42-8	Boron	mg/L	1.7		0.021	0.05
SGWC-9	4/13/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-9	4/13/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-9	4/13/2017	7440-48-4	Cobalt	mg/L	0.014		0.0004	0.0025
SGWC-9	4/13/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.239	U	0.429	5
SGWC-9	4/13/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-9	4/13/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-9	4/13/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-9	4/13/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-9	4/13/2017	7439-98-7	Molybdenum	mg/L	0.001	J	0.00085	0.015
SGWC-9	4/13/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-9	4/13/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-9	6/27/2017	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-9	6/27/2017	7440-38-2	Arsenic	mg/L	0.0011	J	0.00046	0.0013
SGWC-9	6/27/2017	7440-39-3	Barium	mg/L	0.067		0.00049	0.0025
SGWC-9	6/27/2017	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-9	6/27/2017	7440-42-8	Boron	mg/L	1.8		0.021	0.05
SGWC-9	6/27/2017	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-9	6/27/2017	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-9	6/27/2017	7440-48-4	Cobalt	mg/L	0.013		0.0004	0.0025
SGWC-9	6/27/2017	7440-14-4	Combined Radium 226 + 228	pCi/L	0.268	U	0.269	5
SGWC-9	6/27/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-9	6/27/2017	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-9	6/27/2017	7439-93-2	Lithium	mg/L		ND	0.0032	0.005
SGWC-9	6/27/2017	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-9	6/27/2017	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-9	6/27/2017	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-9	6/27/2017	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-9	10/12/2017	7440-42-8	Boron	mg/L	1.8		0.021	0.05
SGWC-9	10/12/2017	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-9	3/28/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-9	3/28/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-9	3/28/2018	7440-39-3	Barium	mg/L	0.069		0.00049	0.0025
SGWC-9	3/28/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-9	3/28/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-9	3/28/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-9	3/28/2018	7440-48-4	Cobalt	mg/L	0.0087		0.0004	0.0025
SGWC-9	3/28/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.378		0.349	5

Appendix B-2
Scherer Risk Evaluation Report
Data Used in Risk Evaluation - Downgradient Groundwater Data (2016-2019)
Scherer AP-1
Plant Scherer, Juliette, GA

Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-9	3/28/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-9	3/28/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-9	3/28/2018	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-9	3/28/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-9	3/28/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-9	3/28/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-9	3/28/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-9	6/6/2018	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-9	6/6/2018	7440-39-3	Barium	mg/L	0.069		0.00049	0.0025
SGWC-9	6/6/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-9	6/6/2018	7440-42-8	Boron	mg/L	1.8		0.021	0.05
SGWC-9	6/6/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-9	6/6/2018	7440-48-4	Cobalt	mg/L	0.0064		0.0004	0.0025
SGWC-9	6/6/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	-0.0272	U	-0.0272	5
SGWC-9	6/6/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-9	6/6/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-9	6/6/2018	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-9	6/6/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-9	6/6/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-9	6/6/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-9	10/9/2018	7440-36-0	Antimony	mg/L		ND	0.001	0.0025
SGWC-9	10/9/2018	7440-38-2	Arsenic	mg/L	0.00068	J	0.00046	0.0013
SGWC-9	10/9/2018	7440-39-3	Barium	mg/L	0.077		0.00049	0.0025
SGWC-9	10/9/2018	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-9	10/9/2018	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-9	10/9/2018	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-9	10/9/2018	7440-48-4	Cobalt	mg/L	0.0049		0.0004	0.0025
SGWC-9	10/9/2018	7440-14-4	Combined Radium 226 + 228	pCi/L	0.565		0.351	5
SGWC-9	10/9/2018	16984-48-8	Fluoride	mg/L		ND	0.082	0.2
SGWC-9	10/9/2018	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-9	10/9/2018	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-9	10/9/2018	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-9	10/9/2018	7439-98-7	Molybdenum	mg/L		ND	0.00085	0.015
SGWC-9	10/9/2018	7782-49-2	Selenium	mg/L		ND	0.00024	0.0013
SGWC-9	10/9/2018	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-9	12/17/2018	7440-42-8	Boron	mg/L	1.6		0.11	0.25
SGWC-9	2/20/2019	7440-36-0	Antimony	mg/L		ND	0.00038	0.0025
SGWC-9	2/20/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
SGWC-9	2/20/2019	7440-39-3	Barium	mg/L	0.077		0.0015	0.0025
SGWC-9	2/20/2019	7440-41-7	Beryllium	mg/L		ND	0.00016	0.0025
SGWC-9	2/20/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-9	2/20/2019	7440-47-3	Chromium	mg/L		ND	0.0015	0.0025
SGWC-9	2/20/2019	7440-48-4	Cobalt	mg/L	0.01		0.000075	0.0025
SGWC-9	2/20/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	0.425		0.372	5
SGWC-9	2/20/2019	16984-48-8	Fluoride	mg/L	0.074	J	0.026	0.2
SGWC-9	2/20/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-9	2/20/2019	7439-93-2	Lithium	mg/L		ND	0.0031	0.005
SGWC-9	2/20/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-9	2/20/2019	7439-98-7	Molybdenum	mg/L	0.00075	J	0.00061	0.015
SGWC-9	2/20/2019	7782-49-2	Selenium	mg/L		ND	0.00081	0.0013
SGWC-9	2/20/2019	7440-28-0	Thallium	mg/L		ND	0.000063	0.0005
SGWC-9	4/1/2019	7440-38-2	Arsenic	mg/L		ND	0.00046	0.0013
SGWC-9	4/1/2019	7440-39-3	Barium	mg/L	0.071		0.00049	0.0025
SGWC-9	4/1/2019	7440-41-7	Beryllium	mg/L		ND	0.00034	0.0025
SGWC-9	4/1/2019	7440-42-8	Boron	mg/L	1.7		0.11	0.25

Appendix B-2
Scherer Risk Evaluation Report
Data Used in Risk Evaluation - Downgradient Groundwater Data (2016-2019)
Scherer AP-1
Plant Scherer, Juliette, GA

Well	Date	CAS	Constituent	Units	Result	Flags	MDL	PQL
SGWC-9	4/1/2019	7440-43-9	Cadmium	mg/L		ND	0.00034	0.0025
SGWC-9	4/1/2019	7440-47-3	Chromium	mg/L		ND	0.0011	0.0025
SGWC-9	4/1/2019	7440-48-4	Cobalt	mg/L	0.01		0.0004	0.0025
SGWC-9	4/1/2019	7440-14-4	Combined Radium 226 + 228	pCi/L		ND	0.325	5
SGWC-9	4/1/2019	16984-48-8	Fluoride	mg/L	0.041	J	0.026	0.2
SGWC-9	4/1/2019	7439-92-1	Lead	mg/L		ND	0.00035	0.0013
SGWC-9	4/1/2019	7439-93-2	Lithium	mg/L		ND	0.0011	0.005
SGWC-9	4/1/2019	7439-97-6	Mercury	mg/L		ND	0.00007	0.0002
SGWC-9	4/1/2019	7439-98-7	Molybdenum	mg/L		ND	0.002	0.015
SGWC-9	4/1/2019	7782-49-2	Selenium	mg/L		ND	0.00071	0.0013
SGWC-9	4/1/2019	7440-28-0	Thallium	mg/L		ND	0.000085	0.0005
SGWC-9	9/16/2019	7440-38-2	Arsenic	mg/L		ND	0.00032	0.0013
SGWC-9	9/16/2019	7440-39-3	Barium	mg/L	0.077		0.0016	0.01
SGWC-9	9/16/2019	7440-41-7	Beryllium	mg/L		ND	0.00018	0.0025
SGWC-9	9/16/2019	7440-42-8	Boron	mg/L	1.6		0.039	0.05
SGWC-9	9/16/2019	7440-43-9	Cadmium	mg/L		ND	0.00013	0.0025
SGWC-9	9/16/2019	7440-47-3	Chromium	mg/L		ND	0.0015	0.0025
SGWC-9	9/16/2019	7440-48-4	Cobalt	mg/L	0.001	J	0.000075	0.0025
SGWC-9	9/16/2019	7440-14-4	Combined Radium 226 + 228	pCi/L	-0.116	U	0.626	5
SGWC-9	9/16/2019	16984-48-8	Fluoride	mg/L	0.057	J	0.026	0.1
SGWC-9	9/16/2019	7439-92-1	Lead	mg/L		ND	0.00013	0.001
SGWC-9	9/16/2019	7439-93-2	Lithium	mg/L		ND	0.002	0.0034
SGWC-9	9/16/2019	7439-97-6	Mercury	mg/L		ND	0.0001	0.0002
SGWC-9	9/16/2019	7439-98-7	Molybdenum	mg/L	0.00067	J	0.00061	0.015
SGWC-9	9/16/2019	7782-49-2	Selenium	mg/L		ND	0.0015	0.0025
SGWC-9	9/16/2019	7440-28-0	Thallium	mg/L		ND	0.00015	0.0005
PZ-13S	9/18/2020	7440-48-4	Cobalt	mg/L	0.0057		0.00019	0.0025

Notes:
mg/L = milligrams per liter
ND = not detected
n/a = not available
MDL = method detection limit
PQL = practical quantitation limit
CAS = Chemical Abstract Service
pCi/L = picocuries per Liter
J = Estimated value less than the reporting limit but greater than the method detection limit
U = non-detect

Prepared by/Date: NSR 09/28/20
Checked by/Date: SBM 09/28/20

Appendix B-3

Surface Water Data

Appendix B-3
Data Used in Risk Evaluation - Berry Creek Surface Water Data (2016-2019)
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

Location	Sample Date	CAS	Analyte	Units	Flag	Result	MDL	PQL
SWA-1	10/09/17	7440-42-8	Boron	mg/L		0.78	0.021	0.05
SWA-1	04/11/17	7440-42-8	Boron	mg/L		0.44	0.021	0.05
SWA-1	03/23/18	7440-42-8	Boron	mg/L		0.39	0.021	0.05
SWA-2	09/12/19	7440-42-8	Boron	mg/L		2.1	0.039	0.05
SWA-2	10/04/18	7440-42-8	Boron	mg/L		1.7	0.021	0.05
SWA-2	10/09/17	7440-42-8	Boron	mg/L		1.8	0.042	0.1
SWA-2	04/11/17	7440-42-8	Boron	mg/L		1.3	0.021	0.05
SWA-2	04/01/19	7440-42-8	Boron	mg/L		1.2	0.021	0.1
SWA-2	03/23/18	7440-42-8	Boron	mg/L		0.95	0.021	0.05
SWA-3	09/12/19	7440-42-8	Boron	mg/L		0.38	0.039	0.05
SWA-3	10/04/18	7440-42-8	Boron	mg/L		0.4	0.021	0.05
SWA-3	10/09/17	7440-42-8	Boron	mg/L		0.38	0.021	0.05
SWA-3	04/11/17	7440-42-8	Boron	mg/L		0.43	0.021	0.05
SWA-3	04/01/19	7440-42-8	Boron	mg/L		0.59	0.021	0.1
SWA-3	03/23/18	7440-42-8	Boron	mg/L		0.56	0.021	0.05
SWC-4	09/12/19	7440-42-8	Boron	mg/L		0.58	0.039	0.05
SWC-4	10/04/18	7440-42-8	Boron	mg/L		0.75	0.021	0.05
SWC-4	10/09/17	7440-42-8	Boron	mg/L		1	0.021	0.05
SWC-4	04/11/17	7440-42-8	Boron	mg/L		0.58	0.021	0.05
SWC-4	04/01/19	7440-42-8	Boron	mg/L		0.63	0.021	0.1
SWC-4	03/23/18	7440-42-8	Boron	mg/L		0.47	0.021	0.05
SWC-5	09/12/19	7440-42-8	Boron	mg/L		0.057	0.039	0.05
SWC-5	10/04/18	7440-42-8	Boron	mg/L	J	0.043	0.021	0.05
SWC-5	10/09/17	7440-42-8	Boron	mg/L	J	0.026	0.021	0.05
SWC-5	04/11/17	7440-42-8	Boron	mg/L	J	0.041	0.021	0.05
SWC-5	04/01/19	7440-42-8	Boron	mg/L		0.061	0.021	0.1
SWC-5	03/23/18	7440-42-8	Boron	mg/L		0.072	0.021	0.05
SWC-6	09/12/19	7440-42-8	Boron	mg/L	ND		0.039	0.05
SWC-6	10/04/18	7440-42-8	Boron	mg/L	ND		0.021	0.05
SWC-6	10/09/17	7440-42-8	Boron	mg/L	J	0.022	0.021	0.05
SWC-6	04/11/17	7440-42-8	Boron	mg/L	ND		0.021	0.05
SWC-6	04/01/19	7440-42-8	Boron	mg/L	ND		0.021	0.1
SWC-6	03/23/18	7440-42-8	Boron	mg/L	ND		0.021	0.05
SWC-7	09/12/19	7440-42-8	Boron	mg/L		0.43	0.039	0.05
SWC-7	10/04/18	7440-42-8	Boron	mg/L		0.58	0.021	0.05
SWC-7	10/09/17	7440-42-8	Boron	mg/L		0.74	0.021	0.05
SWC-7	04/11/17	7440-42-8	Boron	mg/L		0.38	0.021	0.05
SWC-7	04/01/19	7440-42-8	Boron	mg/L		0.51	0.021	0.1
SWC-7	03/23/18	7440-42-8	Boron	mg/L		0.35	0.021	0.05
SWC-8	09/12/19	7440-42-8	Boron	mg/L		1.1	0.039	0.05
SWC-8	10/04/18	7440-42-8	Boron	mg/L		1.2	0.021	0.05
SWC-8	10/09/17	7440-42-8	Boron	mg/L		1.3	0.021	0.05
SWC-8	04/11/17	7440-42-8	Boron	mg/L		0.77	0.021	0.05
SWC-8	04/01/19	7440-42-8	Boron	mg/L		0.87	0.021	0.1
SWC-8	03/23/18	7440-42-8	Boron	mg/L		0.67	0.021	0.05
SWA-1	10/09/17	7440-48-4	Cobalt	mg/L	ND		0.0004	0.0025
SWA-1	04/11/17	7440-48-4	Cobalt	mg/L	ND		0.0004	0.0025
SWA-1	03/23/18	7440-48-4	Cobalt	mg/L	ND		0.0004	0.0025
SWA-2	09/12/19	7440-48-4	Cobalt	mg/L	J	0.0018	0.000075	0.0025
SWA-2	10/04/18	7440-48-4	Cobalt	mg/L		0.0039	0.0004	0.0025
SWA-2	10/09/17	7440-48-4	Cobalt	mg/L	J	0.002	0.0004	0.0025
SWA-2	04/11/17	7440-48-4	Cobalt	mg/L		0.0051	0.0004	0.0025
SWA-2	10/10/16	7440-48-4	Cobalt	mg/L	J	0.00043	n/a	n/a
SWA-2	04/01/19	7440-48-4	Cobalt	mg/L		0.0054	0.0004	0.0025
SWA-2	03/23/18	7440-48-4	Cobalt	mg/L		0.0064	0.0004	0.0025
SWA-3	09/12/19	7440-48-4	Cobalt	mg/L	J	0.00083	0.000075	0.0025
SWA-3	10/04/18	7440-48-4	Cobalt	mg/L	J	0.0022	0.0004	0.0025
SWA-3	10/09/17	7440-48-4	Cobalt	mg/L	J	0.002	0.0004	0.0025
SWA-3	04/11/17	7440-48-4	Cobalt	mg/L		0.0051	0.0004	0.0025
SWA-3	10/10/16	7440-48-4	Cobalt	mg/L	J	0.0011	n/a	n/a

Appendix B-3
Data Used in Risk Evaluation - Berry Creek Surface Water Data (2016-2019)
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

Location	Sample Date	CAS	Analyte	Units	Flag	Result	MDL	PQL
SWA-3	04/01/19	7440-48-4	Cobalt	mg/L		0.0041	0.0004	0.0025
SWA-3	03/23/18	7440-48-4	Cobalt	mg/L		0.0052	0.0004	0.0025
SWC-4	09/12/19	7440-48-4	Cobalt	mg/L	J	0.00064	0.000075	0.0025
SWC-4	10/04/18	7440-48-4	Cobalt	mg/L	J	0.00074	0.0004	0.0025
SWC-4	10/09/17	7440-48-4	Cobalt	mg/L	J	0.00081	0.0004	0.0025
SWC-4	04/11/17	7440-48-4	Cobalt	mg/L	J	0.002	0.0004	0.0025
SWC-4	10/10/16	7440-48-4	Cobalt	mg/L	J	0.0017	n/a	n/a
SWC-4	04/01/19	7440-48-4	Cobalt	mg/L	J	0.002	0.0004	0.0025
SWC-4	03/23/18	7440-48-4	Cobalt	mg/L		0.0025	0.0004	0.0025
SWC-5	09/12/19	7440-48-4	Cobalt	mg/L	J	0.0014	0.000075	0.0025
SWC-5	10/04/18	7440-48-4	Cobalt	mg/L	J	0.00044	0.0004	0.0025
SWC-5	10/09/17	7440-48-4	Cobalt	mg/L	J	0.00089	0.0004	0.0025
SWC-5	04/11/17	7440-48-4	Cobalt	mg/L	ND		0.0004	0.0025
SWC-5	10/10/16	7440-48-4	Cobalt	mg/L	ND		n/a	0.0025
SWC-5	04/01/19	7440-48-4	Cobalt	mg/L	ND		0.0004	0.0025
SWC-5	03/23/18	7440-48-4	Cobalt	mg/L	ND		0.0004	0.0025
SWC-6	09/12/19	7440-48-4	Cobalt	mg/L	J	0.00067	0.000075	0.0025
SWC-6	10/04/18	7440-48-4	Cobalt	mg/L	J	0.0012	0.0004	0.0025
SWC-6	10/09/17	7440-48-4	Cobalt	mg/L		0.0034	0.0004	0.0025
SWC-6	04/11/17	7440-48-4	Cobalt	mg/L		0.0033	0.0004	0.0025
SWC-6	10/10/16	7440-48-4	Cobalt	mg/L	J	0.00058	n/a	n/a
SWC-6	04/01/19	7440-48-4	Cobalt	mg/L		0.0032	0.0004	0.0025
SWC-6	03/23/18	7440-48-4	Cobalt	mg/L		0.0027	0.0004	0.0025
SWC-7	09/12/19	7440-48-4	Cobalt	mg/L	J	0.00046	0.000075	0.0025
SWC-7	10/04/18	7440-48-4	Cobalt	mg/L	ND		0.0004	0.0025
SWC-7	10/09/17	7440-48-4	Cobalt	mg/L	ND		0.0004	0.0025
SWC-7	04/11/17	7440-48-4	Cobalt	mg/L	J	0.00064	0.0004	0.0025
SWC-7	10/10/16	7440-48-4	Cobalt	mg/L	ND		n/a	0.0025
SWC-7	04/01/19	7440-48-4	Cobalt	mg/L	J	0.00043	0.0004	0.0025
SWC-7	03/23/18	7440-48-4	Cobalt	mg/L	J	0.00092	0.0004	0.0025
SWC-8	09/12/19	7440-48-4	Cobalt	mg/L	J	0.0014	0.000075	0.0025
SWC-8	10/04/18	7440-48-4	Cobalt	mg/L	J	0.0021	0.0004	0.0025
SWC-8	10/09/17	7440-48-4	Cobalt	mg/L	J	0.0016	0.0004	0.0025
SWC-8	04/11/17	7440-48-4	Cobalt	mg/L		0.0037	0.0004	0.0025
SWC-8	10/10/16	7440-48-4	Cobalt	mg/L	J	0.0017	n/a	n/a
SWC-8	04/01/19	7440-48-4	Cobalt	mg/L		0.0049	0.0004	0.0025
SWC-8	03/23/18	7440-48-4	Cobalt	mg/L		0.005	0.0004	0.0025
SWA-1	04/11/17	7439-93-2	Lithium	mg/L	ND		0.0032	0.005
SWA-2	04/11/17	7439-93-2	Lithium	mg/L	ND		0.0032	0.005
SWA-3	04/11/17	7439-93-2	Lithium	mg/L	ND		0.0032	0.005
SWC-4	04/11/17	7439-93-2	Lithium	mg/L	ND		0.0032	0.005
SWC-5	04/11/17	7439-93-2	Lithium	mg/L	ND		0.0032	0.005
SWC-6	04/11/17	7439-93-2	Lithium	mg/L	ND		0.0032	0.005
SWC-7	04/11/17	7439-93-2	Lithium	mg/L	ND		0.0032	0.005
SWC-8	04/11/17	7439-93-2	Lithium	mg/L	ND		0.0032	0.005

Notes:
mg/L = milligrams per liter
ND = not detected
n/a = not available
CAS = Chemical Abstract Service
J = Estimated value less than the reporting limit but greater than the method detection limit
MDL = method detection limit
PQL = practical quantitation limit

Prepared by/Date: LO 09/15/20
Checked by/Date: SBM 09/15/20

APPENDIX C

USEPA RSL Calculator Generated Industrial Worker Screening Levels

Appendix C-1
Site-specific
Industrial Worker Equation Inputs for Tap Water

* Inputted values different from Resident defaults are highlighte

Variable	Resident Tap Water Default Value	Form-input Value
BW_{0-2} (mutagenic body weight) kg	15	0
BW_{2-6} (mutagenic body weight) kg	15	0
BW_{6-16} (mutagenic body weight) kg	80	0
BW_{16-26} (mutagenic body weight) kg	80	80
BW_{res-a} (body weight - adult) kg	80	80
BW_{res-c} (body weight - child) kg	15	0
$DFW_{res-adj}$ (age-adjusted dermal factor) cm^2-event/kg	2610650	275546.875
$DFWM_{res-adj}$ (mutagenic age-adjusted dermal factor) cm^2-event/kg	8191633	275546.875
ED_{res} (exposure duration - resident) years	26	25
ED_{0-2} (mutagenic exposure duration first phase) years	2	0
ED_{2-6} (mutagenic exposure duration second phase) years	4	0
ED_{6-16} (mutagenic exposure duration third phase) years	10	0
ED_{16-26} (mutagenic exposure duration fourth phase) years	10	25
ED_{res-a} (exposure duration - adult) years	20	25
ED_{res-c} (exposure duration - child) years	6	0
EF_{res} (exposure frequency) days/year	350	250
EF_{0-2} (mutagenic exposure frequency first phase) days/year	350	0
EF_{2-6} (mutagenic exposure frequency second phase) days/year	350	0
EF_{6-16} (mutagenic exposure frequency third phase) days/year	350	0
EF_{16-26} (mutagenic exposure frequency fourth phase) days/year	350	250
EF_{res-a} (exposure frequency - adult) days/year	350	250
EF_{res-c} (exposure frequency - child) days/year	350	0
ET_{res} (exposure time) hours/day	24	8
$ET_{event-res-adj}$ (age-adjusted exposure time) hours/event	0.67077	0.54
$ET_{event-res-madj}$ (mutagenic age-adjusted exposure time) hours/event	0.67077	0.54
ET_{0-2} (mutagenic dermal exposure time first phase) hours/event	0.54	0
ET_{2-6} (mutagenic dermal exposure time second phase) hours/event	0.54	0
ET_{6-16} (mutagenic dermal exposure time third phase) hours/event	0.71	0
ET_{16-26} (mutagenic dermal exposure time fourth phase) hours/event	0.71	0.54
ET_{res-a} (dermal exposure time - adult) hours/event	0.71	0.54
ET_{res-c} (dermal exposure time - child) hours/event	0.54	0
ET_{0-2} (mutagenic inhalation exposure time first phase) hours/day	24	0
ET_{2-6} (mutagenic inhalation exposure time second phase) hours/day	24	0
ET_{6-16} (mutagenic inhalation exposure time third phase) hours/day	24	0
ET_{16-26} (mutagenic inhalation exposure time fourth phase) hours/day	24	8
ET_{res-a} (inhalation exposure time - adult) hours/day	24	8
ET_{res-c} (inhalation exposure time - child) hours/day	24	0
EV_{0-2} (mutagenic events) per day	1	0
EV_{2-6} (mutagenic events) per day	1	0

Appendix C-1
Site-specific
Industrial Worker Equation Inputs for Tap Water

* Inputted values different from Resident defaults are highlighte

Variable	Resident Tap Water Default Value	Form-input Value
$EV_{6\text{-}16}$ (mutagenic events) per day	1	0
$EV_{16\text{-}26}$ (mutagenic events) per day	1	1
$EV_{res\text{-}a}$ (events - adult) per day	1	1
$EV_{res\text{-}c}$ (events - child) per day	1	0
THQ (target hazard quotient) unitless	0.1	1
$IFW_{res\text{-}adj}$ (adjusted intake factor) L/kg	327.95	78.125
$IFWM_{res\text{-}adj}$ (mutagenic adjusted intake factor) L/kg	1019.9	78.125
$IRW_{0\text{-}2}$ (mutagenic water intake rate) L/day	0.78	0
$IRW_{2\text{-}6}$ (mutagenic water intake rate) L/day	0.78	0
$IRW_{6\text{-}16}$ (mutagenic water intake rate) L/day	2.5	0
$IRW_{16\text{-}26}$ (mutagenic water intake rate) L/day	2.5	1
$IRW_{res\text{-}a}$ (water intake rate - adult) L/day	2.5	1
$IRW_{res\text{-}c}$ (water intake rate - child) L/day	0.78	0
K (volatilization factor of Andelman) L/m^3	0.5	0.5
LT (lifetime) years	70	70
$SA_{0\text{-}2}$ (mutagenic skin surface area) cm^2	6365	0
$SA_{2\text{-}6}$ (mutagenic skin surface area) cm^2	6365	0
$SA_{6\text{-}16}$ (mutagenic skin surface area) cm^2	19652	0
$SA_{16\text{-}26}$ (mutagenic skin surface area) cm^2	19652	3527
$SA_{res\text{-}a}$ (skin surface area - adult) cm^2	19652	3527
$SA_{res\text{-}c}$ (skin surface area - child) cm^2	6365	0
l_{sc} (apparent thickness of stratum corneum) cm	0.001	0.001
TR (target risk) unitless	0.000001	0.00001

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Appendix C-2
Site-specific
Industrial Worker Regional Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = DWSHA; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	SF_o $(mg/kg\text{-}day)^{-1}$	SF_o Ref	IUR $(ug/m^3)^{-1}$	IUR Ref	RfD (mg/kg-day)	RfD Ref	RfC (mg/m^3)	RfC Ref	GIABS
Antimony (metallic)	7440-36-0	No	No	Inorganics	-		-		4.00E-04	I	-		1.50E-01
Barium	7440-39-3	No	No	Inorganics	-		-		2.00E-01	I	5.00E-04	H	7.00E-02
Beryllium and compounds	7440-41-7	No	No	Inorganics	-		2.40E-03	I	2.00E-03	I	2.00E-05	I	7.00E-03
Boron And Borates Only	7440-42-8	No	No	Inorganics	-		-		2.00E-01	I	2.00E-02	H	1.00E+00
Cadmium (Water)	7440-43-9	No	No	Inorganics	-		1.80E-03	I	5.00E-04	I	1.00E-05	A	5.00E-02
Cobalt	7440-48-4	No	No	Inorganics	-		9.00E-03	P	3.00E-04	P	6.00E-06	P	1.00E+00
Fluoride	16984-48-8	No	No	Inorganics	-		-		4.00E-02	C	1.30E-02	C	1.00E+00
Lithium	7439-93-2	No	No	Inorganics	-		-		2.00E-03	P	-		1.00E+00
Mercuric Chloride	7487-94-7	No	No	Inorganics	-		-		3.00E-04	I	3.00E-04	S	7.00E-02
Molybdenum	7439-98-7	No	No	Inorganics	-		-		5.00E-03	I	-		1.00E+00
Selenium	7782-49-2	No	No	Inorganics	-		-		5.00E-03	I	2.00E-02	C	1.00E+00

Output generated 06AUG2020:16:05:01

Appendix C-2
Site-specific
Industrial Worker Regional Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = DWSHA; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	K_p (cm/hr)	MW	B (unitless)	t^* (hr)	T_{event} (hr/event)	FA (unitless)	In EPD?	$DA_{event\ (ca)}$
Antimony (metallic)	7440-36-0	No	No	Inorganics	1.00E-03	1.22E+02	4.24E-03	1.21E+00	5.05E-01	1.00E+00	Yes	-
Barium	7440-39-3	No	No	Inorganics	1.00E-03	1.37E+02	4.51E-03	1.48E+00	6.18E-01	1.00E+00	Yes	-
Beryllium and compounds	7440-41-7	No	No	Inorganics	1.00E-03	9.01E+00	1.15E-03	2.83E-01	1.18E-01	1.00E+00	Yes	-
Boron And Borates Only	7440-42-8	No	No	Inorganics	1.00E-03	1.38E+01	1.43E-03	3.02E-01	1.26E-01	1.00E+00	Yes	-
Cadmium (Water)	7440-43-9	No	No	Inorganics	1.00E-03	1.12E+02	4.08E-03	1.08E+00	4.48E-01	1.00E+00	Yes	-
Cobalt	7440-48-4	No	No	Inorganics	4.00E-04	5.89E+01	1.18E-03	5.40E-01	2.25E-01	1.00E+00	Yes	-
Fluoride	16984-48-8	No	No	Inorganics	1.00E-03	3.80E+01	2.37E-03	4.12E-01	1.72E-01	1.00E+00	Yes	-
Lithium	7439-93-2	No	No	Inorganics	1.00E-03	6.94E+00	1.01E-03	2.76E-01	1.15E-01	1.00E+00	Yes	-
Mercuric Chloride	7487-94-7	No	No	Inorganics	1.00E-03	2.72E+02	6.34E-03	8.36E+00	3.49E+00	1.00E+00	Yes	-
Molybdenum	7439-98-7	No	No	Inorganics	1.00E-03	9.59E+01	3.77E-03	8.70E-01	3.62E-01	1.00E+00	Yes	-
Selenium	7782-49-2	No	No	Inorganics	1.00E-03	7.90E+01	3.42E-03	6.99E-01	2.91E-01	1.00E+00	Yes	-

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Appendix C-2
Site-specific
Industrial Worker Regional Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = DWSHA; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	$DA_{event\ (nc\ child)}$	$DA_{event\ (nc\ adult)}$	MCL (ug/L)	Ingestion SL TR=1E-05 (ug/L)	Dermal SL TR=1E-05 (ug/L)	Inhalation SL TR=1E-05 (ug/L)
Antimony (metallic)	7440-36-0	No	No	Inorganics	-	1.99E-03	6.00E+00	-	-	-
Barium	7440-39-3	No	No	Inorganics	-	4.64E-01	2.00E+03	-	-	-
Beryllium and compounds	7440-41-7	No	No	Inorganics	-	4.64E-04	4.00E+00	-	-	-
Boron And Borates Only	7440-42-8	No	No	Inorganics	-	6.62E+00	-	-	-	-
Cadmium (Water)	7440-43-9	No	No	Inorganics	-	8.28E-04	5.00E+00	-	-	-
Cobalt	7440-48-4	No	No	Inorganics	-	9.93E-03	-	-	-	-
Fluoride	16984-48-8	No	No	Inorganics	-	1.32E+00	4.00E+03	-	-	-
Lithium	7439-93-2	No	No	Inorganics	-	6.62E-02	-	-	-	-
Mercuric Chloride	7487-94-7	No	No	Inorganics	-	6.95E-04	2.00E+00	-	-	-
Molybdenum	7439-98-7	No	No	Inorganics	-	1.66E-01	-	-	-	-
Selenium	7782-49-2	No	No	Inorganics	-	1.66E-01	5.00E+01	-	-	-

Output generated 06AUG2020:16:05:01

Appendix C-2
Site-specific
Industrial Worker Regional Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = DWSHA; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	Carcinogenic SL TR=1E-05 (ug/L)	Ingestion SL Child THQ=1 (ug/L)	Dermal SL Child THQ=1 (ug/L)	Inhalation SL Child THQ=1 (ug/L)	Noncarcinogenic SL Child THI=1 (ug/L)
Antimony (metallic)	7440-36-0	No	No	Inorganics	-	-	-	-	-
Barium	7440-39-3	No	No	Inorganics	-	-	-	-	-
Beryllium and compounds	7440-41-7	No	No	Inorganics	-	-	-	-	-
Boron And Borates Only	7440-42-8	No	No	Inorganics	-	-	-	-	-
Cadmium (Water)	7440-43-9	No	No	Inorganics	-	-	-	-	-
Cobalt	7440-48-4	No	No	Inorganics	-	-	-	-	-
Fluoride	16984-48-8	No	No	Inorganics	-	-	-	-	-
Lithium	7439-93-2	No	No	Inorganics	-	-	-	-	-
Mercuric Chloride	7487-94-7	No	No	Inorganics	-	-	-	-	-
Molybdenum	7439-98-7	No	No	Inorganics	-	-	-	-	-
Selenium	7782-49-2	No	No	Inorganics	-	-	-	-	-

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Appendix C-2
Site-specific
Industrial Worker Regional Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = DWSHA; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	Ingestion SL Adult THQ=1 (ug/L)	Dermal SL Adult THQ=1 (ug/L)	Inhalation SL Adult THQ=1 (ug/L)	Noncarcinogenic SL Adult THI=1 (ug/L)	Screening Level (ug/L)
Antimony (metallic)	7440-36-0	No	No	Inorganics	4.67E+01	3.68E+03	-	4.61E+01	4.61E+01 nc
Barium	7440-39-3	No	No	Inorganics	2.34E+04	8.59E+05	-	2.27E+04	2.27E+04 nc
Beryllium and compounds	7440-41-7	No	No	Inorganics	2.34E+02	8.59E+02	-	1.84E+02	1.84E+02 nc
Boron And Borates Only	7440-42-8	No	No	Inorganics	2.34E+04	1.23E+07	-	2.33E+04	2.33E+04 nc
Cadmium (Water)	7440-43-9	No	No	Inorganics	5.84E+01	1.53E+03	-	5.63E+01	5.63E+01 nc
Cobalt	7440-48-4	No	No	Inorganics	3.50E+01	4.60E+04	-	3.50E+01	3.50E+01 nc
Fluoride	16984-48-8	No	No	Inorganics	4.67E+03	2.45E+06	-	4.66E+03	4.66E+03 nc
Lithium	7439-93-2	No	No	Inorganics	2.34E+02	1.23E+05	-	2.33E+02	2.33E+02 nc
Mercuric Chloride	7487-94-7	No	No	Inorganics	3.50E+01	1.29E+03	-	3.41E+01	3.41E+01 nc
Molybdenum	7439-98-7	No	No	Inorganics	5.84E+02	3.07E+05	-	5.83E+02	5.83E+02 nc
Selenium	7782-49-2	No	No	Inorganics	5.84E+02	3.07E+05	-	5.83E+02	5.83E+02 nc

Output generated 06AUG2020:16:05:01

APPENDIX D

USEPA RSL Calculator Generated Residential Screening Levels

Appendix D-1
Scherer AP-1
Plant Scherer, Juliette, GA

Variable	Value
THQ (target hazard quotient) unitless	1
TR (target risk) unitless	0.00001
LT (lifetime) years	70
K (volatilization factor of Andelman) L/m^3	0.5
l_{sc} (apparent thickness of stratum corneum) cm	0.001
ED_{res} (exposure duration - resident) years	26
ED_{res-c} (exposure duration - child) years	6
ED_{res-a} (exposure duration - adult) years	20
ED_{0-2} (mutagenic exposure duration first phase) years	2
ED_{2-6} (mutagenic exposure duration second phase) years	4
ED_{6-16} (mutagenic exposure duration third phase) years	10
ED_{16-26} (mutagenic exposure duration fourth phase) years	10
EF_{res} (exposure frequency) days/year	350
EF_{res-c} (exposure frequency - child) days/year	350
EF_{res-a} (exposure frequency - adult) days/year	350
EF_{0-2} (mutagenic exposure frequency first phase) days/year	350
EF_{2-6} (mutagenic exposure frequency second phase) days/year	350
EF_{6-16} (mutagenic exposure frequency third phase) days/year	350
EF_{16-26} (mutagenic exposure frequency fourth phase) days/year	350
$ET_{event-res-adj}$ (age-adjusted exposure time) hours/event	0.67077
$ET_{event-res-madj}$ (mutagenic age-adjusted exposure time) hours/event	0.67077
ET_{res} (exposure time) hours/day	24
ET_{res-c} (dermal exposure time - child) hours/event	0.54
ET_{res-a} (dermal exposure time - adult) hours/event	0.71
ET_{res-c} (inhalation exposure time - child) hours/day	24
ET_{res-a} (inhalation exposure time - adult) hours/day	24
ET_{2-6} (mutagenic inhalation exposure time second phase) hours/day	24
ET_{6-16} (mutagenic inhalation exposure time third phase) hours/day	24
ET_{16-26} (mutagenic inhalation exposure time fourth phase) hours/day	24
ET_{16-26} (mutagenic inhalation exposure time fourth phase) hours/day	24
ET_{0-2} (mutagenic dermal exposure time first phase) hours/event	0.54
ET_{2-6} (mutagenic dermal exposure time second phase) hours/event	0.54
ET_{6-16} (mutagenic dermal exposure time third phase) hours/event	0.71
ET_{16-26} (mutagenic dermal exposure time fourth phase) hours/event	0.71
BW_{res-a} (body weight - adult) kg	80

Appendix D-1
Scherer AP-1
Plant Scherer, Juliette, GA

Variable	Value
BW_{res-c} (body weight - child) kg	15
BW_{0-2} (mutagenic body weight) kg	15
BW_{2-6} (mutagenic body weight) kg	15
BW_{6-16} (mutagenic body weight) kg	80
BW_{16-26} (mutagenic body weight) kg	80
$IFW_{res-adj}$ (adjusted intake factor) L/kg	327.95
$IFW_{res-adj}$ (adjusted intake factor) L/kg	327.95
$IFWM_{res-adj}$ (mutagenic adjusted intake factor) L/kg	1019.9
$IFWM_{res-adj}$ (mutagenic adjusted intake factor) L/kg	1019.9
IRW_{res-c} (water intake rate - child) L/day	0.78
IRW_{res-a} (water intake rate - adult) L/day	2.5
IRW_{0-2} (mutagenic water intake rate) L/day	0.78
IRW_{2-6} (mutagenic water intake rate) L/day	0.78
IRW_{6-16} (mutagenic water intake rate) L/day	2.5
IRW_{16-26} (mutagenic water intake rate) L/day	2.5
EV_{res-a} (events - adult) per day	1
EV_{res-c} (events - child) per day	1
EV_{0-2} (mutagenic events) per day	1
EV_{2-6} (mutagenic events) per day	1
EV_{6-16} (mutagenic events) per day	1
EV_{16-26} (mutagenic events) per day	1
$DFW_{res-adj}$ (age-adjusted dermal factor) cm^2-event/kg	2610650
$DFWM_{res-adj}$ (mutagenic age-adjusted dermal factor) cm^2-event/kg	8191633
SA_{res-c} (skin surface area - child) cm^2	6365
SA_{res-a} (skin surface area - adult) cm^2	19652
SA_{0-2} (mutagenic skin surface area) cm^2	6365
SA_{2-6} (mutagenic skin surface area) cm^2	6365
SA_{6-16} (mutagenic skin surface area) cm^2	19652
SA_{16-26} (mutagenic skin surface area) cm^2	19652

Output generated 06AUG2020:16:09:05

Appendix D-2
Default
Resident Risk-Based Regional Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = DWSHA; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	SF_o $(mg/kg\text{-}day)^{-1}$	SF_o Ref	IUR $(ug/m^3)^{-1}$	IUR Ref	RfD (mg/kg-day)	RfD Ref	RfC (mg/m^3)	RfC Ref	GIABS	K_p (cm/hr)	MW
Antimony (metallic)	7440-36-0	No	No	Inorganics	-		-		4.00E-04	I	-		1.50E-01	1.00E-03	1.22E+02
Barium	7440-39-3	No	No	Inorganics	-		-		2.00E-01	I	5.00E-04	H	7.00E-02	1.00E-03	1.37E+02
Beryllium and compounds	7440-41-7	No	No	Inorganics	-		2.40E-03	I	2.00E-03	I	2.00E-05	I	7.00E-03	1.00E-03	9.01E+00
Boron And Borates Only	7440-42-8	No	No	Inorganics	-		-		2.00E-01	I	2.00E-02	H	1.00E+00	1.00E-03	1.38E+01
Cadmium (Water)	7440-43-9	No	No	Inorganics	-		1.80E-03	I	5.00E-04	I	1.00E-05	A	5.00E-02	1.00E-03	1.12E+02
Cobalt	7440-48-4	No	No	Inorganics	-		9.00E-03	P	3.00E-04	P	6.00E-06	P	1.00E+00	4.00E-04	5.89E+01
Lithium	7439-93-2	No	No	Inorganics	-		-		2.00E-03	P	-		1.00E+00	1.00E-03	6.94E+00
Mercuric Chloride	7487-94-7	No	No	Inorganics	-		-		3.00E-04	I	3.00E-04	S	7.00E-02	1.00E-03	2.72E+02
Molybdenum	7439-98-7	No	No	Inorganics	-		-		5.00E-03	I	-		1.00E+00	1.00E-03	9.59E+01
Selenium	7782-49-2	No	No	Inorganics	-		-		5.00E-03	I	2.00E-02	C	1.00E+00	1.00E-03	7.90E+01

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Appendix D-2
Default
Resident Risk-Based Regional Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = DWSHA; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	B (unitless)	t^* (hr)	T_{event} (hr/event)	FA (unitless)	In EPD?	$DA_{event\ (ca)}$	$DA_{event\ (nc\ child)}$	$DA_{event\ (nc\ adult)}$	MCL (ug/L)
Antimony (metallic)	7440-36-0	No	No	Inorganics	4.24E-03	1.21E+00	5.05E-01	1.00E+00	Yes	-	1.47E-04	2.55E-04	6.00E+00
Barium	7440-39-3	No	No	Inorganics	4.51E-03	1.48E+00	6.18E-01	1.00E+00	Yes	-	3.44E-02	5.94E-02	2.00E+03
Beryllium and compounds	7440-41-7	No	No	Inorganics	1.15E-03	2.83E-01	1.18E-01	1.00E+00	Yes	-	3.44E-05	5.94E-05	4.00E+00
Boron And Borates Only	7440-42-8	No	No	Inorganics	1.43E-03	3.02E-01	1.26E-01	1.00E+00	Yes	-	4.92E-01	8.49E-01	-
Cadmium (Water)	7440-43-9	No	No	Inorganics	4.08E-03	1.08E+00	4.48E-01	1.00E+00	Yes	-	6.14E-05	1.06E-04	5.00E+00
Cobalt	7440-48-4	No	No	Inorganics	1.18E-03	5.40E-01	2.25E-01	1.00E+00	Yes	-	7.37E-04	1.27E-03	-
Lithium	7439-93-2	No	No	Inorganics	1.01E-03	2.76E-01	1.15E-01	1.00E+00	Yes	-	4.92E-03	8.49E-03	-
Mercuric Chloride	7487-94-7	No	No	Inorganics	6.34E-03	8.36E+00	3.49E+00	1.00E+00	Yes	-	5.16E-05	8.92E-05	2.00E+00
Molybdenum	7439-98-7	No	No	Inorganics	3.77E-03	8.70E-01	3.62E-01	1.00E+00	Yes	-	1.23E-02	2.12E-02	-
Selenium	7782-49-2	No	No	Inorganics	3.42E-03	6.99E-01	2.91E-01	1.00E+00	Yes	-	1.23E-02	2.12E-02	5.00E+01

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Appendix D-2
Default
Resident Risk-Based Regional Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = DWSHA; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	Ingestion SL TR=1E-05 (ug/L)	Dermal SL TR=1E-05 (ug/L)	Inhalation SL TR=1E-05 (ug/L)	Carcinogenic SL TR=1E-05 (ug/L)	Ingestion SL Child THQ=1 (ug/L)	Dermal SL Child THQ=1 (ug/L)
Antimony (metallic)	7440-36-0	No	No	Inorganics	-	-	-	-	8.02E+00	2.73E+02
Barium	7440-39-3	No	No	Inorganics	-	-	-	-	4.01E+03	6.37E+04
Beryllium and compounds	7440-41-7	No	No	Inorganics	-	-	-	-	4.01E+01	6.37E+01
Boron And Borates Only	7440-42-8	No	No	Inorganics	-	-	-	-	4.01E+03	9.10E+05
Cadmium (Water)	7440-43-9	No	No	Inorganics	-	-	-	-	1.00E+01	1.14E+02
Cobalt	7440-48-4	No	No	Inorganics	-	-	-	-	6.02E+00	3.41E+03
Lithium	7439-93-2	No	No	Inorganics	-	-	-	-	4.01E+01	9.10E+03
Mercuric Chloride	7487-94-7	No	No	Inorganics	-	-	-	-	6.02E+00	9.56E+01
Molybdenum	7439-98-7	No	No	Inorganics	-	-	-	-	1.00E+02	2.28E+04
Selenium	7782-49-2	No	No	Inorganics	-	-	-	-	1.00E+02	2.28E+04

Output generated 06AUG2020:16:09:05

Appendix D-2
Default
Resident Risk-Based Regional Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = DWSHA; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	Inhalation SL Child THQ=1 (ug/L)	Noncarcinogenic SL Child THI=1 (ug/L)	Ingestion SL Adult THQ=1 (ug/L)	Dermal SL Adult THQ=1 (ug/L)	Inhalation SL Adult THQ=1 (ug/L)
Antimony (metallic)	7440-36-0	No	No	Inorganics	-	7.79E+00	1.33E+01	3.59E+02	-
Barium	7440-39-3	No	No	Inorganics	-	3.77E+03	6.67E+03	8.37E+04	-
Beryllium and compounds	7440-41-7	No	No	Inorganics	-	2.46E+01	6.67E+01	8.37E+01	-
Boron And Borates Only	7440-42-8	No	No	Inorganics	-	3.99E+03	6.67E+03	1.20E+06	-
Cadmium (Water)	7440-43-9	No	No	Inorganics	-	9.22E+00	1.67E+01	1.49E+02	-
Cobalt	7440-48-4	No	No	Inorganics	-	6.01E+00	1.00E+01	4.48E+03	-
Lithium	7439-93-2	No	No	Inorganics	-	3.99E+01	6.67E+01	1.20E+04	-
Mercuric Chloride	7487-94-7	No	No	Inorganics	-	5.66E+00	1.00E+01	1.26E+02	-
Molybdenum	7439-98-7	No	No	Inorganics	-	9.98E+01	1.67E+02	2.99E+04	-
Selenium	7782-49-2	No	No	Inorganics	-	9.98E+01	1.67E+02	2.99E+04	-

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Appendix D-2
Default
Resident Risk-Based Regional Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = DWSHA; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	Noncarcinogenic SL Adult THI=1 (ug/L)	Screening Level (ug/L)
Antimony (metallic)	7440-36-0	No	No	Inorganics	1.29E+01	7.79E+00 nc
Barium	7440-39-3	No	No	Inorganics	6.18E+03	3.77E+03 nc
Beryllium and compounds	7440-41-7	No	No	Inorganics	3.71E+01	2.46E+01 nc
Boron And Borates Only	7440-42-8	No	No	Inorganics	6.64E+03	3.99E+03 nc
Cadmium (Water)	7440-43-9	No	No	Inorganics	1.50E+01	9.22E+00 nc
Cobalt	7440-48-4	No	No	Inorganics	9.99E+00	6.01E+00 nc
Lithium	7439-93-2	No	No	Inorganics	6.64E+01	3.99E+01 nc
Mercuric Chloride	7487-94-7	No	No	Inorganics	9.27E+00	5.66E+00 nc
Molybdenum	7439-98-7	No	No	Inorganics	1.66E+02	9.98E+01 nc
Selenium	7782-49-2	No	No	Inorganics	1.66E+02	9.98E+01 nc

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APPENDIX E

Support for Refined Risk Evaluations

Appendix E-1

Exposure Point Concentration Calculation Results

Appendix E-1
Exposure Point Calculation Details[1]
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

CCR Rule Designation	Constituent	Exposure Unit	Well IDs Included	Maximum Concentration (mg/L)	Detection Frequency	Exceedance Frequency	EPC Step 1 Individual Target Well(s) 2016-2019 (mg/L)	EPC Step 2 Target Well(s) & Downgradient Well(s) 2016-2019 (mg/L)	EPC Step 3 Farthest Downgradient Well(s) 2016-2019 (mg/L)
Appendix III	Boron	Southeast	SGWC-18	5.3	14 / 14	7 / 14	4.5		
			SGWC-18 PZ-40I PZ-41S	5.3	17 / 17	7 / 17		4.4	
			PZ-41S	3.5	2 / 2	0 / 2			3.5
	Cobalt	Northwest	SGWC-7	0.021	14 / 14	1 / 14	0.012	0.012	0.012
		Northeast 1	SGWC-10	0.050	14 / 14	9 / 14	0.032		
			SGWC-10 PZ-13S		15 / 15	9 / 15		0.031	
			PZ-13S	0.0057	1 / 1	0 / 1			0.0057
		Northeast 2	SGWC-11 PZ-25S	0.038	15 / 15	15 / 15	0.030		
			SGWC-11 PZ-25S PZ-25I PZ-44I PZ-14S PZ-14I	0.038	17 / 19	15 / 19		0.034	
			PZ-14S PZ-14I	ND (< 0.0005)	0 / 2	0 / 2			ND (< 0.0005)
		East	SGWC-15	0.30	14 / 14	14 / 14	0.28		
			SGWC-15 PZ-17I PZ-39S	0.30	15 / 16	14 / 16		0.28 (a)	
			PZ-39S	0.00051	1 / 1	0 / 1			0.00051
		Southeast 1	SGWC-18	0.21	15 / 15	15 / 15	0.16		
			SGWC-18 PZ-40I PZ-41S	0.21	17 / 17	15 / 17		0.15	
			PZ-41S	0.0092	1 / 1	0 / 1			0.0092
		Southeast 2	SGWC-20	0.26	14 / 14	14 / 14	0.23		
			SGWC-20 PZ-42I PZ-43S	0.26	16 / 16	14 / 16		0.22	
			PZ-43S	0.0086	1 / 1	0 / 1			0.0086
	Lithium	Northeast	PZ-44I	0.069	1 / 2	1 / 2	0.069		
			PZ-14I PZ-14S PZ-44I PZ-25S PZ-25I SGWC-11	0.069	10 / 22	1 / 22		0.019	
			PZ-14I PZ-14S	ND (< 0.005)	0 / 3	0 / 3			ND (< 0.005)

Notes:

Highlighted value is the EPC selected for the refined screening.

1 - EPCs calculated in accordance with USEPA, 2014. Memorandum for Determining Groundwater Exposure Point Concentrations, Supplemental Guidance. OSWER Directive 9283.1-42, February 2014. Located at https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=236917

(a) Recommended UCL exceeds maximum; maximum concentration used.

Definitions:

EPC = Exposure Point Concentration
mg/L = milligrams per liter

Prepared by/Date: NSR 09/28/20
Checked by/Date: SBM 09/28/20

Appendix E-2

Exposure Point Concentration Figures

- Cell 1 Ash Landfill Monitoring
- Cell 3 Ash Landfill Monitoring
- PAC Ash Landfill Monitoring
- Scherer Ash Pond CCR Monitoring Well
- Piezometer
- Individual Target Wells (Step
- Target Wells and Downgradient Wells (Step 2)
- Farthest Downgradient Wells (Step 3)
- Groundwater Elevation Contour (Feet Above Mean Sea Level)
- Streams
- Ash Pond Permit Boundary
- Approximate Property Boundary

N

0 500 1,000 2,000 Feet

Ash Pond 1

Settling (Recycling Pond)

PAC Ash Cell

Gypsum Cell

Cell 3

Luther Smith Road

Berry Creek

Coggins Creek

Potentiometric Surface Map Source: Golder Associates, Inc., 2020a.
Hydrogeologic Assessment Report, Plant Scherer Ash Pond 1 (AP-1), September 2020.

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID,

Document Path: G:\Project\EX\Scherer\MXDs\Groundwater Exposure Point of Concentration for Boron AP1 rev1.mxd

Plant Scherer AP-1
Groundwater Exposure Point of Concentration for Boron

Prepared By-Date: JCD - 11/3/2020	wood.	Figure: E-2a
Checked By-Date: NSR - 11/3/2020		
Project Number: 6123201472		

Cell 1 Ash Landfill Monitoring Well
Cell 3 Ash Landfill Monitoring Well
PAC Ash Landfill Monitoring Well
Scherer Ash Pond CCR Monitoring Well
Piezometer
Individual Target Wells (Step 1)
Target Wells and Downgradient Wells (Step 2)
Farthest Downgradient Wells (Step 3)
Groundwater Elevation Contour (Feet Above Mean Sea Level)
Streams
Ash Pond Permit Boundary
Approximate Property Boundary

N

0 500 1,000 2,000 Feet

Ash Pond 1
PAC Ash Cell
Gypsum Cell
Cell 3
Settling (Recycling Pond)
Luther Smith Road
Berry Creek
Coggins Creek
NA-9A
NA-16B

PZ-47D PZ-45D PZ-46D PZ-63 PZ-11S PZ-52 PZ-12S PZ-10S SGWC-7 SGWC-8 SGWC-9 SGWC-6 PZ-13S PZ-25I PZ-53 PZ-14I PZ-14S SGWC-10 SGWC-11 PZ-25S PZ-26S PZ-44I SGWC-12 PZ-15S SGWC-13 SGWC-14 SGWA-4 SGWA-25 PZ-9I SGWA-3 LPZ-02 SGWA-1 SGWA-2 PZ-51D SGWA-5 LPZ-03 LPZ-01 LPZ-04 LPZ-05 SGWA-24 PZ-6S PZ-51 SGWC-23 PZ-3S PZ-2I SGWC-22 SGWC-21 PZ-42I SGWC-20 SGWC-19 PZ-43S SGWC-18 PZ-40I PZ-41S SGWC-17 PZ-19S PZ-19I PZ-20I PZ-21S SGWC-16 SGWC-15 PZ-17I PZ-36S PZ-39S PZ-36I GWC-53 GWC-52 GWC-50 GWC-51 GWC-29 GWC-14 GWC-30 GWC-13 GWC-31 GWC-12 GWC-32 GWC-11 GWC-33A GWC-34 GWC-35 GWC-36 GWC-37 GWC-38 GWC-8A GWC-10 GWC-9 GWC-7 GWC-6 GWC-5 GWC-4 GWC-3 GWC-2 GWC-1 GWC-20 GWC-18 GWA-15 GWA-16 GWA-17 GWA-21 GWA-22 GWA-49 GWA-48 GWA-46 GWA-45 GWA-47 GWA-44A GWA-43 GWA-42 GWA-41 GWA-54 GWA-39 GWA-40 PZ-48S PZ-68 PZ-59S PZ-59D PZ-67 PZ-67D PZ-66D PZ-66 PZ-60D PZ-60S PZ-64 PZ-58 PZ-57 PZ-56 PZ-49D PZ-49S PZ-61 PZ-62 PZ-65 PZ-55 PZ-35I PZ-27D PZ-27S PZ-38I PZ-54 PZ-28I PZ-29S PZ-30I PZ-31I PZ-32S PZ-32D PZ-37I PZ-33I PZ-34S

400 410 420 430 440 450 460 470 480 490 500 510 400 390 380 370 360 370 380 390 400 410 420 430 440 450 460 470 480 490 500 510

Potentiometric Surface Map Source: Golder Associates, Inc., 2020a.
Hydrogeologic Assessment Report, Plant Scherer Ash Pond 1 (AP-1), September 2020.

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID,

Document Path: G:\Projects\EX\Scherer\MXDs\Groundwater Exposure Point of Concentration for Cobalt AP1 rev1.mxd

Plant Scherer AP-1
Groundwater Exposure Point of Concentration for Cobalt

Prepared By-Date: JCD - 11/3/2020	wood.	Figure: E-2b
Checked By-Date: NSR - 11/3/2020		
Project Number: 6123201472		

- Cell 1 Ash Landfill Monitoring
- Cell 3 Ash Landfill Monitoring
- PAC Ash Landfill Monitoring
- Scherer Ash Pond CCR Monitoring Well
- Piezometer
- Individual Target Wells (Step
- Target Wells and Downgradient Wells (Step 2)
- Farthest Downgradient Wells (Step 3)
- Groundwater Elevation Contour (Feet Above Mean Sea Level)
- Streams
- Ash Pond Permit Boundary
- Approximate Property Boundary

N

0 500 1,000 2,000 Feet

Ash Pond 1

Settling (Recycling Pond)

PAC Ash Cell

Gypsum Cell

Cell 3

Luther Smith Road

Berry Creek

Coggins Creek

Potentiometric Surface Map Source: Golder Associates, Inc., 2020a. Hydrogeologic Assessment Report, Plant Scherer Ash Pond 1 (AP-1), September 2020.

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID,

Plant Scherer AP-1
Groundwater Exposure Point of Concentration for Lithium

Prepared By-Date: JCD - 11/3/2020	wood.	Figure: E-2c
Checked By-Date: NSR - 11/3/2020		
Project Number: 6123201472		

Document Path: G:\Projects\EX\Scherer\MXDs\Groundwater Exposure Point of Concentration for Lithium AP1 rev1.mxd

Appendix E-3

ProUCL Input/Output Files

Appendix E-3a
Downgradient Groundwater ProUCL Input
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

Units	Boron 1	Boron 2	Boron 3	Lithium Step 1	D_Lithium Step 1
mg/L	3.71	3.71	3.5	0.069	1
mg/L	3.8	3.8	3.4	0.005	0
mg/L	3.3	3.3			
mg/L	4.5	4.5			
mg/L	4.8	4.8			
mg/L	3.9	3.9			
mg/L	3.8	3.8			
mg/L	3.6	3.6			
mg/L	3.9	3.9			
mg/L	4.3	4.3			
mg/L	4.9	4.9			
mg/L	5.3	5.3			
mg/L	5	5			
mg/L	4.1	3.5			
mg/L		3.8			
mg/L		3.4			
mg/L		4.1			
mg/L					
mg/L					
mg/L					
mg/L					
mg/L					

Appendix E-3a
Downgradient Groundwater ProUCL Input
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

Units	Lithium Step 2	D_Lithium Step 2	Lithium Step 3	D_Lithium Step 3	SE2 Cobalt Step 1	D_SE2 Cobalt Step 1
mg/L	0.005	0	0.005	0	0.261	1
mg/L	0.005	0	0.005	0	0.23	1
mg/L	0.005	0	0.005	0	0.25	1
mg/L	0.0037	1			0.26	1
mg/L	0.0038	1			0.26	1
mg/L	0.0068	1			0.23	1
mg/L	0.069	1			0.19	1
mg/L	0.005	0			0.19	1
mg/L	0.05	0			0.18	1
mg/L	0.0013	1			0.21	1
mg/L	0.005	0			0.16	1
mg/L	0.005	0			0.18	1
mg/L	0.005	0			0.13	1
mg/L	0.005	0			0.13	1
mg/L	0.005	0				
mg/L	0.005	0				
mg/L	0.0029	1				
mg/L	0.0017	1				
mg/L	0.0031	1				
mg/L	0.0031	1				
mg/L	0.0017	1				
mg/L	0.0034	0				

Appendix E-3a
Downgradient Groundwater ProUCL Input
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

Units	SE2 Cobalt Step 2	D_SE2 Cobalt Step 2	SE2 Cobalt Step 3	D_SE2 Cobalt Step 3	SE1 Cobalt Step 1
mg/L	0.261	1	0.0086	1	0.116
mg/L	0.23	1			0.112
mg/L	0.25	1			0.13
mg/L	0.26	1			0.14
mg/L	0.26	1			0.11
mg/L	0.23	1			0.11
mg/L	0.19	1			0.094
mg/L	0.19	1			0.085
mg/L	0.18	1			0.16
mg/L	0.21	1			0.19
mg/L	0.16	1			0.21
mg/L	0.18	1			0.11
mg/L	0.13	1			0.19
mg/L	0.13	1			0.18
mg/L	0.0064	1			0.16
mg/L	0.0086	1			
mg/L					
mg/L					
mg/L					
mg/L					
mg/L					
mg/L					

Appendix E-3a
Downgradient Groundwater ProUCL Input
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

Units	D_SE1 Cobalt Step 1	SE1 Cobalt Step 2	D_SE1 Cobalt Step 2	SE1 Cobalt Step 3	D_SE1 Cobalt Step 3
mg/L	1	0.116	1	0.0092	1
mg/L	1	0.112	1		
mg/L	1	0.13	1		
mg/L	1	0.14	1		
mg/L	1	0.11	1		
mg/L	1	0.11	1		
mg/L	1	0.094	1		
mg/L	1	0.085	1		
mg/L	1	0.16	1		
mg/L	1	0.19	1		
mg/L	1	0.21	1		
mg/L	1	0.11	1		
mg/L	1	0.19	1		
mg/L	1	0.18	1		
mg/L	1	0.16	1		
mg/L		0.0076	1		
mg/L		0.0092	1		
mg/L					
mg/L					
mg/L					
mg/L					
mg/L					

Appendix E-3a
Downgradient Groundwater ProUCL Input
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

Units	E Cobalt Step 1	D_E Cobalt Step 1	E Cobalt Step 2	D_E Cobalt Step 2	E Cobalt Step 3
mg/L	0.267	1	0.267	1	0.00051
mg/L	0.255	1	0.255	1	
mg/L	0.26	1	0.26	1	
mg/L	0.28	1	0.28	1	
mg/L	0.26	1	0.26	1	
mg/L	0.24	1	0.24	1	
mg/L	0.28	1	0.28	1	
mg/L	0.29	1	0.29	1	
mg/L	0.27	1	0.27	1	
mg/L	0.3	1	0.3	1	
mg/L	0.27	1	0.27	1	
mg/L	0.26	1	0.26	1	
mg/L	0.26	1	0.26	1	
mg/L	0.27	1	0.27	1	
mg/L			0.0025	0	
mg/L			0.00051	1	
mg/L					
mg/L					
mg/L					
mg/L					
mg/L					
mg/L					

Appendix E-3a
Downgradient Groundwater ProUCL Input
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

Units	D_E Cobalt Step 3	NE2 Cobalt Step 1	D_NE2 Cobalt Step 1	NE2 Cobalt Step 2	D_NE2 Cobalt Step 2
mg/L	1	0.026	1	0.026	1
mg/L		0.0378	1	0.0378	1
mg/L		0.0332	1	0.0332	1
mg/L		0.03	1	0.03	1
mg/L		0.032	1	0.032	1
mg/L		0.029	1	0.029	1
mg/L		0.029	1	0.029	1
mg/L		0.028	1	0.028	1
mg/L		0.029	1	0.029	1
mg/L		0.024	1	0.024	1
mg/L		0.026	1	0.026	1
mg/L		0.023	1	0.023	1
mg/L		0.024	1	0.024	1
mg/L		0.021	1	0.021	1
mg/L		0.022	1	0.022	1
mg/L				0.0005	0
mg/L				0.0005	0
mg/L				0.0073	1
mg/L				0.0021	1
mg/L					
mg/L					
mg/L					

Appendix E-3a
Downgradient Groundwater ProUCL Input
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

Units	NE2 Cobalt Step 3	D_NE2 Cobalt Step 3	NW Cobalt Step 1	D_NW Cobalt Step 1	NW Cobalt Step 2
mg/L	0.0005	0	0.0116	1	0.0116
mg/L	0.0005	0	0.0143	1	0.0143
mg/L			0.012	1	0.012
mg/L			0.0099	1	0.0099
mg/L			0.011	1	0.011
mg/L			0.0093	1	0.0093
mg/L			0.0062	1	0.0062
mg/L			0.021	1	0.021
mg/L			0.0054	1	0.0054
mg/L			0.0034	1	0.0034
mg/L			0.013	1	0.013
mg/L			0.0057	1	0.0057
mg/L			0.0046	1	0.0046
mg/L			0.0039	1	0.0039
mg/L					
mg/L					
mg/L					
mg/L					
mg/L					
mg/L					
mg/L					

Appendix E-3a
Downgradient Groundwater ProUCL Input
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

Units	D_NW Cobalt Step 2	NW Cobalt Step 3	D_NW Cobalt Step 3	NE1 Cobalt Step 1	D_NE1 Cobalt Step 1
mg/L	1	0.0116	1	0.0191	1
mg/L	1	0.0143	1	0.0192	1
mg/L	1	0.012	1	0.022	1
mg/L	1	0.0099	1	0.05	1
mg/L	1	0.011	1	0.04	1
mg/L	1	0.0093	1	0.038	1
mg/L	1	0.0062	1	0.018	1
mg/L	1	0.021	1	0.014	1
mg/L	1	0.0054	1	0.026	1
mg/L	1	0.0034	1	0.018	1
mg/L	1	0.013	1	0.03	1
mg/L	1	0.0057	1	0.034	1
mg/L	1	0.0046	1	0.025	1
mg/L	1	0.0039	1	0.022	1
mg/L					
mg/L					
mg/L					
mg/L					
mg/L					
mg/L					
mg/L					
mg/L					

Appendix E-3a
Downgradient Groundwater ProUCL Input
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

Units	NE1 Cobalt Step 2	D_NE1 Cobalt Step 2	NE1 Cobalt Step 3	D_NE1 Cobalt Step 3
mg/L	0.0191	1	0.0057	1
mg/L	0.0192	1		
mg/L	0.022	1		
mg/L	0.05	1		
mg/L	0.04	1		
mg/L	0.038	1		
mg/L	0.018	1		
mg/L	0.014	1		
mg/L	0.026	1		
mg/L	0.018	1		
mg/L	0.03	1		
mg/L	0.034	1		
mg/L	0.025	1		
mg/L	0.022	1		
mg/L	0.0057	1		
mg/L				
mg/L				
mg/L				
mg/L				
mg/L				
mg/L				
mg/L				

Prepared by/Date: NSR 09/28/20
Checked by/Date: SBM 09/28/20

Appendix E-3b
Downgradient Groundwater ProUCL Output - Boron
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

UCL Statistics for Uncensored Full Data Sets

User Selected Options	
Date/Time of Computation	ProUCL 5.13/17/2020 4:29:44 PM
From File	WorkSheet.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

Boron 1

General Statistics

Total Number of Observations	14	Number of Distinct Observations	12
		Number of Missing Observations	0
Minimum	3.3	Mean	4.208
Maximum	5.3	Median	4
SD	0.603	Std. Error of Mean	0.161
Coefficient of Variation	0.143	Skewness	0.44

Normal GOF Test

Shapiro Wilk Test Statistic	0.942	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.874	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.195	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.226	Data appear Normal at 5% Significance Level

Data appear Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		**95% UCLs (Adjusted for Skewness)**	
95% Student's-t UCL	4.493	95% Adjusted-CLT UCL (Chen-1995)	4.493
		95% Modified-t UCL (Johnson-1978)	4.496

Gamma GOF Test

A-D Test Statistic	0.389	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.733	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.193	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.228	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Appendix E-3b
Downgradient Groundwater ProUCL Output - Boron
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

Gamma Statistics

k hat (MLE)	53.67	k star (bias corrected MLE)	42.22
Theta hat (MLE)	0.0784	Theta star (bias corrected MLE)	0.0997
nu hat (MLE)	1503	nu star (bias corrected)	1182
MLE Mean (bias corrected)	4.208	MLE Sd (bias corrected)	0.648
		Approximate Chi Square Value (0.05)	1103
Adjusted Level of Significance	0.0312	Adjusted Chi Square Value	1093

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	4.508	95% Adjusted Gamma UCL (use when n<50)	4.55

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.954	**Shapiro Wilk Lognormal GOF Test**	
5% Shapiro Wilk Critical Value	0.874	Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.181	**Lilliefors Lognormal GOF Test**	
5% Lilliefors Critical Value	0.226	Data appear Lognormal at 5% Significance Level	

Data appear Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	1.194	Mean of logged Data	1.428
Maximum of Logged Data	1.668	SD of logged Data	0.141

Assuming Lognormal Distribution

95% H-UCL	4.515	90% Chebyshev (MVUE) UCL	4.685
95% Chebyshev (MVUE) UCL	4.902	97.5% Chebyshev (MVUE) UCL	5.202
99% Chebyshev (MVUE) UCL	5.792		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	4.473	95% Jackknife UCL	4.493
95% Standard Bootstrap UCL	4.464	95% Bootstrap-t UCL	4.507
95% Hall's Bootstrap UCL	4.483	95% Percentile Bootstrap UCL	4.457
95% BCA Bootstrap UCL	4.479		
90% Chebyshev(Mean, Sd) UCL	4.691	95% Chebyshev(Mean, Sd) UCL	4.91
97.5% Chebyshev(Mean, Sd) UCL	5.213	99% Chebyshev(Mean, Sd) UCL	5.81

Suggested UCL to Use

95% Student's-t UCL 4.493

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Appendix E-3b
Downgradient Groundwater ProUCL Output - Boron
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

Boron 2

General Statistics

Total Number of Observations	17	Number of Distinct Observations	14
		Number of Missing Observations	0
Minimum	3.3	Mean	4.095
Maximum	5.3	Median	3.9
SD	0.603	Std. Error of Mean	0.146
Coefficient of Variation	0.147	Skewness	0.686

Normal GOF Test

Shapiro Wilk Test Statistic	0.919	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.892	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.215	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.207	Data Not Normal at 5% Significance Level

Data appear Approximate Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	4.35	95% Adjusted-CLT UCL (Chen-1995)	4.361
		95% Modified-t UCL (Johnson-1978)	4.354

Gamma GOF Test

A-D Test Statistic	0.534	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.737	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.206	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.208	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	51.14	k star (bias corrected MLE)	42.15
Theta hat (MLE)	0.0801	Theta star (bias corrected MLE)	0.0971
nu hat (MLE)	1739	nu star (bias corrected)	1433
MLE Mean (bias corrected)	4.095	MLE Sd (bias corrected)	0.631
		Approximate Chi Square Value (0.05)	1346
Adjusted Level of Significance	0.0346	Adjusted Chi Square Value	1337

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	4.359	95% Adjusted Gamma UCL (use when n<50)	4.388

Appendix E-3b
Downgradient Groundwater ProUCL Output - Boron
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.938	**Shapiro Wilk Lognormal GOF Test**
5% Shapiro Wilk Critical Value	0.892	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.195	**Lilliefors Lognormal GOF Test**
5% Lilliefors Critical Value	0.207	Data appear Lognormal at 5% Significance Level

Data appear Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	1.194	Mean of logged Data	1.4
Maximum of Logged Data	1.668	SD of logged Data	0.143

Assuming Lognormal Distribution

95% H-UCL	4.362	90% Chebyshev (MVUE) UCL	4.521
95% Chebyshev (MVUE) UCL	4.715	97.5% Chebyshev (MVUE) UCL	4.983
99% Chebyshev (MVUE) UCL	5.511		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	4.335	95% Jackknife UCL	4.35
95% Standard Bootstrap UCL	4.324	95% Bootstrap-t UCL	4.384
95% Hall's Bootstrap UCL	4.363	95% Percentile Bootstrap UCL	4.341
95% BCA Bootstrap UCL	4.359		
90% Chebyshev(Mean, Sd) UCL	4.534	95% Chebyshev(Mean, Sd) UCL	4.732
97.5% Chebyshev(Mean, Sd) UCL	5.008	99% Chebyshev(Mean, Sd) UCL	5.55

Suggested UCL to Use

95% Student's-t UCL 4.35

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test
When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Appendix E-3b
Downgradient Groundwater ProUCL Output - Boron
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

Boron 3

General Statistics

Total Number of Observations	2	Number of Distinct Observations	2
		Number of Missing Observations	0
Minimum	3.4	Mean	3.45
Maximum	3.5	Median	3.45

Warning: This data set only has 2 observations!

Data set is too small to compute reliable and meaningful statistics and estimates!

The data set for variable Boron 3 was not processed!

It is suggested to collect at least 8 to 10 observations before using these statistical methods!

If possible, compute and collect Data Quality Objectives (DQO) based sample size and analytical results.

Appendix E-3c
Downgradient Groundwater ProUCL Output - Lithium
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

UCL Statistics for Data Sets with Non-Detects

User Selected Options	
Date/Time of Computation	ProUCL 5.19/18/2020 10:54:35 AM
From File	inputs.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

Lithium Step 1

General Statistics

Total Number of Observations	2	Number of Distinct Observations	2
Number of Detects	1	Number of Non-Detects	1
Number of Distinct Detects	1	Number of Distinct Non-Detects	1

Warning: This data set only has 2 observations!

Data set is too small to compute reliable and meaningful statistics and estimates!

The data set for variable Lithium Option 1 was not processed!

It is suggested to collect at least 8 to 10 observations before using these statistical methods!

If possible, compute and collect Data Quality Objectives (DQO) based sample size and analytical results.

Lithium Step 2

General Statistics

Total Number of Observations	22	Number of Distinct Observations	11
Number of Detects	10	Number of Non-Detects	12
Number of Distinct Detects	8	Number of Distinct Non-Detects	3
Minimum Detect	0.0013	Minimum Non-Detect	0.0034
Maximum Detect	0.069	Maximum Non-Detect	0.01
Variance Detects	4.3640E-4	Percent Non-Detects	54.55%
Mean Detects	0.00971	SD Detects	0.0209
Median Detects	0.0031	CV Detects	2.151
Skewness Detects	3.13	Kurtosis Detects	9.847
Mean of Logged Detects	-5.563	SD of Logged Detects	1.123

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.43	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.842	Detected Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.455	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.262	Detected Data Not Normal at 5% Significance Level	

Detected Data Not Normal at 5% Significance Level

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Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.00584	KM Standard Error of Mean	0.00312
KM SD	0.0138	95% KM (BCA) UCL	0.0122
95% KM (t) UCL	0.0112	95% KM (Percentile Bootstrap) UCL	0.0117
95% KM (z) UCL	0.011	95% KM Bootstrap t UCL	0.0421
90% KM Chebyshev UCL	0.0152	95% KM Chebyshev UCL	0.0194
97.5% KM Chebyshev UCL	0.0253	99% KM Chebyshev UCL	0.0369

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.798	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.764	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.388	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.278	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.657	k star (bias corrected MLE)	0.526
Theta hat (MLE)	0.0148	Theta star (bias corrected MLE)	0.0184
nu hat (MLE)	13.13	nu star (bias corrected)	10.53
Mean (detects)	0.00971		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0013	Mean	0.0101
Maximum	0.069	Median	0.01
SD	0.0137	CV	1.358
k hat (MLE)	1.312	k star (bias corrected MLE)	1.164
Theta hat (MLE)	0.0077	Theta star (bias corrected MLE)	0.00869
nu hat (MLE)	57.75	nu star (bias corrected)	51.21
Adjusted Level of Significance (β)	0.0386		
Approximate Chi Square Value (51.21, α)	35.77	Adjusted Chi Square Value (51.21, β)	34.81
95% Gamma Approximate UCL (use when n>=50)	0.0145	95% Gamma Adjusted UCL (use when n<50)	0.0149

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.00584	SD (KM)	0.0138
Variance (KM)	1.9148E-4	SE of Mean (KM)	0.00312
k hat (KM)	0.178	k star (KM)	0.184
nu hat (KM)	7.834	nu star (KM)	8.099
theta hat (KM)	0.0328	theta star (KM)	0.0317
80% gamma percentile (KM)	0.00734	90% gamma percentile (KM)	0.0176
95% gamma percentile (KM)	0.0307	99% gamma percentile (KM)	0.0673

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Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (8.10, α)	2.792	Adjusted Chi Square Value (8.10, β)	2.565
95% Gamma Approximate KM-UCL (use when n>=50)	0.0169	95% Gamma Adjusted KM-UCL (use when n<50)	0.0184

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.761	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.842	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.303	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.262	Detected Data Not Lognormal at 5% Significance Level	

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.00608	Mean in Log Scale	-5.779
SD in Original Scale	0.0142	SD in Log Scale	0.885
95% t UCL (assumes normality of ROS data)	0.0113	95% Percentile Bootstrap UCL	0.012
95% BCA Bootstrap UCL	0.0153	95% Bootstrap t UCL	0.0409
95% H-UCL (Log ROS)	0.00731		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-5.811	KM Geo Mean	0.003
KM SD (logged)	0.805	95% Critical H Value (KM-Log)	2.327
KM Standard Error of Mean (logged)	0.206	95% H-UCL (KM -Log)	0.00623
KM SD (logged)	0.805	95% Critical H Value (KM-Log)	2.327
KM Standard Error of Mean (logged)	0.206		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.00585	Mean in Log Scale	-5.783
SD in Original Scale	0.0142	SD in Log Scale	0.782
95% t UCL (Assumes normality)	0.011	95% H-Stat UCL	0.00619

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL	0.0194

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

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Lithium Step 3

General Statistics

Total Number of Observations	3	Number of Distinct Observations	1
Number of Detects	0	Number of Non-Detects	3
Number of Distinct Detects	0	Number of Distinct Non-Detects	1

Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!
Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!
The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Lithium Option 3 was not processed!

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UCL Statistics for Data Sets with Non-Detects

User Selected Options	
Date/Time of Computation	ProUCL 5.19/28/2020 10:35:37 AM
From File	co 92820.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

SE2 Cobalt Step 1

General Statistics

Total Number of Observations	14	Number of Distinct Observations	9
		Number of Missing Observations	0
Minimum	0.13	Mean	0.204
Maximum	0.261	Median	0.2
SD	0.046	Std. Error of Mean	0.0123
Coefficient of Variation	0.225	Skewness	-0.267

Normal GOF Test

Shapiro Wilk Test Statistic	0.918	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.874	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.14	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.226	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		**95% UCLs (Adjusted for Skewness)**	
95% Student's-t UCL	0.226	95% Adjusted-CLT UCL (Chen-1995)	0.224
		95% Modified-t UCL (Johnson-1978)	0.226

Gamma GOF Test

A-D Test Statistic	0.449	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.734	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.158	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.228	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

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Gamma Statistics

k hat (MLE)	19.75	k star (bias corrected MLE)	15.57
Theta hat (MLE)	0.0103	Theta star (bias corrected MLE)	0.0131
nu hat (MLE)	553.1	nu star (bias corrected)	435.9
MLE Mean (bias corrected)	0.204	MLE Sd (bias corrected)	0.0518
		Approximate Chi Square Value (0.05)	388.5
Adjusted Level of Significance	0.0312	Adjusted Chi Square Value	382.6

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	0.229	95% Adjusted Gamma UCL (use when n<50)	0.233

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.902	**Shapiro Wilk Lognormal GOF Test**	
5% Shapiro Wilk Critical Value	0.874	Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.154	**Lilliefors Lognormal GOF Test**	
5% Lilliefors Critical Value	0.226	Data appear Lognormal at 5% Significance Level	

Data appear Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	-2.04	Mean of logged Data	-1.613
Maximum of Logged Data	-1.343	SD of logged Data	0.24

Assuming Lognormal Distribution

95% H-UCL	0.232	90% Chebyshev (MVUE) UCL	0.244
95% Chebyshev (MVUE) UCL	0.262	97.5% Chebyshev (MVUE) UCL	0.287
99% Chebyshev (MVUE) UCL	0.336		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	0.225	95% Jackknife UCL	0.226
95% Standard Bootstrap UCL	0.224	95% Bootstrap-t UCL	0.225
95% Hall's Bootstrap UCL	0.223	95% Percentile Bootstrap UCL	0.224
95% BCA Bootstrap UCL	0.222		
90% Chebyshev(Mean, Sd) UCL	0.241	95% Chebyshev(Mean, Sd) UCL	0.258
97.5% Chebyshev(Mean, Sd) UCL	0.281	99% Chebyshev(Mean, Sd) UCL	0.327

Suggested UCL to Use

95% Student's-t UCL	0.226

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Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Note: For highly negatively-skewed data, confidence limits (e.g., Chen, Johnson, Lognormal, and Gamma) may not be reliable. Chen's and Johnson's methods provide adjustments for positvely skewed data sets.

SE2 Cobalt Step 2

General Statistics

Total Number of Observations	16	Number of Distinct Observations	11
		Number of Missing Observations	0
Minimum	0.0064	Mean	0.18
Maximum	0.261	Median	0.19
SD	0.0797	Std. Error of Mean	0.0199
Coefficient of Variation	0.443	Skewness	-1.246

Normal GOF Test

Shapiro Wilk Test Statistic	0.849	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.887	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.189	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.213	Data appear Normal at 5% Significance Level

Data appear Approximate Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		**95% UCLs (Adjusted for Skewness)**	
95% Student's-t UCL	0.215	95% Adjusted-CLT UCL (Chen-1995)	0.206
		95% Modified-t UCL (Johnson-1978)	0.214

Gamma GOF Test

A-D Test Statistic	2.351	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.752	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.315	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.218	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

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Gamma Statistics

k hat (MLE)	1.769	k star (bias corrected MLE)	1.479
Theta hat (MLE)	0.102	Theta star (bias corrected MLE)	0.122
nu hat (MLE)	56.61	nu star (bias corrected)	47.33
MLE Mean (bias corrected)	0.18	MLE Sd (bias corrected)	0.148
		Approximate Chi Square Value (0.05)	32.54
Adjusted Level of Significance	0.0335	Adjusted Chi Square Value	31.15

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	0.261	95% Adjusted Gamma UCL (use when n<50)	0.273

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.58	**Shapiro Wilk Lognormal GOF Test**	
5% Shapiro Wilk Critical Value	0.887	Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.37	**Lilliefors Lognormal GOF Test**	
5% Lilliefors Critical Value	0.213	Data Not Lognormal at 5% Significance Level	

Data Not Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	-5.051	Mean of logged Data	-2.025
Maximum of Logged Data	-1.343	SD of logged Data	1.147

Assuming Lognormal Distribution

95% H-UCL	0.608	90% Chebyshev (MVUE) UCL	0.47
95% Chebyshev (MVUE) UCL	0.575	97.5% Chebyshev (MVUE) UCL	0.72
99% Chebyshev (MVUE) UCL	1.004		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	0.213	95% Jackknife UCL	0.215
95% Standard Bootstrap UCL	0.212	95% Bootstrap-t UCL	0.209
95% Hall's Bootstrap UCL	0.208	95% Percentile Bootstrap UCL	0.211
95% BCA Bootstrap UCL	0.208		
90% Chebyshev(Mean, Sd) UCL	0.24	95% Chebyshev(Mean, Sd) UCL	0.267
97.5% Chebyshev(Mean, Sd) UCL	0.304	99% Chebyshev(Mean, Sd) UCL	0.378

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Suggested UCL to Use

95% Student's-t UCL 0.215

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test
When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Note: For highly negatively-skewed data, confidence limits (e.g., Chen, Johnson, Lognormal, and Gamma) may not be reliable. Chen's and Johnson's methods provide adjustments for positvely skewed data sets.

SE2 Cobalt Step 3

General Statistics

Total Number of Observations	1	Number of Distinct Observations	1
		Number of Missing Observations	15
Minimum	0.0086	Mean	0.0086
Maximum	0.0086	Median	0.0086

Warning: This data set only has 1 observations!
Data set is too small to compute reliable and meaningful statistics and estimates!
The data set for variable SE2 Cobalt Step 3 was not processed!

It is suggested to collect at least 8 to 10 observations before using these statistical methods!
If possible, compute and collect Data Quality Objectives (DQO) based sample size and analytical results.

SE1 Cobalt Step 1

General Statistics

Total Number of Observations	15	Number of Distinct Observations	11
		Number of Missing Observations	0
Minimum	0.085	Mean	0.14
Maximum	0.21	Median	0.13
SD	0.0393	Std. Error of Mean	0.0101
Coefficient of Variation	0.281	Skewness	0.414

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Normal GOF Test

Shapiro Wilk Test Statistic	0.924	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.881	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.194	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.22	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		**95% UCLs (Adjusted for Skewness)**	
95% Student's-t UCL	0.158	95% Adjusted-CLT UCL (Chen-1995)	0.158
		95% Modified-t UCL (Johnson-1978)	0.158

Gamma GOF Test

A-D Test Statistic	0.474	**Anderson-Darling Gamma GOF Test**	
5% A-D Critical Value	0.736	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.186	**Kolmogorov-Smirnov Gamma GOF Test**	
5% K-S Critical Value	0.221	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	13.8	k star (bias corrected MLE)	11.08
Theta hat (MLE)	0.0101	Theta star (bias corrected MLE)	0.0126
nu hat (MLE)	414	nu star (bias corrected)	332.5
MLE Mean (bias corrected)	0.14	MLE Sd (bias corrected)	0.042
		Approximate Chi Square Value (0.05)	291.3
Adjusted Level of Significance	0.0324	Adjusted Chi Square Value	286.5

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	0.16	95% Adjusted Gamma UCL (use when n<50)	0.162

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.941	**Shapiro Wilk Lognormal GOF Test**	
5% Shapiro Wilk Critical Value	0.881	Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.17	**Lilliefors Lognormal GOF Test**	
5% Lilliefors Critical Value	0.22	Data appear Lognormal at 5% Significance Level	

Data appear Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	-2.465	Mean of logged Data	-2.004
Maximum of Logged Data	-1.561	SD of logged Data	0.28

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Assuming Lognormal Distribution

95% H-UCL	0.161	90% Chebyshev (MVUE) UCL	0.17
95% Chebyshev (MVUE) UCL	0.184	97.5% Chebyshev (MVUE) UCL	0.204
99% Chebyshev (MVUE) UCL	0.242		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	0.156	95% Jackknife UCL	0.158
95% Standard Bootstrap UCL	0.156	95% Bootstrap-t UCL	0.16
95% Hall's Bootstrap UCL	0.156	95% Percentile Bootstrap UCL	0.156
95% BCA Bootstrap UCL	0.156		
90% Chebyshev(Mean, Sd) UCL	0.17	95% Chebyshev(Mean, Sd) UCL	0.184
97.5% Chebyshev(Mean, Sd) UCL	0.203	99% Chebyshev(Mean, Sd) UCL	0.241

Suggested UCL to Use

95% Student's-t UCL 0.158

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

SE1 Cobalt Step 2

General Statistics

Total Number of Observations	17	Number of Distinct Observations	13
		Number of Missing Observations	0
Minimum	0.0076	Mean	0.124
Maximum	0.21	Median	0.116
SD	0.057	Std. Error of Mean	0.0138
Coefficient of Variation	0.459	Skewness	-0.67

Normal GOF Test

Shapiro Wilk Test Statistic	0.925	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.892	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.165	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.207	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

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Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	0.148	95% Adjusted-CLT UCL (Chen-1995)	0.145
		95% Modified-t UCL (Johnson-1978)	0.148

Gamma GOF Test

A-D Test Statistic	1.725	**Anderson-Darling Gamma GOF Test**	
5% A-D Critical Value	0.749	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.286	**Kolmogorov-Smirnov Gamma GOF Test**	
5% K-S Critical Value	0.211	Data Not Gamma Distributed at 5% Significance Level	

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	2.18	k star (bias corrected MLE)	1.835
Theta hat (MLE)	0.057	Theta star (bias corrected MLE)	0.0678
nu hat (MLE)	74.13	nu star (bias corrected)	62.38
MLE Mean (bias corrected)	0.124	MLE Sd (bias corrected)	0.0918
		Approximate Chi Square Value (0.05)	45.21
Adjusted Level of Significance	0.0346	Adjusted Chi Square Value	43.68

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	0.172	95% Adjusted Gamma UCL (use when n<50)	0.178

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.649	**Shapiro Wilk Lognormal GOF Test**	
5% Shapiro Wilk Critical Value	0.892	Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.327	**Lilliefors Lognormal GOF Test**	
5% Lilliefors Critical Value	0.207	Data Not Lognormal at 5% Significance Level	

Data Not Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	-4.88	Mean of logged Data	-2.331
Maximum of Logged Data	-1.561	SD of logged Data	0.96

Assuming Lognormal Distribution

95% H-UCL	0.289	90% Chebyshev (MVUE) UCL	0.263
95% Chebyshev (MVUE) UCL	0.314	97.5% Chebyshev (MVUE) UCL	0.386
99% Chebyshev (MVUE) UCL	0.527		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

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Nonparametric Distribution Free UCLs

95% CLT UCL	0.147	95% Jackknife UCL	0.148
95% Standard Bootstrap UCL	0.146	95% Bootstrap-t UCL	0.146
95% Hall's Bootstrap UCL	0.146	95% Percentile Bootstrap UCL	0.145
95% BCA Bootstrap UCL	0.143		
90% Chebyshev(Mean, Sd) UCL	0.166	95% Chebyshev(Mean, Sd) UCL	0.185
97.5% Chebyshev(Mean, Sd) UCL	0.211	99% Chebyshev(Mean, Sd) UCL	0.262

Suggested UCL to Use

95% Student's-t UCL	0.148

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Note: For highly negatively-skewed data, confidence limits (e.g., Chen, Johnson, Lognormal, and Gamma) may not be reliable. Chen's and Johnson's methods provide adjustments for positvely skewed data sets.

SE1 Cobalt Step 3

General Statistics

Total Number of Observations	1	Number of Distinct Observations	1
		Number of Missing Observations	16
Minimum	0.0092	Mean	0.0092
Maximum	0.0092	Median	0.0092

Warning: This data set only has 1 observations!
Data set is too small to compute reliable and meaningful statistics and estimates!
The data set for variable SE1 Cobalt Step 3 was not processed!

It is suggested to collect at least 8 to 10 observations before using these statistical methods!
If possible, compute and collect Data Quality Objectives (DQO) based sample size and analytical results.

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E Cobalt Step 1

General Statistics

Total Number of Observations	14	Number of Distinct Observations	8
		Number of Missing Observations	0
Minimum	0.24	Mean	0.269
Maximum	0.3	Median	0.269
SD	0.0152	Std. Error of Mean	0.00407
Coefficient of Variation	0.0566	Skewness	0.363

Normal GOF Test

Shapiro Wilk Test Statistic	0.957	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.874	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.181	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.226	Data appear Normal at 5% Significance Level

Data appear Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	0.276	95% Adjusted-CLT UCL (Chen-1995)	0.276
		95% Modified-t UCL (Johnson-1978)	0.276

Gamma GOF Test

A-D Test Statistic	0.366	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.733	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.172	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.228	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	338.4	k star (bias corrected MLE)	265.9
Theta hat (MLE)	7.9406E-4	Theta star (bias corrected MLE)	0.00101
nu hat (MLE)	9475	nu star (bias corrected)	7446
MLE Mean (bias corrected)	0.269	MLE Sd (bias corrected)	0.0165
		Approximate Chi Square Value (0.05)	7247
Adjusted Level of Significance	0.0312	Adjusted Chi Square Value	7221

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	0.276	95% Adjusted Gamma UCL (use when n<50)	0.277

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Lognormal GOF Test

Shapiro Wilk Test Statistic	0.961	**Shapiro Wilk Lognormal GOF Test**
5% Shapiro Wilk Critical Value	0.874	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.17	**Lilliefors Lognormal GOF Test**
5% Lilliefors Critical Value	0.226	Data appear Lognormal at 5% Significance Level

Data appear Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	-1.427	Mean of logged Data	-1.316
Maximum of Logged Data	-1.204	SD of logged Data	0.0563

Assuming Lognormal Distribution

95% H-UCL	N/A	90% Chebyshev (MVUE) UCL	0.281
95% Chebyshev (MVUE) UCL	0.286	97.5% Chebyshev (MVUE) UCL	0.294
99% Chebyshev (MVUE) UCL	0.309		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	0.275	95% Jackknife UCL	0.276
95% Standard Bootstrap UCL	0.275	95% Bootstrap-t UCL	0.276
95% Hall's Bootstrap UCL	0.278	95% Percentile Bootstrap UCL	0.275
95% BCA Bootstrap UCL	0.275		
90% Chebyshev(Mean, Sd) UCL	0.281	95% Chebyshev(Mean, Sd) UCL	0.286
97.5% Chebyshev(Mean, Sd) UCL	0.294	99% Chebyshev(Mean, Sd) UCL	0.309

Suggested UCL to Use

95% Student's-t UCL	0.276

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

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E Cobalt Step 2

General Statistics

Total Number of Observations	16	Number of Distinct Observations	10
Number of Detects	15	Number of Non-Detects	1
Number of Distinct Detects	9	Number of Distinct Non-Detects	1
Minimum Detect	5.1000E-4	Minimum Non-Detect	0.0025
Maximum Detect	0.3	Maximum Non-Detect	0.0025
Variance Detects	0.00501	Percent Non-Detects	6.25%
Mean Detects	0.251	SD Detects	0.0708
Median Detects	0.267	CV Detects	0.282
Skewness Detects	-3.585	Kurtosis Detects	13.46
Mean of Logged Detects	-1.733	SD of Logged Detects	1.619

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.48	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.881	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.39	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.22	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.235	KM Standard Error of Mean	0.0232
KM SD	0.0898	95% KM (BCA) UCL	0.27
95% KM (t) UCL	0.276	95% KM (Percentile Bootstrap) UCL	0.269
95% KM (z) UCL	0.273	95% KM Bootstrap t UCL	0.263
90% KM Chebyshev UCL	0.305	95% KM Chebyshev UCL	0.336
97.5% KM Chebyshev UCL	0.38	99% KM Chebyshev UCL	0.466

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	4.86	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.753	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.518	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.225	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	1.573	k star (bias corrected MLE)	1.303
Theta hat (MLE)	0.159	Theta star (bias corrected MLE)	0.193
nu hat (MLE)	47.2	nu star (bias corrected)	39.09
Mean (detects)	0.251		

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Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	5.1000E-4	Mean	0.248
Maximum	0.3	Median	0.264
SD	0.0695	CV	0.281
k hat (MLE)	1.663	k star (bias corrected MLE)	1.393
Theta hat (MLE)	0.149	Theta star (bias corrected MLE)	0.178
nu hat (MLE)	53.22	nu star (bias corrected)	44.57
Adjusted Level of Significance (β)	0.0335		
Approximate Chi Square Value (44.57, α)	30.26	Adjusted Chi Square Value (44.57, β)	28.92
95% Gamma Approximate UCL (use when n>=50)	0.365	95% Gamma Adjusted UCL (use when n<50)	0.382

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.235	SD (KM)	0.0898
Variance (KM)	0.00806	SE of Mean (KM)	0.0232
k hat (KM)	6.866	k star (KM)	5.62
nu hat (KM)	219.7	nu star (KM)	179.9
theta hat (KM)	0.0343	theta star (KM)	0.0418
80% gamma percentile (KM)	0.312	90% gamma percentile (KM)	0.368
95% gamma percentile (KM)	0.418	99% gamma percentile (KM)	0.525

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (179.86, α)	149.8	Adjusted Chi Square Value (179.86, β)	146.7
95% Gamma Approximate KM-UCL (use when n>=50)	0.282	95% Gamma Adjusted KM-UCL (use when n<50)	0.288

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.314	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.881	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.508	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.22	Detected Data Not Lognormal at 5% Significance Level	

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.237	Mean in Log Scale	-1.844
SD in Original Scale	0.0879	SD in Log Scale	1.626
95% t UCL (assumes normality of ROS data)	0.276	95% Percentile Bootstrap UCL	0.27
95% BCA Bootstrap UCL	0.265	95% Bootstrap t UCL	0.266
95% H-UCL (Log ROS)	2.886		

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Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-2.099	KM Geo Mean	0.123
KM SD (logged)	2.073	95% Critical H Value (KM-Log)	4.608
KM Standard Error of Mean (logged)	0.536	95% H-UCL (KM -Log)	12.37
KM SD (logged)	2.073	95% Critical H Value (KM-Log)	4.608
KM Standard Error of Mean (logged)	0.536		

DL/2 Statistics

DL/2 Normal		DL/2 Log-Transformed	
Mean in Original Scale	0.235	Mean in Log Scale	-2.043
SD in Original Scale	0.0926	SD in Log Scale	1.994
95% t UCL (Assumes normality)	0.276	95% H-Stat UCL	9.416

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

975% KM (Chebyshev) UCL 0.38

Warning: Recommended UCL exceeds the maximum observation

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

E Cobalt Step 3

General Statistics

Total Number of Observations	1	Number of Distinct Observations	1
		Number of Missing Observations	15
Minimum	5.1000E-4	Mean	5.1000E-4
Maximum	5.1000E-4	Median	5.1000E-4

Warning: This data set only has 1 observations!
Data set is too small to compute reliable and meaningful statistics and estimates!
The data set for variable E Cobalt Step 3 was not processed!

It is suggested to collect at least 8 to 10 observations before using these statistical methods!
If possible, compute and collect Data Quality Objectives (DQO) based sample size and analytical results.

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NE2 Cobalt Step 1

General Statistics

Total Number of Observations	15	Number of Distinct Observations	11
		Number of Missing Observations	0
Minimum	0.021	Mean	0.0276
Maximum	0.0378	Median	0.028
SD	0.00458	Std. Error of Mean	0.00118
Coefficient of Variation	0.166	Skewness	0.585

Normal GOF Test

Shapiro Wilk Test Statistic	0.961	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.881	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.117	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.22	Data appear Normal at 5% Significance Level

Data appear Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	0.0297	95% Adjusted-CLT UCL (Chen-1995)	0.0297
		95% Modified-t UCL (Johnson-1978)	0.0297

Gamma GOF Test

A-D Test Statistic	0.215	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.735	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.125	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.221	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	40.06	k star (bias corrected MLE)	32.09
Theta hat (MLE)	6.8895E-4	Theta star (bias corrected MLE)	8.5999E-4
nu hat (MLE)	1202	nu star (bias corrected)	962.8
MLE Mean (bias corrected)	0.0276	MLE Sd (bias corrected)	0.00487
		Approximate Chi Square Value (0.05)	891.8
Adjusted Level of Significance	0.0324	Adjusted Chi Square Value	883.4

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	0.0298	95% Adjusted Gamma UCL (use when n<50)	0.0301

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Lognormal GOF Test

Shapiro Wilk Test Statistic	0.976	**Shapiro Wilk Lognormal GOF Test**
5% Shapiro Wilk Critical Value	0.881	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.116	**Lilliefors Lognormal GOF Test**
5% Lilliefors Critical Value	0.22	Data appear Lognormal at 5% Significance Level

Data appear Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	-3.863	Mean of logged Data	-3.602
Maximum of Logged Data	-3.275	SD of logged Data	0.163

Assuming Lognormal Distribution

95% H-UCL	0.0299	90% Chebyshev (MVUE) UCL	0.0311
95% Chebyshev (MVUE) UCL	0.0327	97.5% Chebyshev (MVUE) UCL	0.0349
99% Chebyshev (MVUE) UCL	0.0392		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	0.0295	95% Jackknife UCL	0.0297
95% Standard Bootstrap UCL	0.0295	95% Bootstrap-t UCL	0.0299
95% Hall's Bootstrap UCL	0.0299	95% Percentile Bootstrap UCL	0.0296
95% BCA Bootstrap UCL	0.0296		
90% Chebyshev(Mean, Sd) UCL	0.0311	95% Chebyshev(Mean, Sd) UCL	0.0328
97.5% Chebyshev(Mean, Sd) UCL	0.035	99% Chebyshev(Mean, Sd) UCL	0.0394

Suggested UCL to Use

95% Student's-t UCL	0.0297

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

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NE2 Cobalt Step 2

General Statistics

Total Number of Observations	19	Number of Distinct Observations	14
Number of Detects	17	Number of Non-Detects	2
Number of Distinct Detects	13	Number of Distinct Non-Detects	1
Minimum Detect	0.0021	Minimum Non-Detect	5.0000E-4
Maximum Detect	0.0378	Maximum Non-Detect	5.0000E-4
Variance Detects	7.7039E-5	Percent Non-Detects	10.53%
Mean Detects	0.0249	SD Detects	0.00878
Median Detects	0.026	CV Detects	0.352
Skewness Detects	-1.463	Kurtosis Detects	2.533
Mean of Logged Detects	-3.831	SD of Logged Detects	0.698

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.857	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.892	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.211	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.207	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.0223	KM Standard Error of Mean	0.0026
KM SD	0.011	95% KM (BCA) UCL	0.0261
95% KM (t) UCL	0.0268	95% KM (Percentile Bootstrap) UCL	0.0264
95% KM (z) UCL	0.0266	95% KM Bootstrap t UCL	0.0263
90% KM Chebyshev UCL	0.0301	95% KM Chebyshev UCL	0.0337
97.5% KM Chebyshev UCL	0.0386	99% KM Chebyshev UCL	0.0482

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	2.142	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.743	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.324	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.21	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	3.779	k star (bias corrected MLE)	3.151
Theta hat (MLE)	0.00659	Theta star (bias corrected MLE)	0.0079
nu hat (MLE)	128.5	nu star (bias corrected)	107.1
Mean (detects)	0.0249		

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Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0021	Mean	0.0236
Maximum	0.0378	Median	0.026
SD	0.00921	CV	0.391
k hat (MLE)	3.628	k star (bias corrected MLE)	3.09
Theta hat (MLE)	0.00649	Theta star (bias corrected MLE)	0.00762
nu hat (MLE)	137.9	nu star (bias corrected)	117.4
Adjusted Level of Significance (β)	0.0369		
Approximate Chi Square Value (117.42, α)	93.4	Adjusted Chi Square Value (117.42, β)	91.53
95% Gamma Approximate UCL (use when n>=50)	0.0296	95% Gamma Adjusted UCL (use when n<50)	0.0302

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.0223	SD (KM)	0.011
Variance (KM)	1.2097E-4	SE of Mean (KM)	0.0026
k hat (KM)	4.124	k star (KM)	3.508
nu hat (KM)	156.7	nu star (KM)	133.3
theta hat (KM)	0.00542	theta star (KM)	0.00637
80% gamma percentile (KM)	0.0313	90% gamma percentile (KM)	0.0383
95% gamma percentile (KM)	0.0449	99% gamma percentile (KM)	0.0589

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (133.31, α)	107.6	Adjusted Chi Square Value (133.31, β)	105.6
95% Gamma Approximate KM-UCL (use when n>=50)	0.0277	95% Gamma Adjusted KM-UCL (use when n<50)	0.0282

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.606	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.892	Detected Data Not Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.364	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.207	Detected Data Not Lognormal at 5% Significance Level

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.023	Mean in Log Scale	-3.954
SD in Original Scale	0.0101	SD in Log Scale	0.755
95% t UCL (assumes normality of ROS data)	0.027	95% Percentile Bootstrap UCL	0.0266
95% BCA Bootstrap UCL	0.0262	95% Bootstrap t UCL	0.0265
95% H-UCL (Log ROS)	0.0383		

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Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-4.228	KM Geo Mean	0.0146
KM SD (logged)	1.322	95% Critical H Value (KM-Log)	3.098
KM Standard Error of Mean (logged)	0.313	95% H-UCL (KM -Log)	0.0919
KM SD (logged)	1.322	95% Critical H Value (KM-Log)	3.098
KM Standard Error of Mean (logged)	0.313		

DL/2 Statistics

DL/2 Normal		DL/2 Log-Transformed	
Mean in Original Scale	0.0223	Mean in Log Scale	-4.301
SD in Original Scale	0.0114	SD in Log Scale	1.554
95% t UCL (Assumes normality)	0.0268	95% H-Stat UCL	0.162

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL 0.0337

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

NE2 Cobalt Step 3

General Statistics

Total Number of Observations	2	Number of Distinct Observations	1
		Number of Missing Observations	15
Number of Detects	0	Number of Non-Detects	2
Number of Distinct Detects	0	Number of Distinct Non-Detects	1

Warning: This data set only has 2 observations!
Data set is too small to compute reliable and meaningful statistics and estimates!
The data set for variable NE2 Cobalt Step 3 was not processed!

It is suggested to collect at least 8 to 10 observations before using these statistical methods!
If possible, compute and collect Data Quality Objectives (DQO) based sample size and analytical results.

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NW Cobalt Step 1

General Statistics

Total Number of Observations	14	Number of Distinct Observations	14
		Number of Missing Observations	0
Minimum	0.0034	Mean	0.00938
Maximum	0.021	Median	0.0096
SD	0.00492	Std. Error of Mean	0.00132
Coefficient of Variation	0.525	Skewness	0.855

Normal GOF Test

Shapiro Wilk Test Statistic	0.922	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.874	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.169	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.226	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		**95% UCLs (Adjusted for Skewness)**	
95% Student's-t UCL	0.0117	95% Adjusted-CLT UCL (Chen-1995)	0.0119
		95% Modified-t UCL (Johnson-1978)	0.0118

Gamma GOF Test

A-D Test Statistic	0.329	**Anderson-Darling Gamma GOF Test**	
5% A-D Critical Value	0.74	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.153	**Kolmogorov-Smirnov Gamma GOF Test**	
5% K-S Critical Value	0.23	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	3.943	k star (bias corrected MLE)	3.146
Theta hat (MLE)	0.00238	Theta star (bias corrected MLE)	0.00298
nu hat (MLE)	110.4	nu star (bias corrected)	88.09
MLE Mean (bias corrected)	0.00938	MLE Sd (bias corrected)	0.00529
		Approximate Chi Square Value (0.05)	67.45
Adjusted Level of Significance	0.0312	Adjusted Chi Square Value	65.06

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	0.0122	95% Adjusted Gamma UCL (use when n<50)	0.0127

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Lognormal GOF Test

Shapiro Wilk Test Statistic	0.954	**Shapiro Wilk Lognormal GOF Test**
5% Shapiro Wilk Critical Value	0.874	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.161	**Lilliefors Lognormal GOF Test**
5% Lilliefors Critical Value	0.226	Data appear Lognormal at 5% Significance Level

Data appear Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	-5.684	Mean of logged Data	-4.801
Maximum of Logged Data	-3.863	SD of logged Data	0.545

Assuming Lognormal Distribution

95% H-UCL	0.013	90% Chebyshev (MVUE) UCL	0.0137
95% Chebyshev (MVUE) UCL	0.0156	97.5% Chebyshev (MVUE) UCL	0.0183
99% Chebyshev (MVUE) UCL	0.0235		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	0.0115	95% Jackknife UCL	0.0117
95% Standard Bootstrap UCL	0.0115	95% Bootstrap-t UCL	0.0122
95% Hall's Bootstrap UCL	0.0122	95% Percentile Bootstrap UCL	0.0115
95% BCA Bootstrap UCL	0.0117		
90% Chebyshev(Mean, Sd) UCL	0.0133	95% Chebyshev(Mean, Sd) UCL	0.0151
97.5% Chebyshev(Mean, Sd) UCL	0.0176	99% Chebyshev(Mean, Sd) UCL	0.0225

Suggested UCL to Use

95% Student's-t UCL	0.0117

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Appendix E-3d
Downgradient Groundwater ProUCL Output - Cobalt
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

NW Cobalt Step 2

General Statistics

Total Number of Observations	14	Number of Distinct Observations	14
		Number of Missing Observations	0
Minimum	0.0034	Mean	0.00938
Maximum	0.021	Median	0.0096
SD	0.00492	Std. Error of Mean	0.00132
Coefficient of Variation	0.525	Skewness	0.855

Normal GOF Test

Shapiro Wilk Test Statistic	0.922	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.874	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.169	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.226	Data appear Normal at 5% Significance Level

Data appear Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	0.0117	95% Adjusted-CLT UCL (Chen-1995)	0.0119
		95% Modified-t UCL (Johnson-1978)	0.0118

Gamma GOF Test

A-D Test Statistic	0.329	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.74	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.153	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.23	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	3.943	k star (bias corrected MLE)	3.146
Theta hat (MLE)	0.00238	Theta star (bias corrected MLE)	0.00298
nu hat (MLE)	110.4	nu star (bias corrected)	88.09
MLE Mean (bias corrected)	0.00938	MLE Sd (bias corrected)	0.00529
		Approximate Chi Square Value (0.05)	67.45
Adjusted Level of Significance	0.0312	Adjusted Chi Square Value	65.06

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	0.0122	95% Adjusted Gamma UCL (use when n<50)	0.0127

Appendix E-3d
Downgradient Groundwater ProUCL Output - Cobalt
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.954	**Shapiro Wilk Lognormal GOF Test**
5% Shapiro Wilk Critical Value	0.874	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.161	**Lilliefors Lognormal GOF Test**
5% Lilliefors Critical Value	0.226	Data appear Lognormal at 5% Significance Level

Data appear Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	-5.684	Mean of logged Data	-4.801
Maximum of Logged Data	-3.863	SD of logged Data	0.545

Assuming Lognormal Distribution

95% H-UCL	0.013	90% Chebyshev (MVUE) UCL	0.0137
95% Chebyshev (MVUE) UCL	0.0156	97.5% Chebyshev (MVUE) UCL	0.0183
99% Chebyshev (MVUE) UCL	0.0235		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	0.0115	95% Jackknife UCL	0.0117
95% Standard Bootstrap UCL	0.0114	95% Bootstrap-t UCL	0.012
95% Hall's Bootstrap UCL	0.0123	95% Percentile Bootstrap UCL	0.0115
95% BCA Bootstrap UCL	0.0117		
90% Chebyshev(Mean, Sd) UCL	0.0133	95% Chebyshev(Mean, Sd) UCL	0.0151
97.5% Chebyshev(Mean, Sd) UCL	0.0176	99% Chebyshev(Mean, Sd) UCL	0.0225

Suggested UCL to Use

95% Student's-t UCL	0.0117

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Appendix E-3d
Downgradient Groundwater ProUCL Output - Cobalt
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

NW Cobalt Step 3

General Statistics

Total Number of Observations	14	Number of Distinct Observations	14
		Number of Missing Observations	0
Minimum	0.0034	Mean	0.00938
Maximum	0.021	Median	0.0096
SD	0.00492	Std. Error of Mean	0.00132
Coefficient of Variation	0.525	Skewness	0.855

Normal GOF Test

Shapiro Wilk Test Statistic	0.922	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.874	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.169	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.226	Data appear Normal at 5% Significance Level

Data appear Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	0.0117	95% Adjusted-CLT UCL (Chen-1995)	0.0119
		95% Modified-t UCL (Johnson-1978)	0.0118

Gamma GOF Test

A-D Test Statistic	0.329	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.74	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.153	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.23	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	3.943	k star (bias corrected MLE)	3.146
Theta hat (MLE)	0.00238	Theta star (bias corrected MLE)	0.00298
nu hat (MLE)	110.4	nu star (bias corrected)	88.09
MLE Mean (bias corrected)	0.00938	MLE Sd (bias corrected)	0.00529
		Approximate Chi Square Value (0.05)	67.45
Adjusted Level of Significance	0.0312	Adjusted Chi Square Value	65.06

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	0.0122	95% Adjusted Gamma UCL (use when n<50)	0.0127

Appendix E-3d
Downgradient Groundwater ProUCL Output - Cobalt
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.954	**Shapiro Wilk Lognormal GOF Test**
5% Shapiro Wilk Critical Value	0.874	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.161	**Lilliefors Lognormal GOF Test**
5% Lilliefors Critical Value	0.226	Data appear Lognormal at 5% Significance Level

Data appear Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	-5.684	Mean of logged Data	-4.801
Maximum of Logged Data	-3.863	SD of logged Data	0.545

Assuming Lognormal Distribution

95% H-UCL	0.013	90% Chebyshev (MVUE) UCL	0.0137
95% Chebyshev (MVUE) UCL	0.0156	97.5% Chebyshev (MVUE) UCL	0.0183
99% Chebyshev (MVUE) UCL	0.0235		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	0.0115	95% Jackknife UCL	0.0117
95% Standard Bootstrap UCL	0.0114	95% Bootstrap-t UCL	0.0121
95% Hall's Bootstrap UCL	0.0123	95% Percentile Bootstrap UCL	0.0114
95% BCA Bootstrap UCL	0.0116		
90% Chebyshev(Mean, Sd) UCL	0.0133	95% Chebyshev(Mean, Sd) UCL	0.0151
97.5% Chebyshev(Mean, Sd) UCL	0.0176	99% Chebyshev(Mean, Sd) UCL	0.0225

Suggested UCL to Use

95% Student's-t UCL	0.0117

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Appendix E-3d
Downgradient Groundwater ProUCL Output - Cobalt
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

NE1 Cobalt Step 1

General Statistics

Total Number of Observations	14	Number of Distinct Observations	12
		Number of Missing Observations	0
Minimum	0.014	Mean	0.0268
Maximum	0.05	Median	0.0235
SD	0.0103	Std. Error of Mean	0.00276
Coefficient of Variation	0.385	Skewness	0.977

Normal GOF Test

Shapiro Wilk Test Statistic	0.91	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.874	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.179	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.226	Data appear Normal at 5% Significance Level

Data appear Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	0.0317	95% Adjusted-CLT UCL (Chen-1995)	0.0321
		95% Modified-t UCL (Johnson-1978)	0.0318

Gamma GOF Test

A-D Test Statistic	0.36	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.736	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.163	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.229	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	8.012	k star (bias corrected MLE)	6.343
Theta hat (MLE)	0.00335	Theta star (bias corrected MLE)	0.00423
nu hat (MLE)	224.3	nu star (bias corrected)	177.6
MLE Mean (bias corrected)	0.0268	MLE Sd (bias corrected)	0.0106
		Approximate Chi Square Value (0.05)	147.8
Adjusted Level of Significance	0.0312	Adjusted Chi Square Value	144.2

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	0.0322	95% Adjusted Gamma UCL (use when n<50)	0.033

Appendix E-3d
Downgradient Groundwater ProUCL Output - Cobalt
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.963	**Shapiro Wilk Lognormal GOF Test**
5% Shapiro Wilk Critical Value	0.874	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.143	**Lilliefors Lognormal GOF Test**
5% Lilliefors Critical Value	0.226	Data appear Lognormal at 5% Significance Level

Data appear Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	-4.269	Mean of logged Data	-3.683
Maximum of Logged Data	-2.996	SD of logged Data	0.365

Assuming Lognormal Distribution

95% H-UCL	0.0328	90% Chebyshev (MVUE) UCL	0.0347
95% Chebyshev (MVUE) UCL	0.0383	97.5% Chebyshev (MVUE) UCL	0.0433
99% Chebyshev (MVUE) UCL	0.0531		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	0.0313	95% Jackknife UCL	0.0317
95% Standard Bootstrap UCL	0.0312	95% Bootstrap-t UCL	0.0327
95% Hall's Bootstrap UCL	0.0325	95% Percentile Bootstrap UCL	0.0315
95% BCA Bootstrap UCL	0.0319		
90% Chebyshev(Mean, Sd) UCL	0.0351	95% Chebyshev(Mean, Sd) UCL	0.0388
97.5% Chebyshev(Mean, Sd) UCL	0.044	99% Chebyshev(Mean, Sd) UCL	0.0543

Suggested UCL to Use

95% Student's-t UCL	0.0317

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Appendix E-3d
Downgradient Groundwater ProUCL Output - Cobalt
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

NE1 Cobalt Step 2

General Statistics

Total Number of Observations	15	Number of Distinct Observations	13
		Number of Missing Observations	0
Minimum	0.0057	Mean	0.0254
Maximum	0.05	Median	0.022
SD	0.0113	Std. Error of Mean	0.00293
Coefficient of Variation	0.447	Skewness	0.578

Normal GOF Test

Shapiro Wilk Test Statistic	0.961	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.881	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.151	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.22	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		**95% UCLs (Adjusted for Skewness)**	
95% Student's-t UCL	0.0306	95% Adjusted-CLT UCL (Chen-1995)	0.0307
		95% Modified-t UCL (Johnson-1978)	0.0306

Gamma GOF Test

A-D Test Statistic	0.279	**Anderson-Darling Gamma GOF Test**	
5% A-D Critical Value	0.739	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.157	**Kolmogorov-Smirnov Gamma GOF Test**	
5% K-S Critical Value	0.222	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	4.758	k star (bias corrected MLE)	3.851
Theta hat (MLE)	0.00534	Theta star (bias corrected MLE)	0.0066
nu hat (MLE)	142.7	nu star (bias corrected)	115.5
MLE Mean (bias corrected)	0.0254	MLE Sd (bias corrected)	0.0129
		Approximate Chi Square Value (0.05)	91.71
Adjusted Level of Significance	0.0324	Adjusted Chi Square Value	89.1

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	0.032	95% Adjusted Gamma UCL (use when n<50)	0.0329

Appendix E-3d
Downgradient Groundwater ProUCL Output - Cobalt
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.918	**Shapiro Wilk Lognormal GOF Test**
5% Shapiro Wilk Critical Value	0.881	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.192	**Lilliefors Lognormal GOF Test**
5% Lilliefors Critical Value	0.22	Data appear Lognormal at 5% Significance Level

Data appear Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	-5.167	Mean of logged Data	-3.782
Maximum of Logged Data	-2.996	SD of logged Data	0.52

Assuming Lognormal Distribution

95% H-UCL	0.0349	90% Chebyshev (MVUE) UCL	0.0366
95% Chebyshev (MVUE) UCL	0.0414	97.5% Chebyshev (MVUE) UCL	0.0482
99% Chebyshev (MVUE) UCL	0.0615		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	0.0302	95% Jackknife UCL	0.0306
95% Standard Bootstrap UCL	0.0301	95% Bootstrap-t UCL	0.0315
95% Hall's Bootstrap UCL	0.0317	95% Percentile Bootstrap UCL	0.0302
95% BCA Bootstrap UCL	0.0303		
90% Chebyshev(Mean, Sd) UCL	0.0342	95% Chebyshev(Mean, Sd) UCL	0.0382
97.5% Chebyshev(Mean, Sd) UCL	0.0437	99% Chebyshev(Mean, Sd) UCL	0.0545

Suggested UCL to Use

95% Student's-t UCL	0.0306

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Appendix E-3d
Downgradient Groundwater ProUCL Output - Cobalt
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

NE1 Cobalt Step 3

General Statistics

Total Number of Observations	1	Number of Distinct Observations	1
		Number of Missing Observations	14
Minimum	0.0057	Mean	0.0057
Maximum	0.0057	Median	0.0057

Warning: This data set only has 1 observations!

Data set is too small to compute reliable and meaningful statistics and estimates!

The data set for variable NE1 Cobalt Step 3 was not processed!

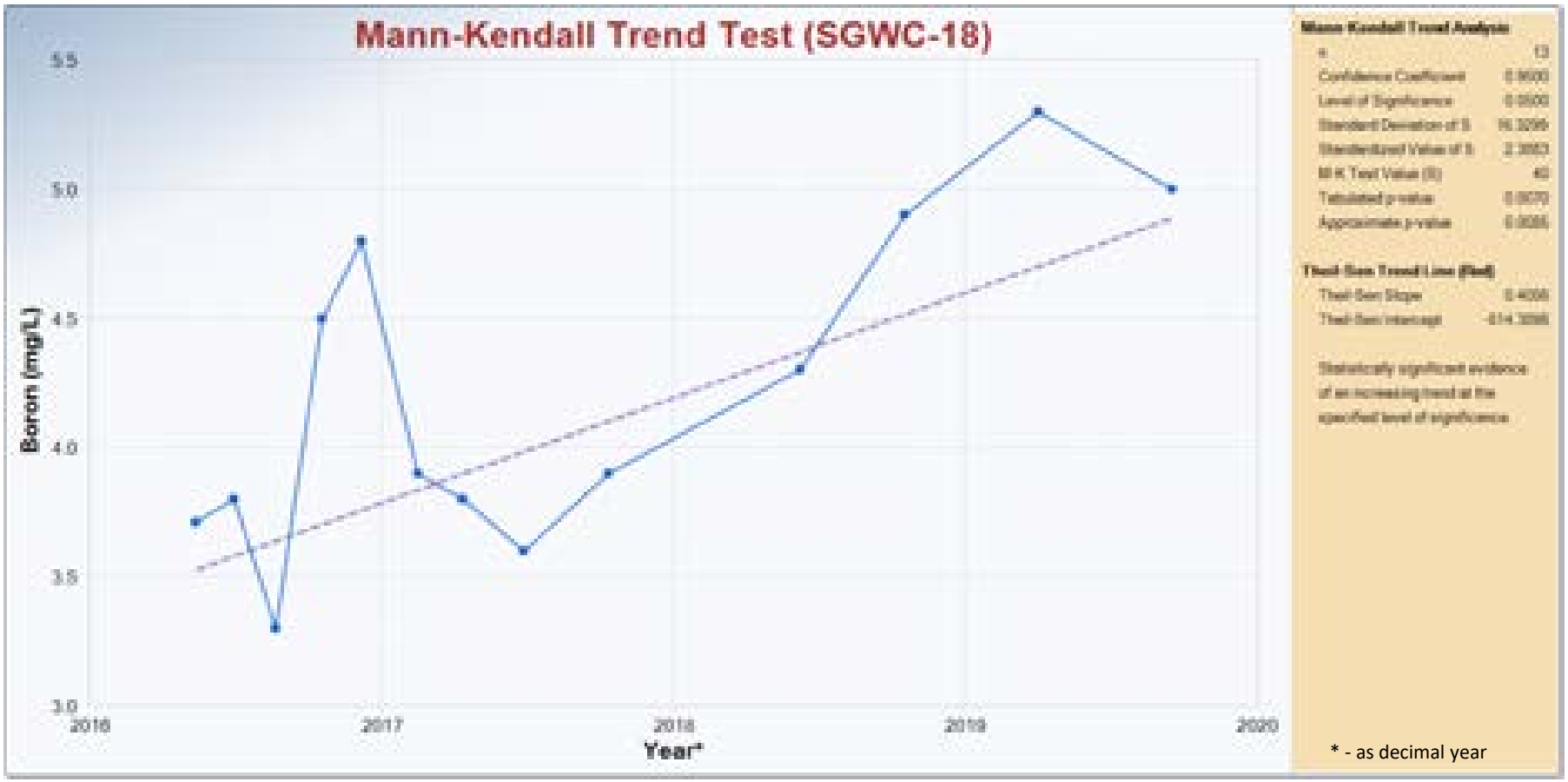
It is suggested to collect at least 8 to 10 observations before using these statistical methods!

If possible, compute and collect Data Quality Objectives (DQO) based sample size and analytical results.

Appendix E-4

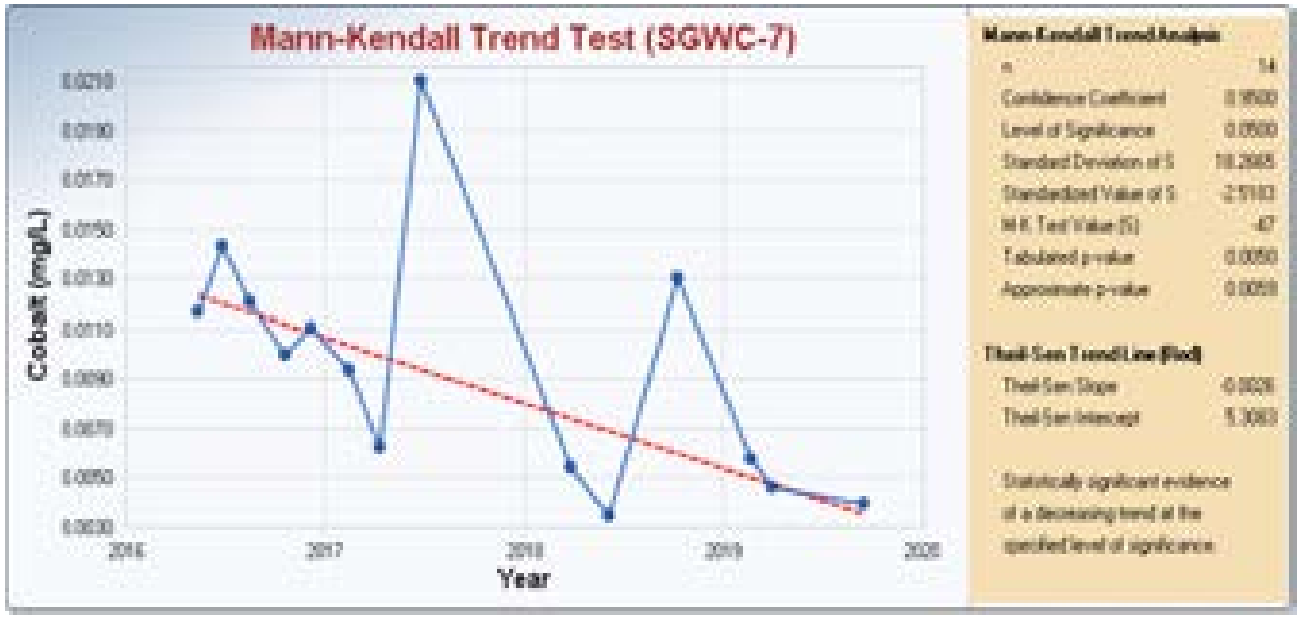
Groundwater Trend Graphs

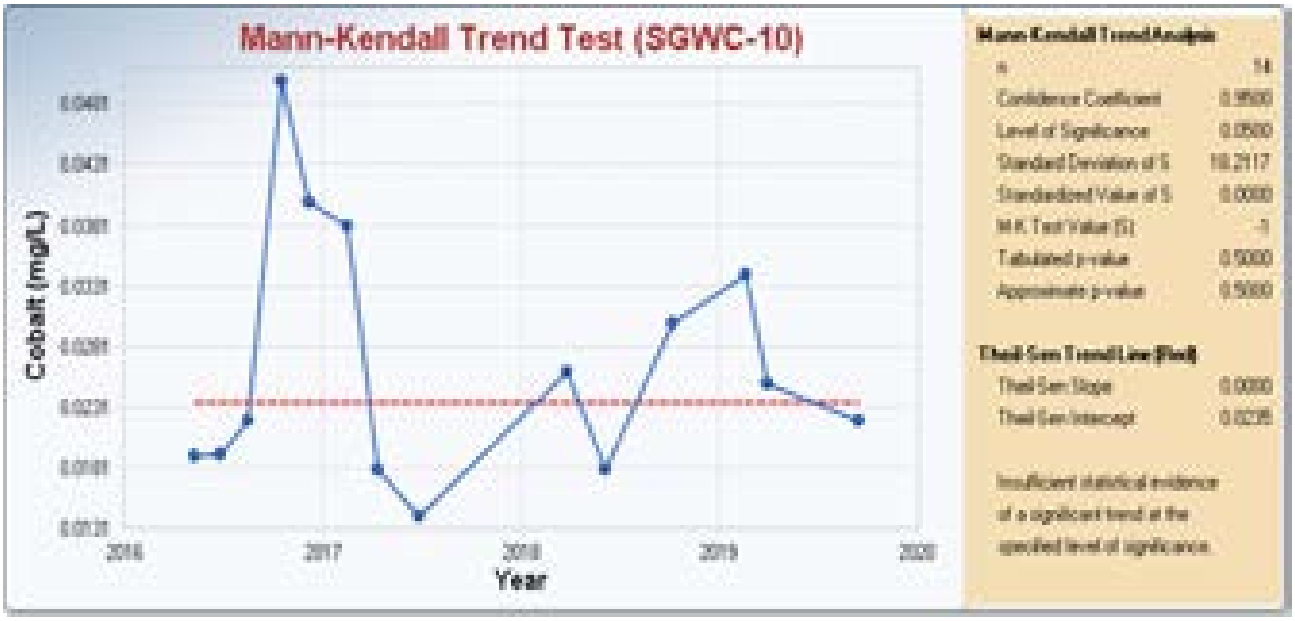
Appendix E-4
Groundwater Mann-Kendall Trend Graphs - Boron
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA



Prepared by/Date: LO 05/22/20
Checked by/Date: SMB 05/22/20

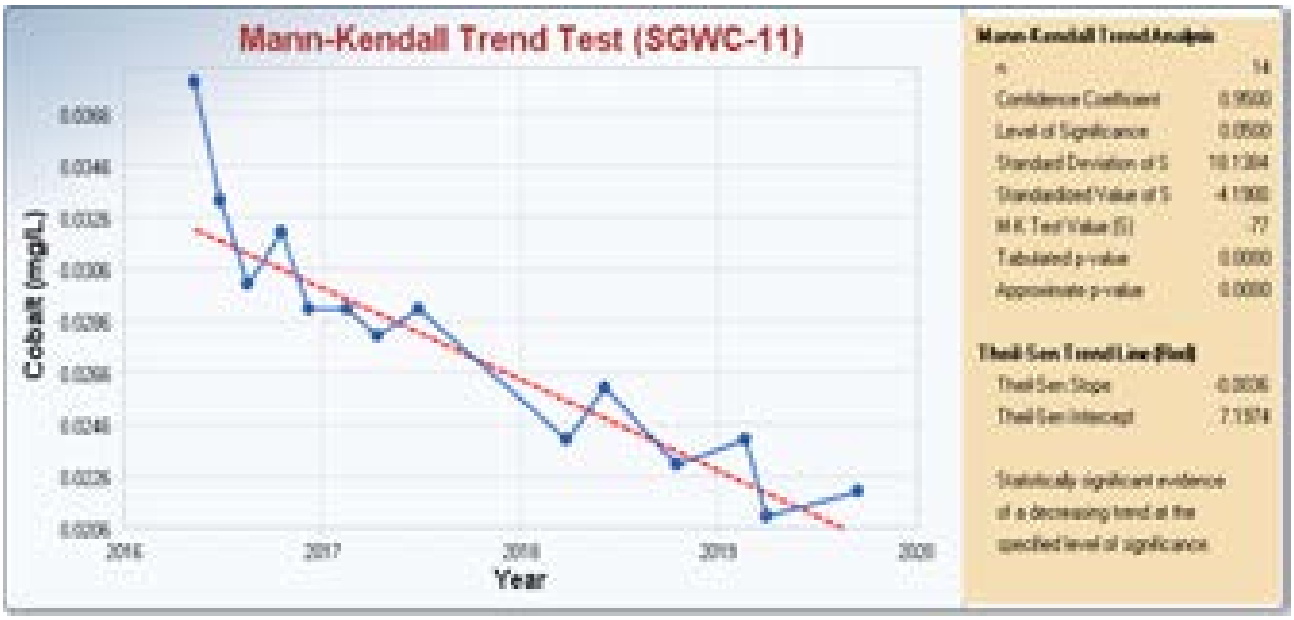
Appendix E-4
Groundwater Mann-Kendall Trend Graphs - Cobalt
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA

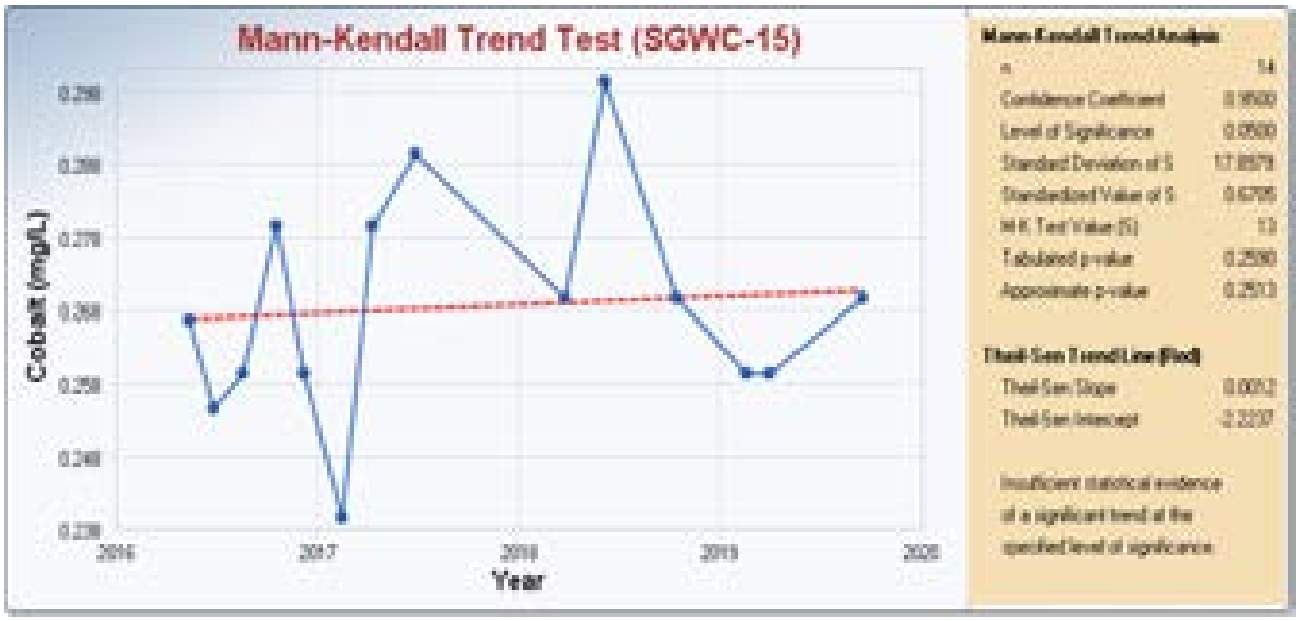




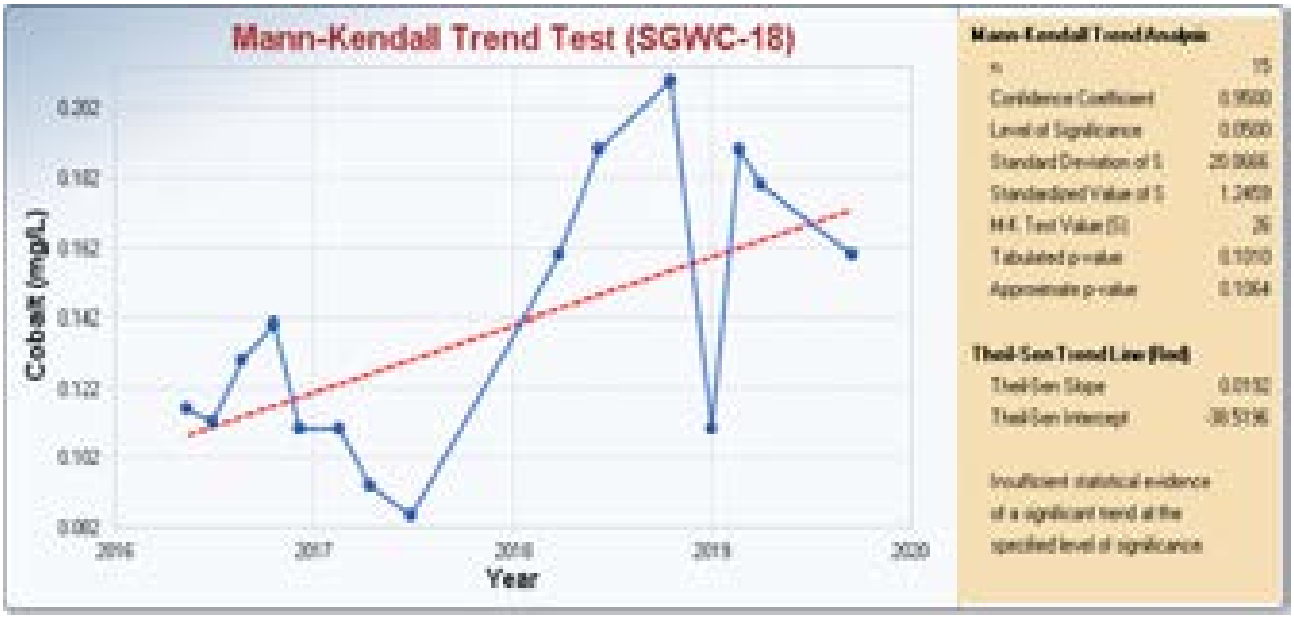
Prepared by/Date: LO 09/17/20
Checked by/Date: NSR 09/17/20

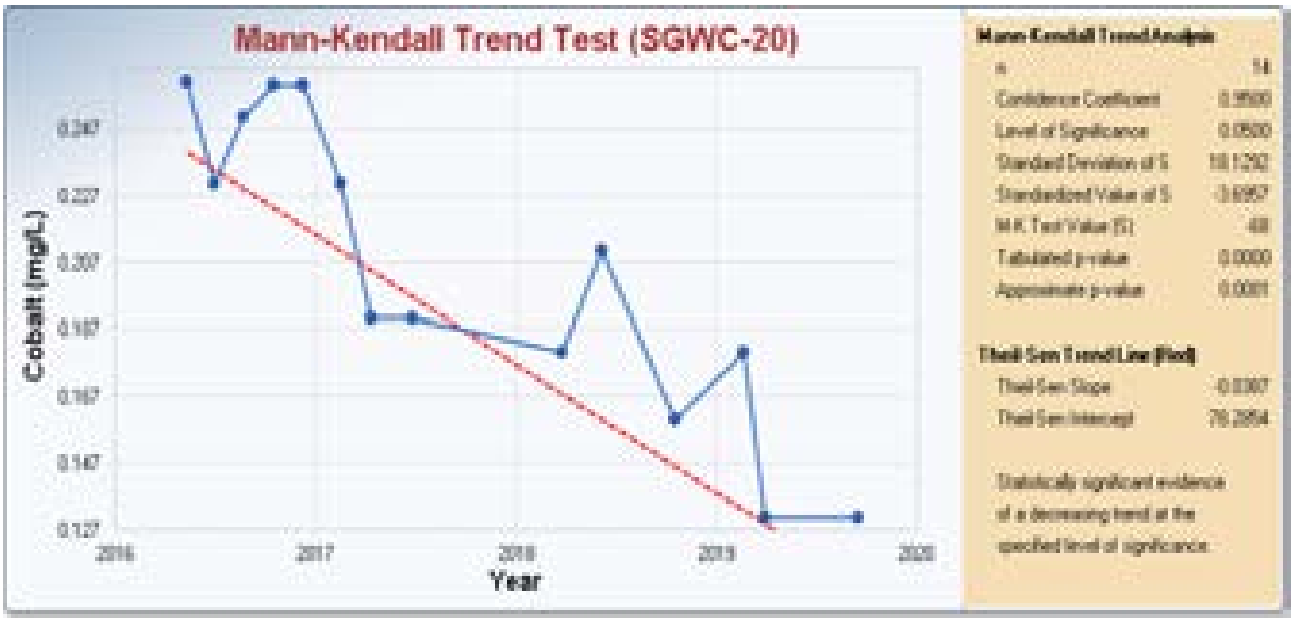
Appendix E-4
Groundwater Mann-Kendall Trend Graphs - Cobalt
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA





Appendix E-4
Groundwater Mann-Kendall Trend Graphs - Cobalt
Scherer Risk Evaluation Report
Scherer AP-1
Plant Scherer, Juliette, GA





Prepared by/Date: LO 09/17/20
Checked by/Date: NSR 09/17/20

APPENDIX B

Analytical Data Reports

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-125972-1
Client Project/Site: Plant Scherer Ash Pond
Revision: 1

For:
Southern Company
241 Ralph McGill Blvd SE
B10185
Atlanta, Georgia 30308

Attn: Joju Abraham

Authorized for release by:
9/9/2021 7:45:39 PM

Shali Brown, Project Manager II
(615)301-5031
Shali.Brown@Eurofinset.com

PA Lab ID: 02-00416

Table of Contents

Case Narrative

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Job ID: 180-125972-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-125972-1

Comments
090921 Revised report to remove qualifier from Mercury on sample SGWC-12 (180-126090-14). This report replaces the report previously issued on 090821.

Receipt
The samples were received on 8/19/2021 9:15 AM, 8/20/2021 9:30 AM and 8/21/2021 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 13 coolers at receipt time were 2.1º C, 2.1º C, 3.2º C, 3.2º C, 3.4º C, 3.7º C, 3.7º C, 3.8º C, 3.8º C, 3.8º C, 4.2º C, 4.2º C and 5.8º C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.
The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. The COC was not relinquished.

The container label for one out of two of the plastic liters for the following sample did not match the information listed on the Chain-of-Custody (COC): SGWC-15 (180-126090-6). The container labels list a sample id of SGWC-14 while the COC lists SGWC-15. The id on the COC was used.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Southern Company
Job ID: 180-125972-1
Project/Site: Plant Scherer Ash Pond

Laboratory: Eurofins TestAmerica, Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-21 *
California	State	2891	04-30-22
Connecticut	State	PH-0688	09-30-22
Florida	NELAP	E871008	06-30-22
Georgia	State	PA 02-00416	04-30-22
Illinois	NELAP	004375	06-30-22
Kansas	NELAP	E-10350	01-31-22
Kentucky (UST)	State	162013	04-30-22
Kentucky (WW)	State	KY98043	12-31-21
Louisiana	NELAP	04041	06-30-22
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-21
Nevada	State	PA00164	08-31-22
New Hampshire	NELAP	2030	04-05-22
New Jersey	NELAP	PA005	06-30-22
New York	NELAP	11182	04-01-22
North Carolina (WW/SW)	State	434	12-31-21
North Dakota	State	R-227	04-30-22
Oregon	NELAP	PA-2151	02-06-22
Pennsylvania	NELAP	02-00416	04-30-22
Rhode Island	State	LAO00362	12-31-21
South Carolina	State	89014	04-30-22
Texas	NELAP	T104704528	03-31-22
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-22
Virginia	NELAP	10043	09-14-21
West Virginia DEP	State	142	01-31-22
Wisconsin	State	998027800	08-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-125972-1	SGWA-1	Water	08/17/21 15:10	08/19/21 09:15
180-125972-2	SGWA-2	Water	08/17/21 16:10	08/19/21 09:15
180-125972-3	SGWA-4	Water	08/17/21 14:45	08/19/21 09:15
180-125972-4	SGWA-25	Water	08/17/21 16:13	08/19/21 09:15
180-126059-1	SGWA-3	Water	08/18/21 11:50	08/20/21 09:30
180-126059-2	SGWA-5	Water	08/18/21 10:55	08/20/21 09:30
180-126059-3	SGWC-6	Water	08/18/21 14:32	08/20/21 09:30
180-126059-4	SGWC-7	Water	08/18/21 16:00	08/20/21 09:30
180-126059-5	SGWC-8	Water	08/18/21 16:50	08/20/21 09:30
180-126059-6	SGWC-17	Water	08/18/21 16:45	08/20/21 09:30
180-126059-7	SGWC-18	Water	08/18/21 14:30	08/20/21 09:30
180-126059-8	SGWC-21	Water	08/18/21 15:30	08/20/21 09:30
180-126059-9	SGWC-22	Water	08/18/21 14:15	08/20/21 09:30
180-126059-10	SGWC-23	Water	08/18/21 11:30	08/20/21 09:30
180-126059-11	SGWA-24	Water	08/18/21 10:35	08/20/21 09:30
180-126059-12	EB-5	Water	08/18/21 14:30	08/20/21 09:30
180-126060-1	EB-6	Water	08/18/21 17:00	08/20/21 09:30
180-126060-2	DUP-5	Water	08/18/21 00:00	08/20/21 09:30
180-126060-3	FB-5	Water	08/18/21 11:15	08/20/21 09:30
180-126060-4	FB-6	Water	08/18/21 15:25	08/20/21 09:30
180-126090-1	SGWC-9	Water	08/19/21 10:22	08/21/21 09:30
180-126090-2	SGWC-10	Water	08/19/21 10:20	08/21/21 09:30
180-126090-3	SGWC-11	Water	08/19/21 12:02	08/21/21 09:30
180-126090-4	SGWC-13	Water	08/19/21 10:15	08/21/21 09:30
180-126090-5	SGWC-14	Water	08/19/21 11:25	08/21/21 09:30
180-126090-6	SGWC-15	Water	08/19/21 13:45	08/21/21 09:30
180-126090-7	SGWC-16	Water	08/19/21 10:10	08/21/21 09:30
180-126090-8	SGWC-19	Water	08/19/21 13:30	08/21/21 09:30
180-126090-9	SGWC-20	Water	08/19/21 11:55	08/21/21 09:30
180-126090-10	EB-7	Water	08/19/21 10:30	08/21/21 09:30
180-126090-11	DUP-7	Water	08/19/21 00:00	08/21/21 09:30
180-126090-12	FB-8	Water	08/19/21 12:32	08/21/21 09:30
180-126090-13	DUP-8	Water	08/19/21 00:00	08/21/21 09:30
180-126090-14	SGWC-12	Water	08/20/21 09:30	08/21/21 09:30

Method Summary

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
EPA 6020B	Metals (ICP/MS)	SW846	TAL PIT
EPA 7470A	Mercury (CVAA)	SW846	TAL PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
Field Sampling	Field Sampling	EPA	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT
7470A	Preparation, Mercury	SW846	TAL PIT

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWA-1

Lab Sample ID: 180-125972-1
Date Collected: 08/17/21 15:10
Matrix: Water
Date Received: 08/19/21 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			369870	09/01/21 16:51	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	368730	08/20/21 12:11	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369103	08/24/21 20:41	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	368875	08/23/21 12:47	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369203	08/25/21 14:57	KEM	TAL PIT
	Instrument ID: HGZ									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	368811	08/22/21 17:36	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369539	08/17/21 15:10	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SGWA-2

Lab Sample ID: 180-125972-2
Date Collected: 08/17/21 16:10
Matrix: Water
Date Received: 08/19/21 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			369870	09/01/21 17:07	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	368730	08/20/21 12:11	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369103	08/24/21 20:45	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	368875	08/23/21 12:47	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369203	08/25/21 14:58	KEM	TAL PIT
	Instrument ID: HGZ									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	368811	08/22/21 17:36	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369539	08/17/21 16:10	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SGWA-4

Lab Sample ID: 180-125972-3
Date Collected: 08/17/21 14:45
Matrix: Water
Date Received: 08/19/21 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			369870	09/01/21 15:32	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	368730	08/20/21 12:11	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369103	08/24/21 20:49	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	368875	08/23/21 12:47	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369203	08/25/21 14:59	KEM	TAL PIT
	Instrument ID: HGZ									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWA-4

Lab Sample ID: 180-125972-3
Date Collected: 08/17/21 14:45
Matrix: Water
Date Received: 08/19/21 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	368811	08/22/21 17:36	KMM	TAL PIT
Total/NA	Analysis	Field Sampling		1			369539	08/17/21 14:45	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SGWA-25

Lab Sample ID: 180-125972-4
Date Collected: 08/17/21 16:13
Matrix: Water
Date Received: 08/19/21 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			369870	09/01/21 17:23	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	368730	08/20/21 12:11	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369103	08/24/21 20:52	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	368875	08/23/21 12:47	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369203	08/25/21 15:00	KEM	TAL PIT
	Instrument ID: HGZ									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	368811	08/22/21 17:36	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369539	08/17/21 16:13	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SGWA-3

Lab Sample ID: 180-126059-1
Date Collected: 08/18/21 11:50
Matrix: Water
Date Received: 08/20/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370035	09/02/21 09:48	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		1			370188	09/03/21 10:30	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	369118	08/25/21 08:46	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369368	08/26/21 11:56	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	369480	08/27/21 13:00	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369675	08/30/21 16:30	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369142	08/25/21 10:30	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369647	08/18/21 11:50	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWA-5

Date Collected: 08/18/21 10:55
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370035	09/02/21 10:36	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		1			370188	09/03/21 11:18	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	369118	08/25/21 08:46	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369368	08/26/21 12:10	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	369480	08/27/21 13:00	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369675	08/30/21 16:31	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369142	08/25/21 10:30	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369647	08/18/21 10:55	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SGWC-6

Date Collected: 08/18/21 14:32
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370035	09/02/21 10:51	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		1			370188	09/03/21 11:35	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	369118	08/25/21 08:46	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369368	08/26/21 12:13	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	369480	08/27/21 13:00	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369675	08/30/21 16:32	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369142	08/25/21 10:30	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369647	08/18/21 14:32	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SGWC-7

Date Collected: 08/18/21 16:00
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370035	09/02/21 11:07	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		1			370188	09/03/21 11:51	SAB	TAL PIT
	Instrument ID: CHIC2100A									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWC-7

Lab Sample ID: 180-126059-4

Date Collected: 08/18/21 16:00
Matrix: Water
Date Received: 08/20/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	369118	08/25/21 08:46	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369368	08/26/21 12:16	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	369480	08/27/21 13:00	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369675	08/30/21 16:33	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369142	08/25/21 10:30	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369647	08/18/21 16:00	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SGWC-8

Lab Sample ID: 180-126059-5

Date Collected: 08/18/21 16:50
Matrix: Water
Date Received: 08/20/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370035	09/02/21 11:23	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		1			370188	09/03/21 12:07	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	369118	08/25/21 08:46	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369368	08/26/21 12:18	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	369480	08/27/21 13:00	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369675	08/30/21 16:34	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369142	08/25/21 10:30	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369647	08/18/21 16:50	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SGWC-17

Lab Sample ID: 180-126059-6

Date Collected: 08/18/21 16:45
Matrix: Water
Date Received: 08/20/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370188	09/03/21 12:55	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		5			370188	09/03/21 15:18	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	369118	08/25/21 08:46	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369368	08/26/21 12:27	RJR	TAL PIT
	Instrument ID: NEMO									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWC-17

Date Collected: 08/18/21 16:45
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			25 mL	25 mL	369480	08/27/21 13:00	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369675	08/30/21 16:35	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369142	08/25/21 10:30	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369647	08/18/21 16:45	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SGWC-18

Date Collected: 08/18/21 14:30
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		10			370035	09/02/21 12:59	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		1			370188	09/03/21 13:11	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	369118	08/25/21 08:46	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369368	08/26/21 12:30	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	369480	08/27/21 13:00	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369675	08/30/21 16:36	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369142	08/25/21 10:30	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369647	08/18/21 14:30	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SGWC-21

Date Collected: 08/18/21 15:30
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370035	09/02/21 13:14	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		1			370188	09/03/21 13:26	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	369118	08/25/21 08:46	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369368	08/26/21 12:38	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	369480	08/27/21 13:00	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369675	08/30/21 16:39	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369160	08/25/21 11:13	KMM	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWC-21

Date Collected: 08/18/21 15:30
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			369647	08/18/21 15:30	FDS	TAL PIT

Client Sample ID: SGWC-22

Date Collected: 08/18/21 14:15
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370035	09/02/21 13:30	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		1			370188	09/03/21 13:42	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	369118	08/25/21 08:46	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369368	08/26/21 12:41	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	369480	08/27/21 13:00	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369675	08/30/21 16:40	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369160	08/25/21 11:13	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369647	08/18/21 14:15	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SGWC-23

Date Collected: 08/18/21 11:30
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370035	09/02/21 13:46	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		1			370188	09/03/21 13:58	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	369118	08/25/21 08:46	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369368	08/26/21 12:44	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	369480	08/27/21 13:00	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369675	08/30/21 16:41	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369160	08/25/21 11:13	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369647	08/18/21 11:30	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SGWA-24

Lab Sample ID: 180-126059-11

Date Collected: 08/18/21 10:35

Matrix: Water

Date Received: 08/20/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370035	09/02/21 14:02	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		1			370188	09/03/21 14:14	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	369118	08/25/21 08:46	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369368	08/26/21 12:47	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	369480	08/27/21 13:00	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369675	08/30/21 16:42	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369160	08/25/21 11:13	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369647	08/18/21 10:35	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: EB-5

Lab Sample ID: 180-126059-12

Date Collected: 08/18/21 14:30

Matrix: Water

Date Received: 08/20/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370035	09/02/21 14:50	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		1			370188	09/03/21 15:02	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	369118	08/25/21 08:46	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369368	08/26/21 12:50	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	369480	08/27/21 13:00	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369675	08/30/21 16:43	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369160	08/25/21 11:13	KMM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: EB-6

Lab Sample ID: 180-126060-1

Date Collected: 08/18/21 17:00

Matrix: Water

Date Received: 08/20/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			369894	09/01/21 19:06	J1T	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	369118	08/25/21 08:46	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369368	08/26/21 12:52	RJR	TAL PIT
	Instrument ID: NEMO									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: EB-6

Date Collected: 08/18/21 17:00
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126060-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			25 mL	25 mL	369480	08/27/21 13:00	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369675	08/30/21 16:44	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369160	08/25/21 11:13	KMM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-5

Date Collected: 08/18/21 00:00
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126060-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			369894	09/01/21 21:29	J1T	TAL PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 300.0 R2.1		10			369894	09/01/21 21:47	J1T	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	369118	08/25/21 08:46	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369368	08/26/21 12:55	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	369480	08/27/21 13:00	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369675	08/30/21 16:45	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369160	08/25/21 11:13	KMM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FB-5

Date Collected: 08/18/21 11:15
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126060-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			369894	09/01/21 19:24	J1T	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	369118	08/25/21 08:46	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369368	08/26/21 13:14	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	369480	08/27/21 13:00	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369675	08/30/21 16:46	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369160	08/25/21 11:13	KMM	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: FB-6

Lab Sample ID: 180-126060-4
Matrix: Water
Date Collected: 08/18/21 15:25
Date Received: 08/20/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			369894	09/01/21 19:42	J1T	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	369118	08/25/21 08:46	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369368	08/26/21 13:16	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	369480	08/27/21 13:00	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369675	08/30/21 16:48	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369160	08/25/21 11:13	KMM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SGWC-9

Lab Sample ID: 180-126090-1
Matrix: Water
Date Collected: 08/19/21 10:22
Date Received: 08/21/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370036	09/03/21 04:59	J1T	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		1			370252	09/04/21 02:40	SAB	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	369326	08/26/21 12:39	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369490	08/27/21 11:09	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	369880	09/01/21 09:36	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			370276	09/03/21 13:46	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369160	08/25/21 11:13	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369649	08/19/21 10:22	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SGWC-10

Lab Sample ID: 180-126090-2
Matrix: Water
Date Collected: 08/19/21 10:20
Date Received: 08/21/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370036	09/03/21 05:16	J1T	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		1			370252	09/04/21 02:56	SAB	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	369326	08/26/21 12:39	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369490	08/27/21 11:11	RJR	TAL PIT
	Instrument ID: NEMO									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWC-10

Date Collected: 08/19/21 10:20
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			25 mL	25 mL	369880	09/01/21 09:36	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			370276	09/03/21 13:47	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369160	08/25/21 11:13	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369649	08/19/21 10:20	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SGWC-11

Date Collected: 08/19/21 12:02
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370036	09/03/21 06:05	J1T	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		1			370252	09/04/21 04:01	SAB	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	369326	08/26/21 12:39	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369490	08/27/21 11:14	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	369880	09/01/21 09:36	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			370276	09/03/21 13:48	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369160	08/25/21 11:13	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369649	08/19/21 12:02	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SGWC-13

Date Collected: 08/19/21 10:15
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370036	09/03/21 06:21	J1T	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		1			370252	09/04/21 04:18	SAB	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	369326	08/26/21 12:39	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369490	08/27/21 11:17	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	369880	09/01/21 09:36	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			370276	09/03/21 13:49	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369160	08/25/21 11:13	KMM	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWC-13

Date Collected: 08/19/21 10:15
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			369649	08/19/21 10:15	FDS	TAL PIT

Client Sample ID: SGWC-14

Date Collected: 08/19/21 11:25
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370036	09/03/21 06:37	J1T	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		1			370252	09/04/21 04:34	SAB	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	369326	08/26/21 12:39	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369490	08/27/21 11:20	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	369880	09/01/21 09:36	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			370276	09/03/21 13:53	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369160	08/25/21 11:13	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369649	08/19/21 11:25	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SGWC-15

Date Collected: 08/19/21 13:45
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370036	09/03/21 06:54	J1T	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		1			370252	09/04/21 04:50	SAB	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	369326	08/26/21 12:39	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369490	08/27/21 11:23	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	369880	09/01/21 09:36	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			370276	09/03/21 13:54	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369205	08/25/21 16:50	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369649	08/19/21 13:45	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWC-16

Date Collected: 08/19/21 10:10
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370036	09/03/21 07:10	J1T	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		1			370252	09/04/21 05:07	SAB	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	369326	08/26/21 12:39	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369490	08/27/21 11:26	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	369880	09/01/21 09:36	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			370276	09/03/21 13:55	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369205	08/25/21 16:50	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369649	08/19/21 10:10	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SGWC-19

Date Collected: 08/19/21 13:30
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370036	09/03/21 07:59	J1T	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		1			370252	09/04/21 05:56	SAB	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		5			370252	09/04/21 06:12	SAB	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	369326	08/26/21 12:39	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369490	08/27/21 11:28	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	369880	09/01/21 09:36	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			370276	09/03/21 13:56	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369205	08/25/21 16:50	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369649	08/19/21 13:30	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SGWC-20

Date Collected: 08/19/21 11:55
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370036	09/03/21 08:32	J1T	TAL PIT
	Instrument ID: CHICS2100B									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWC-20

Date Collected: 08/19/21 11:55
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370252	09/04/21 07:34	SAB	TAL PIT
Total/NA	Analysis	EPA 300.0 R2.1		5			370252	09/04/21 07:50	SAB	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	369326	08/26/21 12:39	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369490	08/27/21 11:37	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	369881	09/01/21 09:39	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			370276	09/03/21 14:08	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369205	08/25/21 16:50	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369649	08/19/21 11:55	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: EB-7

Date Collected: 08/19/21 10:30
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370036	09/03/21 09:37	J1T	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	369326	08/26/21 12:39	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369490	08/27/21 11:40	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	369881	09/01/21 09:39	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			370276	09/03/21 14:09	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369205	08/25/21 16:50	KMM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-7

Date Collected: 08/19/21 00:00
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370036	09/03/21 09:54	J1T	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	369326	08/26/21 12:39	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369490	08/27/21 11:43	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	369881	09/01/21 09:39	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			370276	09/03/21 14:10	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369205	08/25/21 16:51	KMM	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: FB-8

Date Collected: 08/19/21 12:32
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370036	09/03/21 09:21	J1T	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	369326	08/26/21 12:39	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369490	08/27/21 11:46	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	369881	09/01/21 09:39	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			370276	09/03/21 14:11	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369205	08/25/21 16:50	KMM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-8

Date Collected: 08/19/21 00:00
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370036	09/03/21 10:10	J1T	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		5			370252	09/04/21 06:28	SAB	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	369326	08/26/21 12:39	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369490	08/27/21 11:48	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	369881	09/01/21 09:39	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			370276	09/03/21 14:13	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369205	08/25/21 16:50	KMM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SGWC-12

Date Collected: 08/20/21 09:30
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370036	09/03/21 10:26	J1T	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	369326	08/26/21 12:39	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369490	08/27/21 11:51	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	369922	09/01/21 12:39	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			370104	09/02/21 13:23	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369205	08/25/21 16:50	KMM	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWC-12

Date Collected: 08/20/21 09:30
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			369649	08/20/21 09:30	FDS	TAL PIT

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Prep

AMD = Alysha Donlan
MM1 = Mary Beth Miller
TLP = Tara Peterson

Batch Type: Analysis

FDS = Sampler Field
J1T = Jianwu Tang
KEM = Kimberly Mahoney
KMM = Kendric Moore
RJR = Ron Rosenbaum
RSK = Robert Kurtz
SAB = Sharon Bacha

Client Sample Results

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWA-1

Date Collected: 08/17/21 15:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125972-1

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.9**		1.0	0.71	mg/L			09/01/21 16:51	1
Fluoride	**0.052**	**J**	0.10	0.026	mg/L			09/01/21 16:51	1
Sulfate	<0.76		1.0	0.76	mg/L			09/01/21 16:51	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/20/21 12:11	08/24/21 20:41	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/20/21 12:11	08/24/21 20:41	1
Barium	**0.047**		0.010	0.0016	mg/L		08/20/21 12:11	08/24/21 20:41	1
Beryllium	**0.00029**	**J**	0.0025	0.00018	mg/L		08/20/21 12:11	08/24/21 20:41	1
Boron	<0.039		0.080	0.039	mg/L		08/20/21 12:11	08/24/21 20:41	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/20/21 12:11	08/24/21 20:41	1
Calcium	**1.8**		0.50	0.13	mg/L		08/20/21 12:11	08/24/21 20:41	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/20/21 12:11	08/24/21 20:41	1
Cobalt	**0.00072**	**J**	0.0025	0.00013	mg/L		08/20/21 12:11	08/24/21 20:41	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/20/21 12:11	08/24/21 20:41	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/20/21 12:11	08/24/21 20:41	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/20/21 12:11	08/24/21 20:41	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/20/21 12:11	08/24/21 20:41	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/20/21 12:11	08/24/21 20:41	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/23/21 12:47	08/25/21 14:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**27**		10	10	mg/L			08/22/21 17:36	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.26**				SU			08/17/21 15:10	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWA-2

Date Collected: 08/17/21 16:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125972-2

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.6**		1.0	0.71	mg/L			09/01/21 17:07	1
Fluoride	**0.096**	**J**	0.10	0.026	mg/L			09/01/21 17:07	1
Sulfate	<0.76		1.0	0.76	mg/L			09/01/21 17:07	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/20/21 12:11	08/24/21 20:45	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/20/21 12:11	08/24/21 20:45	1
Barium	**0.038**		0.010	0.0016	mg/L		08/20/21 12:11	08/24/21 20:45	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/20/21 12:11	08/24/21 20:45	1
Boron	<0.039		0.080	0.039	mg/L		08/20/21 12:11	08/24/21 20:45	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/20/21 12:11	08/24/21 20:45	1
Calcium	**12**		0.50	0.13	mg/L		08/20/21 12:11	08/24/21 20:45	1
Chromium	**0.013**		0.0020	0.0015	mg/L		08/20/21 12:11	08/24/21 20:45	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/20/21 12:11	08/24/21 20:45	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/20/21 12:11	08/24/21 20:45	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/20/21 12:11	08/24/21 20:45	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/20/21 12:11	08/24/21 20:45	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/20/21 12:11	08/24/21 20:45	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/20/21 12:11	08/24/21 20:45	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/23/21 12:47	08/25/21 14:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**110**		10	10	mg/L			08/22/21 17:36	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.84**				SU			08/17/21 16:10	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWA-4

Date Collected: 08/17/21 14:45
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125972-3

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.6**		1.0	0.71	mg/L			09/01/21 15:32	1
Fluoride	**0.093**	**J**	0.10	0.026	mg/L			09/01/21 15:32	1
Sulfate	**1.1**		1.0	0.76	mg/L			09/01/21 15:32	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/20/21 12:11	08/24/21 20:49	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/20/21 12:11	08/24/21 20:49	1
Barium	**0.066**		0.010	0.0016	mg/L		08/20/21 12:11	08/24/21 20:49	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/20/21 12:11	08/24/21 20:49	1
Boron	<0.039		0.080	0.039	mg/L		08/20/21 12:11	08/24/21 20:49	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/20/21 12:11	08/24/21 20:49	1
Calcium	**18**		0.50	0.13	mg/L		08/20/21 12:11	08/24/21 20:49	1
Chromium	**0.0053**		0.0020	0.0015	mg/L		08/20/21 12:11	08/24/21 20:49	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/20/21 12:11	08/24/21 20:49	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/20/21 12:11	08/24/21 20:49	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/20/21 12:11	08/24/21 20:49	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/20/21 12:11	08/24/21 20:49	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/20/21 12:11	08/24/21 20:49	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/20/21 12:11	08/24/21 20:49	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/23/21 12:47	08/25/21 14:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**130**		10	10	mg/L			08/22/21 17:36	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.41**				SU			08/17/21 14:45	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWA-25

Date Collected: 08/17/21 16:13
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125972-4

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.6**		1.0	0.71	mg/L			09/01/21 17:23	1
Fluoride	**0.079**	**J**	0.10	0.026	mg/L			09/01/21 17:23	1
Sulfate	<0.76		1.0	0.76	mg/L			09/01/21 17:23	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/20/21 12:11	08/24/21 20:52	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/20/21 12:11	08/24/21 20:52	1
Barium	**0.027**		0.010	0.0016	mg/L		08/20/21 12:11	08/24/21 20:52	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/20/21 12:11	08/24/21 20:52	1
Boron	<0.039		0.080	0.039	mg/L		08/20/21 12:11	08/24/21 20:52	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/20/21 12:11	08/24/21 20:52	1
Calcium	**9.6**		0.50	0.13	mg/L		08/20/21 12:11	08/24/21 20:52	1
Chromium	**0.0047**		0.0020	0.0015	mg/L		08/20/21 12:11	08/24/21 20:52	1
Cobalt	**0.0011**	**J**	0.0025	0.00013	mg/L		08/20/21 12:11	08/24/21 20:52	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/20/21 12:11	08/24/21 20:52	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/20/21 12:11	08/24/21 20:52	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/20/21 12:11	08/24/21 20:52	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/20/21 12:11	08/24/21 20:52	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/20/21 12:11	08/24/21 20:52	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/23/21 12:47	08/25/21 15:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**97**		10	10	mg/L			08/22/21 17:36	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.08**				SU			08/17/21 16:13	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWA-3

Date Collected: 08/18/21 11:50
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-1

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.4**		1.0	0.71	mg/L			09/03/21 10:30	1
Fluoride	**0.066**	**J**	0.10	0.026	mg/L			09/03/21 10:30	1
Sulfate	**0.90**	**J**	1.0	0.76	mg/L			09/02/21 09:48	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/25/21 08:46	08/26/21 11:56	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/25/21 08:46	08/26/21 11:56	1
Barium	**0.036**		0.010	0.0016	mg/L		08/25/21 08:46	08/26/21 11:56	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/25/21 08:46	08/26/21 11:56	1
Boron	<0.039		0.080	0.039	mg/L		08/25/21 08:46	08/26/21 11:56	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/25/21 08:46	08/26/21 11:56	1
Calcium	**5.9**		0.50	0.13	mg/L		08/25/21 08:46	08/26/21 11:56	1
Chromium	**0.020**		0.0020	0.0015	mg/L		08/25/21 08:46	08/26/21 11:56	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/25/21 08:46	08/26/21 11:56	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/25/21 08:46	08/26/21 11:56	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/25/21 08:46	08/26/21 11:56	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/25/21 08:46	08/26/21 11:56	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/25/21 08:46	08/26/21 11:56	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/25/21 08:46	08/26/21 11:56	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/27/21 13:00	08/30/21 16:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**66**		10	10	mg/L			08/25/21 10:30	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.85**				SU			08/18/21 11:50	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWA-5

Date Collected: 08/18/21 10:55
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-2

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.2**		1.0	0.71	mg/L			09/03/21 11:18	1
Fluoride	**0.070**	**J**	0.10	0.026	mg/L			09/03/21 11:18	1
Sulfate	<0.76		1.0	0.76	mg/L			09/02/21 10:36	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/25/21 08:46	08/26/21 12:10	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/25/21 08:46	08/26/21 12:10	1
Barium	**0.011**		0.010	0.0016	mg/L		08/25/21 08:46	08/26/21 12:10	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/25/21 08:46	08/26/21 12:10	1
Boron	<0.039		0.080	0.039	mg/L		08/25/21 08:46	08/26/21 12:10	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/25/21 08:46	08/26/21 12:10	1
Calcium	**1.7**		0.50	0.13	mg/L		08/25/21 08:46	08/26/21 12:10	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/25/21 08:46	08/26/21 12:10	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/25/21 08:46	08/26/21 12:10	1
Lead	**0.00030**	**J**	0.0010	0.00013	mg/L		08/25/21 08:46	08/26/21 12:10	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/25/21 08:46	08/26/21 12:10	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/25/21 08:46	08/26/21 12:10	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/25/21 08:46	08/26/21 12:10	1
Thallium	**0.00030**	**J**	0.0010	0.00015	mg/L		08/25/21 08:46	08/26/21 12:10	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/27/21 13:00	08/30/21 16:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**53**		10	10	mg/L			08/25/21 10:30	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.51**				SU			08/18/21 10:55	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWC-6

Date Collected: 08/18/21 14:32
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-3

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.5**		1.0	0.71	mg/L			09/03/21 11:35	1
Fluoride	**0.19**		0.10	0.026	mg/L			09/03/21 11:35	1
Sulfate	<0.76		1.0	0.76	mg/L			09/02/21 10:51	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/25/21 08:46	08/26/21 12:13	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/25/21 08:46	08/26/21 12:13	1
Barium	**0.13**		0.010	0.0016	mg/L		08/25/21 08:46	08/26/21 12:13	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/25/21 08:46	08/26/21 12:13	1
Boron	<0.039		0.080	0.039	mg/L		08/25/21 08:46	08/26/21 12:13	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/25/21 08:46	08/26/21 12:13	1
Calcium	**11**		0.50	0.13	mg/L		08/25/21 08:46	08/26/21 12:13	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/25/21 08:46	08/26/21 12:13	1
Cobalt	**0.00024**	**J**	0.0025	0.00013	mg/L		08/25/21 08:46	08/26/21 12:13	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/25/21 08:46	08/26/21 12:13	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/25/21 08:46	08/26/21 12:13	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/25/21 08:46	08/26/21 12:13	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/25/21 08:46	08/26/21 12:13	1
Thallium	**0.00017**	**J**	0.0010	0.00015	mg/L		08/25/21 08:46	08/26/21 12:13	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/27/21 13:00	08/30/21 16:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**140**		10	10	mg/L			08/25/21 10:30	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.33**				SU			08/18/21 14:32	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWC-7

Date Collected: 08/18/21 16:00
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-4

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.0**		1.0	0.71	mg/L			09/03/21 11:51	1
Fluoride	**0.31**		0.10	0.026	mg/L			09/03/21 11:51	1
Sulfate	**12**		1.0	0.76	mg/L			09/02/21 11:07	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/25/21 08:46	08/26/21 12:16	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/25/21 08:46	08/26/21 12:16	1
Barium	**0.24**		0.010	0.0016	mg/L		08/25/21 08:46	08/26/21 12:16	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/25/21 08:46	08/26/21 12:16	1
Boron	**0.047**	**J**	0.080	0.039	mg/L		08/25/21 08:46	08/26/21 12:16	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/25/21 08:46	08/26/21 12:16	1
Calcium	**22**		0.50	0.13	mg/L		08/25/21 08:46	08/26/21 12:16	1
Chromium	**0.0026**		0.0020	0.0015	mg/L		08/25/21 08:46	08/26/21 12:16	1
Cobalt	**0.0021**	**J**	0.0025	0.00013	mg/L		08/25/21 08:46	08/26/21 12:16	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/25/21 08:46	08/26/21 12:16	1
Lithium	**0.0034**	**J**	0.0050	0.0034	mg/L		08/25/21 08:46	08/26/21 12:16	1
Molybdenum	**0.0016**	**J**	0.015	0.00061	mg/L		08/25/21 08:46	08/26/21 12:16	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/25/21 08:46	08/26/21 12:16	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/25/21 08:46	08/26/21 12:16	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/27/21 13:00	08/30/21 16:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**210**		10	10	mg/L			08/25/21 10:30	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.61**				SU			08/18/21 16:00	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWC-8

Date Collected: 08/18/21 16:50
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-5

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14**		1.0	0.71	mg/L			09/03/21 12:07	1
Fluoride	**0.48**		0.10	0.026	mg/L			09/03/21 12:07	1
Sulfate	**78**		1.0	0.76	mg/L			09/02/21 11:23	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/25/21 08:46	08/26/21 12:18	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/25/21 08:46	08/26/21 12:18	1
Barium	**0.16**		0.010	0.0016	mg/L		08/25/21 08:46	08/26/21 12:18	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/25/21 08:46	08/26/21 12:18	1
Boron	**0.14**		0.080	0.039	mg/L		08/25/21 08:46	08/26/21 12:18	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/25/21 08:46	08/26/21 12:18	1
Calcium	**49**		0.50	0.13	mg/L		08/25/21 08:46	08/26/21 12:18	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/25/21 08:46	08/26/21 12:18	1
Cobalt	**0.00021**	**J**	0.0025	0.00013	mg/L		08/25/21 08:46	08/26/21 12:18	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/25/21 08:46	08/26/21 12:18	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/25/21 08:46	08/26/21 12:18	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/25/21 08:46	08/26/21 12:18	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/25/21 08:46	08/26/21 12:18	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/25/21 08:46	08/26/21 12:18	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/27/21 13:00	08/30/21 16:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**410**		10	10	mg/L			08/25/21 10:30	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.48**				SU			08/18/21 16:50	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWC-17

Date Collected: 08/18/21 16:45
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-6

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.9**		1.0	0.71	mg/L			09/03/21 12:55	1
Fluoride	**0.087**	**J**	0.10	0.026	mg/L			09/03/21 12:55	1
Sulfate	**200**		5.0	3.8	mg/L			09/03/21 15:18	5

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/25/21 08:46	08/26/21 12:27	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/25/21 08:46	08/26/21 12:27	1
Barium	**0.024**		0.010	0.0016	mg/L		08/25/21 08:46	08/26/21 12:27	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/25/21 08:46	08/26/21 12:27	1
Boron	**0.32**		0.080	0.039	mg/L		08/25/21 08:46	08/26/21 12:27	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/25/21 08:46	08/26/21 12:27	1
Calcium	**55**		0.50	0.13	mg/L		08/25/21 08:46	08/26/21 12:27	1
Chromium	**0.012**		0.0020	0.0015	mg/L		08/25/21 08:46	08/26/21 12:27	1
Cobalt	**0.00043**	**J**	0.0025	0.00013	mg/L		08/25/21 08:46	08/26/21 12:27	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/25/21 08:46	08/26/21 12:27	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/25/21 08:46	08/26/21 12:27	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/25/21 08:46	08/26/21 12:27	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/25/21 08:46	08/26/21 12:27	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/25/21 08:46	08/26/21 12:27	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00017**	**J**	0.00020	0.00013	mg/L		08/27/21 13:00	08/30/21 16:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**450**		10	10	mg/L			08/25/21 10:30	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.26**				SU			08/18/21 16:45	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWC-18

Date Collected: 08/18/21 14:30
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-7

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15		1.0	0.71	mg/L			09/03/21 13:11	1
Fluoride	0.099	J	0.10	0.026	mg/L			09/03/21 13:11	1
Sulfate	940		10	7.6	mg/L			09/02/21 12:59	10

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/25/21 08:46	08/26/21 12:30	1
Arsenic	0.0028		0.0010	0.00031	mg/L		08/25/21 08:46	08/26/21 12:30	1
Barium	0.022		0.010	0.0016	mg/L		08/25/21 08:46	08/26/21 12:30	1
Beryllium	0.00035	J	0.0025	0.00018	mg/L		08/25/21 08:46	08/26/21 12:30	1
Boron	6.6		0.080	0.039	mg/L		08/25/21 08:46	08/26/21 12:30	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/25/21 08:46	08/26/21 12:30	1
Calcium	55		0.50	0.13	mg/L		08/25/21 08:46	08/26/21 12:30	1
Chromium	0.019		0.0020	0.0015	mg/L		08/25/21 08:46	08/26/21 12:30	1
Cobalt	0.095		0.0025	0.00013	mg/L		08/25/21 08:46	08/26/21 12:30	1
Lead	0.00071	J	0.0010	0.00013	mg/L		08/25/21 08:46	08/26/21 12:30	1
Lithium	0.0047	J	0.0050	0.0034	mg/L		08/25/21 08:46	08/26/21 12:30	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/25/21 08:46	08/26/21 12:30	1
Selenium	0.0020	J	0.0050	0.0015	mg/L		08/25/21 08:46	08/26/21 12:30	1
Thallium	0.00022	J	0.0010	0.00015	mg/L		08/25/21 08:46	08/26/21 12:30	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00022		0.00020	0.00013	mg/L		08/27/21 13:00	08/30/21 16:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1400		10	10	mg/L			08/25/21 10:30	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	4.83				SU			08/18/21 14:30	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWC-21

Date Collected: 08/18/21 15:30
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-8

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**13**		1.0	0.71	mg/L			09/03/21 13:26	1
Fluoride	**0.12**		0.10	0.026	mg/L			09/03/21 13:26	1
Sulfate	**130**		1.0	0.76	mg/L			09/02/21 13:14	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/25/21 08:46	08/26/21 12:38	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/25/21 08:46	08/26/21 12:38	1
Barium	**0.12**		0.010	0.0016	mg/L		08/25/21 08:46	08/26/21 12:38	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/25/21 08:46	08/26/21 12:38	1
Boron	**1.1**		0.080	0.039	mg/L		08/25/21 08:46	08/26/21 12:38	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/25/21 08:46	08/26/21 12:38	1
Calcium	**39**		0.50	0.13	mg/L		08/25/21 08:46	08/26/21 12:38	1
Chromium	**0.0022**		0.0020	0.0015	mg/L		08/25/21 08:46	08/26/21 12:38	1
Cobalt	**0.00016**	**J**	0.0025	0.00013	mg/L		08/25/21 08:46	08/26/21 12:38	1
Lead	**0.00041**	**J**	0.0010	0.00013	mg/L		08/25/21 08:46	08/26/21 12:38	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/25/21 08:46	08/26/21 12:38	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/25/21 08:46	08/26/21 12:38	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/25/21 08:46	08/26/21 12:38	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/25/21 08:46	08/26/21 12:38	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/27/21 13:00	08/30/21 16:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**380**		10	10	mg/L			08/25/21 11:13	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.26**				SU			08/18/21 15:30	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWC-22

Date Collected: 08/18/21 14:15
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-9

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11**		1.0	0.71	mg/L			09/03/21 13:42	1
Fluoride	**0.054**	**J**	0.10	0.026	mg/L			09/03/21 13:42	1
Sulfate	**110**		1.0	0.76	mg/L			09/02/21 13:30	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/25/21 08:46	08/26/21 12:41	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/25/21 08:46	08/26/21 12:41	1
Barium	**0.074**		0.010	0.0016	mg/L		08/25/21 08:46	08/26/21 12:41	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/25/21 08:46	08/26/21 12:41	1
Boron	**0.44**		0.080	0.039	mg/L		08/25/21 08:46	08/26/21 12:41	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/25/21 08:46	08/26/21 12:41	1
Calcium	**30**		0.50	0.13	mg/L		08/25/21 08:46	08/26/21 12:41	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/25/21 08:46	08/26/21 12:41	1
Cobalt	**0.0010**	**J**	0.0025	0.00013	mg/L		08/25/21 08:46	08/26/21 12:41	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/25/21 08:46	08/26/21 12:41	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/25/21 08:46	08/26/21 12:41	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/25/21 08:46	08/26/21 12:41	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/25/21 08:46	08/26/21 12:41	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/25/21 08:46	08/26/21 12:41	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/27/21 13:00	08/30/21 16:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**260**		10	10	mg/L			08/25/21 11:13	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.76**				SU			08/18/21 14:15	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWC-23

Date Collected: 08/18/21 11:30
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-10

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11**		1.0	0.71	mg/L			09/03/21 13:58	1
Fluoride	**0.11**		0.10	0.026	mg/L			09/03/21 13:58	1
Sulfate	**66**		1.0	0.76	mg/L			09/02/21 13:46	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/25/21 08:46	08/26/21 12:44	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/25/21 08:46	08/26/21 12:44	1
Barium	**0.056**		0.010	0.0016	mg/L		08/25/21 08:46	08/26/21 12:44	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/25/21 08:46	08/26/21 12:44	1
Boron	**0.42**		0.080	0.039	mg/L		08/25/21 08:46	08/26/21 12:44	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/25/21 08:46	08/26/21 12:44	1
Calcium	**21**		0.50	0.13	mg/L		08/25/21 08:46	08/26/21 12:44	1
Chromium	**0.0019**	**J**	0.0020	0.0015	mg/L		08/25/21 08:46	08/26/21 12:44	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/25/21 08:46	08/26/21 12:44	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/25/21 08:46	08/26/21 12:44	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/25/21 08:46	08/26/21 12:44	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/25/21 08:46	08/26/21 12:44	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/25/21 08:46	08/26/21 12:44	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/25/21 08:46	08/26/21 12:44	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/27/21 13:00	08/30/21 16:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**210**		10	10	mg/L			08/25/21 11:13	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.01**				SU			08/18/21 11:30	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWA-24

Date Collected: 08/18/21 10:35
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-11

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.7**		1.0	0.71	mg/L			09/03/21 14:14	1
Fluoride	**0.16**		0.10	0.026	mg/L			09/03/21 14:14	1
Sulfate	**1.0**		1.0	0.76	mg/L			09/02/21 14:02	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/25/21 08:46	08/26/21 12:47	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/25/21 08:46	08/26/21 12:47	1
Barium	**0.025**		0.010	0.0016	mg/L		08/25/21 08:46	08/26/21 12:47	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/25/21 08:46	08/26/21 12:47	1
Boron	<0.039		0.080	0.039	mg/L		08/25/21 08:46	08/26/21 12:47	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/25/21 08:46	08/26/21 12:47	1
Calcium	**14**		0.50	0.13	mg/L		08/25/21 08:46	08/26/21 12:47	1
Chromium	**0.0056**		0.0020	0.0015	mg/L		08/25/21 08:46	08/26/21 12:47	1
Cobalt	**0.00057**	**J**	0.0025	0.00013	mg/L		08/25/21 08:46	08/26/21 12:47	1
Lead	**0.00023**	**J**	0.0010	0.00013	mg/L		08/25/21 08:46	08/26/21 12:47	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/25/21 08:46	08/26/21 12:47	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/25/21 08:46	08/26/21 12:47	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/25/21 08:46	08/26/21 12:47	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/25/21 08:46	08/26/21 12:47	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/27/21 13:00	08/30/21 16:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**120**		10	10	mg/L			08/25/21 11:13	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.45**				SU			08/18/21 10:35	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: EB-5

Date Collected: 08/18/21 14:30
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-12

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/03/21 15:02	1
Fluoride	**0.060**	**J**	0.10	0.026	mg/L			09/03/21 15:02	1
Sulfate	<0.76		1.0	0.76	mg/L			09/02/21 14:50	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/25/21 08:46	08/26/21 12:50	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/25/21 08:46	08/26/21 12:50	1
Barium	<0.0016		0.010	0.0016	mg/L		08/25/21 08:46	08/26/21 12:50	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/25/21 08:46	08/26/21 12:50	1
Boron	<0.039		0.080	0.039	mg/L		08/25/21 08:46	08/26/21 12:50	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/25/21 08:46	08/26/21 12:50	1
Calcium	<0.13		0.50	0.13	mg/L		08/25/21 08:46	08/26/21 12:50	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/25/21 08:46	08/26/21 12:50	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/25/21 08:46	08/26/21 12:50	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/25/21 08:46	08/26/21 12:50	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/25/21 08:46	08/26/21 12:50	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/25/21 08:46	08/26/21 12:50	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/25/21 08:46	08/26/21 12:50	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/25/21 08:46	08/26/21 12:50	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/27/21 13:00	08/30/21 16:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/25/21 11:13	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: EB-6

Date Collected: 08/18/21 17:00
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126060-1

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/01/21 19:06	1
Fluoride	<0.026		0.10	0.026	mg/L			09/01/21 19:06	1
Sulfate	<0.76		1.0	0.76	mg/L			09/01/21 19:06	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/25/21 08:46	08/26/21 12:52	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/25/21 08:46	08/26/21 12:52	1
Barium	<0.0016		0.010	0.0016	mg/L		08/25/21 08:46	08/26/21 12:52	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/25/21 08:46	08/26/21 12:52	1
Boron	<0.039		0.080	0.039	mg/L		08/25/21 08:46	08/26/21 12:52	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/25/21 08:46	08/26/21 12:52	1
Calcium	<0.13		0.50	0.13	mg/L		08/25/21 08:46	08/26/21 12:52	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/25/21 08:46	08/26/21 12:52	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/25/21 08:46	08/26/21 12:52	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/25/21 08:46	08/26/21 12:52	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/25/21 08:46	08/26/21 12:52	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/25/21 08:46	08/26/21 12:52	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/25/21 08:46	08/26/21 12:52	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/25/21 08:46	08/26/21 12:52	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/27/21 13:00	08/30/21 16:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/25/21 11:13	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: DUP-5

Date Collected: 08/18/21 00:00
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126060-2

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14		1.0	0.71	mg/L			09/01/21 21:29	1
Fluoride	0.087	J	0.10	0.026	mg/L			09/01/21 21:29	1
Sulfate	960		10	7.6	mg/L			09/01/21 21:47	10

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/25/21 08:46	08/26/21 12:55	1
Arsenic	0.0029		0.0010	0.00031	mg/L		08/25/21 08:46	08/26/21 12:55	1
Barium	0.013		0.010	0.0016	mg/L		08/25/21 08:46	08/26/21 12:55	1
Beryllium	0.00020	J	0.0025	0.00018	mg/L		08/25/21 08:46	08/26/21 12:55	1
Boron	7.0		0.080	0.039	mg/L		08/25/21 08:46	08/26/21 12:55	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/25/21 08:46	08/26/21 12:55	1
Calcium	56		0.50	0.13	mg/L		08/25/21 08:46	08/26/21 12:55	1
Chromium	0.0093		0.0020	0.0015	mg/L		08/25/21 08:46	08/26/21 12:55	1
Cobalt	0.093		0.0025	0.00013	mg/L		08/25/21 08:46	08/26/21 12:55	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/25/21 08:46	08/26/21 12:55	1
Lithium	0.0034	J	0.0050	0.0034	mg/L		08/25/21 08:46	08/26/21 12:55	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/25/21 08:46	08/26/21 12:55	1
Selenium	0.0022	J	0.0050	0.0015	mg/L		08/25/21 08:46	08/26/21 12:55	1
Thallium	0.00018	J	0.0010	0.00015	mg/L		08/25/21 08:46	08/26/21 12:55	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00024		0.00020	0.00013	mg/L		08/27/21 13:00	08/30/21 16:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1400		10	10	mg/L			08/25/21 11:13	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: FB-5

Date Collected: 08/18/21 11:15
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126060-3

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/01/21 19:24	1
Fluoride	**0.043**	**J**	0.10	0.026	mg/L			09/01/21 19:24	1
Sulfate	<0.76		1.0	0.76	mg/L			09/01/21 19:24	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/25/21 08:46	08/26/21 13:14	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/25/21 08:46	08/26/21 13:14	1
Barium	<0.0016		0.010	0.0016	mg/L		08/25/21 08:46	08/26/21 13:14	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/25/21 08:46	08/26/21 13:14	1
Boron	<0.039		0.080	0.039	mg/L		08/25/21 08:46	08/26/21 13:14	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/25/21 08:46	08/26/21 13:14	1
Calcium	<0.13		0.50	0.13	mg/L		08/25/21 08:46	08/26/21 13:14	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/25/21 08:46	08/26/21 13:14	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/25/21 08:46	08/26/21 13:14	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/25/21 08:46	08/26/21 13:14	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/25/21 08:46	08/26/21 13:14	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/25/21 08:46	08/26/21 13:14	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/25/21 08:46	08/26/21 13:14	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/25/21 08:46	08/26/21 13:14	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/27/21 13:00	08/30/21 16:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/25/21 11:13	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: FB-6

Date Collected: 08/18/21 15:25
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126060-4

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/01/21 19:42	1
Fluoride	**0.11**		0.10	0.026	mg/L			09/01/21 19:42	1
Sulfate	<0.76		1.0	0.76	mg/L			09/01/21 19:42	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/25/21 08:46	08/26/21 13:16	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/25/21 08:46	08/26/21 13:16	1
Barium	<0.0016		0.010	0.0016	mg/L		08/25/21 08:46	08/26/21 13:16	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/25/21 08:46	08/26/21 13:16	1
Boron	<0.039		0.080	0.039	mg/L		08/25/21 08:46	08/26/21 13:16	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/25/21 08:46	08/26/21 13:16	1
Calcium	<0.13		0.50	0.13	mg/L		08/25/21 08:46	08/26/21 13:16	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/25/21 08:46	08/26/21 13:16	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/25/21 08:46	08/26/21 13:16	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/25/21 08:46	08/26/21 13:16	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/25/21 08:46	08/26/21 13:16	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/25/21 08:46	08/26/21 13:16	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/25/21 08:46	08/26/21 13:16	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/25/21 08:46	08/26/21 13:16	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/27/21 13:00	08/30/21 16:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/25/21 11:13	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWC-9

Date Collected: 08/19/21 10:22
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-1

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**18**		1.0	0.71	mg/L			09/03/21 04:59	1
Fluoride	**0.078**	**J**	0.10	0.026	mg/L			09/04/21 02:40	1
Sulfate	**160**		1.0	0.76	mg/L			09/04/21 02:40	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/26/21 12:39	08/27/21 11:09	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/26/21 12:39	08/27/21 11:09	1
Barium	**0.043**		0.010	0.0016	mg/L		08/26/21 12:39	08/27/21 11:09	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/26/21 12:39	08/27/21 11:09	1
Boron	**1.5**		0.080	0.039	mg/L		08/26/21 12:39	08/27/21 11:09	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/26/21 12:39	08/27/21 11:09	1
Calcium	**34**		0.50	0.13	mg/L		08/26/21 12:39	08/27/21 11:09	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/26/21 12:39	08/27/21 11:09	1
Cobalt	**0.00072**	**J**	0.0025	0.00013	mg/L		08/26/21 12:39	08/27/21 11:09	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/26/21 12:39	08/27/21 11:09	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/26/21 12:39	08/27/21 11:09	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/26/21 12:39	08/27/21 11:09	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/26/21 12:39	08/27/21 11:09	1
Thallium	**0.00040**	**J**	0.0010	0.00015	mg/L		08/26/21 12:39	08/27/21 11:09	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		09/01/21 09:36	09/03/21 13:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**380**		10	10	mg/L			08/25/21 11:13	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.22**				SU			08/19/21 10:22	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWC-10

Date Collected: 08/19/21 10:20
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-2

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.3**		1.0	0.71	mg/L			09/03/21 05:16	1
Fluoride	<0.026		0.10	0.026	mg/L			09/04/21 02:56	1
Sulfate	**2.2**		1.0	0.76	mg/L			09/04/21 02:56	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/26/21 12:39	08/27/21 11:11	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/26/21 12:39	08/27/21 11:11	1
Barium	**0.025**		0.010	0.0016	mg/L		08/26/21 12:39	08/27/21 11:11	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/26/21 12:39	08/27/21 11:11	1
Boron	**0.091**		0.080	0.039	mg/L		08/26/21 12:39	08/27/21 11:11	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/26/21 12:39	08/27/21 11:11	1
Calcium	**0.67**		0.50	0.13	mg/L		08/26/21 12:39	08/27/21 11:11	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/26/21 12:39	08/27/21 11:11	1
Cobalt	**0.022**		0.0025	0.00013	mg/L		08/26/21 12:39	08/27/21 11:11	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/26/21 12:39	08/27/21 11:11	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/26/21 12:39	08/27/21 11:11	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/26/21 12:39	08/27/21 11:11	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/26/21 12:39	08/27/21 11:11	1
Thallium	**0.00024**	**J**	0.0010	0.00015	mg/L		08/26/21 12:39	08/27/21 11:11	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		09/01/21 09:36	09/03/21 13:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**54**		10	10	mg/L			08/25/21 11:13	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.21**				SU			08/19/21 10:20	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWC-11

Date Collected: 08/19/21 12:02
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-3

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.9**		1.0	0.71	mg/L			09/03/21 06:05	1
Fluoride	<0.026		0.10	0.026	mg/L			09/04/21 04:01	1
Sulfate	<0.76		1.0	0.76	mg/L			09/04/21 04:01	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/26/21 12:39	08/27/21 11:14	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/26/21 12:39	08/27/21 11:14	1
Barium	**0.045**		0.010	0.0016	mg/L		08/26/21 12:39	08/27/21 11:14	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/26/21 12:39	08/27/21 11:14	1
Boron	**0.54**		0.080	0.039	mg/L		08/26/21 12:39	08/27/21 11:14	1
Cadmium	**0.00022**	**J**	0.0025	0.00022	mg/L		08/26/21 12:39	08/27/21 11:14	1
Calcium	**1.9**		0.50	0.13	mg/L		08/26/21 12:39	08/27/21 11:14	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/26/21 12:39	08/27/21 11:14	1
Cobalt	**0.014**		0.0025	0.00013	mg/L		08/26/21 12:39	08/27/21 11:14	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/26/21 12:39	08/27/21 11:14	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/26/21 12:39	08/27/21 11:14	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/26/21 12:39	08/27/21 11:14	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/26/21 12:39	08/27/21 11:14	1
Thallium	**0.00015**	**J**	0.0010	0.00015	mg/L		08/26/21 12:39	08/27/21 11:14	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		09/01/21 09:36	09/03/21 13:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**36**		10	10	mg/L			08/25/21 11:13	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.23**				SU			08/19/21 12:02	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWC-13

Date Collected: 08/19/21 10:15
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-4

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12**		1.0	0.71	mg/L			09/03/21 06:21	1
Fluoride	<0.026		0.10	0.026	mg/L			09/04/21 04:18	1
Sulfate	**82**		1.0	0.76	mg/L			09/04/21 04:18	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/26/21 12:39	08/27/21 11:17	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/26/21 12:39	08/27/21 11:17	1
Barium	**0.036**		0.010	0.0016	mg/L		08/26/21 12:39	08/27/21 11:17	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/26/21 12:39	08/27/21 11:17	1
Boron	**0.59**		0.080	0.039	mg/L		08/26/21 12:39	08/27/21 11:17	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/26/21 12:39	08/27/21 11:17	1
Calcium	**20**		0.50	0.13	mg/L		08/26/21 12:39	08/27/21 11:17	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/26/21 12:39	08/27/21 11:17	1
Cobalt	**0.0021**	**J**	0.0025	0.00013	mg/L		08/26/21 12:39	08/27/21 11:17	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/26/21 12:39	08/27/21 11:17	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/26/21 12:39	08/27/21 11:17	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/26/21 12:39	08/27/21 11:17	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/26/21 12:39	08/27/21 11:17	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/26/21 12:39	08/27/21 11:17	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		09/01/21 09:36	09/03/21 13:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**210**		10	10	mg/L			08/25/21 11:13	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.99**				SU			08/19/21 10:15	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWC-14

Date Collected: 08/19/21 11:25
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-5

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11**		1.0	0.71	mg/L			09/03/21 06:37	1
Fluoride	<0.026		0.10	0.026	mg/L			09/04/21 04:34	1
Sulfate	**190**		1.0	0.76	mg/L			09/04/21 04:34	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/26/21 12:39	08/27/21 11:20	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/26/21 12:39	08/27/21 11:20	1
Barium	**0.042**		0.010	0.0016	mg/L		08/26/21 12:39	08/27/21 11:20	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/26/21 12:39	08/27/21 11:20	1
Boron	**1.7**		0.080	0.039	mg/L		08/26/21 12:39	08/27/21 11:20	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/26/21 12:39	08/27/21 11:20	1
Calcium	**40**		0.50	0.13	mg/L		08/26/21 12:39	08/27/21 11:20	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/26/21 12:39	08/27/21 11:20	1
Cobalt	**0.0047**		0.0025	0.00013	mg/L		08/26/21 12:39	08/27/21 11:20	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/26/21 12:39	08/27/21 11:20	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/26/21 12:39	08/27/21 11:20	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/26/21 12:39	08/27/21 11:20	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/26/21 12:39	08/27/21 11:20	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/26/21 12:39	08/27/21 11:20	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		09/01/21 09:36	09/03/21 13:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**370**		10	10	mg/L			08/25/21 11:13	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.86**				SU			08/19/21 11:25	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWC-15

Date Collected: 08/19/21 13:45
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-6

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11**		1.0	0.71	mg/L			09/03/21 06:54	1
Fluoride	**0.12**		0.10	0.026	mg/L			09/04/21 04:50	1
Sulfate	**200**		1.0	0.76	mg/L			09/04/21 04:50	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/26/21 12:39	08/27/21 11:23	1
Arsenic	**0.0014**		0.0010	0.00031	mg/L		08/26/21 12:39	08/27/21 11:23	1
Barium	**0.027**		0.010	0.0016	mg/L		08/26/21 12:39	08/27/21 11:23	1
Beryllium	**0.00033**	**J**	0.0025	0.00018	mg/L		08/26/21 12:39	08/27/21 11:23	1
Boron	**1.6**		0.080	0.039	mg/L		08/26/21 12:39	08/27/21 11:23	1
Cadmium	**0.00026**	**J**	0.0025	0.00022	mg/L		08/26/21 12:39	08/27/21 11:23	1
Calcium	**17**		0.50	0.13	mg/L		08/26/21 12:39	08/27/21 11:23	1
Chromium	**0.032**		0.0020	0.0015	mg/L		08/26/21 12:39	08/27/21 11:23	1
Cobalt	**0.27**		0.0025	0.00013	mg/L		08/26/21 12:39	08/27/21 11:23	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/26/21 12:39	08/27/21 11:23	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/26/21 12:39	08/27/21 11:23	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/26/21 12:39	08/27/21 11:23	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/26/21 12:39	08/27/21 11:23	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/26/21 12:39	08/27/21 11:23	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		09/01/21 09:36	09/03/21 13:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**320**		10	10	mg/L			08/25/21 16:50	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**4.63**				SU			08/19/21 13:45	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWC-16

Date Collected: 08/19/21 10:10
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-7

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.5**		1.0	0.71	mg/L			09/03/21 07:10	1
Fluoride	**0.038**	**J**	0.10	0.026	mg/L			09/04/21 05:07	1
Sulfate	**38**		1.0	0.76	mg/L			09/04/21 05:07	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/26/21 12:39	08/27/21 11:26	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/26/21 12:39	08/27/21 11:26	1
Barium	**0.029**		0.010	0.0016	mg/L		08/26/21 12:39	08/27/21 11:26	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/26/21 12:39	08/27/21 11:26	1
Boron	**0.72**		0.080	0.039	mg/L		08/26/21 12:39	08/27/21 11:26	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/26/21 12:39	08/27/21 11:26	1
Calcium	**1.1**		0.50	0.13	mg/L		08/26/21 12:39	08/27/21 11:26	1
Chromium	**0.011**		0.0020	0.0015	mg/L		08/26/21 12:39	08/27/21 11:26	1
Cobalt	**0.0051**		0.0025	0.00013	mg/L		08/26/21 12:39	08/27/21 11:26	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/26/21 12:39	08/27/21 11:26	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/26/21 12:39	08/27/21 11:26	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/26/21 12:39	08/27/21 11:26	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/26/21 12:39	08/27/21 11:26	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/26/21 12:39	08/27/21 11:26	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		09/01/21 09:36	09/03/21 13:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**100**		10	10	mg/L			08/25/21 16:50	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.28**				SU			08/19/21 10:10	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWC-19

Date Collected: 08/19/21 13:30
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-8

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.4**		1.0	0.71	mg/L			09/03/21 07:59	1
Fluoride	<0.026		0.10	0.026	mg/L			09/04/21 05:56	1
Sulfate	**280**		5.0	3.8	mg/L			09/04/21 06:12	5

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/26/21 12:39	08/27/21 11:28	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/26/21 12:39	08/27/21 11:28	1
Barium	**0.027**		0.010	0.0016	mg/L		08/26/21 12:39	08/27/21 11:28	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/26/21 12:39	08/27/21 11:28	1
Boron	**2.1**		0.080	0.039	mg/L		08/26/21 12:39	08/27/21 11:28	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/26/21 12:39	08/27/21 11:28	1
Calcium	**45**		0.50	0.13	mg/L		08/26/21 12:39	08/27/21 11:28	1
Chromium	**0.014**		0.0020	0.0015	mg/L		08/26/21 12:39	08/27/21 11:28	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/26/21 12:39	08/27/21 11:28	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/26/21 12:39	08/27/21 11:28	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/26/21 12:39	08/27/21 11:28	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/26/21 12:39	08/27/21 11:28	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/26/21 12:39	08/27/21 11:28	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/26/21 12:39	08/27/21 11:28	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		09/01/21 09:36	09/03/21 13:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**440**		10	10	mg/L			08/25/21 16:50	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.61**				SU			08/19/21 13:30	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWC-20

Date Collected: 08/19/21 11:55
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-9

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10**		1.0	0.71	mg/L			09/03/21 08:32	1
Fluoride	**0.17**		0.10	0.026	mg/L			09/04/21 07:34	1
Sulfate	**230**		5.0	3.8	mg/L			09/04/21 07:50	5

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/26/21 12:39	08/27/21 11:37	1
Arsenic	**0.00066**	**J**	0.0010	0.00031	mg/L		08/26/21 12:39	08/27/21 11:37	1
Barium	**0.020**		0.010	0.0016	mg/L		08/26/21 12:39	08/27/21 11:37	1
Beryllium	**0.00091**	**J**	0.0025	0.00018	mg/L		08/26/21 12:39	08/27/21 11:37	1
Boron	**1.9**		0.080	0.039	mg/L		08/26/21 12:39	08/27/21 11:37	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/26/21 12:39	08/27/21 11:37	1
Calcium	**12**		0.50	0.13	mg/L		08/26/21 12:39	08/27/21 11:37	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/26/21 12:39	08/27/21 11:37	1
Cobalt	**0.20**		0.0025	0.00013	mg/L		08/26/21 12:39	08/27/21 11:37	1
Lead	**0.00034**	**J**	0.0010	0.00013	mg/L		08/26/21 12:39	08/27/21 11:37	1
Lithium	**0.0046**	**J**	0.0050	0.0034	mg/L		08/26/21 12:39	08/27/21 11:37	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/26/21 12:39	08/27/21 11:37	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/26/21 12:39	08/27/21 11:37	1
Thallium	**0.00018**	**J**	0.0010	0.00015	mg/L		08/26/21 12:39	08/27/21 11:37	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		09/01/21 09:39	09/03/21 14:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**340**		10	10	mg/L			08/25/21 16:50	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**4.28**				SU			08/19/21 11:55	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: EB-7

Date Collected: 08/19/21 10:30
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-10

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/03/21 09:37	1
Fluoride	**0.065**	**J**	0.10	0.026	mg/L			09/03/21 09:37	1
Sulfate	<0.76		1.0	0.76	mg/L			09/03/21 09:37	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/26/21 12:39	08/27/21 11:40	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/26/21 12:39	08/27/21 11:40	1
Barium	<0.0016		0.010	0.0016	mg/L		08/26/21 12:39	08/27/21 11:40	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/26/21 12:39	08/27/21 11:40	1
Boron	**0.044**	**J**	0.080	0.039	mg/L		08/26/21 12:39	08/27/21 11:40	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/26/21 12:39	08/27/21 11:40	1
Calcium	<0.13		0.50	0.13	mg/L		08/26/21 12:39	08/27/21 11:40	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/26/21 12:39	08/27/21 11:40	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/26/21 12:39	08/27/21 11:40	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/26/21 12:39	08/27/21 11:40	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/26/21 12:39	08/27/21 11:40	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/26/21 12:39	08/27/21 11:40	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/26/21 12:39	08/27/21 11:40	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/26/21 12:39	08/27/21 11:40	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		09/01/21 09:39	09/03/21 14:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/25/21 16:50	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: DUP-7

Date Collected: 08/19/21 00:00
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-11

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.2**		1.0	0.71	mg/L			09/03/21 09:54	1
Fluoride	**0.046**	**J**	0.10	0.026	mg/L			09/03/21 09:54	1
Sulfate	**5.9**		1.0	0.76	mg/L			09/03/21 09:54	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/26/21 12:39	08/27/21 11:43	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/26/21 12:39	08/27/21 11:43	1
Barium	**0.029**		0.010	0.0016	mg/L		08/26/21 12:39	08/27/21 11:43	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/26/21 12:39	08/27/21 11:43	1
Boron	**0.11**		0.080	0.039	mg/L		08/26/21 12:39	08/27/21 11:43	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/26/21 12:39	08/27/21 11:43	1
Calcium	**1.1**		0.50	0.13	mg/L		08/26/21 12:39	08/27/21 11:43	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/26/21 12:39	08/27/21 11:43	1
Cobalt	**0.023**		0.0025	0.00013	mg/L		08/26/21 12:39	08/27/21 11:43	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/26/21 12:39	08/27/21 11:43	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/26/21 12:39	08/27/21 11:43	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/26/21 12:39	08/27/21 11:43	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/26/21 12:39	08/27/21 11:43	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/26/21 12:39	08/27/21 11:43	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		09/01/21 09:39	09/03/21 14:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**44**		10	10	mg/L			08/25/21 16:51	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: FB-8

Date Collected: 08/19/21 12:32
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-12

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/03/21 09:21	1
Fluoride	**0.049**	**J**	0.10	0.026	mg/L			09/03/21 09:21	1
Sulfate	<0.76		1.0	0.76	mg/L			09/03/21 09:21	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/26/21 12:39	08/27/21 11:46	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/26/21 12:39	08/27/21 11:46	1
Barium	<0.0016		0.010	0.0016	mg/L		08/26/21 12:39	08/27/21 11:46	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/26/21 12:39	08/27/21 11:46	1
Boron	<0.039		0.080	0.039	mg/L		08/26/21 12:39	08/27/21 11:46	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/26/21 12:39	08/27/21 11:46	1
Calcium	<0.13		0.50	0.13	mg/L		08/26/21 12:39	08/27/21 11:46	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/26/21 12:39	08/27/21 11:46	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/26/21 12:39	08/27/21 11:46	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/26/21 12:39	08/27/21 11:46	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/26/21 12:39	08/27/21 11:46	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/26/21 12:39	08/27/21 11:46	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/26/21 12:39	08/27/21 11:46	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/26/21 12:39	08/27/21 11:46	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		09/01/21 09:39	09/03/21 14:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/25/21 16:50	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: DUP-8

Date Collected: 08/19/21 00:00
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-13

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**13**		1.0	0.71	mg/L			09/03/21 10:10	1
Fluoride	**0.046**	**J**	0.10	0.026	mg/L			09/03/21 10:10	1
Sulfate	**180**		5.0	3.8	mg/L			09/04/21 06:28	5

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/26/21 12:39	08/27/21 11:48	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/26/21 12:39	08/27/21 11:48	1
Barium	**0.041**		0.010	0.0016	mg/L		08/26/21 12:39	08/27/21 11:48	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/26/21 12:39	08/27/21 11:48	1
Boron	**1.7**		0.080	0.039	mg/L		08/26/21 12:39	08/27/21 11:48	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/26/21 12:39	08/27/21 11:48	1
Calcium	**40**		0.50	0.13	mg/L		08/26/21 12:39	08/27/21 11:48	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/26/21 12:39	08/27/21 11:48	1
Cobalt	**0.0070**		0.0025	0.00013	mg/L		08/26/21 12:39	08/27/21 11:48	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/26/21 12:39	08/27/21 11:48	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/26/21 12:39	08/27/21 11:48	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/26/21 12:39	08/27/21 11:48	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/26/21 12:39	08/27/21 11:48	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/26/21 12:39	08/27/21 11:48	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		09/01/21 09:39	09/03/21 14:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**350**		10	10	mg/L			08/25/21 16:50	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-1

Client Sample ID: SGWC-12

Date Collected: 08/20/21 09:30
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-14

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.9**		1.0	0.71	mg/L			09/03/21 10:26	1
Fluoride	**0.082**	**J**	0.10	0.026	mg/L			09/03/21 10:26	1
Sulfate	**60**		1.0	0.76	mg/L			09/03/21 10:26	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/26/21 12:39	08/27/21 11:51	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/26/21 12:39	08/27/21 11:51	1
Barium	**0.057**		0.010	0.0016	mg/L		08/26/21 12:39	08/27/21 11:51	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/26/21 12:39	08/27/21 11:51	1
Boron	**0.043**	**J**	0.080	0.039	mg/L		08/26/21 12:39	08/27/21 11:51	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/26/21 12:39	08/27/21 11:51	1
Calcium	**23**		0.50	0.13	mg/L		08/26/21 12:39	08/27/21 11:51	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/26/21 12:39	08/27/21 11:51	1
Cobalt	**0.0019**	**J**	0.0025	0.00013	mg/L		08/26/21 12:39	08/27/21 11:51	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/26/21 12:39	08/27/21 11:51	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/26/21 12:39	08/27/21 11:51	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/26/21 12:39	08/27/21 11:51	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/26/21 12:39	08/27/21 11:51	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/26/21 12:39	08/27/21 11:51	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		09/01/21 12:39	09/02/21 13:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**220**		10	10	mg/L			08/25/21 16:50	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.13**				SU			08/20/21 09:30	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 180-369870/7
Matrix: Water
Analysis Batch: 369870

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/01/21 09:24	1
Fluoride	<0.026		0.10	0.026	mg/L			09/01/21 09:24	1
Sulfate	<0.76		1.0	0.76	mg/L			09/01/21 09:24	1

Lab Sample ID: LCS 180-369870/6
Matrix: Water
Analysis Batch: 369870

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.6		mg/L		99	90 - 110
Fluoride	2.50	2.58		mg/L		103	90 - 110
Sulfate	50.0	48.7		mg/L		97	90 - 110

Lab Sample ID: 180-125972-3 MS
Matrix: Water
Analysis Batch: 369870

Client Sample ID: SGWA-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.6		50.0	53.4		mg/L		104	90 - 110
Fluoride	0.093	J	2.50	2.83		mg/L		109	90 - 110
Sulfate	1.1		50.0	51.6		mg/L		101	90 - 110

Lab Sample ID: 180-125972-3 MSD
Matrix: Water
Analysis Batch: 369870

Client Sample ID: SGWA-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.6		50.0	53.2		mg/L		103	90 - 110	0	20
Fluoride	0.093	J	2.50	2.80		mg/L		108	90 - 110	1	20
Sulfate	1.1		50.0	51.8		mg/L		101	90 - 110	0	20

Lab Sample ID: MB 180-369894/6
Matrix: Water
Analysis Batch: 369894

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/01/21 11:57	1
Fluoride	<0.026		0.10	0.026	mg/L			09/01/21 11:57	1
Sulfate	<0.76		1.0	0.76	mg/L			09/01/21 11:57	1

Lab Sample ID: LCS 180-369894/5
Matrix: Water
Analysis Batch: 369894

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.2		mg/L		98	90 - 110
Fluoride	2.50	2.62		mg/L		105	90 - 110
Sulfate	50.0	49.0		mg/L		98	90 - 110

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 180-126437-C-1 MS
Matrix: Water
Analysis Batch: 369894

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	16		50.0	67.0		mg/L		102	90 - 110
Fluoride	0.11		2.50	2.86		mg/L		110	90 - 110
Sulfate	50		50.0	100		mg/L		101	90 - 110

Lab Sample ID: 180-126437-C-1 MSD
Matrix: Water
Analysis Batch: 369894

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	16		50.0	64.7		mg/L		98	90 - 110	3	20
Fluoride	0.11		2.50	2.70		mg/L		103	90 - 110	6	20
Sulfate	50		50.0	96.3		mg/L		93	90 - 110	4	20

Lab Sample ID: MB 180-370035/7
Matrix: Water
Analysis Batch: 370035

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<0.76		1.0	0.76	mg/L			09/02/21 09:32	1

Lab Sample ID: LCS 180-370035/6
Matrix: Water
Analysis Batch: 370035

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate			50.0	49.7		mg/L		99	90 - 110

Lab Sample ID: 180-126059-1 MS
Matrix: Water
Analysis Batch: 370035

Client Sample ID: SGWA-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	0.90	J	50.0	49.4		mg/L		97	90 - 110

Lab Sample ID: 180-126059-1 MSD
Matrix: Water
Analysis Batch: 370035

Client Sample ID: SGWA-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	0.90	J	50.0	50.9		mg/L		100	90 - 110	3	20

Lab Sample ID: 180-126059-11 MS
Matrix: Water
Analysis Batch: 370035

Client Sample ID: SGWA-24
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	1.0		50.0	51.0		mg/L		100	90 - 110

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 180-126059-11 MSD — **Client Sample ID: SGWA-24**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 370035

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	1.0		50.0	46.9		mg/L		92	90 - 110	8	20

Lab Sample ID: MB 180-370036/64 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 370036

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/03/21 03:05	1

Lab Sample ID: LCS 180-370036/63 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 370036

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	54.3		mg/L		109	90 - 110

Lab Sample ID: 180-126090-7 MS — **Client Sample ID: SGWC-16**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 370036

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	9.5		50.0	60.9		mg/L		103	90 - 110

Lab Sample ID: 180-126090-7 MSD — **Client Sample ID: SGWC-16**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 370036

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	9.5		50.0	62.2		mg/L		105	90 - 110	2	20

Lab Sample ID: 180-126093-A-11 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 370036

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	6.0	F1	50.0	52.7		mg/L		93	90 - 110

Lab Sample ID: 180-126093-A-11 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 370036

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	6.0	F1	50.0	62.2	F1	mg/L		112	90 - 110	16	20

Lab Sample ID: MB 180-370188/7 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 370188

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/03/21 10:14	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 180-370188/7
Matrix: Water
Analysis Batch: 370188

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.026		0.10	0.026	mg/L			09/03/21 10:14	1
Sulfate	<0.76		1.0	0.76	mg/L			09/03/21 10:14	1

Lab Sample ID: LCS 180-370188/6
Matrix: Water
Analysis Batch: 370188

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.2		mg/L		98	90 - 110
Fluoride	2.50	2.65		mg/L		106	90 - 110
Sulfate	50.0	47.0		mg/L		94	90 - 110

Lab Sample ID: 180-126059-1 MS
Matrix: Water
Analysis Batch: 370188

Client Sample ID: SGWA-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.4		50.0	54.1		mg/L		103	90 - 110
Fluoride	0.066	J	2.50	2.82		mg/L		110	90 - 110

Lab Sample ID: 180-126059-1 MSD
Matrix: Water
Analysis Batch: 370188

Client Sample ID: SGWA-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	2.4		50.0	52.8		mg/L		101	90 - 110	2	20
Fluoride	0.066	J	2.50	2.69		mg/L		105	90 - 110	5	20

Lab Sample ID: 180-126059-11 MS
Matrix: Water
Analysis Batch: 370188

Client Sample ID: SGWA-24
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.7		50.0	51.9		mg/L		98	90 - 110
Fluoride	0.16		2.50	2.71		mg/L		102	90 - 110

Lab Sample ID: 180-126059-11 MSD
Matrix: Water
Analysis Batch: 370188

Client Sample ID: SGWA-24
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	2.7		50.0	51.9		mg/L		98	90 - 110	0	20
Fluoride	0.16		2.50	2.66		mg/L		100	90 - 110	2	20

Lab Sample ID: MB 180-370252/42
Matrix: Water
Analysis Batch: 370252

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/04/21 00:45	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 180-370252/42
Matrix: Water
Analysis Batch: 370252

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.026		0.10	0.026	mg/L			09/04/21 00:45	1
Sulfate	<0.76		1.0	0.76	mg/L			09/04/21 00:45	1

Lab Sample ID: MB 180-370252/6
Matrix: Water
Analysis Batch: 370252

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/03/21 13:48	1
Fluoride	<0.026		0.10	0.026	mg/L			09/03/21 13:48	1
Sulfate	<0.76		1.0	0.76	mg/L			09/03/21 13:48	1

Lab Sample ID: LCS 180-370252/41
Matrix: Water
Analysis Batch: 370252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	53.3		mg/L		107	90 - 110
Fluoride	2.50	2.62		mg/L		105	90 - 110
Sulfate	50.0	53.0		mg/L		106	90 - 110

Lab Sample ID: 180-126090-7 MS
Matrix: Water
Analysis Batch: 370252

Client Sample ID: SGWC-16
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.038	J	2.50	2.51		mg/L		99	90 - 110
Sulfate	38		50.0	87.2		mg/L		97	90 - 110

Lab Sample ID: 180-126090-7 MSD
Matrix: Water
Analysis Batch: 370252

Client Sample ID: SGWC-16
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.038	J	2.50	2.40		mg/L		95	90 - 110	4	20
Sulfate	38		50.0	84.8		mg/L		93	90 - 110	3	20

Method: EPA 6020B - Metals (ICP/MS)

Lab Sample ID: MB 180-368730/1-A
Matrix: Water
Analysis Batch: 369103

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 368730

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/20/21 12:11	08/24/21 19:25	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/20/21 12:11	08/24/21 19:25	1
Barium	<0.0016		0.010	0.0016	mg/L		08/20/21 12:11	08/24/21 19:25	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/20/21 12:11	08/24/21 19:25	1
Boron	<0.039		0.080	0.039	mg/L		08/20/21 12:11	08/24/21 19:25	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/20/21 12:11	08/24/21 19:25	1

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 180-368730/1-A
Matrix: Water
Analysis Batch: 369103

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 368730

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.13		0.50	0.13	mg/L		08/20/21 12:11	08/24/21 19:25	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/20/21 12:11	08/24/21 19:25	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/20/21 12:11	08/24/21 19:25	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/20/21 12:11	08/24/21 19:25	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/20/21 12:11	08/24/21 19:25	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/20/21 12:11	08/24/21 19:25	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/20/21 12:11	08/24/21 19:25	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/20/21 12:11	08/24/21 19:25	1

Lab Sample ID: LCS 180-368730/2-A
Matrix: Water
Analysis Batch: 369103

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 368730

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.250	0.254		mg/L		102	80 - 120
Arsenic	1.00	1.01		mg/L		101	80 - 120
Barium	1.00	1.06		mg/L		106	80 - 120
Beryllium	0.500	0.506		mg/L		101	80 - 120
Boron	1.25	1.32		mg/L		105	80 - 120
Cadmium	0.500	0.535		mg/L		107	80 - 120
Calcium	25.0	27.6		mg/L		110	80 - 120
Chromium	0.500	0.514		mg/L		103	80 - 120
Cobalt	0.500	0.511		mg/L		102	80 - 120
Lead	0.500	0.528		mg/L		106	80 - 120
Lithium	0.500	0.486		mg/L		97	80 - 120
Molybdenum	0.500	0.535		mg/L		107	80 - 120
Selenium	1.00	1.06		mg/L		106	80 - 120
Thallium	1.00	1.05		mg/L		105	80 - 120

Lab Sample ID: 180-125969-B-2-B MS
Matrix: Water
Analysis Batch: 369103

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 368730

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.00038		0.250	0.250		mg/L		100	75 - 125
Arsenic	<0.00031		1.00	1.02		mg/L		102	75 - 125
Barium	0.015		1.00	1.08		mg/L		106	75 - 125
Beryllium	<0.00018		0.500	0.513		mg/L		103	75 - 125
Boron	<0.039		1.25	1.31		mg/L		105	75 - 125
Cadmium	<0.00022		0.500	0.541		mg/L		108	75 - 125
Calcium	0.81		25.0	28.5		mg/L		111	75 - 125
Chromium	0.0015	J	0.500	0.519		mg/L		103	75 - 125
Cobalt	0.00039	J	0.500	0.513		mg/L		103	75 - 125
Lead	<0.00013		0.500	0.531		mg/L		106	75 - 125
Lithium	<0.0034		0.500	0.494		mg/L		99	75 - 125
Molybdenum	<0.00061		0.500	0.531		mg/L		106	75 - 125
Selenium	<0.0015		1.00	1.03		mg/L		103	75 - 125
Thallium	0.00015	J	1.00	1.06		mg/L		106	75 - 125

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-125969-B-2-C MSD
Matrix: Water
Analysis Batch: 369103

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 368730

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	<0.00038		0.250	0.252		mg/L		101	75 - 125	1	20
Arsenic	<0.00031		1.00	1.04		mg/L		104	75 - 125	2	20
Barium	0.015		1.00	1.07		mg/L		105	75 - 125	1	20
Beryllium	<0.00018		0.500	0.514		mg/L		103	75 - 125	0	20
Boron	<0.039		1.25	1.38		mg/L		110	75 - 125	5	20
Cadmium	<0.00022		0.500	0.535		mg/L		107	75 - 125	1	20
Calcium	0.81		25.0	28.6		mg/L		111	75 - 125	0	20
Chromium	0.0015	J	0.500	0.527		mg/L		105	75 - 125	1	20
Cobalt	0.00039	J	0.500	0.524		mg/L		105	75 - 125	2	20
Lead	<0.00013		0.500	0.538		mg/L		108	75 - 125	1	20
Lithium	<0.0034		0.500	0.495		mg/L		99	75 - 125	0	20
Molybdenum	<0.00061		0.500	0.539		mg/L		108	75 - 125	1	20
Selenium	<0.0015		1.00	1.04		mg/L		104	75 - 125	1	20
Thallium	0.00015	J	1.00	1.08		mg/L		108	75 - 125	1	20

Lab Sample ID: MB 180-369118/1-A
Matrix: Water
Analysis Batch: 369490

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 369118

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/25/21 08:46	08/27/21 09:52	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/25/21 08:46	08/27/21 09:52	1
Barium	<0.0016		0.010	0.0016	mg/L		08/25/21 08:46	08/27/21 09:52	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/25/21 08:46	08/27/21 09:52	1
Boron	<0.039		0.080	0.039	mg/L		08/25/21 08:46	08/27/21 09:52	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/25/21 08:46	08/27/21 09:52	1
Calcium	<0.13		0.50	0.13	mg/L		08/25/21 08:46	08/27/21 09:52	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/25/21 08:46	08/27/21 09:52	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/25/21 08:46	08/27/21 09:52	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/25/21 08:46	08/27/21 09:52	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/25/21 08:46	08/27/21 09:52	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/25/21 08:46	08/27/21 09:52	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/25/21 08:46	08/27/21 09:52	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/25/21 08:46	08/27/21 09:52	1

Lab Sample ID: LCS 180-369118/2-A
Matrix: Water
Analysis Batch: 369368

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 369118

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.250	0.232		mg/L		93	80 - 120
Arsenic	1.00	0.998		mg/L		100	80 - 120
Barium	1.00	0.971		mg/L		97	80 - 120
Beryllium	0.500	0.500		mg/L		100	80 - 120
Boron	1.25	1.28		mg/L		102	80 - 120
Cadmium	0.500	0.484		mg/L		97	80 - 120
Calcium	25.0	26.4		mg/L		105	80 - 120
Chromium	0.500	0.474		mg/L		95	80 - 120
Cobalt	0.500	0.474		mg/L		95	80 - 120

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 180-369118/2-A
Matrix: Water
Analysis Batch: 369368

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 369118

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.500	0.489		mg/L		98	80 - 120
Lithium	0.500	0.492		mg/L		98	80 - 120
Molybdenum	0.500	0.514		mg/L		103	80 - 120
Selenium	1.00	1.00		mg/L		100	80 - 120
Thallium	1.00	0.974		mg/L		97	80 - 120

Lab Sample ID: 180-126059-1 MS
Matrix: Water
Analysis Batch: 369368

Client Sample ID: SGWA-3
Prep Type: Total Recoverable
Prep Batch: 369118

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.00038		0.250	0.234		mg/L		93	75 - 125
Arsenic	<0.00031		1.00	1.02		mg/L		102	75 - 125
Barium	0.036		1.00	1.03		mg/L		99	75 - 125
Beryllium	<0.00018		0.500	0.505		mg/L		101	75 - 125
Boron	<0.039		1.25	1.29		mg/L		103	75 - 125
Cadmium	<0.00022		0.500	0.480		mg/L		96	75 - 125
Calcium	5.9		25.0	32.3		mg/L		106	75 - 125
Chromium	0.020		0.500	0.499		mg/L		96	75 - 125
Cobalt	<0.00013		0.500	0.484		mg/L		97	75 - 125
Lead	<0.00013		0.500	0.501		mg/L		100	75 - 125
Lithium	<0.0034		0.500	0.500		mg/L		100	75 - 125
Molybdenum	<0.00061		0.500	0.517		mg/L		103	75 - 125
Selenium	<0.0015		1.00	1.00		mg/L		100	75 - 125
Thallium	<0.00015		1.00	0.978		mg/L		98	75 - 125

Lab Sample ID: 180-126059-1 MSD
Matrix: Water
Analysis Batch: 369368

Client Sample ID: SGWA-3
Prep Type: Total Recoverable
Prep Batch: 369118

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	<0.00038		0.250	0.236		mg/L		94	75 - 125	1	20
Arsenic	<0.00031		1.00	1.01		mg/L		101	75 - 125	1	20
Barium	0.036		1.00	1.03		mg/L		99	75 - 125	0	20
Beryllium	<0.00018		0.500	0.505		mg/L		101	75 - 125	0	20
Boron	<0.039		1.25	1.29		mg/L		103	75 - 125	0	20
Cadmium	<0.00022		0.500	0.484		mg/L		97	75 - 125	1	20
Calcium	5.9		25.0	31.9		mg/L		104	75 - 125	1	20
Chromium	0.020		0.500	0.495		mg/L		95	75 - 125	1	20
Cobalt	<0.00013		0.500	0.472		mg/L		94	75 - 125	2	20
Lead	<0.00013		0.500	0.493		mg/L		99	75 - 125	2	20
Lithium	<0.0034		0.500	0.501		mg/L		100	75 - 125	0	20
Molybdenum	<0.00061		0.500	0.510		mg/L		102	75 - 125	1	20
Selenium	<0.0015		1.00	1.01		mg/L		101	75 - 125	1	20
Thallium	<0.00015		1.00	0.991		mg/L		99	75 - 125	1	20

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 180-369326/1-A
Matrix: Water
Analysis Batch: 369490

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 369326

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/26/21 12:39	08/27/21 10:35	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/26/21 12:39	08/27/21 10:35	1
Barium	<0.0016		0.010	0.0016	mg/L		08/26/21 12:39	08/27/21 10:35	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/26/21 12:39	08/27/21 10:35	1
Boron	<0.039		0.080	0.039	mg/L		08/26/21 12:39	08/27/21 10:35	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/26/21 12:39	08/27/21 10:35	1
Calcium	<0.13		0.50	0.13	mg/L		08/26/21 12:39	08/27/21 10:35	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/26/21 12:39	08/27/21 10:35	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/26/21 12:39	08/27/21 10:35	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/26/21 12:39	08/27/21 10:35	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/26/21 12:39	08/27/21 10:35	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/26/21 12:39	08/27/21 10:35	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/26/21 12:39	08/27/21 10:35	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/26/21 12:39	08/27/21 10:35	1

Lab Sample ID: LCS 180-369326/2-A
Matrix: Water
Analysis Batch: 369490

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 369326

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.250	0.246		mg/L		98	80 - 120
Arsenic	1.00	1.06		mg/L		106	80 - 120
Barium	1.00	1.02		mg/L		102	80 - 120
Beryllium	0.500	0.512		mg/L		102	80 - 120
Boron	1.25	1.32		mg/L		106	80 - 120
Cadmium	0.500	0.525		mg/L		105	80 - 120
Calcium	25.0	26.8		mg/L		107	80 - 120
Chromium	0.500	0.495		mg/L		99	80 - 120
Cobalt	0.500	0.521		mg/L		104	80 - 120
Lead	0.500	0.525		mg/L		105	80 - 120
Lithium	0.500	0.497		mg/L		99	80 - 120
Molybdenum	0.500	0.524		mg/L		105	80 - 120
Selenium	1.00	1.02		mg/L		102	80 - 120
Thallium	1.00	1.05		mg/L		105	80 - 120

Lab Sample ID: 180-126093-B-14-B MS
Matrix: Water
Analysis Batch: 369490

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 369326

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.00038		0.250	0.243		mg/L		97	75 - 125
Arsenic	<0.00031		1.00	1.04		mg/L		104	75 - 125
Barium	0.011		1.00	1.00		mg/L		99	75 - 125
Beryllium	<0.00018		0.500	0.517		mg/L		103	75 - 125
Boron	<0.039		1.25	1.36		mg/L		109	75 - 125
Cadmium	<0.00022		0.500	0.521		mg/L		104	75 - 125
Calcium	6.9		25.0	33.5		mg/L		107	75 - 125
Chromium	0.0015	J	0.500	0.495		mg/L		99	75 - 125
Cobalt	<0.00013		0.500	0.513		mg/L		103	75 - 125

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-126093-B-14-B MS
Matrix: Water
Analysis Batch: 369490

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 369326

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.00017	J	0.500	0.531		mg/L		106	75 - 125
Lithium	<0.0034		0.500	0.500		mg/L		100	75 - 125
Molybdenum	<0.00061		0.500	0.521		mg/L		104	75 - 125
Selenium	<0.0015		1.00	1.01		mg/L		101	75 - 125
Thallium	<0.00015		1.00	1.05		mg/L		105	75 - 125

Lab Sample ID: 180-126093-B-14-C MSD
Matrix: Water
Analysis Batch: 369490

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 369326

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	<0.00038		0.250	0.239		mg/L		96	75 - 125	2	20
Arsenic	<0.00031		1.00	1.03		mg/L		103	75 - 125	1	20
Barium	0.011		1.00	1.00		mg/L		99	75 - 125	0	20
Beryllium	<0.00018		0.500	0.513		mg/L		103	75 - 125	1	20
Boron	<0.039		1.25	1.35		mg/L		108	75 - 125	1	20
Cadmium	<0.00022		0.500	0.513		mg/L		103	75 - 125	1	20
Calcium	6.9		25.0	33.1		mg/L		105	75 - 125	1	20
Chromium	0.0015	J	0.500	0.482		mg/L		96	75 - 125	3	20
Cobalt	<0.00013		0.500	0.518		mg/L		104	75 - 125	1	20
Lead	0.00017	J	0.500	0.513		mg/L		103	75 - 125	3	20
Lithium	<0.0034		0.500	0.500		mg/L		100	75 - 125	0	20
Molybdenum	<0.00061		0.500	0.525		mg/L		105	75 - 125	1	20
Selenium	<0.0015		1.00	1.01		mg/L		101	75 - 125	0	20
Thallium	<0.00015		1.00	1.04		mg/L		104	75 - 125	1	20

Method: EPA 7470A - Mercury (CVAA)

Lab Sample ID: MB 180-368875/1-A
Matrix: Water
Analysis Batch: 369203

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 368875

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/23/21 12:47	08/25/21 14:44	1

Lab Sample ID: LCS 180-368875/2-A
Matrix: Water
Analysis Batch: 369203

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 368875

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00250	0.00268		mg/L		107	80 - 120

Lab Sample ID: 180-125920-E-5-E MS
Matrix: Water
Analysis Batch: 369203

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 368875

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.00013		0.00100	0.000932		mg/L		93	75 - 125

Method: EPA 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 180-125920-E-5-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 369203 — **Prep Batch: 368875**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.00013		0.00100	0.00100		mg/L		100	75 - 125	7	20

Lab Sample ID: MB 180-369480/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 369675 — **Prep Batch: 369480**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/27/21 13:00	08/30/21 16:20	1

Lab Sample ID: LCS 180-369480/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 369675 — **Prep Batch: 369480**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00250	0.00228		mg/L		91	80 - 120

Lab Sample ID: 180-125815-E-1-C MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 369675 — **Prep Batch: 369480**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.00013		0.00100	0.000962		mg/L		96	75 - 125

Lab Sample ID: 180-125815-E-1-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 369675 — **Prep Batch: 369480**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.00013		0.00100	0.000906		mg/L		91	75 - 125	6	20

Lab Sample ID: MB 180-369880/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 370276 — **Prep Batch: 369880**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		09/01/21 09:36	09/03/21 13:30	1

Lab Sample ID: LCS 180-369880/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 370276 — **Prep Batch: 369880**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00250	0.00250		mg/L		100	80 - 120

Lab Sample ID: 180-126085-E-1-C MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 370276 — **Prep Batch: 369880**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.00013		0.00100	0.00103		mg/L		103	75 - 125

Method: EPA 7470A - Mercury (CVAA)

Lab Sample ID: 180-126085-E-1-D MSD
Matrix: Water
Analysis Batch: 370276

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 369880

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.00013		0.00100	0.00102		mg/L		102	75 - 125	0	20

Lab Sample ID: MB 180-369881/1-A
Matrix: Water
Analysis Batch: 370276

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 369881

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		09/01/21 09:39	09/03/21 13:59	1

Lab Sample ID: LCS 180-369881/2-A
Matrix: Water
Analysis Batch: 370276

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 369881

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00250	0.00244		mg/L		98	80 - 120		

Lab Sample ID: 180-126089-F-3-C MS
Matrix: Water
Analysis Batch: 370276

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 369881

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	<0.00013		0.00100	0.000982		mg/L		98	75 - 125		

Lab Sample ID: 180-126089-F-3-D MSD
Matrix: Water
Analysis Batch: 370276

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 369881

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.00013		0.00100	0.000941		mg/L		94	75 - 125	4	20

Lab Sample ID: MB 180-369922/1-A
Matrix: Water
Analysis Batch: 370104

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 369922

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		09/01/21 12:39	09/02/21 12:58	1

Lab Sample ID: LCS 180-369922/2-A
Matrix: Water
Analysis Batch: 370104

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 369922

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00250	0.00266		mg/L		106	80 - 120		

Lab Sample ID: 180-126187-D-1-E MS
Matrix: Water
Analysis Batch: 370104

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 369922

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	<0.00013		0.00100	0.000799		mg/L		80	75 - 125		

Method: EPA 7470A - Mercury (CVAA)

Lab Sample ID: 180-126187-D-1-F MSD
Matrix: Water
Analysis Batch: 370104

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 369922

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.00013		0.00100	0.000906		mg/L		91	75 - 125	13	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 180-368811/2
Matrix: Water
Analysis Batch: 368811

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/22/21 17:36	1

Lab Sample ID: LCS 180-368811/1
Matrix: Water
Analysis Batch: 368811

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			685	704		mg/L		103	80 - 120		

Lab Sample ID: 180-125972-3 DU
Matrix: Water
Analysis Batch: 368811

Client Sample ID: SGWA-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	130			126		mg/L				3	10

Lab Sample ID: MB 180-369142/2
Matrix: Water
Analysis Batch: 369142

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/25/21 10:30	1

Lab Sample ID: LCS 180-369142/1
Matrix: Water
Analysis Batch: 369142

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			685	708		mg/L		103	80 - 120		

Lab Sample ID: 180-126043-A-3 DU
Matrix: Water
Analysis Batch: 369142

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	5100			5030		mg/L				1	10

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: MB 180-369160/2
Matrix: Water
Analysis Batch: 369160

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/25/21 11:13	1

Lab Sample ID: LCS 180-369160/1
Matrix: Water
Analysis Batch: 369160

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	685	656		mg/L		96	80 - 120

Lab Sample ID: 180-126059-8 DU
Matrix: Water
Analysis Batch: 369160

Client Sample ID: SGWC-21
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	380		387		mg/L		1	10

Lab Sample ID: 180-126085-C-1 DU
Matrix: Water
Analysis Batch: 369160

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	2500		2530		mg/L		2	10

Lab Sample ID: MB 180-369205/2
Matrix: Water
Analysis Batch: 369205

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/25/21 16:50	1

Lab Sample ID: LCS 180-369205/1
Matrix: Water
Analysis Batch: 369205

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	685	694		mg/L		101	80 - 120

Lab Sample ID: 180-126090-6 DU
Matrix: Water
Analysis Batch: 369205

Client Sample ID: SGWC-15
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	320		319		mg/L		0.6	10

HPLC/IC

Analysis Batch: 369870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125972-1	SGWA-1	Total/NA	Water	EPA 300.0 R2.1	
180-125972-2	SGWA-2	Total/NA	Water	EPA 300.0 R2.1	
180-125972-3	SGWA-4	Total/NA	Water	EPA 300.0 R2.1	
180-125972-4	SGWA-25	Total/NA	Water	EPA 300.0 R2.1	
MB 180-369870/7	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-369870/6	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-125972-3 MS	SGWA-4	Total/NA	Water	EPA 300.0 R2.1	
180-125972-3 MSD	SGWA-4	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 369894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126060-1	EB-6	Total/NA	Water	EPA 300.0 R2.1	
180-126060-2	DUP-5	Total/NA	Water	EPA 300.0 R2.1	
180-126060-2	DUP-5	Total/NA	Water	EPA 300.0 R2.1	
180-126060-3	FB-5	Total/NA	Water	EPA 300.0 R2.1	
180-126060-4	FB-6	Total/NA	Water	EPA 300.0 R2.1	
MB 180-369894/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-369894/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-126437-C-1 MS	Matrix Spike	Total/NA	Water	EPA 300.0 R2.1	
180-126437-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 370035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126059-1	SGWA-3	Total/NA	Water	EPA 300.0 R2.1	
180-126059-2	SGWA-5	Total/NA	Water	EPA 300.0 R2.1	
180-126059-3	SGWC-6	Total/NA	Water	EPA 300.0 R2.1	
180-126059-4	SGWC-7	Total/NA	Water	EPA 300.0 R2.1	
180-126059-5	SGWC-8	Total/NA	Water	EPA 300.0 R2.1	
180-126059-7	SGWC-18	Total/NA	Water	EPA 300.0 R2.1	
180-126059-8	SGWC-21	Total/NA	Water	EPA 300.0 R2.1	
180-126059-9	SGWC-22	Total/NA	Water	EPA 300.0 R2.1	
180-126059-10	SGWC-23	Total/NA	Water	EPA 300.0 R2.1	
180-126059-11	SGWA-24	Total/NA	Water	EPA 300.0 R2.1	
180-126059-12	EB-5	Total/NA	Water	EPA 300.0 R2.1	
MB 180-370035/7	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-370035/6	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-126059-1 MS	SGWA-3	Total/NA	Water	EPA 300.0 R2.1	
180-126059-1 MSD	SGWA-3	Total/NA	Water	EPA 300.0 R2.1	
180-126059-11 MS	SGWA-24	Total/NA	Water	EPA 300.0 R2.1	
180-126059-11 MSD	SGWA-24	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 370036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126090-1	SGWC-9	Total/NA	Water	EPA 300.0 R2.1	
180-126090-2	SGWC-10	Total/NA	Water	EPA 300.0 R2.1	
180-126090-3	SGWC-11	Total/NA	Water	EPA 300.0 R2.1	
180-126090-4	SGWC-13	Total/NA	Water	EPA 300.0 R2.1	
180-126090-5	SGWC-14	Total/NA	Water	EPA 300.0 R2.1	
180-126090-6	SGWC-15	Total/NA	Water	EPA 300.0 R2.1	
180-126090-7	SGWC-16	Total/NA	Water	EPA 300.0 R2.1	
180-126090-8	SGWC-19	Total/NA	Water	EPA 300.0 R2.1	

HPLC/IC (Continued)

Analysis Batch: 370036 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126090-9	SGWC-20	Total/NA	Water	EPA 300.0 R2.1	
180-126090-10	EB-7	Total/NA	Water	EPA 300.0 R2.1	
180-126090-11	DUP-7	Total/NA	Water	EPA 300.0 R2.1	
180-126090-12	FB-8	Total/NA	Water	EPA 300.0 R2.1	
180-126090-13	DUP-8	Total/NA	Water	EPA 300.0 R2.1	
180-126090-14	SGWC-12	Total/NA	Water	EPA 300.0 R2.1	
MB 180-370036/64	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-370036/63	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-126090-7 MS	SGWC-16	Total/NA	Water	EPA 300.0 R2.1	
180-126090-7 MSD	SGWC-16	Total/NA	Water	EPA 300.0 R2.1	
180-126093-A-11 MS	Matrix Spike	Total/NA	Water	EPA 300.0 R2.1	
180-126093-A-11 MSD	Matrix Spike Duplicate	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 370188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126059-1	SGWA-3	Total/NA	Water	EPA 300.0 R2.1	
180-126059-2	SGWA-5	Total/NA	Water	EPA 300.0 R2.1	
180-126059-3	SGWC-6	Total/NA	Water	EPA 300.0 R2.1	
180-126059-4	SGWC-7	Total/NA	Water	EPA 300.0 R2.1	
180-126059-5	SGWC-8	Total/NA	Water	EPA 300.0 R2.1	
180-126059-6	SGWC-17	Total/NA	Water	EPA 300.0 R2.1	
180-126059-6	SGWC-17	Total/NA	Water	EPA 300.0 R2.1	
180-126059-7	SGWC-18	Total/NA	Water	EPA 300.0 R2.1	
180-126059-8	SGWC-21	Total/NA	Water	EPA 300.0 R2.1	
180-126059-9	SGWC-22	Total/NA	Water	EPA 300.0 R2.1	
180-126059-10	SGWC-23	Total/NA	Water	EPA 300.0 R2.1	
180-126059-11	SGWA-24	Total/NA	Water	EPA 300.0 R2.1	
180-126059-12	EB-5	Total/NA	Water	EPA 300.0 R2.1	
MB 180-370188/7	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-370188/6	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-126059-1 MS	SGWA-3	Total/NA	Water	EPA 300.0 R2.1	
180-126059-1 MSD	SGWA-3	Total/NA	Water	EPA 300.0 R2.1	
180-126059-11 MS	SGWA-24	Total/NA	Water	EPA 300.0 R2.1	
180-126059-11 MSD	SGWA-24	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 370252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126090-1	SGWC-9	Total/NA	Water	EPA 300.0 R2.1	
180-126090-2	SGWC-10	Total/NA	Water	EPA 300.0 R2.1	
180-126090-3	SGWC-11	Total/NA	Water	EPA 300.0 R2.1	
180-126090-4	SGWC-13	Total/NA	Water	EPA 300.0 R2.1	
180-126090-5	SGWC-14	Total/NA	Water	EPA 300.0 R2.1	
180-126090-6	SGWC-15	Total/NA	Water	EPA 300.0 R2.1	
180-126090-7	SGWC-16	Total/NA	Water	EPA 300.0 R2.1	
180-126090-8	SGWC-19	Total/NA	Water	EPA 300.0 R2.1	
180-126090-8	SGWC-19	Total/NA	Water	EPA 300.0 R2.1	
180-126090-9	SGWC-20	Total/NA	Water	EPA 300.0 R2.1	
180-126090-9	SGWC-20	Total/NA	Water	EPA 300.0 R2.1	
180-126090-13	DUP-8	Total/NA	Water	EPA 300.0 R2.1	
MB 180-370252/42	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
MB 180-370252/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	

HPLC/IC (Continued)

Analysis Batch: 370252 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-370252/41	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-126090-7 MS	SGWC-16	Total/NA	Water	EPA 300.0 R2.1	
180-126090-7 MSD	SGWC-16	Total/NA	Water	EPA 300.0 R2.1	

Metals

Prep Batch: 368730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125972-1	SGWA-1	Total Recoverable	Water	3005A	
180-125972-2	SGWA-2	Total Recoverable	Water	3005A	
180-125972-3	SGWA-4	Total Recoverable	Water	3005A	
180-125972-4	SGWA-25	Total Recoverable	Water	3005A	
MB 180-368730/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-368730/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-125969-B-2-B MS	Matrix Spike	Total Recoverable	Water	3005A	
180-125969-B-2-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Prep Batch: 368875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125972-1	SGWA-1	Total/NA	Water	7470A	
180-125972-2	SGWA-2	Total/NA	Water	7470A	
180-125972-3	SGWA-4	Total/NA	Water	7470A	
180-125972-4	SGWA-25	Total/NA	Water	7470A	
MB 180-368875/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-368875/2-A	Lab Control Sample	Total/NA	Water	7470A	
180-125920-E-5-E MS	Matrix Spike	Total/NA	Water	7470A	
180-125920-E-5-F MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 369103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125972-1	SGWA-1	Total Recoverable	Water	EPA 6020B	368730
180-125972-2	SGWA-2	Total Recoverable	Water	EPA 6020B	368730
180-125972-3	SGWA-4	Total Recoverable	Water	EPA 6020B	368730
180-125972-4	SGWA-25	Total Recoverable	Water	EPA 6020B	368730
MB 180-368730/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	368730
LCS 180-368730/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	368730
180-125969-B-2-B MS	Matrix Spike	Total Recoverable	Water	EPA 6020B	368730
180-125969-B-2-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	EPA 6020B	368730

Prep Batch: 369118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126059-1	SGWA-3	Total Recoverable	Water	3005A	
180-126059-2	SGWA-5	Total Recoverable	Water	3005A	
180-126059-3	SGWC-6	Total Recoverable	Water	3005A	
180-126059-4	SGWC-7	Total Recoverable	Water	3005A	
180-126059-5	SGWC-8	Total Recoverable	Water	3005A	
180-126059-6	SGWC-17	Total Recoverable	Water	3005A	
180-126059-7	SGWC-18	Total Recoverable	Water	3005A	
180-126059-8	SGWC-21	Total Recoverable	Water	3005A	
180-126059-9	SGWC-22	Total Recoverable	Water	3005A	
180-126059-10	SGWC-23	Total Recoverable	Water	3005A	

Metals (Continued)

Prep Batch: 369118 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126059-11	SGWA-24	Total Recoverable	Water	3005A	
180-126059-12	EB-5	Total Recoverable	Water	3005A	
180-126060-1	EB-6	Total Recoverable	Water	3005A	
180-126060-2	DUP-5	Total Recoverable	Water	3005A	
180-126060-3	FB-5	Total Recoverable	Water	3005A	
180-126060-4	FB-6	Total Recoverable	Water	3005A	
MB 180-369118/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-369118/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-126059-1 MS	SGWA-3	Total Recoverable	Water	3005A	
180-126059-1 MSD	SGWA-3	Total Recoverable	Water	3005A	

Analysis Batch: 369203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125972-1	SGWA-1	Total/NA	Water	EPA 7470A	368875
180-125972-2	SGWA-2	Total/NA	Water	EPA 7470A	368875
180-125972-3	SGWA-4	Total/NA	Water	EPA 7470A	368875
180-125972-4	SGWA-25	Total/NA	Water	EPA 7470A	368875
MB 180-368875/1-A	Method Blank	Total/NA	Water	EPA 7470A	368875
LCS 180-368875/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	368875
180-125920-E-5-E MS	Matrix Spike	Total/NA	Water	EPA 7470A	368875
180-125920-E-5-F MSD	Matrix Spike Duplicate	Total/NA	Water	EPA 7470A	368875

Prep Batch: 369326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126090-1	SGWC-9	Total Recoverable	Water	3005A	
180-126090-2	SGWC-10	Total Recoverable	Water	3005A	
180-126090-3	SGWC-11	Total Recoverable	Water	3005A	
180-126090-4	SGWC-13	Total Recoverable	Water	3005A	
180-126090-5	SGWC-14	Total Recoverable	Water	3005A	
180-126090-6	SGWC-15	Total Recoverable	Water	3005A	
180-126090-7	SGWC-16	Total Recoverable	Water	3005A	
180-126090-8	SGWC-19	Total Recoverable	Water	3005A	
180-126090-9	SGWC-20	Total Recoverable	Water	3005A	
180-126090-10	EB-7	Total Recoverable	Water	3005A	
180-126090-11	DUP-7	Total Recoverable	Water	3005A	
180-126090-12	FB-8	Total Recoverable	Water	3005A	
180-126090-13	DUP-8	Total Recoverable	Water	3005A	
180-126090-14	SGWC-12	Total Recoverable	Water	3005A	
MB 180-369326/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-369326/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-126093-B-14-B MS	Matrix Spike	Total Recoverable	Water	3005A	
180-126093-B-14-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 369368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126059-1	SGWA-3	Total Recoverable	Water	EPA 6020B	369118
180-126059-2	SGWA-5	Total Recoverable	Water	EPA 6020B	369118
180-126059-3	SGWC-6	Total Recoverable	Water	EPA 6020B	369118
180-126059-4	SGWC-7	Total Recoverable	Water	EPA 6020B	369118
180-126059-5	SGWC-8	Total Recoverable	Water	EPA 6020B	369118
180-126059-6	SGWC-17	Total Recoverable	Water	EPA 6020B	369118

Metals (Continued)

Analysis Batch: 369368 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126059-7	SGWC-18	Total Recoverable	Water	EPA 6020B	369118
180-126059-8	SGWC-21	Total Recoverable	Water	EPA 6020B	369118
180-126059-9	SGWC-22	Total Recoverable	Water	EPA 6020B	369118
180-126059-10	SGWC-23	Total Recoverable	Water	EPA 6020B	369118
180-126059-11	SGWA-24	Total Recoverable	Water	EPA 6020B	369118
180-126059-12	EB-5	Total Recoverable	Water	EPA 6020B	369118
180-126060-1	EB-6	Total Recoverable	Water	EPA 6020B	369118
180-126060-2	DUP-5	Total Recoverable	Water	EPA 6020B	369118
180-126060-3	FB-5	Total Recoverable	Water	EPA 6020B	369118
180-126060-4	FB-6	Total Recoverable	Water	EPA 6020B	369118
LCS 180-369118/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	369118
180-126059-1 MS	SGWA-3	Total Recoverable	Water	EPA 6020B	369118
180-126059-1 MSD	SGWA-3	Total Recoverable	Water	EPA 6020B	369118

Prep Batch: 369480

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126059-1	SGWA-3	Total/NA	Water	7470A	
180-126059-2	SGWA-5	Total/NA	Water	7470A	
180-126059-3	SGWC-6	Total/NA	Water	7470A	
180-126059-4	SGWC-7	Total/NA	Water	7470A	
180-126059-5	SGWC-8	Total/NA	Water	7470A	
180-126059-6	SGWC-17	Total/NA	Water	7470A	
180-126059-7	SGWC-18	Total/NA	Water	7470A	
180-126059-8	SGWC-21	Total/NA	Water	7470A	
180-126059-9	SGWC-22	Total/NA	Water	7470A	
180-126059-10	SGWC-23	Total/NA	Water	7470A	
180-126059-11	SGWA-24	Total/NA	Water	7470A	
180-126059-12	EB-5	Total/NA	Water	7470A	
180-126060-1	EB-6	Total/NA	Water	7470A	
180-126060-2	DUP-5	Total/NA	Water	7470A	
180-126060-3	FB-5	Total/NA	Water	7470A	
180-126060-4	FB-6	Total/NA	Water	7470A	
MB 180-369480/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-369480/2-A	Lab Control Sample	Total/NA	Water	7470A	
180-125815-E-1-C MS	Matrix Spike	Total/NA	Water	7470A	
180-125815-E-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 369490

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126090-1	SGWC-9	Total Recoverable	Water	EPA 6020B	369326
180-126090-2	SGWC-10	Total Recoverable	Water	EPA 6020B	369326
180-126090-3	SGWC-11	Total Recoverable	Water	EPA 6020B	369326
180-126090-4	SGWC-13	Total Recoverable	Water	EPA 6020B	369326
180-126090-5	SGWC-14	Total Recoverable	Water	EPA 6020B	369326
180-126090-6	SGWC-15	Total Recoverable	Water	EPA 6020B	369326
180-126090-7	SGWC-16	Total Recoverable	Water	EPA 6020B	369326
180-126090-8	SGWC-19	Total Recoverable	Water	EPA 6020B	369326
180-126090-9	SGWC-20	Total Recoverable	Water	EPA 6020B	369326
180-126090-10	EB-7	Total Recoverable	Water	EPA 6020B	369326
180-126090-11	DUP-7	Total Recoverable	Water	EPA 6020B	369326
180-126090-12	FB-8	Total Recoverable	Water	EPA 6020B	369326

Metals (Continued)

Analysis Batch: 369490 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126090-13	DUP-8	Total Recoverable	Water	EPA 6020B	369326
180-126090-14	SGWC-12	Total Recoverable	Water	EPA 6020B	369326
MB 180-369118/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	369118
MB 180-369326/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	369326
LCS 180-369326/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	369326
180-126093-B-14-B MS	Matrix Spike	Total Recoverable	Water	EPA 6020B	369326
180-126093-B-14-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	EPA 6020B	369326

Analysis Batch: 369675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126059-1	SGWA-3	Total/NA	Water	EPA 7470A	369480
180-126059-2	SGWA-5	Total/NA	Water	EPA 7470A	369480
180-126059-3	SGWC-6	Total/NA	Water	EPA 7470A	369480
180-126059-4	SGWC-7	Total/NA	Water	EPA 7470A	369480
180-126059-5	SGWC-8	Total/NA	Water	EPA 7470A	369480
180-126059-6	SGWC-17	Total/NA	Water	EPA 7470A	369480
180-126059-7	SGWC-18	Total/NA	Water	EPA 7470A	369480
180-126059-8	SGWC-21	Total/NA	Water	EPA 7470A	369480
180-126059-9	SGWC-22	Total/NA	Water	EPA 7470A	369480
180-126059-10	SGWC-23	Total/NA	Water	EPA 7470A	369480
180-126059-11	SGWA-24	Total/NA	Water	EPA 7470A	369480
180-126059-12	EB-5	Total/NA	Water	EPA 7470A	369480
180-126060-1	EB-6	Total/NA	Water	EPA 7470A	369480
180-126060-2	DUP-5	Total/NA	Water	EPA 7470A	369480
180-126060-3	FB-5	Total/NA	Water	EPA 7470A	369480
180-126060-4	FB-6	Total/NA	Water	EPA 7470A	369480
MB 180-369480/1-A	Method Blank	Total/NA	Water	EPA 7470A	369480
LCS 180-369480/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	369480
180-125815-E-1-C MS	Matrix Spike	Total/NA	Water	EPA 7470A	369480
180-125815-E-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	EPA 7470A	369480

Prep Batch: 369880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126090-1	SGWC-9	Total/NA	Water	7470A	
180-126090-2	SGWC-10	Total/NA	Water	7470A	
180-126090-3	SGWC-11	Total/NA	Water	7470A	
180-126090-4	SGWC-13	Total/NA	Water	7470A	
180-126090-5	SGWC-14	Total/NA	Water	7470A	
180-126090-6	SGWC-15	Total/NA	Water	7470A	
180-126090-7	SGWC-16	Total/NA	Water	7470A	
180-126090-8	SGWC-19	Total/NA	Water	7470A	
MB 180-369880/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-369880/2-A	Lab Control Sample	Total/NA	Water	7470A	
180-126085-E-1-C MS	Matrix Spike	Total/NA	Water	7470A	
180-126085-E-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Prep Batch: 369881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126090-9	SGWC-20	Total/NA	Water	7470A	
180-126090-10	EB-7	Total/NA	Water	7470A	
180-126090-11	DUP-7	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 369881 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126090-12	FB-8	Total/NA	Water	7470A	
180-126090-13	DUP-8	Total/NA	Water	7470A	
MB 180-369881/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-369881/2-A	Lab Control Sample	Total/NA	Water	7470A	
180-126089-F-3-C MS	Matrix Spike	Total/NA	Water	7470A	
180-126089-F-3-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Prep Batch: 369922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126090-14	SGWC-12	Total/NA	Water	7470A	
MB 180-369922/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-369922/2-A	Lab Control Sample	Total/NA	Water	7470A	
180-126187-D-1-E MS	Matrix Spike	Total/NA	Water	7470A	
180-126187-D-1-F MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 370104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126090-14	SGWC-12	Total/NA	Water	EPA 7470A	369922
MB 180-369922/1-A	Method Blank	Total/NA	Water	EPA 7470A	369922
LCS 180-369922/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	369922
180-126187-D-1-E MS	Matrix Spike	Total/NA	Water	EPA 7470A	369922
180-126187-D-1-F MSD	Matrix Spike Duplicate	Total/NA	Water	EPA 7470A	369922

Analysis Batch: 370276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126090-1	SGWC-9	Total/NA	Water	EPA 7470A	369880
180-126090-2	SGWC-10	Total/NA	Water	EPA 7470A	369880
180-126090-3	SGWC-11	Total/NA	Water	EPA 7470A	369880
180-126090-4	SGWC-13	Total/NA	Water	EPA 7470A	369880
180-126090-5	SGWC-14	Total/NA	Water	EPA 7470A	369880
180-126090-6	SGWC-15	Total/NA	Water	EPA 7470A	369880
180-126090-7	SGWC-16	Total/NA	Water	EPA 7470A	369880
180-126090-8	SGWC-19	Total/NA	Water	EPA 7470A	369880
180-126090-9	SGWC-20	Total/NA	Water	EPA 7470A	369881
180-126090-10	EB-7	Total/NA	Water	EPA 7470A	369881
180-126090-11	DUP-7	Total/NA	Water	EPA 7470A	369881
180-126090-12	FB-8	Total/NA	Water	EPA 7470A	369881
180-126090-13	DUP-8	Total/NA	Water	EPA 7470A	369881
MB 180-369880/1-A	Method Blank	Total/NA	Water	EPA 7470A	369880
MB 180-369881/1-A	Method Blank	Total/NA	Water	EPA 7470A	369881
LCS 180-369880/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	369880
LCS 180-369881/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	369881
180-126085-E-1-C MS	Matrix Spike	Total/NA	Water	EPA 7470A	369880
180-126085-E-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	EPA 7470A	369880
180-126089-F-3-C MS	Matrix Spike	Total/NA	Water	EPA 7470A	369881
180-126089-F-3-D MSD	Matrix Spike Duplicate	Total/NA	Water	EPA 7470A	369881

General Chemistry

Analysis Batch: 368811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125972-1	SGWA-1	Total/NA	Water	SM 2540C	
180-125972-2	SGWA-2	Total/NA	Water	SM 2540C	
180-125972-3	SGWA-4	Total/NA	Water	SM 2540C	
180-125972-4	SGWA-25	Total/NA	Water	SM 2540C	
MB 180-368811/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-368811/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-125972-3 DU	SGWA-4	Total/NA	Water	SM 2540C	

Analysis Batch: 369142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126059-1	SGWA-3	Total/NA	Water	SM 2540C	
180-126059-2	SGWA-5	Total/NA	Water	SM 2540C	
180-126059-3	SGWC-6	Total/NA	Water	SM 2540C	
180-126059-4	SGWC-7	Total/NA	Water	SM 2540C	
180-126059-5	SGWC-8	Total/NA	Water	SM 2540C	
180-126059-6	SGWC-17	Total/NA	Water	SM 2540C	
180-126059-7	SGWC-18	Total/NA	Water	SM 2540C	
MB 180-369142/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-369142/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-126043-A-3 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 369160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126059-8	SGWC-21	Total/NA	Water	SM 2540C	
180-126059-9	SGWC-22	Total/NA	Water	SM 2540C	
180-126059-10	SGWC-23	Total/NA	Water	SM 2540C	
180-126059-11	SGWA-24	Total/NA	Water	SM 2540C	
180-126059-12	EB-5	Total/NA	Water	SM 2540C	
180-126060-1	EB-6	Total/NA	Water	SM 2540C	
180-126060-2	DUP-5	Total/NA	Water	SM 2540C	
180-126060-3	FB-5	Total/NA	Water	SM 2540C	
180-126060-4	FB-6	Total/NA	Water	SM 2540C	
180-126090-1	SGWC-9	Total/NA	Water	SM 2540C	
180-126090-2	SGWC-10	Total/NA	Water	SM 2540C	
180-126090-3	SGWC-11	Total/NA	Water	SM 2540C	
180-126090-4	SGWC-13	Total/NA	Water	SM 2540C	
180-126090-5	SGWC-14	Total/NA	Water	SM 2540C	
MB 180-369160/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-369160/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-126059-8 DU	SGWC-21	Total/NA	Water	SM 2540C	
180-126085-C-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 369205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126090-6	SGWC-15	Total/NA	Water	SM 2540C	
180-126090-7	SGWC-16	Total/NA	Water	SM 2540C	
180-126090-8	SGWC-19	Total/NA	Water	SM 2540C	
180-126090-9	SGWC-20	Total/NA	Water	SM 2540C	
180-126090-10	EB-7	Total/NA	Water	SM 2540C	
180-126090-11	DUP-7	Total/NA	Water	SM 2540C	
180-126090-12	FB-8	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 369205 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126090-13	DUP-8	Total/NA	Water	SM 2540C	
180-126090-14	SGWC-12	Total/NA	Water	SM 2540C	
MB 180-369205/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-369205/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-126090-6 DU	SGWC-15	Total/NA	Water	SM 2540C	

Field Service / Mobile Lab

Analysis Batch: 369539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125972-1	SGWA-1	Total/NA	Water	Field Sampling	
180-125972-2	SGWA-2	Total/NA	Water	Field Sampling	
180-125972-3	SGWA-4	Total/NA	Water	Field Sampling	
180-125972-4	SGWA-25	Total/NA	Water	Field Sampling	

Analysis Batch: 369647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126059-1	SGWA-3	Total/NA	Water	Field Sampling	
180-126059-2	SGWA-5	Total/NA	Water	Field Sampling	
180-126059-3	SGWC-6	Total/NA	Water	Field Sampling	
180-126059-4	SGWC-7	Total/NA	Water	Field Sampling	
180-126059-5	SGWC-8	Total/NA	Water	Field Sampling	
180-126059-6	SGWC-17	Total/NA	Water	Field Sampling	
180-126059-7	SGWC-18	Total/NA	Water	Field Sampling	
180-126059-8	SGWC-21	Total/NA	Water	Field Sampling	
180-126059-9	SGWC-22	Total/NA	Water	Field Sampling	
180-126059-10	SGWC-23	Total/NA	Water	Field Sampling	
180-126059-11	SGWA-24	Total/NA	Water	Field Sampling	

Analysis Batch: 369649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126090-1	SGWC-9	Total/NA	Water	Field Sampling	
180-126090-2	SGWC-10	Total/NA	Water	Field Sampling	
180-126090-3	SGWC-11	Total/NA	Water	Field Sampling	
180-126090-4	SGWC-13	Total/NA	Water	Field Sampling	
180-126090-5	SGWC-14	Total/NA	Water	Field Sampling	
180-126090-6	SGWC-15	Total/NA	Water	Field Sampling	
180-126090-7	SGWC-16	Total/NA	Water	Field Sampling	
180-126090-8	SGWC-19	Total/NA	Water	Field Sampling	
180-126090-9	SGWC-20	Total/NA	Water	Field Sampling	
180-126090-14	SGWC-12	Total/NA	Water	Field Sampling	

TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238-2907
phone 412.963.7058 fax 412.963.2468

Chain of Custody Record

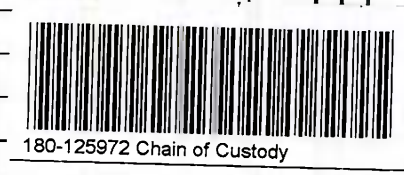
TestAm
THE LEADER IN ENVIRONI

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Labo

Client Contact	Project Manager: Dawn Prell	Site Contact: Dawn Prell	Date:	COC No:
Joju Abraham	Tel/Fax: 248-536-5445	Lab Contact: Shali Brown	Carrier:	1 of 1 C
Southern Company	Analysis Turnaround Time			Sampler:
241 Ralph McGill Blvd SE B10185	☑ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Atlanta, GA 30308	TAT if different from Below 3-5 days			Walk-in Client:
JAbraham@southernco.com	☐ 2 weeks			Lab Sampling:
Project Name: CCR - Plant Scherer Ash Pond	☐ 1 week			
Site: Georgia	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	6020, 7470A: App III / IV metals	Cl, F, SO4, TDS	Radium 226 + 228	Sample Specific
SGWA-1	8/17/2021	15:10	G	GW	3			X	X	X	pH = 5.26
SGWA-2	8/17/2021	16:10	G	GW	3			X	X	X	pH = 6.84
SGWA-4	8/17/2021	14:45	G	GW	3			X	X	X	pH = 6.41
SGWA-25	8/17/2021	16:13	G	GW	3			X	X	X	pH = 6.08
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other								4	1	4	



Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____	Therm ID No.: _____
Relinquished by:	Company: GOLDER	Date/Time: 08/18/21 08:03	Received by: Elaine Cox/C	Company: Courier Mod 8/18/21	Date/Time:
Relinquished by:	Company:	Date/Time: 8/18/21 10am	Received by:	Company: 8/19/21 10am	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 4.20, da

TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238-2907
phone 412.963.7058 fax 412.963.2468

Chain of Custo

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA

Client Contact	Project Manager: Dawn Prell	Site Contact: Dawn P.	Date:	COC No:
Joju Abraham	Tel/Fax: 248-536-5445	Lab Contact: Shali Brown	Carrier:	1 of 1 COCs
Southern Company	Analysis Turnaround Time			Sampler:
241 Ralph McGill Blvd SE B10185	☑ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Atlanta, GA 30308	TAT if different from Below 3-5 days			Walk-in Client:
JAbraham@southernco.com	☐ 2 weeks			Lab Sampling:
Project Name: CCR - Plant Scherer Ash Pond	☐ 1 week			
Site: Georgia	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	6020, 7470A: App III / IV metals	Cl, F, SO4, TDS	Radium 226 + 228	Sample Specific Notes:
SGWA-3	8/18/2021	11:50	G	GW	5			X	X	X	pH = 5.85
SGWA-5	8/18/2021	10:55	G	GW	3			X	X	X	pH = 5.51
SGWC-6	8/18/2021	14:32	G	GW	3			X	X	X	pH = 6.33
SGWC-7	8/18/2021	16:00	G	GW	3			X	X	X	pH = 6.61
SGWC-8	8/18/2021	16:50	G	GW	3			X	X	X	pH = 6.48
SGWC-17	8/18/2021	16:45	G	GW	3			X	X	X	pH = 6.26
SGWC-18	8/18/2021	14:30	G	GW	3			X	X	X	pH = 4.83
SGWC-21	8/18/2021	15:30	G	GW	3			X	X	X	pH = 6.26
SGWC-22	8/18/2021	14:15	G	GW	3			X	X	X	pH = 5.76
SGWC-23	8/18/2021	11:30	G	GW	3			X	X	X	pH = 6.01
SGWA-24	8/18/2021	10:35	G	GW	3			X	X	X	pH = 6.45
EB-5	8/18/2021	14:30	G	Water	3			X	X	X	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other								**4**	**1**	**4**	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____		
Relinquished by:	Company: GOLDER	Date/Time: 08-19-21/08:00	Received by: Elaine Codik	Company: Courier NOW	Date/Time: 08/19/21
Relinquished by:	Company:	Date/Time: 8/19/21 958	Received by:	Company:	Date/Time: 8/19/21 958
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Co	Date/Time: 8-20-21 7:30

Form No. CA-C-WI-002, Rev. 4.20, dated 2/28/2019

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301 Alpha Drive
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Pittsburgh, PA 15238-2907
phone 412.963.7058 fax 412.963.2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Dawn Prell	Site Contact: Dawn Prell	Date:	COC No:
Joju Abraham	Tel/Fax: 248-536-5445	Lab Contact: Shali Brown	Carrier:	__1__ of __1__ COCs
Southern Company	Analysis Turnaround Time			Sampler:
241 Ralph McGill Blvd SE B10185	☑ CALENDAR DAYS ☐ WORKING DAYS			**For Lab Use Only:**
Atlanta, GA 30308	TAT if different from Below __3-5 days__			Walk-in Client:
JAbraham@southernco.com	☐ 2 weeks			Lab Sampling:
Project Name: CCR - Plant Scherer Ash Pond	☐ 1 week			
Site: Georgia	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	6020, 7470A: App III / IV metals	Cl, F, SO4, TDS	Radium 226 + 228	Sample Specific Notes:
EB-6	8/18/2021	17:00	G	Water	3			X	X	X	
Dup-5	8/18/2021		G	GW	3			X	X	X	
FB-5	8/18/2021	11:15	G	Water	3			X	X	X	
FB-6	8/18/2021	15:25	G	Water	3			X	X	X	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other								4	1	4	

180-126060 Chain of Custody

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal by Lab ☐ Archive for______ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd:____ Corr'd:____ Therm ID No.:____		
Relinquished by: [signature]	Company: GOLDER	Date/Time: 08-19-21/0800	Received by: Elaine Cook	Company: Courier Now	Date/Time: 08/19/21
Relinquished by: [signature]	Company:	Date/Time: 8/19/21 958	Received by: [signature]	Company:	Date/Time: 8/19/21 958
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: [signature]	Company: [illegible]	Date/Time: 8-20-21 9:30

Form No. CA-C-WI-002, Rev. 4.20, dated 2/28/2019

9/9/2021 (Rev. 1)

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301 Alpha Drive
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Pittsburgh, PA 15238-2907
phone 412.963.7058 fax 412.963.2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Dawn Prell	Site Contact: Dawn Prell	Date:	COC No:
Joju Abraham	Tel/Fax: 248-536-5445	Lab Contact: Shali Brown	Carrier:	1 of 2 COCs
Southern Company	Analysis Turnaround Time			Sampler: Jude Waguespack
241 Ralph McGill Blvd SE B10185	☑ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Atlanta, GA 30308	TAT if different from Below 3-5 days			Walk-in Client:
JAbraham@southernco.com	☐ 2 weeks			Shipping:
Project Name: CCR - Plant Scherer Ash Pond	☐ 1 week			
Site: Georgia	☐ 2 days			G No.:
P O #	☐ 1 day			

180-126090 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	6020, 7470A: App III / IV metals	Cl, F, SO4, TDS	Radium 226 + 228	Sample Specific Notes:
SGWC-9	8/19/2021	10:22	G	GW	3	N	N	X	X	X	pH = 6.22
SGWC-10	8/19/2021	10:20	G	GW	3	N	N	X	X	X	pH = 5.21
SGWC-11	8/19/2021	12:02	G	GW	3	N	N	X	X	X	pH = 5.23
SGWC-13	8/19/2021	10:15	G	GW	3	N	N	X	X	X	pH = 5.99
SGWC-14	8/19/2021	11:25	G	GW	3	N	N	X	X	X	pH = 5.86
SGWC-15	8/19/2021	13:45	G	GW	3	N	N	X	X	X	pH = 4.63
SGWC-16	8/19/2021	10:10	G	GW	5	N	N	X	X	X	pH = 5.28; Extra Radium
SGWC-19	8/19/2021	13:30	G	GW	5	N	N	X	X	X	pH = 5.61; Extra Radium
SGWC-20	8/19/2021	11:55	G	GW	3	N	N	X	X	X	pH = 4.28
EB-7	8/19/2021	10:30	G	Water	3	N	N	X	X	X	
Dup-7	8/19/2021	--	G	GW	3	N	N	X	X	X	
FB-8	8/19/2021	12:32	G	Water	3	N	N	X	X	X	
								4	1	4	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____	Therm ID No.: _____
Relinquished by: TW... / SAMPLER	Company: GOLDER	Date/Time: 08-20-21/1500	Received by:	Company:	Date/Time: 8/20/21 1500
Relinquished by: TM	Company:	Date/Time: 8/20/21 1500	Received by: Dawn Prell	Company: GAP	Date/Time: 8-21-21 930
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 4.20, dated 2/28/2019

TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238-2907
phone 412.963.7058 fax 412.963.2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Dawn Prell	Site Contact: Dawn Prell	Date:	COC No:
Joju Abraham	Tel/Fax: 248-536-5445	Lab Contact: Shali Brown	Carrier:	2 of 2 COCs
Southern Company	**Analysis Turnaround Time**			Sampler: J. Waguespack
241 Ralph McGill Blvd SE B10185	☑ CALENDAR DAYS ☐ WORKING DAYS			**For Lab Use Only:**
Atlanta, GA 30308	TAT if different from Below 3-5 days			Walk-in Client:
JAbraham@southernco.com	☐ 2 weeks			Lab Sampling:
Project Name: CCR - Plant Scherer Ash Pond	☐ 1 week			
Site: Georgia	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	6020, 7470A: App III / IV metals	Cl, F, SO4, TDS	Radium 226 + 228	Sample Specific Notes:
Dup-8	8/19/2021	--	G	GW	3	N	N	X	X	X	
SGWC-12	8/20/2021	09:30	G	GW	3	N	N	X	X	X	pH = 6.13
								4	1	4	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:			Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____		
Relinquished by: J. Waguespack	Company: Golder	Date/Time: 08-20-21/1500	Received by:	Company:	Date/Time: 8/20/21 1500	
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:	
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time: 8-21-21 0930	

Form No. CA-C-WI-002, Rev. 4.20, dated 2/28/2019

TRCK: 1516 9332 0409

Part # 159469-434 RITZ EXP 04/22

eurofins | Environment Testing TestAmerica

ORIGIN ID:LIYA (678) 966-9981
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 18AUG21
ACTWGT: 60.90 LB
CAD: 859116/CAFE3409

BILL THIRD PARTY

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058

REF:
INV:
PO:
DEPT:

FedEx Express

THU - 19 AUG 10:30A
PRIORITY OVERNIGHT

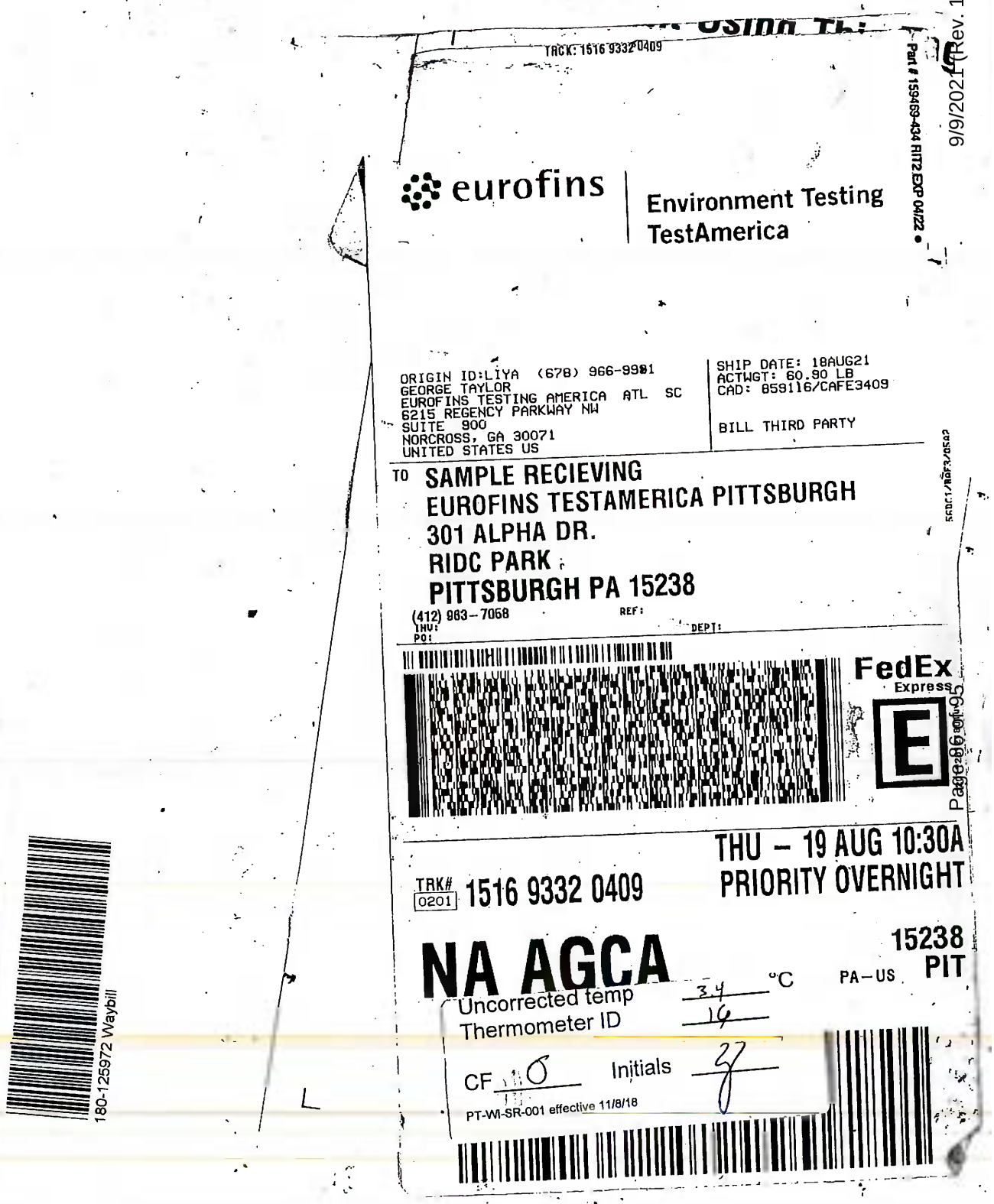
TRK# 0201 1516 9332 0409

NA AGCA

15238
PIT
PA-US

Uncorrected temp 3.4 °C
Thermometer ID 16
CF 0.0 Initials SJ
PT-WI-SR-001 effective 11/8/18

180-125972 Waybill



TRACK: 1516 9332 0409

Part # 159469-434 RITT2 EXP 04/22

eurofins | Environment Testing TestAmerica

9/9/2021 (Rev. 1)

ORIGIN ID:LIYA (678) 966-9901
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 18AUG21
ACTWGT: 60.90 LB
CAD: 859116/CAFE3409

BILL THIRD PARTY

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238

(412) 963-7068 REF:
INV: DEPT:
PO:

FedEx Express

THU - 19 AUG 10:30A
PRIORITY OVERNIGHT

TRK# 0201 1516 9332 0409

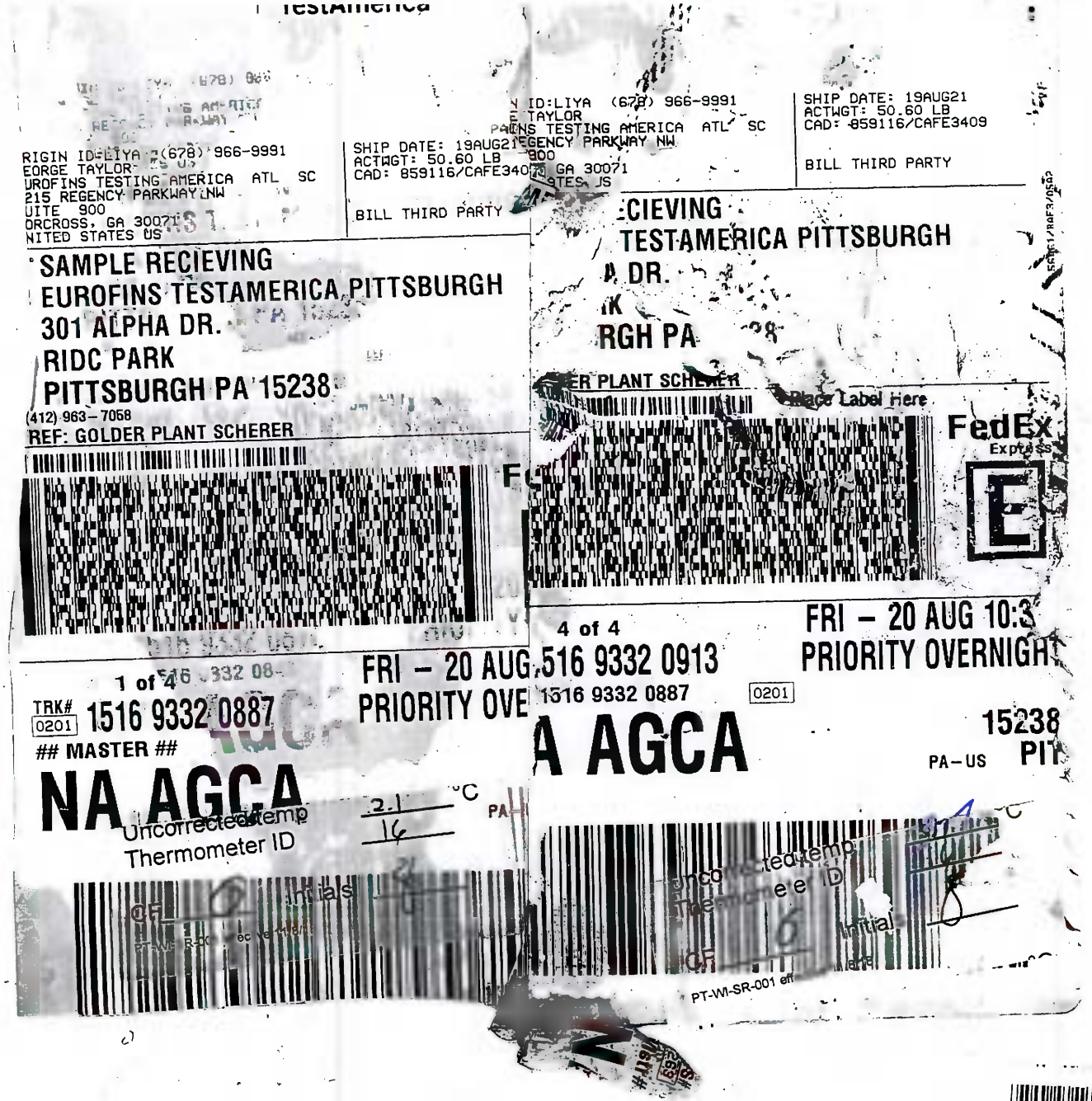
NA AGCA

15238 PIT PA-US

Uncorrected temp 3.4 °C
Thermometer ID 16
CF 0 Initials JF
PT-WI-SR-001 effective 11/8/18

180-125972 Waybill

Page 86 of 95



180-126059 Waybill

ot Lift Using This Tag

98 1 A
10:30 0898
08.20

Environment Testing
TestAmerica

:LIYA (678) 966-9991
YLOR
TESTING AMERICA ATL SC
NCY PARKWAY NW
O
GA 30071
ATES US

SHIP DATE: 19AUG21
ACTWGT: 50.60 LB
CAD: 859116/CAFE340

BILL THIRD PARTY

PLE RECIEVING
OFINS TESTAMERICA PITTSBURGH
ALPHA DR.
; PARK
SBURGH PA 15238
7058
LDER PLANT SCHERER

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2 of 4
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PA–US PIT

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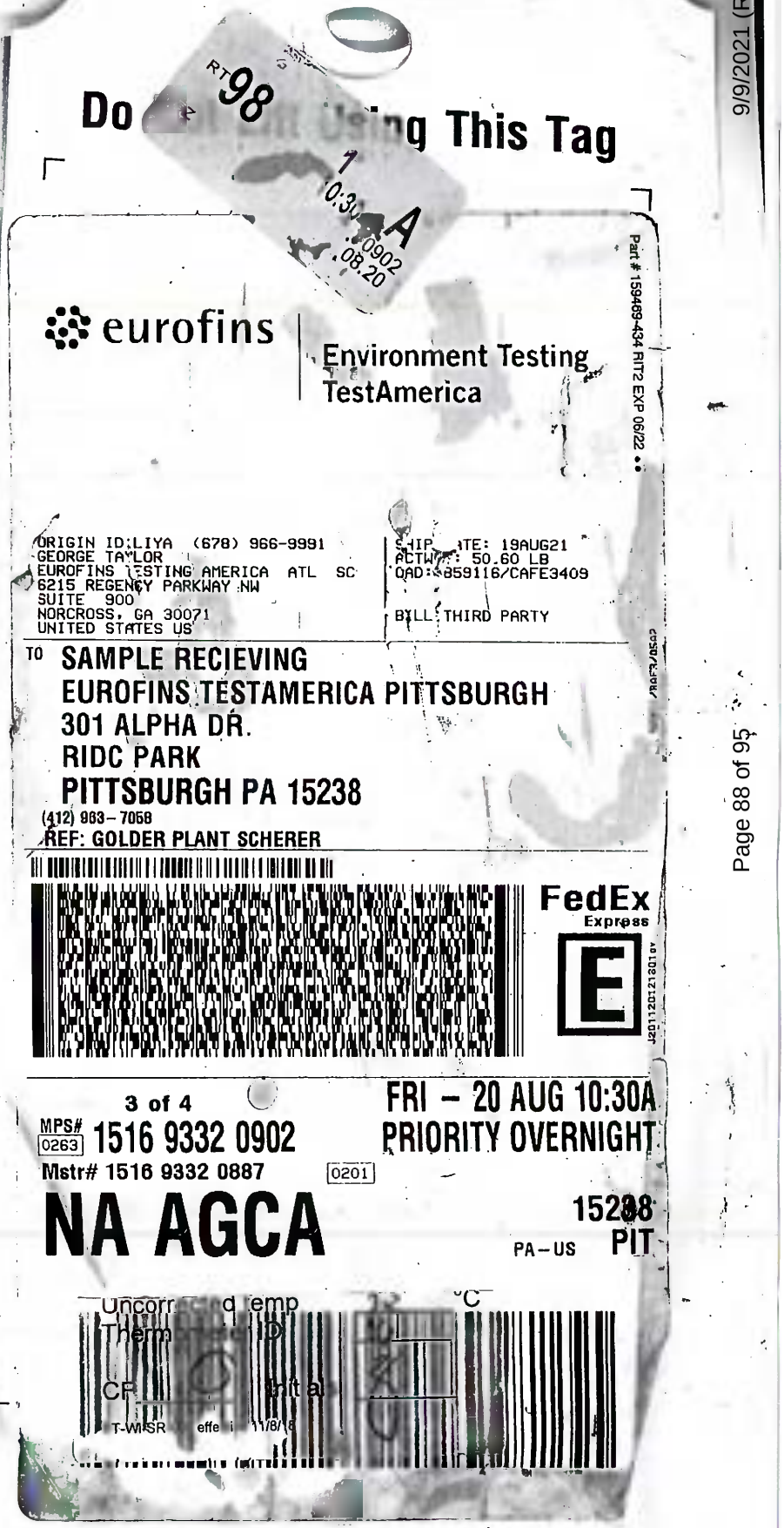
°C



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98 1 A
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08.20

eurofins | Environment Testing
TestAmerica

Part # 159469-434 RIT2 EXP 06/22

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 19AUG21
ACTWGT: 50.60 LB
CAD: 859116/CAFE3409

BILL THIRD PARTY

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF: GOLDER PLANT SCHERER

FedEx Express

3 of 4
MPS# 0263 1516 9332 0902
Mstr# 1516 9332 0887 0201

FRI – 20 AUG 10:30A
PRIORITY OVERNIGHT

NA AGCA

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9/9/2021 (Rev. 1)

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Environment Testing
TestAmerica

469-434 RIT2 EXP 06/22

D:LIYA (678) 966-9991
AYLOR
TESTING AMERICA ATL SC
ENCY PARKWAY NW
00
, GA 30071
TATES US

SHIP DATE: 19AUG21
ACTWGT: 50.60 LB
CAD: 859116/CAFE340

BILL THIRD PARTY

PLE RECIEVING
OFINS TESTAMERICA PITTSBURGH
ALPHA DR.
PARK
SBURGH PA 15238
7058
LDER PLANT SCHERER

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2 of 4
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Do ng This Tag

RT 98 1 10:3 A 0902 08.20

eurofins | Environment Testing
TestAmerica

Part # 159469-434 RIT2 EXP 06/22

ORIGIN ID:LIYA (678) 966-9991
RGE TAYLOR
OFINS TESTING AMERICA ATL SC
5 REGENCY PARKWAY NW
TE 900
ROSS, GA 30071
ED STATES US

SHIP DATE: 19AUG21
ACTWGT: 50.60 LB
CAD: 859116/CAFE3409

BILL THIRD PARTY

AMPLE RECIEVING
IROFINS TESTAMERICA PITTSBURGH
1 ALPHA DR.
DC PARK
TSBURGH PA 15238
-7058
LDER PLANT SCHERER

180-126060 Waybill

FedEx Express

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3 of 4
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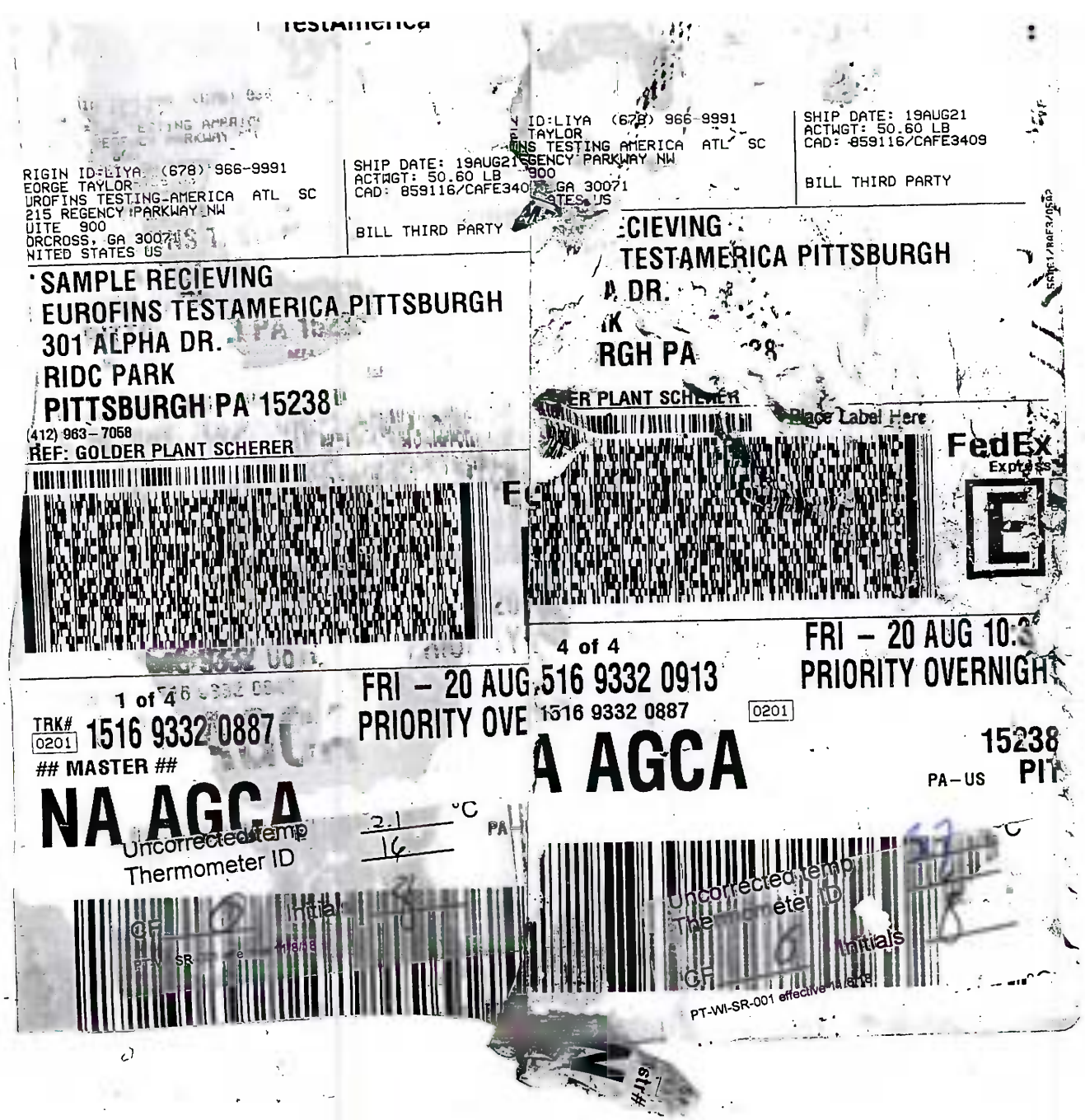
Mstr# 1516 9332 0887
0201

FRI – 20 AUG 10:30A
PRIORITY OVERNIGHT

NA AGCA

15238
PA-US PIT

Uncorrected temp 3.2 °C
Thermometer ID
CF Initial
T-WISR effective 11/8/18


SHIP DATE: 19AUG21
ACTWGT: 50.60 LB
CAD: 859116/CAFE3409
BILL THIRD PARTY
SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF: GOLDER PLANT SCHERER
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Express
1 of 4
4 of 4
TRK# 1516 9332 0887
0201
MASTER
NA AGCA
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15238
PA-US
Uncorrected temp
Thermometer ID
Initials
PT-WI-SR-001 effective date


eurofins
Environment Testing
TestAmerica
ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US
SHIP DATE: 20AUG21
ACTWGT: 55.40 LB
CAD: 859116/CAFE3409
BILL THIRD PARTY
TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
REF:
DEPT:
(412) 963-7058
INV:
PO:
FedEx Express
SATURDAY 12:00P
PRIORITY OVERNIGHT
4 of 4
MPS# 1516 9332 2261
Mstr# 1516 9332 2239
0263
0201
PA-US
XO AGCA
Uncorrected temp 5.8 °C
Thermometer ID 16
CF 0
Initials
PT-WI-SR-001 effective 11/8/18
639
FZ
SATURDAY 12:00P
PRIORITY OVERNIGHT
15238
PIT
Uncorrected temp
Thermometer ID
4.2 °C
16
CF 0
Initials
PT-WI-SR-001 effective 11/8/18
SATURDAY 12:00P
PRIORITY OVERNIGHT
15238
XO AGCA

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125972-1

Login Number: 125972
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125972-1

Login Number: 126059
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125972-1

Login Number: 126060
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125972-1

Login Number: 126090
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-125972-2
Client Project/Site: Plant Scherer Ash Pond

For:
Southern Company
241 Ralph McGill Blvd SE
B10185
Atlanta, Georgia 30308

Attn: Joju Abraham

Authorized for release by:
10/11/2021 10:44:50 AM

Shali Brown, Project Manager II
(615)301-5031
Shali.Brown@Eurofinset.com

PA Lab ID: 02-00416

Table of Contents

Job ID: 180-125972-2

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-125972-2

Comments
No additional comments.

Receipt
The samples were received on 8/19/2021 9:15 AM, 8/20/2021 9:30 AM and 8/21/2021 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 13 coolers at receipt time were 2.1º C, 2.1º C, 3.2º C, 3.2º C, 3.4º C, 3.7º C, 3.7º C, 3.8º C, 3.8º C, 3.8º C, 4.2º C, 4.2º C and 5.8º C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.
The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. The COC was not relinquished.

The container label for one out of two of the plastic liters for the following sample did not match the information listed on the Chain-of-Custody (COC): SGWC-15 (180-126090-6). The container labels list a sample id of SGWC-14 while the COC lists SGWC-15. The id on the COC was used.

RAD
Methods 903.0, 9315: Radium 226 prep batch 160-524072
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. SGWA-1 (180-125972-1), SGWA-2 (180-125972-2), SGWA-4 (180-125972-3), SGWA-25 (180-125972-4), (LCS 160-524072/1-A) and (MB 160-524072/24-A)

Methods 903.0, 9315: Radium-226 prep batch 160-524265:
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. EB-6 (180-126060-1), DUP-5 (180-126060-2), FB-5 (180-126060-3), FB-6 (180-126060-4), (LCS 160-524265/1-A) and (MB 160-524265/23-A)

Methods 903.0, 9315: Radium 226 prep batch 160-524328
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. SGWA-3 (180-126059-1), SGWA-5 (180-126059-2), SGWC-6 (180-126059-3), SGWC-7 (180-126059-4), SGWC-8 (180-126059-5), SGWC-17 (180-126059-6), SGWC-18 (180-126059-7), (LCS 160-524328/1-A) and (MB 160-524328/23-A)

Methods 903.0, 9315: Radium-226 Batch 524649
The Radium-226 laboratory control sample (LCS) associated with the following samples recovered at 66% outside the in house statistical limits (67-118%). The LCSD is within criteria and the RPD is less than our in house limits of 40%. The laboratory does not believe this negatively affects the data and no further action is required.(LCS 160-524649/1-A)

Methods 903.0, 9315: Radium-226 Batch 524649
The following samples have an RER (replicate error ratio) result outside of the acceptance criteria of 1 for Radium-226 . Duplicate precision is demonstrated by acceptable relative percent difference (RPD), within the limit of 40%. The data have been reported with this narrative. SGWC-21 (180-126059-8), SGWC-22 (180-126059-9), SGWC-23 (180-126059-10), SGWA-24 (180-126059-11), EB-5 (180-126059-12), SGWC-9 (180-126090-1), SGWC-10 (180-126090-2), SGWC-11 (180-126090-3), SGWC-13 (180-126090-4), (LCSD 160-524649/2-A) and (MB 160-524649/23-A)

Methods 903.0, 9315: Radium-226 Batch 524649
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. SGWC-21 (180-126059-8), SGWC-22 (180-126059-9), SGWC-23 (180-126059-10), SGWA-24

Job ID: 180-125972-2 (Continued)

Laboratory: Eurofins TestAmerica, Pittsburgh (Continued)

(180-126059-11), EB-5 (180-126059-12), SGWC-9 (180-126090-1), SGWC-10 (180-126090-2), SGWC-11 (180-126090-3), SGWC-13 (180-126090-4), (LCS 160-524649/1-A), (LCSD 160-524649/2-A) and (MB 160-524649/23-A)

Method 9315: Radium-226 Batch 524659
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. SGWC-14 (180-126090-5), SGWC-15 (180-126090-6), SGWC-16 (180-126090-7), SGWC-19 (180-126090-8), SGWC-20 (180-126090-9), EB-7 (180-126090-10), DUP-7 (180-126090-11), FB-8 (180-126090-12), DUP-8 (180-126090-13), SGWC-12 (180-126090-14), (LCS 160-524659/1-A), (LCSD 160-524659/2-A) and (MB 160-524659/23-A)

Methods 904.0, 9320: Radium 228 prep batch 160-524342
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. SGWA-3 (180-126059-1), SGWA-5 (180-126059-2), SGWC-6 (180-126059-3), SGWC-7 (180-126059-4), SGWC-8 (180-126059-5), SGWC-17 (180-126059-6), SGWC-18 (180-126059-7), (LCS 160-524342/1-A) and (MB 160-524342/23-A)

Methods 904.0, 9320: Radium 228 prep batch 160-524081
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. SGWA-1 (180-125972-1), SGWA-2 (180-125972-2), SGWA-4 (180-125972-3), SGWA-25 (180-125972-4), (LCS 160-524081/1-A) and (MB 160-524081/24-A)

Methods 904.0, 9320: Radium 228 prep batch 160-524267
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. EB-6 (180-126060-1), DUP-5 (180-126060-2), FB-5 (180-126060-3), FB-6 (180-126060-4), (LCS 160-524267/1-A), (MB 160-524267/23-A) and (500-204022-G-5-B DU)

Method 9320: Radium-228 Batch 524669
Minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. SGWC-14 (180-126090-5), SGWC-15 (180-126090-6), SGWC-16 (180-126090-7), SGWC-19 (180-126090-8), SGWC-20 (180-126090-9), EB-7 (180-126090-10), DUP-7 (180-126090-11), FB-8 (180-126090-12), DUP-8 (180-126090-13), SGWC-12 (180-126090-14), (LCS 160-524669/1-A), (LCSD 160-524669/2-A) and (MB 160-524669/23-A)

Methods 904.0, 9320: Radium-228 prep batch 160-528274:
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. SGWC-21 (180-126059-8), SGWC-22 (180-126059-9), SGWC-23 (180-126059-10), SGWA-24 (180-126059-11), EB-5 (180-126059-12), SGWC-9 (180-126090-1), SGWC-10 (180-126090-2), SGWC-11 (180-126090-3), SGWC-13 (180-126090-4), (LCS 160-528274/1-A), (LCSD 160-528274/2-A) and (MB 160-528274/22-A)

Method PrecSep_0: Ra-228 Batch 160-524652:
Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: SGWC-21 (180-126059-8), SGWC-22 (180-126059-9), SGWC-23 (180-126059-10), SGWA-24 (180-126059-11), EB-5 (180-126059-12), SGWC-9 (180-126090-1), SGWC-10 (180-126090-2), SGWC-11 (180-126090-3) and SGWC-13 (180-126090-4). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep_0: Ra-228 Batch 160-524669:
Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: SGWC-14 (180-126090-5), SGWC-15 (180-126090-6), SGWC-16 (180-126090-7), SGWC-19 (180-126090-8), SGWC-20 (180-126090-9), EB-7 (180-126090-10), DUP-7 (180-126090-11), FB-8 (180-126090-12), DUP-8 (180-126090-13) and SGWC-12 (180-126090-14). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Job ID: 180-125972-2 (Continued)

Laboratory: Eurofins TestAmerica, Pittsburgh (Continued)

Method PrecSep_0: Radium-228 Prep Batch 160-528274:
Insufficient sample volume was available to perform a sample duplicate for the following samples: SGWC-21 (180-126059-8), SGWC-22 (180-126059-9), SGWC-23 (180-126059-10), SGWA-24 (180-126059-11), EB-5 (180-126059-12), SGWC-9 (180-126090-1), SGWC-10 (180-126090-2), SGWC-11 (180-126090-3) and SGWC-13 (180-126090-4). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep-21: Ra-226 Batch 160-524649:
Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: SGWC-21 (180-126059-8), SGWC-22 (180-126059-9), SGWC-23 (180-126059-10), SGWA-24 (180-126059-11), EB-5 (180-126059-12), SGWC-9 (180-126090-1), SGWC-10 (180-126090-2), SGWC-11 (180-126090-3) and SGWC-13 (180-126090-4). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep-21: Ra-226 Batch 160-524659:
Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: SGWC-14 (180-126090-5), SGWC-15 (180-126090-6), SGWC-16 (180-126090-7), SGWC-19 (180-126090-8), SGWC-20 (180-126090-9), EB-7 (180-126090-10), DUP-7 (180-126090-11), FB-8 (180-126090-12), DUP-8 (180-126090-13) and SGWC-12 (180-126090-14). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Qualifiers

Rad

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Laboratory: Eurofins TestAmerica, St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-21
California	Los Angeles County Sanitation Districts	10259	06-30-22
California	State	2886	06-30-21 *
Connecticut	State	PH-0241	03-31-23
Florida	NELAP	E87689	06-30-22
HI - RadChem Recognition	State	n/a	06-30-22
Illinois	NELAP	004553	11-30-21
Iowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-21
Kentucky (DW)	State	KY90125	01-01-22
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-21
Louisiana	NELAP	04080	06-30-22
Louisiana (DW)	State	LA011	12-31-21
Maryland	State	310	09-30-22
MI - RadChem Recognition	State	9005	06-30-22
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-22
New Jersey	NELAP	MO002	06-30-22
New York	NELAP	11616	04-01-22
North Dakota	State	R-207	06-30-22
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-22
Oregon	NELAP	4157	09-01-22
Pennsylvania	NELAP	68-00540	03-01-22
South Carolina	State	85002001	06-30-22
Texas	NELAP	T104704193	07-31-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542021-14	08-01-22
Virginia	NELAP	10310	06-14-22
Washington	State	C592	08-30-22
West Virginia DEP	State	381	10-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-125972-1	SGWA-1	Water	08/17/21 15:10	08/19/21 09:15
180-125972-2	SGWA-2	Water	08/17/21 16:10	08/19/21 09:15
180-125972-3	SGWA-4	Water	08/17/21 14:45	08/19/21 09:15
180-125972-4	SGWA-25	Water	08/17/21 16:13	08/19/21 09:15
180-126059-1	SGWA-3	Water	08/18/21 11:50	08/20/21 09:30
180-126059-2	SGWA-5	Water	08/18/21 10:55	08/20/21 09:30
180-126059-3	SGWC-6	Water	08/18/21 14:32	08/20/21 09:30
180-126059-4	SGWC-7	Water	08/18/21 16:00	08/20/21 09:30
180-126059-5	SGWC-8	Water	08/18/21 16:50	08/20/21 09:30
180-126059-6	SGWC-17	Water	08/18/21 16:45	08/20/21 09:30
180-126059-7	SGWC-18	Water	08/18/21 14:30	08/20/21 09:30
180-126059-8	SGWC-21	Water	08/18/21 15:30	08/20/21 09:30
180-126059-9	SGWC-22	Water	08/18/21 14:15	08/20/21 09:30
180-126059-10	SGWC-23	Water	08/18/21 11:30	08/20/21 09:30
180-126059-11	SGWA-24	Water	08/18/21 10:35	08/20/21 09:30
180-126059-12	EB-5	Water	08/18/21 14:30	08/20/21 09:30
180-126060-1	EB-6	Water	08/18/21 17:00	08/20/21 09:30
180-126060-2	DUP-5	Water	08/18/21 00:00	08/20/21 09:30
180-126060-3	FB-5	Water	08/18/21 11:15	08/20/21 09:30
180-126060-4	FB-6	Water	08/18/21 15:25	08/20/21 09:30
180-126090-1	SGWC-9	Water	08/19/21 10:22	08/21/21 09:30
180-126090-2	SGWC-10	Water	08/19/21 10:20	08/21/21 09:30
180-126090-3	SGWC-11	Water	08/19/21 12:02	08/21/21 09:30
180-126090-4	SGWC-13	Water	08/19/21 10:15	08/21/21 09:30
180-126090-5	SGWC-14	Water	08/19/21 11:25	08/21/21 09:30
180-126090-6	SGWC-15	Water	08/19/21 13:45	08/21/21 09:30
180-126090-7	SGWC-16	Water	08/19/21 10:10	08/21/21 09:30
180-126090-8	SGWC-19	Water	08/19/21 13:30	08/21/21 09:30
180-126090-9	SGWC-20	Water	08/19/21 11:55	08/21/21 09:30
180-126090-10	EB-7	Water	08/19/21 10:30	08/21/21 09:30
180-126090-11	DUP-7	Water	08/19/21 00:00	08/21/21 09:30
180-126090-12	FB-8	Water	08/19/21 12:32	08/21/21 09:30
180-126090-13	DUP-8	Water	08/19/21 00:00	08/21/21 09:30
180-126090-14	SGWC-12	Water	08/20/21 09:30	08/21/21 09:30

Method Summary

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWA-1
Date Collected: 08/17/21 15:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125972-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.41 mL	1.0 g	524072	08/25/21 12:41	MJ	TAL SL
Total/NA	Analysis	9315		1			527397	09/16/21 21:20	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.41 mL	1.0 g	524081	08/25/21 13:37	MJ	TAL SL
Total/NA	Analysis	9320		1			527379	09/16/21 11:55	ANW	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Analysis	Ra226_Ra228		1			530589	10/08/21 16:53	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SGWA-2
Date Collected: 08/17/21 16:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125972-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.95 mL	1.0 g	524072	08/25/21 12:41	MJ	TAL SL
Total/NA	Analysis	9315		1			527397	09/16/21 21:21	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			999.95 mL	1.0 g	524081	08/25/21 13:37	MJ	TAL SL
Total/NA	Analysis	9320		1			527379	09/16/21 11:55	ANW	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Analysis	Ra226_Ra228		1			530589	10/08/21 16:53	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SGWA-4
Date Collected: 08/17/21 14:45
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125972-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.97 mL	1.0 g	524072	08/25/21 12:41	MJ	TAL SL
Total/NA	Analysis	9315		1			527397	09/16/21 21:21	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.97 mL	1.0 g	524081	08/25/21 13:37	MJ	TAL SL
Total/NA	Analysis	9320		1			527379	09/16/21 11:56	ANW	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Analysis	Ra226_Ra228		1			530589	10/08/21 16:53	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SGWA-25
Date Collected: 08/17/21 16:13
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125972-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.71 mL	1.0 g	524072	08/25/21 12:41	MJ	TAL SL
Total/NA	Analysis	9315		1			527379	09/16/21 21:16	ANW	TAL SL
	Instrument ID: GFPCRED									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWA-25
Date Collected: 08/17/21 16:13
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125972-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			999.71 mL	1.0 g	524081	08/25/21 13:37	MJ	TAL SL
Total/NA	Analysis	9320		1			527379	09/16/21 11:56	ANW	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Analysis	Ra226_Ra228		1			530589	10/08/21 16:53	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SGWA-3
Date Collected: 08/18/21 11:50
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.66 mL	1.0 g	524328	08/27/21 10:49	MJ	TAL SL
Total/NA	Analysis	9315		1			528286	09/21/21 13:39	SCB	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			999.66 mL	1.0 g	524342	08/27/21 12:08	MJ	TAL SL
Total/NA	Analysis	9320		1			527397	09/16/21 12:19	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			528682	09/23/21 16:11	SCB	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SGWA-5
Date Collected: 08/18/21 10:55
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.67 mL	1.0 g	524328	08/27/21 10:49	MJ	TAL SL
Total/NA	Analysis	9315		1			528286	09/21/21 13:39	SCB	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.67 mL	1.0 g	524342	08/27/21 12:08	MJ	TAL SL
Total/NA	Analysis	9320		1			527397	09/16/21 12:19	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			528682	09/23/21 16:11	SCB	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SGWC-6
Date Collected: 08/18/21 14:32
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.87 mL	1.0 g	524328	08/27/21 10:49	MJ	TAL SL
Total/NA	Analysis	9315		1			527825	09/21/21 15:26	SCB	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.87 mL	1.0 g	524342	08/27/21 12:08	MJ	TAL SL
Total/NA	Analysis	9320		1			527397	09/16/21 12:19	ANW	TAL SL
	Instrument ID: GFPCPURPLE									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWC-6
Date Collected: 08/18/21 14:32
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1			528682	09/23/21 16:11	SCB	TAL SL

Client Sample ID: SGWC-7
Date Collected: 08/18/21 16:00
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.51 mL	1.0 g	524328	08/27/21 10:49	MJ	TAL SL
Total/NA	Analysis	9315		1			527825	09/21/21 15:26	SCB	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			999.51 mL	1.0 g	524342	08/27/21 12:08	MJ	TAL SL
Total/NA	Analysis	9320		1			527397	09/16/21 12:19	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			528682	09/23/21 16:11	SCB	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SGWC-8
Date Collected: 08/18/21 16:50
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.75 mL	1.0 g	524328	08/27/21 10:49	MJ	TAL SL
Total/NA	Analysis	9315		1			527825	09/21/21 15:26	SCB	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			999.75 mL	1.0 g	524342	08/27/21 12:08	MJ	TAL SL
Total/NA	Analysis	9320		1			527397	09/16/21 12:20	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			528682	09/23/21 16:11	SCB	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SGWC-17
Date Collected: 08/18/21 16:45
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.20 mL	1.0 g	524328	08/27/21 10:49	MJ	TAL SL
Total/NA	Analysis	9315		1			527825	09/21/21 15:26	SCB	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.20 mL	1.0 g	524342	08/27/21 12:08	MJ	TAL SL
Total/NA	Analysis	9320		1			527396	09/16/21 12:15	ANW	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			528682	09/23/21 16:11	SCB	TAL SL
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWC-18

Lab Sample ID: 180-126059-7

Date Collected: 08/18/21 14:30

Matrix: Water

Date Received: 08/20/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			749.63 mL	1.0 g	524328	08/27/21 10:49	MJ	TAL SL
Total/NA	Analysis	9315		1			527825	09/21/21 15:26	SCB	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			749.63 mL	1.0 g	524342	08/27/21 12:08	MJ	TAL SL
Total/NA	Analysis	9320		1			527397	09/16/21 12:20	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			528682	09/23/21 16:11	SCB	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SGWC-21

Lab Sample ID: 180-126059-8

Date Collected: 08/18/21 15:30

Matrix: Water

Date Received: 08/20/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.62 mL	1.0 g	524649	08/30/21 09:41	MJ	TAL SL
Total/NA	Analysis	9315		1			528321	09/22/21 08:38	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.00 mL	1.0 g	528274	09/21/21 14:27	BMP	TAL SL
Total/NA	Analysis	9320		1			529144	09/28/21 19:33	ANW	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Analysis	Ra226_Ra228		1			530591	10/08/21 16:55	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SGWC-22

Lab Sample ID: 180-126059-9

Date Collected: 08/18/21 14:15

Matrix: Water

Date Received: 08/20/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.72 mL	1.0 g	524649	08/30/21 09:41	MJ	TAL SL
Total/NA	Analysis	9315		1			528321	09/22/21 08:38	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.68 mL	1.0 g	528274	09/21/21 14:27	BMP	TAL SL
Total/NA	Analysis	9320		1			529144	09/28/21 19:33	ANW	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Analysis	Ra226_Ra228		1			530591	10/08/21 16:55	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SGWC-23

Lab Sample ID: 180-126059-10

Date Collected: 08/18/21 11:30

Matrix: Water

Date Received: 08/20/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.73 mL	1.0 g	524649	08/30/21 09:41	MJ	TAL SL
Total/NA	Analysis	9315		1			528321	09/22/21 08:38	FLC	TAL SL
	Instrument ID: GFPCBLUE									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWC-23
Date Collected: 08/18/21 11:30
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			1000.26 mL	1.0 g	528274	09/21/21 14:27	BMP	TAL SL
Total/NA	Analysis	9320		1			529144	09/28/21 19:33	ANW	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Analysis	Ra226_Ra228		1			530591	10/08/21 16:55	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SGWA-24
Date Collected: 08/18/21 10:35
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.36 mL	1.0 g	524649	08/30/21 09:41	MJ	TAL SL
Total/NA	Analysis	9315		1			528313	09/22/21 08:42	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.05 mL	1.0 g	528274	09/21/21 14:27	BMP	TAL SL
Total/NA	Analysis	9320		1			529144	09/28/21 19:34	ANW	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Analysis	Ra226_Ra228		1			530591	10/08/21 16:55	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: EB-5
Date Collected: 08/18/21 14:30
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.90 mL	1.0 g	524649	08/30/21 09:41	MJ	TAL SL
Total/NA	Analysis	9315		1			528313	09/22/21 08:42	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.62 mL	1.0 g	528274	09/21/21 14:27	BMP	TAL SL
Total/NA	Analysis	9320		1			529144	09/28/21 19:35	ANW	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Analysis	Ra226_Ra228		1			530591	10/08/21 16:55	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: EB-6
Date Collected: 08/18/21 17:00
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126060-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.16 mL	1.0 g	524265	08/26/21 15:39	MJ	TAL SL
Total/NA	Analysis	9315		1			527825	09/21/21 11:27	SCB	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			999.16 mL	1.0 g	524267	08/26/21 16:14	MJ	TAL SL
Total/NA	Analysis	9320		1			527565	09/17/21 13:22	FLC	TAL SL
	Instrument ID: GFPCPURPLE									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: EB-6
Date Collected: 08/18/21 17:00
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126060-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1			530590	10/08/21 16:54	EMH	TAL SL

Client Sample ID: DUP-5
Date Collected: 08/18/21 00:00
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126060-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.11 mL	1.0 g	524265	08/26/21 15:39	MJ	TAL SL
Total/NA	Analysis	9315		1			527825	09/21/21 11:27	SCB	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.11 mL	1.0 g	524267	08/26/21 16:14	MJ	TAL SL
Total/NA	Analysis	9320		1			527565	09/17/21 13:22	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			530590	10/08/21 16:54	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: FB-5
Date Collected: 08/18/21 11:15
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126060-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.43 mL	1.0 g	524265	08/26/21 15:39	MJ	TAL SL
Total/NA	Analysis	9315		1			527825	09/21/21 12:09	SCB	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.43 mL	1.0 g	524267	08/26/21 16:14	MJ	TAL SL
Total/NA	Analysis	9320		1			527565	09/17/21 13:22	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			530590	10/08/21 16:54	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: FB-6
Date Collected: 08/18/21 15:25
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126060-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.30 mL	1.0 g	524265	08/26/21 15:39	MJ	TAL SL
Total/NA	Analysis	9315		1			527825	09/21/21 12:09	SCB	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			999.30 mL	1.0 g	524267	08/26/21 16:14	MJ	TAL SL
Total/NA	Analysis	9320		1	1.0 mL	1.0 mL	527565	09/17/21 13:22	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			530590	10/08/21 16:54	EMH	TAL SL
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWC-9
Date Collected: 08/19/21 10:22
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.99 mL	1.0 g	524649	08/30/21 09:41	MJ	TAL SL
Total/NA	Analysis	9315		1			528313	09/22/21 08:42	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.74 mL	1.0 g	528274	09/21/21 14:27	BMP	TAL SL
Total/NA	Analysis	9320		1			529144	09/28/21 19:35	ANW	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Analysis	Ra226_Ra228		1			530591	10/08/21 16:55	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SGWC-10
Date Collected: 08/19/21 10:20
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.51 mL	1.0 g	524649	08/30/21 09:41	MJ	TAL SL
Total/NA	Analysis	9315		1			528313	09/22/21 08:43	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.62 mL	1.0 g	528274	09/21/21 14:27	BMP	TAL SL
Total/NA	Analysis	9320		1			529144	09/28/21 19:35	ANW	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Analysis	Ra226_Ra228		1			530591	10/08/21 16:55	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SGWC-11
Date Collected: 08/19/21 12:02
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.19 mL	1.0 g	524649	08/30/21 09:41	MJ	TAL SL
Total/NA	Analysis	9315		1			528313	09/22/21 08:43	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.10 mL	1.0 g	528274	09/21/21 14:27	BMP	TAL SL
Total/NA	Analysis	9320		1			529158	09/28/21 19:28	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			530591	10/08/21 16:55	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SGWC-13
Date Collected: 08/19/21 10:15
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.72 mL	1.0 g	524649	08/30/21 09:41	MJ	TAL SL
Total/NA	Analysis	9315		1	1.0 mL	1.0 mL	528313	09/22/21 08:43	FLC	TAL SL
	Instrument ID: GFPCPURPLE									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWC-13
Date Collected: 08/19/21 10:15
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			1000.36 mL	1.0 g	528274	09/21/21 14:27	BMP	TAL SL
Total/NA	Analysis	9320		1			529158	09/28/21 19:28	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			530591	10/08/21 16:55	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SGWC-14
Date Collected: 08/19/21 11:25
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.62 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528313	09/22/21 16:52	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			999.62 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528313	09/22/21 14:03	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			530592	10/08/21 16:55	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SGWC-15
Date Collected: 08/19/21 13:45
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.21 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528321	09/22/21 16:54	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.21 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528313	09/22/21 14:04	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			530592	10/08/21 16:55	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SGWC-16
Date Collected: 08/19/21 10:10
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.16 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528321	09/22/21 16:54	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.16 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528313	09/22/21 14:04	FLC	TAL SL
	Instrument ID: GFPCPURPLE									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWC-16
Date Collected: 08/19/21 10:10
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1			530592	10/08/21 16:55	EMH	TAL SL

Client Sample ID: SGWC-19
Date Collected: 08/19/21 13:30
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.73 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528321	09/22/21 16:54	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.73 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528313	09/22/21 14:04	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			530592	10/08/21 16:55	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SGWC-20
Date Collected: 08/19/21 11:55
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.09 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528321	09/22/21 20:10	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.09 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528313	09/22/21 14:04	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			530592	10/08/21 16:55	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: EB-7
Date Collected: 08/19/21 10:30
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.56 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528321	09/22/21 20:10	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			999.56 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528313	09/22/21 14:04	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			530592	10/08/21 16:55	EMH	TAL SL
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: DUP-7

Lab Sample ID: 180-126090-11

Date Collected: 08/19/21 00:00

Matrix: Water

Date Received: 08/21/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.96 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528321	09/22/21 20:11	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			999.96 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528313	09/22/21 14:04	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			530592	10/08/21 16:55	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: FB-8

Lab Sample ID: 180-126090-12

Date Collected: 08/19/21 12:32

Matrix: Water

Date Received: 08/21/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.78 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528321	09/22/21 20:11	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			999.78 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528313	09/22/21 14:05	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			530592	10/08/21 16:55	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-8

Lab Sample ID: 180-126090-13

Date Collected: 08/19/21 00:00

Matrix: Water

Date Received: 08/21/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.39 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528313	09/22/21 20:13	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.39 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528313	09/22/21 14:05	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			530592	10/08/21 16:55	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: SGWC-12

Lab Sample ID: 180-126090-14

Date Collected: 08/20/21 09:30

Matrix: Water

Date Received: 08/21/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.63 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528313	09/22/21 20:14	FLC	TAL SL
	Instrument ID: GFPCPURPLE									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWC-12

Date Collected: 08/20/21 09:30
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			1000.63 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528313	09/22/21 14:05	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			530592	10/08/21 16:55	EMH	TAL SL
	Instrument ID: NOEQUIP									

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Analyst References:

Lab: TAL SL

Batch Type: Prep

BMP = Bailey Pinette
MJ = Mary Johns

Batch Type: Analysis

ANW = Aamber Woods
EMH = Elizabeth Hoerchler
FLC = Fernando Cruz
SCB = Sarah Bernsen

Client Sample ID: SGWA-1

Date Collected: 08/17/21 15:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125972-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.159	U	0.229	0.230	1.00	0.389	pCi/L	08/25/21 12:41	09/16/21 21:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.2*		*40 - 110*	*08/25/21 12:41*	*09/16/21 21:20*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.492**		0.274	0.277	1.00	0.408	pCi/L	08/25/21 13:37	09/16/21 11:55	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.2*		*40 - 110*	*08/25/21 13:37*	*09/16/21 11:55*	*1*
Y Carrier	*85.2*		*40 - 110*	*08/25/21 13:37*	*09/16/21 11:55*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.651**		0.357	0.360	5.00	0.408	pCi/L		10/08/21 16:53	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWA-2

Date Collected: 08/17/21 16:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125972-2

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.133	U	0.207	0.207	1.00	0.355	pCi/L	08/25/21 12:41	09/16/21 21:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.5*		*40 - 110*	*08/25/21 12:41*	*09/16/21 21:21*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0585	U	0.278	0.278	1.00	0.485	pCi/L	08/25/21 13:37	09/16/21 11:55	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.5*		*40 - 110*	*08/25/21 13:37*	*09/16/21 11:55*	*1*
Y Carrier	*83.7*		*40 - 110*	*08/25/21 13:37*	*09/16/21 11:55*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.192	U	0.347	0.347	5.00	0.485	pCi/L		10/08/21 16:53	1

Client Sample ID: SGWA-4

Date Collected: 08/17/21 14:45
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125972-3

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0552	U	0.224	0.224	1.00	0.420	pCi/L	08/25/21 12:41	09/16/21 21:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*73.9*		*40 - 110*	*08/25/21 12:41*	*09/16/21 21:21*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**1.49**		0.427	0.448	1.00	0.551	pCi/L	08/25/21 13:37	09/16/21 11:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*73.9*		*40 - 110*	*08/25/21 13:37*	*09/16/21 11:56*	*1*
Y Carrier	*84.1*		*40 - 110*	*08/25/21 13:37*	*09/16/21 11:56*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.54**		0.482	0.501	5.00	0.551	pCi/L		10/08/21 16:53	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWA-25

Date Collected: 08/17/21 16:13
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125972-4

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00813	U	0.154	0.154	1.00	0.310	pCi/L	08/25/21 12:41	09/16/21 21:16	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.6*		*40 - 110*	*08/25/21 12:41*	*09/16/21 21:16*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.220	U	0.239	0.240	1.00	0.392	pCi/L	08/25/21 13:37	09/16/21 11:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.6*		*40 - 110*	*08/25/21 13:37*	*09/16/21 11:56*	*1*
Y Carrier	*85.2*		*40 - 110*	*08/25/21 13:37*	*09/16/21 11:56*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.228	U	0.284	0.285	5.00	0.392	pCi/L		10/08/21 16:53	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWA-3

Date Collected: 08/18/21 11:50
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0259	U	0.0684	0.0684	1.00	0.144	pCi/L	08/27/21 10:49	09/21/21 13:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*40 - 110*	*08/27/21 10:49*	*09/21/21 13:39*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.253	U	0.223	0.225	1.00	0.357	pCi/L	08/27/21 12:08	09/16/21 12:19	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:19*	*1*
Y Carrier	*86.0*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:19*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.228	U	0.233	0.235	5.00	0.357	pCi/L		09/23/21 16:11	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWA-5

Date Collected: 08/18/21 10:55
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-2

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0906	U	0.0955	0.0959	1.00	0.154	pCi/L	08/27/21 10:49	09/21/21 13:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*102*		*40 - 110*	*08/27/21 10:49*	*09/21/21 13:39*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.151	U	0.256	0.257	1.00	0.433	pCi/L	08/27/21 12:08	09/16/21 12:19	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*102*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:19*	*1*
Y Carrier	*75.9*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:19*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.242	U	0.273	0.274	5.00	0.433	pCi/L		09/23/21 16:11	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWC-6

Date Collected: 08/18/21 14:32
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-3

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0946	U	0.0954	0.0957	1.00	0.152	pCi/L	08/27/21 10:49	09/21/21 15:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.5*		*40 - 110*	*08/27/21 10:49*	*09/21/21 15:26*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.128	U	0.220	0.220	1.00	0.415	pCi/L	08/27/21 12:08	09/16/21 12:19	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.5*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:19*	*1*
Y Carrier	*85.6*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:19*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0332	U	0.240	0.240	5.00	0.415	pCi/L		09/23/21 16:11	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWC-7

Date Collected: 08/18/21 16:00
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-4

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0224	U	0.0955	0.0956	1.00	0.179	pCi/L	08/27/21 10:49	09/21/21 15:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.2*		*40 - 110*	*08/27/21 10:49*	*09/21/21 15:26*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.703**		0.417	0.422	1.00	0.632	pCi/L	08/27/21 12:08	09/16/21 12:19	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.2*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:19*	*1*
Y Carrier	*59.1*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:19*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.726**		0.428	0.433	5.00	0.632	pCi/L		09/23/21 16:11	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWC-8

Date Collected: 08/18/21 16:50
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-5

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.548		0.173	0.180	1.00	0.181	pCi/L	08/27/21 10:49	09/21/21 15:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.4*		*40 - 110*	*08/27/21 10:49*	*09/21/21 15:26*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.13		0.339	0.354	1.00	0.432	pCi/L	08/27/21 12:08	09/16/21 12:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.4*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:20*	*1*
Y Carrier	*85.2*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:20*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.68		0.381	0.397	5.00	0.432	pCi/L		09/23/21 16:11	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWC-17

Date Collected: 08/18/21 16:45
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-6

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00294	U	0.0896	0.0896	1.00	0.176	pCi/L	08/27/21 10:49	09/21/21 15:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.5*		*40 - 110*	*08/27/21 10:49*	*09/21/21 15:26*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.127	U	0.352	0.352	1.00	0.604	pCi/L	08/27/21 12:08	09/16/21 12:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.5*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:15*	*1*
Y Carrier	*84.1*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:15*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.130	U	0.363	0.363	5.00	0.604	pCi/L		09/23/21 16:11	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWC-18

Date Collected: 08/18/21 14:30
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-7

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00326	U	0.102	0.102	1.00	0.199	pCi/L	08/27/21 10:49	09/21/21 15:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*104*		*40 - 110*	*08/27/21 10:49*	*09/21/21 15:26*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.274	U	0.269	0.270	1.00	0.435	pCi/L	08/27/21 12:08	09/16/21 12:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*104*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:20*	*1*
Y Carrier	*85.2*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:20*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.277	U	0.288	0.289	5.00	0.435	pCi/L		09/23/21 16:11	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWC-21

Date Collected: 08/18/21 15:30
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-8

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.145	U	0.126	0.126	1.00	0.194	pCi/L	08/30/21 09:41	09/22/21 08:38	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.8*		*40 - 110*	*08/30/21 09:41*	*09/22/21 08:38*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.360	U	0.260	0.262	1.00	0.405	pCi/L	09/21/21 14:27	09/28/21 19:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.7*		*40 - 110*	*09/21/21 14:27*	*09/28/21 19:33*	*1*
Y Carrier	*84.9*		*40 - 110*	*09/21/21 14:27*	*09/28/21 19:33*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.505**		0.289	0.291	5.00	0.405	pCi/L		10/08/21 16:55	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWC-22

Date Collected: 08/18/21 14:15
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-9

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0536	U	0.0895	0.0896	1.00	0.195	pCi/L	08/30/21 09:41	09/22/21 08:38	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.5*		*40 - 110*	*08/30/21 09:41*	*09/22/21 08:38*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0796	U	0.242	0.242	1.00	0.422	pCi/L	09/21/21 14:27	09/28/21 19:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.0*		*40 - 110*	*09/21/21 14:27*	*09/28/21 19:33*	*1*
Y Carrier	*85.2*		*40 - 110*	*09/21/21 14:27*	*09/28/21 19:33*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0260	U	0.258	0.258	5.00	0.422	pCi/L		10/08/21 16:55	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWC-23

Date Collected: 08/18/21 11:30
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-10

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.169	U	0.133	0.134	1.00	0.202	pCi/L	08/30/21 09:41	09/22/21 08:38	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*40 - 110*	*08/30/21 09:41*	*09/22/21 08:38*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.434	U	0.352	0.355	1.00	0.562	pCi/L	09/21/21 14:27	09/28/21 19:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*72.8*		*40 - 110*	*09/21/21 14:27*	*09/28/21 19:33*	*1*
Y Carrier	*86.4*		*40 - 110*	*09/21/21 14:27*	*09/28/21 19:33*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.603**		0.376	0.379	5.00	0.562	pCi/L		10/08/21 16:55	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWA-24

Date Collected: 08/18/21 10:35
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-11

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.00619	U	0.0831	0.0831	1.00	0.165	pCi/L	08/30/21 09:41	09/22/21 08:42	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.5*		*40 - 110*	*08/30/21 09:41*	*09/22/21 08:42*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.166	U	0.290	0.290	1.00	0.489	pCi/L	09/21/21 14:27	09/28/21 19:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.9*		*40 - 110*	*09/21/21 14:27*	*09/28/21 19:34*	*1*
Y Carrier	*85.6*		*40 - 110*	*09/21/21 14:27*	*09/28/21 19:34*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.160	U	0.302	0.302	5.00	0.489	pCi/L		10/08/21 16:55	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: EB-5

Date Collected: 08/18/21 14:30
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126059-12

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0104	U	0.0886	0.0886	1.00	0.168	pCi/L	08/30/21 09:41	09/22/21 08:42	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.7*		*40 - 110*	*08/30/21 09:41*	*09/22/21 08:42*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.532**		0.277	0.281	1.00	0.409	pCi/L	09/21/21 14:27	09/28/21 19:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.4*		*40 - 110*	*09/21/21 14:27*	*09/28/21 19:35*	*1*
Y Carrier	*87.1*		*40 - 110*	*09/21/21 14:27*	*09/28/21 19:35*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.542**		0.291	0.295	5.00	0.409	pCi/L		10/08/21 16:55	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: EB-6

Date Collected: 08/18/21 17:00
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126060-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0371	U	0.110	0.110	1.00	0.201	pCi/L	08/26/21 15:39	09/21/21 11:27	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.7*		*40 - 110*	*08/26/21 15:39*	*09/21/21 11:27*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.280	U	0.360	0.361	1.00	0.597	pCi/L	08/26/21 16:14	09/17/21 13:22	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.7*		*40 - 110*	*08/26/21 16:14*	*09/17/21 13:22*	*1*
Y Carrier	*83.7*		*40 - 110*	*08/26/21 16:14*	*09/17/21 13:22*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.317	U	0.376	0.377	5.00	0.597	pCi/L		10/08/21 16:54	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: DUP-5

Date Collected: 08/18/21 00:00
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126060-2

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0593	U	0.0832	0.0834	1.00	0.191	pCi/L	08/26/21 15:39	09/21/21 11:27	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.0*		*40 - 110*	*08/26/21 15:39*	*09/21/21 11:27*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.273	U	0.299	0.300	1.00	0.491	pCi/L	08/26/21 16:14	09/17/21 13:22	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.0*		*40 - 110*	*08/26/21 16:14*	*09/17/21 13:22*	*1*
Y Carrier	*84.1*		*40 - 110*	*08/26/21 16:14*	*09/17/21 13:22*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.213	U	0.310	0.311	5.00	0.491	pCi/L		10/08/21 16:54	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: FB-5

Date Collected: 08/18/21 11:15
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126060-3

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0327	U	0.136	0.136	1.00	0.253	pCi/L	08/26/21 15:39	09/21/21 12:09	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*72.9*		*40 - 110*	*08/26/21 15:39*	*09/21/21 12:09*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.138	U	0.341	0.341	1.00	0.587	pCi/L	08/26/21 16:14	09/17/21 13:22	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*72.9*		*40 - 110*	*08/26/21 16:14*	*09/17/21 13:22*	*1*
Y Carrier	*84.9*		*40 - 110*	*08/26/21 16:14*	*09/17/21 13:22*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.171	U	0.367	0.367	5.00	0.587	pCi/L		10/08/21 16:54	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: FB-6

Date Collected: 08/18/21 15:25
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126060-4

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0921	U	0.125	0.126	1.00	0.211	pCi/L	08/26/21 15:39	09/21/21 12:09	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.8*		*40 - 110*	*08/26/21 15:39*	*09/21/21 12:09*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.245	U	0.264	0.265	1.00	0.431	pCi/L	08/26/21 16:14	09/17/21 13:22	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.8*		*40 - 110*	*08/26/21 16:14*	*09/17/21 13:22*	*1*
Y Carrier	*85.6*		*40 - 110*	*08/26/21 16:14*	*09/17/21 13:22*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.337	U	0.292	0.293	5.00	0.431	pCi/L		10/08/21 16:54	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWC-9

Date Collected: 08/19/21 10:22
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0895	U	0.114	0.115	1.00	0.190	pCi/L	08/30/21 09:41	09/22/21 08:42	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.1*		*40 - 110*	*08/30/21 09:41*	*09/22/21 08:42*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0555	U	0.239	0.239	1.00	0.419	pCi/L	09/21/21 14:27	09/28/21 19:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.3*		*40 - 110*	*09/21/21 14:27*	*09/28/21 19:35*	*1*
Y Carrier	*85.6*		*40 - 110*	*09/21/21 14:27*	*09/28/21 19:35*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.145	U	0.265	0.265	5.00	0.419	pCi/L		10/08/21 16:55	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWC-10

Date Collected: 08/19/21 10:20
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-2

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00745	U	0.0827	0.0827	1.00	0.161	pCi/L	08/30/21 09:41	09/22/21 08:43	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.7*		*40 - 110*	*08/30/21 09:41*	*09/22/21 08:43*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0948	U	0.262	0.262	1.00	0.453	pCi/L	09/21/21 14:27	09/28/21 19:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.3*		*40 - 110*	*09/21/21 14:27*	*09/28/21 19:35*	*1*
Y Carrier	*85.2*		*40 - 110*	*09/21/21 14:27*	*09/28/21 19:35*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.102	U	0.275	0.275	5.00	0.453	pCi/L		10/08/21 16:55	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWC-11

Date Collected: 08/19/21 12:02
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-3

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0982	U	0.100	0.101	1.00	0.161	pCi/L	08/30/21 09:41	09/22/21 08:43	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*40 - 110*	*08/30/21 09:41*	*09/22/21 08:43*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.657**		0.295	0.301	1.00	0.423	pCi/L	09/21/21 14:27	09/28/21 19:28	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.5*		*40 - 110*	*09/21/21 14:27*	*09/28/21 19:28*	*1*
Y Carrier	*87.1*		*40 - 110*	*09/21/21 14:27*	*09/28/21 19:28*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.755**		0.311	0.317	5.00	0.423	pCi/L		10/08/21 16:55	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWC-13

Date Collected: 08/19/21 10:15
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-4

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0805	U	0.126	0.126	1.00	0.215	pCi/L	08/30/21 09:41	09/22/21 08:43	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*67.8*		*40 - 110*	*08/30/21 09:41*	*09/22/21 08:43*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.147	U	0.259	0.259	1.00	0.439	pCi/L	09/21/21 14:27	09/28/21 19:28	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.1*		*40 - 110*	*09/21/21 14:27*	*09/28/21 19:28*	*1*
Y Carrier	*84.9*		*40 - 110*	*09/21/21 14:27*	*09/28/21 19:28*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.228	U	0.288	0.288	5.00	0.439	pCi/L		10/08/21 16:55	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWC-14

Date Collected: 08/19/21 11:25
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-5

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0330	U	0.222	0.222	1.00	0.448	pCi/L	08/30/21 12:33	09/22/21 16:52	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.3*		*40 - 110*	*08/30/21 12:33*	*09/22/21 16:52*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0476	U	0.315	0.315	1.00	0.565	pCi/L	08/30/21 13:46	09/22/21 14:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.3*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:03*	*1*
Y Carrier	*84.5*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:03*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0806	U	0.385	0.385	5.00	0.565	pCi/L		10/08/21 16:55	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWC-15

Date Collected: 08/19/21 13:45
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-6

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.178	U	0.263	0.263	1.00	0.447	pCi/L	08/30/21 12:33	09/22/21 16:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.3*		*40 - 110*	*08/30/21 12:33*	*09/22/21 16:54*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.340	U	0.284	0.285	1.00	0.453	pCi/L	08/30/21 13:46	09/22/21 14:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.3*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:04*	*1*
Y Carrier	*84.9*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:04*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.518**		0.387	0.388	5.00	0.453	pCi/L		10/08/21 16:55	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWC-16

Date Collected: 08/19/21 10:10
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-7

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0248	U	0.187	0.187	1.00	0.371	pCi/L	08/30/21 12:33	09/22/21 16:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.9*		*40 - 110*	*08/30/21 12:33*	*09/22/21 16:54*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0122	U	0.266	0.266	1.00	0.473	pCi/L	08/30/21 13:46	09/22/21 14:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.9*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:04*	*1*
Y Carrier	*87.5*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:04*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0370	U	0.325	0.325	5.00	0.473	pCi/L		10/08/21 16:55	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWC-19

Date Collected: 08/19/21 13:30
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-8

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.121	U	0.290	0.290	1.00	0.519	pCi/L	08/30/21 12:33	09/22/21 16:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.9*		*40 - 110*	*08/30/21 12:33*	*09/22/21 16:54*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.172	U	0.247	0.247	1.00	0.469	pCi/L	08/30/21 13:46	09/22/21 14:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.9*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:04*	*1*
Y Carrier	*87.1*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:04*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0514	U	0.381	0.381	5.00	0.519	pCi/L		10/08/21 16:55	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWC-20

Date Collected: 08/19/21 11:55
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-9

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0328	U	0.173	0.173	1.00	0.363	pCi/L	08/30/21 12:33	09/22/21 20:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.3*		*40 - 110*	*08/30/21 12:33*	*09/22/21 20:10*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.177	U	0.217	0.218	1.00	0.423	pCi/L	08/30/21 13:46	09/22/21 14:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.3*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:04*	*1*
Y Carrier	*83.7*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:04*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.210	U	0.278	0.278	5.00	0.423	pCi/L		10/08/21 16:55	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: EB-7

Date Collected: 08/19/21 10:30
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-10

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00781	U	0.244	0.244	1.00	0.477	pCi/L	08/30/21 12:33	09/22/21 20:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*77.2*		*40 - 110*	*08/30/21 12:33*	*09/22/21 20:10*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0922	U	0.282	0.283	1.00	0.521	pCi/L	08/30/21 13:46	09/22/21 14:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*77.2*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:04*	*1*
Y Carrier	*85.2*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:04*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0844	U	0.373	0.374	5.00	0.521	pCi/L		10/08/21 16:55	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: DUP-7
Date Collected: 08/19/21 00:00
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-11
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.111	U	0.189	0.189	1.00	0.331	pCi/L	08/30/21 12:33	09/22/21 20:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.3*		*40 - 110*	*08/30/21 12:33*	*09/22/21 20:11*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.115	U	0.240	0.241	1.00	0.450	pCi/L	08/30/21 13:46	09/22/21 14:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.3*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:04*	*1*
Y Carrier	*84.1*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:04*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.00435	U	0.305	0.306	5.00	0.450	pCi/L		10/08/21 16:55	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: FB-8

Date Collected: 08/19/21 12:32
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-12

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0832	U	0.253	0.253	1.00	0.460	pCi/L	08/30/21 12:33	09/22/21 20:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.3*		*40 - 110*	*08/30/21 12:33*	*09/22/21 20:11*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0607	U	0.237	0.237	1.00	0.435	pCi/L	08/30/21 13:46	09/22/21 14:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.3*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:05*	*1*
Y Carrier	*85.2*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:05*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0225	U	0.347	0.347	5.00	0.460	pCi/L		10/08/21 16:55	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: DUP-8

Date Collected: 08/19/21 00:00
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-13

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.364	U	0.288	0.290	1.00	0.437	pCi/L	08/30/21 12:33	09/22/21 20:13	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.4*		*40 - 110*	*08/30/21 12:33*	*09/22/21 20:13*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.309	U	0.299	0.300	1.00	0.485	pCi/L	08/30/21 13:46	09/22/21 14:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.4*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:05*	*1*
Y Carrier	*87.5*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:05*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.673**		0.415	0.417	5.00	0.485	pCi/L		10/08/21 16:55	1

Client: Southern Company
Project/Site: Plant Scherer Ash Pond

Job ID: 180-125972-2

Client Sample ID: SGWC-12

Date Collected: 08/20/21 09:30
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126090-14

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.135	U	0.213	0.214	1.00	0.468	pCi/L	08/30/21 12:33	09/22/21 20:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.8*		*40 - 110*	*08/30/21 12:33*	*09/22/21 20:14*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.146	U	0.287	0.287	1.00	0.491	pCi/L	08/30/21 13:46	09/22/21 14:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.8*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:05*	*1*
Y Carrier	*74.0*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:05*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0109	U	0.357	0.358	5.00	0.491	pCi/L		10/08/21 16:55	1

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-524072/24-A
Matrix: Water
Analysis Batch: 527397

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 524072

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.08951	U	0.238	0.238	1.00	0.429	pCi/L	08/25/21 12:41	09/16/21 23:02	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.8*		*40 - 110*	*08/25/21 12:41*	*09/16/21 23:02*	*1*

Lab Sample ID: LCS 160-524072/1-A
Matrix: Water
Analysis Batch: 527396

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 524072

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	11.32		1.46	1.00	0.372	pCi/L	100	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*77.2*		*40 - 110*

Lab Sample ID: 410-51803-D-1-A MS
Matrix: Water
Analysis Batch: 527379

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 524072

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226	0.0547	U	11.3	10.25		1.30	1.00	0.342	pCi/L	90	75 - 138		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*92.1*		*40 - 110*

Lab Sample ID: 410-51803-E-1-A MSD
Matrix: Water
Analysis Batch: 527379

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 524072

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	0.0547	U	11.3	10.90		1.36	1.00	0.312	pCi/L	96	75 - 138	0.24	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*94.9*		*40 - 110*

Lab Sample ID: MB 160-524265/23-A
Matrix: Water
Analysis Batch: 528286

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 524265

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.06000	U	0.0776	0.0778	1.00	0.178	pCi/L	08/26/21 15:39	09/21/21 11:31	1

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: MB 160-524265/23-A
Matrix: Water
Analysis Batch: 528286

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 524265

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	87.7		40 - 110	08/26/21 15:39	09/21/21 11:31	1

Lab Sample ID: LCS 160-524265/1-A
Matrix: Water
Analysis Batch: 527814

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 524265

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	10.98		1.21	1.00	0.169	pCi/L	97	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	94.1		40 - 110

Lab Sample ID: 500-204022-G-5-A DU
Matrix: Water
Analysis Batch: 527814

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 524265

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	0.254			0.2175		0.143	1.00	0.200	pCi/L			0.12	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	88.5		40 - 110

Lab Sample ID: MB 160-524328/23-A
Matrix: Water
Analysis Batch: 527825

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 524328

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1190	U	0.126	0.126	1.00	0.203	pCi/L	08/27/21 10:49	09/21/21 15:26	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	87.2		40 - 110	08/27/21 10:49	09/21/21 15:26	1

Lab Sample ID: LCS 160-524328/1-A
Matrix: Water
Analysis Batch: 528287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 524328

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	11.81		1.29	1.00	0.202	pCi/L	104	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	74.7		40 - 110

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: 500-204027-D-4-A DU
Matrix: Water
Analysis Batch: 528287

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 524328

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	0.158			0.07604	U	0.108	1.00	0.183	pCi/L			0.38	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*94.9*		*40 - 110*

Lab Sample ID: MB 160-524649/23-A
Matrix: Water
Analysis Batch: 528313

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 524649

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.02719	U	0.0926	0.0926	1.00	0.170	pCi/L	08/30/21 09:41	09/22/21 08:43	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.1*		*40 - 110*	*08/30/21 09:41*	*09/22/21 08:43*	*1*

Lab Sample ID: LCS 160-524649/1-A
Matrix: Water
Analysis Batch: 528321

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 524649

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	7.428	*	0.877	1.00	0.176	pCi/L	66	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*76.7*		*40 - 110*

Lab Sample ID: LCSD 160-524649/2-A
Matrix: Water
Analysis Batch: 528321

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 524649

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226			11.3	9.590	*	1.08	1.00	0.194	pCi/L	85	75 - 125	1.11	1

Carrier	*LCSD %Yield*	*LCSD Qualifier*	*Limits*
Ba Carrier	*79.0*		*40 - 110*

Lab Sample ID: MB 160-524659/23-A
Matrix: Water
Analysis Batch: 528321

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 524659

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1098	U	0.243	0.243	1.00	0.433	pCi/L	08/30/21 12:33	09/22/21 20:19	1

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: MB 160-524659/23-A
Matrix: Water
Analysis Batch: 528321

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 524659

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	90.8		40 - 110	08/30/21 12:33	09/22/21 20:19	1

Lab Sample ID: LCS 160-524659/1-A
Matrix: Water
Analysis Batch: 528478

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 524659

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	10.76		1.42	1.00	0.396	pCi/L	95	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	83.1		40 - 110

Lab Sample ID: LCSD 160-524659/2-A
Matrix: Water
Analysis Batch: 528478

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 524659

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226			11.3	10.50		1.41	1.00	0.378	pCi/L	93	75 - 125	0.09	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	82.1		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-524081/24-A
Matrix: Water
Analysis Batch: 527396

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 524081

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.5380		0.312	0.316	1.00	0.473	pCi/L	08/25/21 13:37	09/16/21 12:06	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	79.8		40 - 110	08/25/21 13:37	09/16/21 12:06	1
Y Carrier	86.7		40 - 110	08/25/21 13:37	09/16/21 12:06	1

Lab Sample ID: LCS 160-524081/1-A
Matrix: Water
Analysis Batch: 527452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 524081

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.33	7.639		1.01	1.00	0.555	pCi/L	82	75 - 125		

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-524081/1-A
Matrix: Water
Analysis Batch: 527452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 524081

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	77.2		40 - 110
Y Carrier	82.2		40 - 110

Lab Sample ID: 410-51803-D-1-B MS
Matrix: Water
Analysis Batch: 527379

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 524081

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228	0.210	U	9.33	8.913		1.07	1.00	0.438	pCi/L	93	45 - 150		

Carrier	MS %Yield	MS Qualifier	Limits
Ba Carrier	92.1		40 - 110
Y Carrier	85.6		40 - 110

Lab Sample ID: 410-51803-E-1-B MSD
Matrix: Water
Analysis Batch: 527379

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 524081

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	0.210	U	9.33	8.912		1.06	1.00	0.388	pCi/L	93	45 - 150	0	1

Carrier	MSD %Yield	MSD Qualifier	Limits
Ba Carrier	94.9		40 - 110
Y Carrier	84.9		40 - 110

Lab Sample ID: MB 160-524267/23-A
Matrix: Water
Analysis Batch: 527619

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 524267

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.05410	U	0.223	0.223	1.00	0.395	pCi/L	08/26/21 16:14	09/17/21 13:27	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	87.7		40 - 110	08/26/21 16:14	09/17/21 13:27	1
Y Carrier	87.5		40 - 110	08/26/21 16:14	09/17/21 13:27	1

Lab Sample ID: LCS 160-524267/1-A
Matrix: Water
Analysis Batch: 527466

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 524267

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.32	9.141		1.11	1.00	0.418	pCi/L	98	75 - 125		

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-524267/1-A
Matrix: Water
Analysis Batch: 527466

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 524267

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	94.1		40 - 110
Y Carrier	81.1		40 - 110

Lab Sample ID: 500-204022-G-5-B DU
Matrix: Water
Analysis Batch: 527466

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 524267

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	0.544			0.03687	U	0.252	1.00	0.448	pCi/L			0.91	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	88.5		40 - 110
Y Carrier	84.1		40 - 110

Lab Sample ID: MB 160-524342/23-A
Matrix: Water
Analysis Batch: 527397

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 524342

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1554	U	0.251	0.251	1.00	0.424	pCi/L	08/27/21 12:08	09/16/21 12:20	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	87.2		40 - 110	08/27/21 12:08	09/16/21 12:20	1
Y Carrier	85.2		40 - 110	08/27/21 12:08	09/16/21 12:20	1

Lab Sample ID: LCS 160-524342/1-A
Matrix: Water
Analysis Batch: 527396

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 524342

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.33	9.679		1.22	1.00	0.510	pCi/L	104	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	74.7		40 - 110
Y Carrier	79.3		40 - 110

Lab Sample ID: 500-204027-D-4-B DU
Matrix: Water
Analysis Batch: 527396

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 524342

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	0.365	U		0.4157		0.273	1.00	0.415	pCi/L			0.09	1

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: 500-204027-D-4-B DU
Matrix: Water
Analysis Batch: 527396

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 524342

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	94.9		40 - 110
Y Carrier	82.2		40 - 110

Lab Sample ID: MB 160-524669/23-A
Matrix: Water
Analysis Batch: 528321

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 524669

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.05024	U	0.282	0.282	1.00	0.507	pCi/L	08/30/21 13:46	09/22/21 14:12	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	90.8		40 - 110	08/30/21 13:46	09/22/21 14:12	1
Y Carrier	87.9		40 - 110	08/30/21 13:46	09/22/21 14:12	1

Lab Sample ID: LCS 160-524669/1-A
Matrix: Water
Analysis Batch: 528313

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 524669

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.31	9.135		1.13	1.00	0.530	pCi/L	98	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	83.1		40 - 110
Y Carrier	83.0		40 - 110

Lab Sample ID: LCSD 160-524669/2-A
Matrix: Water
Analysis Batch: 528313

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 524669

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228			9.31	9.261		1.13	1.00	0.499	pCi/L	99	75 - 125	0.06	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	82.1		40 - 110
Y Carrier	84.9		40 - 110

Lab Sample ID: MB 160-528274/22-A
Matrix: Water
Analysis Batch: 529158

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 528274

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1042	U	0.256	0.256	1.00	0.441	pCi/L	09/21/21 14:27	09/28/21 19:28	1

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: MB 160-528274/22-A
Matrix: Water
Analysis Batch: 529158

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 528274

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	81.2		40 - 110	09/21/21 14:27	09/28/21 19:28	1
Y Carrier	90.5		40 - 110	09/21/21 14:27	09/28/21 19:28	1

Lab Sample ID: LCS 160-528274/1-A
Matrix: Water
Analysis Batch: 529143

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 528274

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.29	11.04		1.35	1.00	0.578	pCi/L	119	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	67.6		40 - 110
Y Carrier	83.7		40 - 110

Lab Sample ID: LCSD 160-528274/2-A
Matrix: Water
Analysis Batch: 529143

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 528274

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228			9.29	9.264		1.13	1.00	0.453	pCi/L	100	75 - 125	0.72	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	78.9		40 - 110
Y Carrier	84.1		40 - 110

Rad

Prep Batch: 524072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125972-1	SGWA-1	Total/NA	Water	PrecSep-21	
180-125972-2	SGWA-2	Total/NA	Water	PrecSep-21	
180-125972-3	SGWA-4	Total/NA	Water	PrecSep-21	
180-125972-4	SGWA-25	Total/NA	Water	PrecSep-21	
MB 160-524072/24-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-524072/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
410-51803-D-1-A MS	Matrix Spike	Total/NA	Water	PrecSep-21	
410-51803-E-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 524081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125972-1	SGWA-1	Total/NA	Water	PrecSep_0	
180-125972-2	SGWA-2	Total/NA	Water	PrecSep_0	
180-125972-3	SGWA-4	Total/NA	Water	PrecSep_0	
180-125972-4	SGWA-25	Total/NA	Water	PrecSep_0	
MB 160-524081/24-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-524081/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
410-51803-D-1-B MS	Matrix Spike	Total/NA	Water	PrecSep_0	
410-51803-E-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep_0	

Prep Batch: 524265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126060-1	EB-6	Total/NA	Water	PrecSep-21	
180-126060-2	DUP-5	Total/NA	Water	PrecSep-21	
180-126060-3	FB-5	Total/NA	Water	PrecSep-21	
180-126060-4	FB-6	Total/NA	Water	PrecSep-21	
MB 160-524265/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-524265/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
500-204022-G-5-A DU	Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 524267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126060-1	EB-6	Total/NA	Water	PrecSep_0	
180-126060-2	DUP-5	Total/NA	Water	PrecSep_0	
180-126060-3	FB-5	Total/NA	Water	PrecSep_0	
180-126060-4	FB-6	Total/NA	Water	PrecSep_0	
MB 160-524267/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-524267/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
500-204022-G-5-B DU	Duplicate	Total/NA	Water	PrecSep_0	

Prep Batch: 524328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126059-1	SGWA-3	Total/NA	Water	PrecSep-21	
180-126059-2	SGWA-5	Total/NA	Water	PrecSep-21	
180-126059-3	SGWC-6	Total/NA	Water	PrecSep-21	
180-126059-4	SGWC-7	Total/NA	Water	PrecSep-21	
180-126059-5	SGWC-8	Total/NA	Water	PrecSep-21	
180-126059-6	SGWC-17	Total/NA	Water	PrecSep-21	
180-126059-7	SGWC-18	Total/NA	Water	PrecSep-21	
MB 160-524328/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-524328/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Rad (Continued)

Prep Batch: 524328 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-204027-D-4-A DU	Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 524342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126059-1	SGWA-3	Total/NA	Water	PrecSep_0	
180-126059-2	SGWA-5	Total/NA	Water	PrecSep_0	
180-126059-3	SGWC-6	Total/NA	Water	PrecSep_0	
180-126059-4	SGWC-7	Total/NA	Water	PrecSep_0	
180-126059-5	SGWC-8	Total/NA	Water	PrecSep_0	
180-126059-6	SGWC-17	Total/NA	Water	PrecSep_0	
180-126059-7	SGWC-18	Total/NA	Water	PrecSep_0	
MB 160-524342/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-524342/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
500-204027-D-4-B DU	Duplicate	Total/NA	Water	PrecSep_0	

Prep Batch: 524649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126059-8	SGWC-21	Total/NA	Water	PrecSep-21	
180-126059-9	SGWC-22	Total/NA	Water	PrecSep-21	
180-126059-10	SGWC-23	Total/NA	Water	PrecSep-21	
180-126059-11	SGWA-24	Total/NA	Water	PrecSep-21	
180-126059-12	EB-5	Total/NA	Water	PrecSep-21	
180-126090-1	SGWC-9	Total/NA	Water	PrecSep-21	
180-126090-2	SGWC-10	Total/NA	Water	PrecSep-21	
180-126090-3	SGWC-11	Total/NA	Water	PrecSep-21	
180-126090-4	SGWC-13	Total/NA	Water	PrecSep-21	
MB 160-524649/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-524649/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-524649/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 524659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126090-5	SGWC-14	Total/NA	Water	PrecSep-21	
180-126090-6	SGWC-15	Total/NA	Water	PrecSep-21	
180-126090-7	SGWC-16	Total/NA	Water	PrecSep-21	
180-126090-8	SGWC-19	Total/NA	Water	PrecSep-21	
180-126090-9	SGWC-20	Total/NA	Water	PrecSep-21	
180-126090-10	EB-7	Total/NA	Water	PrecSep-21	
180-126090-11	DUP-7	Total/NA	Water	PrecSep-21	
180-126090-12	FB-8	Total/NA	Water	PrecSep-21	
180-126090-13	DUP-8	Total/NA	Water	PrecSep-21	
180-126090-14	SGWC-12	Total/NA	Water	PrecSep-21	
MB 160-524659/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-524659/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-524659/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 524669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126090-5	SGWC-14	Total/NA	Water	PrecSep_0	
180-126090-6	SGWC-15	Total/NA	Water	PrecSep_0	
180-126090-7	SGWC-16	Total/NA	Water	PrecSep_0	

Rad (Continued)

Prep Batch: 524669 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126090-8	SGWC-19	Total/NA	Water	PrecSep_0	
180-126090-9	SGWC-20	Total/NA	Water	PrecSep_0	
180-126090-10	EB-7	Total/NA	Water	PrecSep_0	
180-126090-11	DUP-7	Total/NA	Water	PrecSep_0	
180-126090-12	FB-8	Total/NA	Water	PrecSep_0	
180-126090-13	DUP-8	Total/NA	Water	PrecSep_0	
180-126090-14	SGWC-12	Total/NA	Water	PrecSep_0	
MB 160-524669/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-524669/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-524669/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Prep Batch: 528274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126059-8	SGWC-21	Total/NA	Water	PrecSep_0	
180-126059-9	SGWC-22	Total/NA	Water	PrecSep_0	
180-126059-10	SGWC-23	Total/NA	Water	PrecSep_0	
180-126059-11	SGWA-24	Total/NA	Water	PrecSep_0	
180-126059-12	EB-5	Total/NA	Water	PrecSep_0	
180-126090-1	SGWC-9	Total/NA	Water	PrecSep_0	
180-126090-2	SGWC-10	Total/NA	Water	PrecSep_0	
180-126090-3	SGWC-11	Total/NA	Water	PrecSep_0	
180-126090-4	SGWC-13	Total/NA	Water	PrecSep_0	
MB 160-528274/22-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-528274/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-528274/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238-2907
phone 412.963.7058 fax 412.963.2468

Chain of Custody Record

TestAme... THE LEADER IN ENVIRON...

TestAmerica Labor...

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Dawn Prell	Site Contact: Dawn Prell	Date:	COC No:
Joju Abraham	Tel/Fax: 248-536-5445	Lab Contact: Shali Brown	Carrier:	__1__ of __1__ CO...
Southern Company	Analysis Turnaround Time			Sampler:
241 Ralph McGill Blvd SE B10185	☑ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Atlanta, GA 30308	TAT if different from Below __3-5 days__			Walk-in Client:
JAbraham@southernco.com	☐ 2 weeks			Lab Sampling:
Project Name: CCR - Plant Scherer Ash Pond	☐ 1 week			
Site: Georgia	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	6020, 7470A: App III / IV metals	Cl, F, SO4, TDS	Radium 226 + 228	Sample Specific...
SGWA-1	8/17/2021	15:10	G	GW	3			X	X	X	pH = 5.26
SGWA-2	8/17/2021	16:10	G	GW	3			X	X	X	pH = 6.84
SGWA-4	8/17/2021	14:45	G	GW	3			X	X	X	pH = 6.41
SGWA-25	8/17/2021	16:13	G	GW	3			X	X	X	pH = 6.08
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other								4	1	4	

180-125972 Chain of Custody

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal by Lab ☐ Archive for________ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:______ Corr'd:______ Therm ID No.:______

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by: JW...	Company: GOLDER	Date/Time: 08/18/21 08:03	Received by: Elaine Cook	Company: Courier Now	Date/Time: 8/18/21
Relinquished by: TM	Company:	Date/Time: 8/18/21 10am	Received by: TM	Company: 8/18/21 10am	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: [signature]	Company: ETA Pitt	Date/Time: 8-19-21

Form No. CA-C-WI-002, Rev. 4.20, da...

10/11/2021 9/15

TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238-2907
phone 412.963.7058 fax 412.963.2468

Chain of Custo

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA

Client Contact	Project Manager: Dawn Prell	Site Contact: Dawn P.	Date:	COC No:
Joju Abraham	Tel/Fax: 248-536-5445	Lab Contact: Shali Brown	Carrier:	1 of 1 COCs
Southern Company	Analysis Turnaround Time			Sampler:
241 Ralph McGill Blvd SE B10185	☑ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Atlanta, GA 30308	TAT if different from Below 3-5 days			Walk-in Client:
JAbraham@southernco.com	☐ 2 weeks			Lab Sampling:
Project Name: CCR - Plant Scherer Ash Pond	☐ 1 week			
Site: Georgia	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	6020, 7470A: App III / IV metals	Cl, F, SO4, TDS	Radium 226 + 228	Sample Specific Notes:
SGWA-3	8/18/2021	11:50	G	GW	5			X	X	X	pH = 5.85
SGWA-5	8/18/2021	10:55	G	GW	3			X	X	X	pH = 5.51
SGWC-6	8/18/2021	14:32	G	GW	3			X	X	X	pH = 6.33
SGWC-7	8/18/2021	16:00	G	GW	3			X	X	X	pH = 6.61
SGWC-8	8/18/2021	16:50	G	GW	3			X	X	X	pH = 6.48
SGWC-17	8/18/2021	16:45	G	GW	3			X	X	X	pH = 6.26
SGWC-18	8/18/2021	14:30	G	GW	3			X	X	X	pH = 4.83
SGWC-21	8/18/2021	15:30	G	GW	3			X	X	X	pH = 6.26
SGWC-22	8/18/2021	14:15	G	GW	3			X	X	X	pH = 5.76
SGWC-23	8/18/2021	11:30	G	GW	3			X	X	X	pH = 6.01
SGWA-24	8/18/2021	10:35	G	GW	3			X	X	X	pH = 6.45
EB-5	8/18/2021	14:30	G	Water	3			X	X	X	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other								4	1	4	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____		
Relinquished by:	Company: GOLDER	Date/Time: 08-19-21/08:00	Received by: Elaine Codik	Company: Courier Now	Date/Time: 08/19/21
Relinquished by:	Company:	Date/Time: 8/19/21 958	Received by:	Company:	Date/Time: 8/19/21 958
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Co	Date/Time: 8-20-21

Form No. CA-C-WI-002, Rev. 4.20, dated 2/28/2019

TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238-2907
phone 412.963.7058 fax 412.963.2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Dawn Prell	Site Contact: Dawn Prell	Date:	COC No:
Joju Abraham	Tel/Fax: 248-536-5445	Lab Contact: Shali Brown	Carrier:	1 of 1 COCs
Southern Company	Analysis Turnaround Time			Sampler:
241 Ralph McGill Blvd SE B10185	☑ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Atlanta, GA 30308	TAT if different from Below 3-5 days			Walk-in Client:
JAbraham@southernco.com	☐ 2 weeks			Lab Sampling:
Project Name: CCR - Plant Scherer Ash Pond	☐ 1 week			Job / SDG No.:
Site: Georgia	☐ 2 days			
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	6020, 7470A: App III / IV metals	Cl, F, SO4, TDS	Radium 226 + 228	Sample Specific Notes:
EB-6	8/18/2021	17:00	G	Water	3			X	X	X	
Dup-5	8/18/2021		G	GW	3			X	X	X	
FB-5	8/18/2021	11:15	G	Water	3			X	X	X	
FB-6	8/18/2021	15:25	G	Water	3			X	X	X	
								4	1	4	

180-126060 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____			
Relinquished by:	Company: Golder	Date/Time: 08-19-21 0800	Received by: Elaine Cook	Company: Courier Now	Date/Time: 08/19/21
Relinquished by:	Company:	Date/Time: 8/19/21 952	Received by:	Company:	Date/Time: 8/19/21 958
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: DK Peters	Company: TAP, PT	Date/Time: 8-20-21

Form No. CA-C-WI-002, Rev. 4.20, dated 2/28/2019

9-30

TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238-2907
phone 412.963.7058 fax 412.963.2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Dawn Prell	Site Contact: Dawn Prell	Date:	COC No:
Joju Abraham	Tel/Fax: 248-536-5445	Lab Contact: Shali Brown	Carrier:	1 of 2 COCs
Southern Company	Analysis Turnaround Time			Sampler: Jude Waguespack
241 Ralph McGill Blvd SE B10185	☑ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Atlanta, GA 30308	TAT if different from Below 3-5 days			Walk-in Client:
JAbraham@southernco.com	☐ 2 weeks			Shipping:
Project Name: CCR - Plant Scherer Ash Pond	☐ 1 week			
Site: Georgia	☐ 2 days			G No.:
P O #	☐ 1 day			

180-126090 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	6020, 7470A: App III / IV metals	Cl, F, SO4, TDS	Radium 226 + 228	Sample Specific Notes:
SGWC-9	8/19/2021	10:22	G	GW	3	N	N	X	X	X	pH = 6.22
SGWC-10	8/19/2021	10:20	G	GW	3	N	N	X	X	X	pH = 5.21
SGWC-11	8/19/2021	12:02	G	GW	3	N	N	X	X	X	pH = 5.23
SGWC-13	8/19/2021	10:15	G	GW	3	N	N	X	X	X	pH = 5.99
SGWC-14	8/19/2021	11:25	G	GW	3	N	N	X	X	X	pH = 5.86
SGWC-15	8/19/2021	13:45	G	GW	3	N	N	X	X	X	pH = 4.63
SGWC-16	8/19/2021	10:10	G	GW	5	N	N	X	X	X	pH = 5.28; Extra Radium
SGWC-19	8/19/2021	13:30	G	GW	5	N	N	X	X	X	pH = 5.61; Extra Radium
SGWC-20	8/19/2021	11:55	G	GW	3	N	N	X	X	X	pH = 4.28
EB-7	8/19/2021	10:30	G	Water	3	N	N	X	X	X	
Dup-7	8/19/2021	--	G	GW	3	N	N	X	X	X	
FB-8	8/19/2021	12:32	G	Water	3	N	N	X	X	X	
								4	1	4	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____	Therm ID No.: _____
Relinquished by: TW... / SAMPLER	Company: GOLDER	Date/Time: 08-20-21/1500	Received by:	Company:	Date/Time: 8/20/21 1500
Relinquished by: TM	Company:	Date/Time: 8/20/21 1500	Received by: Dawn Prell	Company: GAP	Date/Time: 8-21-21 930
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 4.20, dated 2/28/2019

TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238-2907
phone 412.963.7058 fax 412.963.2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Dawn Prell	Site Contact: Dawn Prell	Date:	COC No:
Joju Abraham	Tel/Fax: 248-536-5445	Lab Contact: Shali Brown	Carrier:	__2__ of __2__ COCs
Southern Company	Analysis Turnaround Time			Sampler: J. Waguespack
241 Ralph McGill Blvd SE B10185	☑ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Atlanta, GA 30308	TAT if different from Below __3-5 days__			Walk-in Client:
JAbraham@southernco.com	☐ 2 weeks			Lab Sampling:
Project Name: CCR - Plant Scherer Ash Pond	☐ 1 week			
Site: Georgia	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	6020, 7470A: App III / IV metals	Cl, F, SO4, TDS	Radium 226 + 228	Sample Specific Notes:
Dup-8	8/19/2021	--	G	GW	3	N	N	X	X	X	
SGWC-12	8/20/2021	09:30	G	GW	3	N	N	X	X	X	pH = 6.13
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____								4	1	4	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal by Lab ☐ Archive for_______ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd:____ Corr'd:____		Therm ID No.:____
Relinquished by: JW... / J. Waguespack	Company: Golder	Date/Time: 08-20-21/1500	Received by: [signature]	Company:	Date/Time: 8/20/21 1500
Relinquished by: [signature]	Company:	Date/Time: 8/20/21 1800	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: D. Walls	Company: TA PITT	Date/Time: 8-21-21 9:30

Form No. CA-C-WI-002, Rev. 4.20, dated 2/28/2019

10/11/2021

TRCK: 1516 9332 0409

Part # 159469-434 RITT EXP 04/22

eurofins | Environment Testing TestAmerica

ORIGIN ID:LIYA (678) 966-9981
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 18AUG21
ACTWGT: 60.90 LB
CAD: 859116/CAFE3409

BILL THIRD PARTY

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238

(412) 963-7058 REF:
INV:
PO: DEPT:

FedEx Express

THU - 19 AUG 10:30A
PRIORITY OVERNIGHT

TRK# 0201 1516 9332 0409

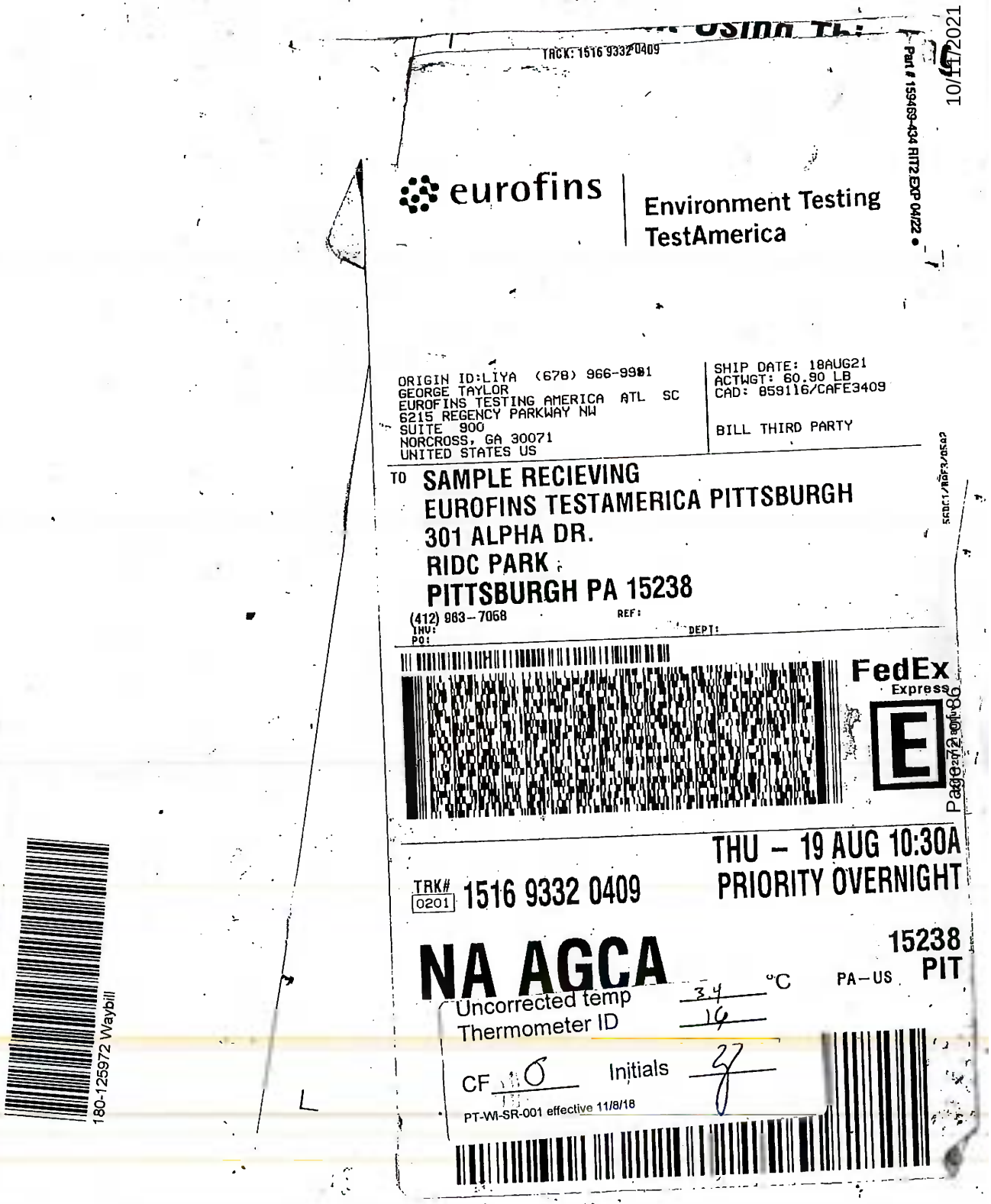
NA AGCA

15238
PIT
PA-US

Uncorrected temp 3.4 °C
Thermometer ID 16
CF 0 Initials SJ
PT-WI-SR-001 effective 11/8/18

180-125972 Waybill

Page 41 of 80



TRACK: 1516 9332 0409

Part # 159469-434 RITT2 EXP 04/22

10/11/2021

eurofins | Environment Testing TestAmerica

ORIGIN ID:LIYA (678) 966-9901
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 18AUG21
ACTWGT: 60.90 LB
CAD: 859116/CAFE3409

BILL THIRD PARTY

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238

(412) 963-7068 REF:
INV: DEPT:
PO:

FedEx Express

Page 72 of 86

THU - 19 AUG 10:30A
PRIORITY OVERNIGHT

TRK# 0201 1516 9332 0409

NA AGCA

15238
PIT
PA-US

Uncorrected temp 3.4 °C
Thermometer ID 16
CF 0 Initials

PT-WI-SR-001 effective 11/8/18

180-125972 Waybill

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-442319.1
Client Contact: Shipping/Receiving	Phone	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: Georgia	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-125972-2
Address: 13715 Rider Trail North,	Due Date Requested: 9/22/2021			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: GPC Plant Scherer Ash Pond	Project #: 18019884			
Site: CCR Plant Scherer	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Standard Target List	9320_Ra228/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
SGWA-1 (180-125972-1)	8/17/21	15:10 Eastern		Water			X	X	X	2	
SGWA-2 (180-125972-2)	8/17/21	16:10 Eastern		Water			X	X	X	2	
SGWA-4 (180-125972-3)	8/17/21	14:45 Eastern		Water			X	X	X	2	
SGWA-25 (180-125972-4)	8/17/21	16:13 Eastern		Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		8/20/21 1700		FED EX		
	Relinquished by: FED EX	Date/Time:	Company	Received by:	Date/Time: 8/21/21 0842	Company ERA SRT
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):
Client Contact: Shipping/Receiving	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: Georgia
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):	
Address: 13715 Rider Trail North,	Due Date Requested: 9/26/2021		
City: Earth City	TAT Requested (days):		
State, Zip: MO, 63045			
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:		
Email:	WO #:		
Project Name: Plant Scherer Ash Pond	Project #: 18019884		
Site: CCR Plant Scherer	SSOW#:		

COC No: 180-442391.1
Page: Page 1 of 2
Job #: 180-126059-2

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Standard Target List	9320_Ra228/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
SGWA-3 (180-126059-1)	8/18/21	11:50 Eastern		Water			X	X	X	4	
SGWA-5 (180-126059-2)	8/18/21	10:55 Eastern		Water			X	X	X	2	
SGWC-6 (180-126059-3)	8/18/21	14:32 Eastern		Water			X	X	X	2	
SGWC-7 (180-126059-4)	8/18/21	16:00 Eastern		Water			X	X	X	2	
SGWC-8 (180-126059-5)	8/18/21	16:50 Eastern		Water			X	X	X	2	
SGWC-17 (180-126059-6)	8/18/21	16:45 Eastern		Water			X	X	X	2	
SGWC-18 (180-126059-7)	8/18/21	14:30 Eastern		Water			X	X	X	2	
SGWC-21 (180-126059-8)	8/18/21	15:30 Eastern		Water			X	X	X	2	
SGWC-22 (180-126059-9)	8/18/21	14:15 Eastern		Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica

Possible Hazard Identification
Unconfirmed
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ______ *Months*
Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:	
Relinquished by: MO	Date/Time: 8/23/21 1700	Company: ETA	Received by: FE	Date/Time:	Company:
Relinquished by: FE	Date/Time:	Company:	Received by: Micha Koniahing	Date/Time: 8/24/21 0935	Company: ETA STL
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time: ME 8/24/21	Company:

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-442391.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: Georgia	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-126059-2
Address: 13715 Rider Trail North,	Due Date Requested: 9/26/2021			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Plant Scherer Ash Pond	Project #: 18019884			
Site: CCR Plant Scherer	SSOW#:			

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Standard Target List	9320_Ra228/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
SGWC-23 (180-126059-10)	8/18/21	11:30 Eastern		Water			X	X	X	2	
SGWA-24 (180-126059-11)	8/18/21	10:35 Eastern		Water			X	X	X	2	
EB-5 (180-126059-12)	8/18/21	14:30 Eastern		Water			X	X	X	2	

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica.

Possible Hazard Identification

Unconfirmed

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ________ *Months*

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: MO	Date/Time: 8/23/21 1700	Company: RTI	Received by: FE	Date/Time:	Company:
Relinquished by: FE	Date/Time:	Company:	Received by: Micha Kenniburg	Date/Time: 8/24/21 09:35	Company: ETA STL
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-442391.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: Georgia	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-126060-2
Address: 13715 Rider Trail North,	Due Date Requested: 9/23/2021			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Plant Scherer Ash Pond	Project #: 18019884			
Site: CCR Plant Scherer	SSOW#:			

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Standard Target List	9320_Ra228/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
EB-6 (180-126060-1)	8/18/21	17:00 Eastern		Water			X	X	X	2	
DUP-5 (180-126060-2)	8/18/21	Eastern		Water			X	X	X	2	
FB-5 (180-126060-3)	8/18/21	11:15 Eastern		Water			X	X	X	2	
FB-6 (180-126060-4)	8/18/21	15:25 Eastern		Water			X	X	X	2	

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Other:

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For ______ Months*

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:	
Relinquished by: MO	Date/Time: 8/23/21 1700	Company: ERH	Received by: FE	Date/Time:	Company:
Relinquished by: FE	Date/Time:	Company:	Received by: Michael Koviniking	Date/Time: 8/24/21 09:35	Company: ETA STL
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		

Ver: 06/08/2021

1 2 3 4 5 6 7 8 9 10 11 12 13

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-442391.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: Georgia	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-126090-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 9/26/2021			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Plant Scherer Ash Pond	Project #: 18019884			
Site: CCR Plant Scherer	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Standard Target List	9320_Ra228/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
SGWC-9 (180-126090-1)	8/19/21	10:22 Eastern		Water			X	X	X	2	
SGWC-10 (180-126090-2)	8/19/21	10:20 Eastern		Water			X	X	X	2	
SGWC-11 (180-126090-3)	8/19/21	12:02 Eastern		Water			X	X	X	2	
SGWC-13 (180-126090-4)	8/19/21	10:15 Eastern		Water			X	X	X	2	
SGWC-14 (180-126090-5)	8/19/21	11:25 Eastern		Water			X	X	X	2	
SGWC-15 (180-126090-6)	8/19/21	13:45 Eastern		Water			X	X	X	2	
SGWC-16 (180-126090-7)	8/19/21	10:10 Eastern		Water			X	X	X	2	
SGWC-19 (180-126090-8)	8/19/21	13:30 Eastern		Water			X	X	X	4	
SGWC-20 (180-126090-9)	8/19/21	11:55 Eastern		Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: MB	Date/Time: 8/23/21 1700	Company: EST	Received by: FE
Relinquished by: FE	Date/Time:	Company	Received by: Michaela Cominsky
Relinquished by:	Date/Time:	Company	Received by:

Date/Time	Company
Date/Time: 8/24/21 09:35	Company: ETA SRL
Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-442391.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: Georgia	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-126090-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 9/26/2021	Analysis Requested		Preservation Codes:
City: Earth City	TAT Requested (days):			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: MO, 63045	PO #:			Other:
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	WO #:			
Email:	Project #: 18019884			
Project Name: Plant Scherer Ash Pond	SSOW#:			
Site: CCR Plant Scherer				

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Standard Target List	9320_Ra228/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
EB-7 (180-126090-10)	8/19/21	10:30 Eastern		Water			X	X	X	2	
DUP-7 (180-126090-11)	8/19/21	Eastern		Water			X	X	X	2	
FB-8 (180-126090-12)	8/19/21	12:32 Eastern		Water			X	X	X	2	
DUP-8 (180-126090-13)	8/19/21	Eastern		Water			X	X	X	2	
SGWC-12 (180-126090-14)	8/20/21	09:30 Eastern		Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: MO	Date/Time: 8/23/21 1700	Company: EA PT	Received by: FE
Relinquished by: FE	Date/Time:	Company	Received by: Michaela Hinkins
Relinquished by:	Date/Time:	Company	Received by:

Received by	Date/Time	Company
FE		
Michaela Hinkins	8/24/2021 09:35	EA SR

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

10/11/2021

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125972-2

Login Number: 125972
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125972-2

Login Number: 125972
List Number: 2
Creator: Mazariegos, Leonel A

List Source: Eurofins TestAmerica, St. Louis
List Creation: 08/21/21 11:11 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125972-2

Login Number: 126059
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125972-2

Login Number: 126059
List Number: 2
Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 08/24/21 05:42 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125972-2

Login Number: 126060
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125972-2

Login Number: 126060
List Number: 2
Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 08/24/21 05:46 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125972-2

Login Number: 126090
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125972-2

Login Number: 126090
List Number: 2
Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 08/24/21 05:49 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-126062-1
Client Project/Site: Plant Scherer Risk Eva AP-1
Revision: 1

For:
Southern Company
241 Ralph McGill Blvd SE
B10185
Atlanta, Georgia 30308

Attn: Joju Abraham

Authorized for release by:
9/28/2021 10:22:47 AM

Shali Brown, Project Manager II
(615)301-5031
Shali.Brown@Eurofinset.com

PA Lab ID: 02-00416

Table of Contents

Case Narrative

Client: Southern Company
Project/Site: Plant Scherer Risk Eva AP-1

Job ID: 180-126062-1

Job ID: 180-126062-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-126062-1

Comments
092821 Revised report to correct field pH value of the following sample at client request: PZ-13S A revised COC has also been included. This report replaces the report previously issued on 083121.

Receipt
The samples were received on 8/20/2021 9:30 AM and 8/21/2021 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 6 coolers at receipt time were 3.2º C, 3.8º C, 3.8º C, 4.2º C, 4.2º C and 5.8º C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.
The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. The COC was not relinquished.

Metals
Methods 6020A, 6020B: The following sample was diluted due to the nature of the sample matrix: PZ-41S (180-126091-3). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Job ID: 180-126062-1
Project/Site: Plant Scherer Risk Eva AP-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Southern Company
Job ID: 180-126062-1
Project/Site: Plant Scherer Risk Eva AP-1

Laboratory: Eurofins TestAmerica, Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-21 *
California	State	2891	04-30-22
Connecticut	State	PH-0688	09-30-22
Florida	NELAP	E871008	08-31-21
Georgia	State	PA 02-00416	08-31-21
Illinois	NELAP	004375	08-31-21
Kansas	NELAP	E-10350	08-31-21
Kentucky (UST)	State	162013	04-30-22
Kentucky (WW)	State	KY98043	12-31-21
Louisiana	NELAP	04041	08-31-21
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	08-31-21
Nevada	State	PA00164	08-31-22
New Hampshire	NELAP	2030	04-05-22
New Jersey	NELAP	PA005	08-31-21
New York	NELAP	11182	08-31-21
North Carolina (WW/SW)	State	434	12-31-21
North Dakota	State	R-227	08-31-21
Oregon	NELAP	PA-2151	08-31-21
Pennsylvania	NELAP	02-00416	08-31-21
Rhode Island	State	LAO00362	12-31-21
South Carolina	State	89014	04-30-22
Texas	NELAP	T104704528	08-31-21
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	08-31-21
Virginia	NELAP	10043	09-14-21
West Virginia DEP	State	142	08-31-21
Wisconsin	State	998027800	08-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Southern Company
Project/Site: Plant Scherer Risk Eva AP-1

Job ID: 180-126062-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-126062-1	PZ-14I	Water	08/18/21 15:40	08/20/21 09:30
180-126062-2	PZ-14S	Water	08/18/21 16:25	08/20/21 09:30
180-126062-3	PZ-43S	Water	08/18/21 11:58	08/20/21 09:30
180-126062-4	PZ-44I	Water	08/18/21 14:18	08/20/21 09:30
180-126062-5	FB-7	Water	08/18/21 15:53	08/20/21 09:30
180-126062-6	DUP-6	Water	08/18/21 00:00	08/20/21 09:30
180-126091-1	PZ-25S	Water	08/19/21 12:32	08/21/21 09:30
180-126091-2	PZ-39S	Water	08/19/21 11:47	08/21/21 09:30
180-126091-3	PZ-41S	Water	08/19/21 13:33	08/21/21 09:30
180-126091-4	PZ-13S	Water	08/20/21 09:27	08/21/21 09:30
180-126091-5	EB-8	Water	08/20/21 09:42	08/21/21 09:30

Method Summary

Client: Southern Company
Project/Site: Plant Scherer Risk Eva AP-1

Job ID: 180-126062-1

Method	Method Description	Protocol	Laboratory
EPA 6020B	Metals (ICP/MS)	SW846	TAL PIT
Field Sampling	Field Sampling	EPA	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer Risk Eva AP-1

Job ID: 180-126062-1

Client Sample ID: PZ-14I
Date Collected: 08/18/21 15:40
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126062-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	369166	08/25/21 11:37	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369367	08/26/21 12:23	RSK	TAL PIT
	Instrument ID: DORY									
Total/NA	Analysis	Field Sampling		1			369647	08/18/21 15:40	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: PZ-14S
Date Collected: 08/18/21 16:25
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126062-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	369166	08/25/21 11:37	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369367	08/26/21 12:51	RSK	TAL PIT
	Instrument ID: DORY									
Total/NA	Analysis	Field Sampling		1			369647	08/18/21 16:25	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: PZ-43S
Date Collected: 08/18/21 11:58
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126062-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	369166	08/25/21 11:37	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369367	08/26/21 12:54	RSK	TAL PIT
	Instrument ID: DORY									
Total/NA	Analysis	Field Sampling		1			369647	08/18/21 11:58	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: PZ-44I
Date Collected: 08/18/21 14:18
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126062-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	369166	08/25/21 11:37	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369367	08/26/21 12:58	RSK	TAL PIT
	Instrument ID: DORY									
Total/NA	Analysis	Field Sampling		1			369647	08/18/21 14:18	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer Risk Eva AP-1

Job ID: 180-126062-1

Client Sample ID: FB-7
Date Collected: 08/18/21 15:53
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126062-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	369166	08/25/21 11:37	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369367	08/26/21 13:01	RSK	TAL PIT
	Instrument ID: DORY									

Client Sample ID: DUP-6
Date Collected: 08/18/21 00:00
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126062-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	369166	08/25/21 11:37	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369367	08/26/21 13:04	RSK	TAL PIT
	Instrument ID: DORY									

Client Sample ID: PZ-25S
Date Collected: 08/19/21 12:32
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126091-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	369320	08/26/21 12:26	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369512	08/27/21 12:03	RSK	TAL PIT
	Instrument ID: DORY									
Total/NA	Analysis	Field Sampling		1			369649	08/19/21 12:32	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: PZ-39S
Date Collected: 08/19/21 11:47
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126091-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	369320	08/26/21 12:26	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369512	08/27/21 12:06	RSK	TAL PIT
	Instrument ID: DORY									
Total/NA	Analysis	Field Sampling		1			369649	08/19/21 11:47	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: PZ-41S
Date Collected: 08/19/21 13:33
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126091-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	369320	08/26/21 12:26	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369512	08/27/21 12:10	RSK	TAL PIT
	Instrument ID: DORY									
Total Recoverable	Prep	3005A			50 mL	50 mL	369320	08/26/21 12:26	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		2			369565	08/28/21 11:05	RJR	TAL PIT
	Instrument ID: NEMO									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer Risk Eva AP-1

Job ID: 180-126062-1

Client Sample ID: PZ-41S
Date Collected: 08/19/21 13:33
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126091-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			369649	08/19/21 13:33	FDS	TAL PIT

Client Sample ID: PZ-13S
Date Collected: 08/20/21 09:27
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126091-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	369166	08/25/21 11:37	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369367	08/26/21 13:39	RSK	TAL PIT
	Instrument ID: DORY									
Total/NA	Analysis	Field Sampling		1			369649	08/20/21 09:27	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: EB-8
Date Collected: 08/20/21 09:42
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126091-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	369166	08/25/21 11:37	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369367	08/26/21 13:42	RSK	TAL PIT
	Instrument ID: DORY									

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Prep

AMD = Alysha Donlan

TLP = Tara Peterson

Batch Type: Analysis

FDS = Sampler Field

RJR = Ron Rosenbaum

RSK = Robert Kurtz

Client Sample Results

Client: Southern Company
Project/Site: Plant Scherer Risk Eva AP-1

Job ID: 180-126062-1

Client Sample ID: PZ-14I

Date Collected: 08/18/21 15:40
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126062-1

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**0.00016**	**J**	0.0025	0.00013	mg/L		08/25/21 11:37	08/26/21 12:23	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/25/21 11:37	08/26/21 12:23	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.45**				SU			08/18/21 15:40	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Scherer Risk Eva AP-1

Job ID: 180-126062-1

Client Sample ID: PZ-14S

Date Collected: 08/18/21 16:25
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126062-2

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**0.00030**	**J**	0.0025	0.00013	mg/L		08/25/21 11:37	08/26/21 12:51	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/25/21 11:37	08/26/21 12:51	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.40**				SU			08/18/21 16:25	1

Client: Southern Company
Project/Site: Plant Scherer Risk Eva AP-1

Job ID: 180-126062-1

Client Sample ID: PZ-43S
Date Collected: 08/18/21 11:58
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126062-3
Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	0.00025	J	0.0025	0.00013	mg/L		08/25/21 11:37	08/26/21 12:54	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.35				SU			08/18/21 11:58	1

Client: Southern Company
Project/Site: Plant Scherer Risk Eva AP-1

Job ID: 180-126062-1

Client Sample ID: PZ-44I
Date Collected: 08/18/21 14:18
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126062-4
Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.0095		0.0050	0.0034	mg/L		08/25/21 11:37	08/26/21 12:58	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.50				SU			08/18/21 14:18	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Scherer Risk Eva AP-1

Job ID: 180-126062-1

Client Sample ID: FB-7

Date Collected: 08/18/21 15:53
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126062-5

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/25/21 11:37	08/26/21 13:01	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/25/21 11:37	08/26/21 13:01	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Scherer Risk Eva AP-1

Job ID: 180-126062-1

Client Sample ID: DUP-6

Date Collected: 08/18/21 00:00
Date Received: 08/20/21 09:30

Lab Sample ID: 180-126062-6

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	0.00024	J	0.0025	0.00013	mg/L		08/25/21 11:37	08/26/21 13:04	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/25/21 11:37	08/26/21 13:04	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Scherer Risk Eva AP-1

Job ID: 180-126062-1

Client Sample ID: PZ-25S

Date Collected: 08/19/21 12:32
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126091-1

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	0.022		0.0025	0.00013	mg/L		08/26/21 12:26	08/27/21 12:03	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.01				SU			08/19/21 12:32	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Scherer Risk Eva AP-1

Job ID: 180-126062-1

Client Sample ID: PZ-39S

Date Collected: 08/19/21 11:47
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126091-2

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	0.00028	J	0.0025	0.00013	mg/L		08/26/21 12:26	08/27/21 12:06	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.68				SU			08/19/21 11:47	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Scherer Risk Eva AP-1

Job ID: 180-126062-1

Client Sample ID: PZ-41S
Date Collected: 08/19/21 13:33
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126091-3
Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2.2		0.16	0.077	mg/L		08/26/21 12:26	08/28/21 11:05	2
Cobalt	0.0013	J	0.0025	0.00013	mg/L		08/26/21 12:26	08/27/21 12:10	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.91				SU			08/19/21 13:33	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Scherer Risk Eva AP-1

Job ID: 180-126062-1

Client Sample ID: PZ-13S

Date Collected: 08/20/21 09:27
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126091-4

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	0.0060		0.0025	0.00013	mg/L		08/25/21 11:37	08/26/21 13:39	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.13				SU			08/20/21 09:27	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Scherer Risk Eva AP-1

Job ID: 180-126062-1

Client Sample ID: EB-8

Date Collected: 08/20/21 09:42
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126091-5

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.039**	**J**	0.080	0.039	mg/L		08/25/21 11:37	08/26/21 13:42	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/25/21 11:37	08/26/21 13:42	1

Method: EPA 6020B - Metals (ICP/MS)

Lab Sample ID: MB 180-369166/1-A
Matrix: Water
Analysis Batch: 369367

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 369166

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.039		0.080	0.039	mg/L		08/25/21 11:37	08/26/21 12:37	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/25/21 11:37	08/26/21 12:37	1

Lab Sample ID: LCS 180-369166/2-A
Matrix: Water
Analysis Batch: 369367

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 369166

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	0.500	0.502		mg/L		100	80 - 120
Lithium	0.500	0.513		mg/L		103	80 - 120

Lab Sample ID: 180-126062-1 MS
Matrix: Water
Analysis Batch: 369367

Client Sample ID: PZ-14I
Prep Type: Total Recoverable
Prep Batch: 369166

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	0.00016	J	0.500	0.501		mg/L		100	75 - 125
Lithium	<0.0034		0.500	0.514		mg/L		103	75 - 125

Lab Sample ID: 180-126062-1 MSD
Matrix: Water
Analysis Batch: 369367

Client Sample ID: PZ-14I
Prep Type: Total Recoverable
Prep Batch: 369166

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cobalt	0.00016	J	0.500	0.505		mg/L		101	75 - 125	1	20
Lithium	<0.0034		0.500	0.507		mg/L		101	75 - 125	1	20

Lab Sample ID: MB 180-369320/1-A
Matrix: Water
Analysis Batch: 369512

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 369320

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.039		0.080	0.039	mg/L		08/26/21 12:26	08/27/21 09:21	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/26/21 12:26	08/27/21 09:21	1

Lab Sample ID: LCS 180-369320/2-A
Matrix: Water
Analysis Batch: 369512

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 369320

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.25	1.20		mg/L		96	80 - 120
Cobalt	0.500	0.508		mg/L		102	80 - 120

Lab Sample ID: 180-126083-A-4-B MS
Matrix: Water
Analysis Batch: 369512

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 369320

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	<0.00013		0.500	0.512		mg/L		102	75 - 125

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-126083-A-4-B MS ^5
Matrix: Water
Analysis Batch: 369565

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 369320

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	<0.19		1.25	1.31		mg/L		105	75 - 125

Lab Sample ID: 180-126083-A-4-C MSD
Matrix: Water
Analysis Batch: 369512

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 369320

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cobalt	<0.00013		0.500	0.508		mg/L		102	75 - 125	1	20

Lab Sample ID: 180-126083-A-4-C MSD ^5
Matrix: Water
Analysis Batch: 369565

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 369320

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	<0.19		1.25	1.33		mg/L		106	75 - 125	2	20

QC Association Summary

Client: Southern Company
Project/Site: Plant Scherer Risk Eva AP-1

Job ID: 180-126062-1

Metals

Prep Batch: 369166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126062-1	PZ-14I	Total Recoverable	Water	3005A	
180-126062-2	PZ-14S	Total Recoverable	Water	3005A	
180-126062-3	PZ-43S	Total Recoverable	Water	3005A	
180-126062-4	PZ-44I	Total Recoverable	Water	3005A	
180-126062-5	FB-7	Total Recoverable	Water	3005A	
180-126062-6	DUP-6	Total Recoverable	Water	3005A	
180-126091-4	PZ-13S	Total Recoverable	Water	3005A	
180-126091-5	EB-8	Total Recoverable	Water	3005A	
MB 180-369166/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-369166/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-126062-1 MS	PZ-14I	Total Recoverable	Water	3005A	
180-126062-1 MSD	PZ-14I	Total Recoverable	Water	3005A	

Prep Batch: 369320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126091-1	PZ-25S	Total Recoverable	Water	3005A	
180-126091-2	PZ-39S	Total Recoverable	Water	3005A	
180-126091-3	PZ-41S	Total Recoverable	Water	3005A	
MB 180-369320/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-369320/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-126083-A-4-B MS	Matrix Spike	Total Recoverable	Water	3005A	
180-126083-A-4-B MS ^5	Matrix Spike	Total Recoverable	Water	3005A	
180-126083-A-4-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	
180-126083-A-4-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 369367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126062-1	PZ-14I	Total Recoverable	Water	EPA 6020B	369166
180-126062-2	PZ-14S	Total Recoverable	Water	EPA 6020B	369166
180-126062-3	PZ-43S	Total Recoverable	Water	EPA 6020B	369166
180-126062-4	PZ-44I	Total Recoverable	Water	EPA 6020B	369166
180-126062-5	FB-7	Total Recoverable	Water	EPA 6020B	369166
180-126062-6	DUP-6	Total Recoverable	Water	EPA 6020B	369166
180-126091-4	PZ-13S	Total Recoverable	Water	EPA 6020B	369166
180-126091-5	EB-8	Total Recoverable	Water	EPA 6020B	369166
MB 180-369166/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	369166
LCS 180-369166/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	369166
180-126062-1 MS	PZ-14I	Total Recoverable	Water	EPA 6020B	369166
180-126062-1 MSD	PZ-14I	Total Recoverable	Water	EPA 6020B	369166

Analysis Batch: 369512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126091-1	PZ-25S	Total Recoverable	Water	EPA 6020B	369320
180-126091-2	PZ-39S	Total Recoverable	Water	EPA 6020B	369320
180-126091-3	PZ-41S	Total Recoverable	Water	EPA 6020B	369320
MB 180-369320/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	369320
LCS 180-369320/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	369320
180-126083-A-4-B MS	Matrix Spike	Total Recoverable	Water	EPA 6020B	369320
180-126083-A-4-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	EPA 6020B	369320

QC Association Summary

Client: Southern Company
Project/Site: Plant Scherer Risk Eva AP-1

Job ID: 180-126062-1

Metals

Analysis Batch: 369565

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126091-3	PZ-41S	Total Recoverable	Water	EPA 6020B	369320
180-126083-A-4-B MS ^5	Matrix Spike	Total Recoverable	Water	EPA 6020B	369320
180-126083-A-4-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	EPA 6020B	369320

Field Service / Mobile Lab

Analysis Batch: 369647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126062-1	PZ-14I	Total/NA	Water	Field Sampling	
180-126062-2	PZ-14S	Total/NA	Water	Field Sampling	
180-126062-3	PZ-43S	Total/NA	Water	Field Sampling	
180-126062-4	PZ-44I	Total/NA	Water	Field Sampling	

Analysis Batch: 369649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126091-1	PZ-25S	Total/NA	Water	Field Sampling	
180-126091-2	PZ-39S	Total/NA	Water	Field Sampling	
180-126091-3	PZ-41S	Total/NA	Water	Field Sampling	
180-126091-4	PZ-13S	Total/NA	Water	Field Sampling	

TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238-2907
phone 412.963.7058 fax 412.963.2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Dawn Prell	Site Contact: Dawn Prell	Date:	COC No:
Joju Abraham	Tel/Fax: 248-536-5445	Lab Contact: Shali Brown	Carrier:	1 of 1 COCs
Southern Company	Analysis Turnaround Time			Sampler:
241 Ralph McGill Blvd SE B10185	☑ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Atlanta, GA 30308	TAT if different from Below 3-5 days			Walk-in Client:
JAbraham@southernco.com	☐ 2 weeks			Lab Sampling:
Project Name: CCR - Plant Scherer Risk Eva (AP-1)	☐ 1 week			
Site: Georgia	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	Cobalt	Lithium	Sample Specific Notes:
PZ-14I	8/18/2021	15:40	G	GW	1			X	X	pH = 6.45
PZ-14S	8/18/2021	16:25	G	GW	1			X	X	pH = 5.40
PZ-43S	8/18/2021	11:58	G	GW	1			X		pH = 6.35
PZ-44I	8/18/2021	14:18	G	GW	1				X	pH = 6.50
FB-7	8/18/2021	15:53	G	Water	1			X	X	
Dup-6	8/18/2021		G	GW	1			X	X	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other								4	4	

180-126062 Chain of Custody

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	GOLDER	08-19-21/0800	Elaine Cook	Courier Now	8/19/21
Relinquished by: TM	Company:	Date/Time: 8/19/21 955	Received by: TM	Company:	Date/Time: 8/19/21 955
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Dwatson	Company: FedEx	Date/Time: 8-20-21

Form No. CA-C-WI-002, Rev. 4.20, dated 2/28/2019

9:30

TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238-2907
phone 412.963.7058 fax 412.963.2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Dawn Prell	Site Contact: Dawn Prell	Date:	COC No:
Joju Abraham	Tel/Fax: 248-536-5445	Lab Contact: Shali Brown	Carrier:	1 of 1 COCs
Southern Company	**Analysis Turnaround Time**			Sampler: Jude Waguespack
241 Ralph McGill Blvd SE B10185	☑ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Atlanta, GA 30308	TAT if different from Below 3-5 days			Walk-in Client:
JAbraham@southernco.com	☐ 2 weeks			Lab Sampling:
Project Name: CCR - Plant Scherer Risk Eva (AP-1)	☐ 1 week			
Site: Georgia	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Cobalt	Boron	Sample Specific Notes:
PZ-25S	8/19/2021	12:32	G	GW	1	N	N	X		pH = 5.01
PZ-39S	8/19/2021	11:47	G	GW	1	N	N	X		pH = 6.68
PZ-41S	8/19/2021	13:33	G	GW	1	N	N	X	X	pH = 5.91
PZ-13S	8/20/2021	9:27	G	GW	1	N	N	X		pH = 5.03
EB-8	8/20/2021	9:42	G	Water	1	N	N	X	X	
								4	4	

180-126091 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____		
Relinquished by: JW... / J. Waguespack	Company: Golder	Date/Time: 08-20-21 1500	Received by: JW	Company:	Date/Time: 8/20/21 1500
Relinquished by:	Company:	Date/Time: 8/20/21 2100	Received by: DW	Company:	Date/Time: 8-21-21
Relinquished by:	Company:	Date/Time	Received in Laboratory by:	Company:	Date/Time: 930

Form No. CA-C-WI-002, Rev. 4.20, dated 2/28/2019

TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238-2907
phone 412.963.7058 fax 412.963.2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Dawn Prell	Site Contact: Dawn Prell	Date:	COC No:
Joju Abraham	Tel/Fax: 248-538-5445	Lab Contact: Shali Brown	Carrier:	__1__ of __1__ COCs
Southern Company	Analysis Turnaround Time			Sampler: Jude Waguespack
241 Ralph McGill Blvd SE B10185	☑ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Atlanta, GA 30308	TAT if different from Below ___3-5 days___			Walk-in Client:
JAbraham@southernco.com	☐ 2 weeks			Lab Sampling:
Project Name: CCR - Plant Scherer Risk Eva (AP-1)	☐ 1 week			
Site: Georgia	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	Cobalt	Boron	Sample Specific Notes:
PZ-26S	8/19/2021	12:32	G	GW	1	N	N	X		pH = 5.01
PZ-36S	8/19/2021	11:47	G	GW	1	N	N	X		pH = 6.68
PZ-41S	8/19/2021	13:33	G	GW	1	N	N	X	X	pH = 5.91
PZ-13S	8/20/2021	9:27	G	GW	1	N	N	X		~~pH = [illegible]~~ DH pH = 5.13
EB-8	8/20/2021	9:42	G	Water	1	N	N	X	X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other — Cobalt: 4, Boron: 4

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal by Lab ☐ Archive for______ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:____ Corr'd:____ Therm ID No.:____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature] / J. Waguespack	Golder	8/20/21 1500	[signature]		8/20/21 1500
Relinquished by: [signature]	Company:	Date/Time: 8/20/21 1500	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 4.20, dated 2/28/2019

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-126062-1

Login Number: 126062
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-126062-1

Login Number: 126091
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-133600-1
Client Project/Site: Plant Scherer AP1 Assessment

For:
Southern Company
241 Ralph McGill Blvd SE
B10185
Atlanta, Georgia 30308

Attn: Joju Abraham

Authorized for release by:
2/28/2022 5:01:07 PM

Shali Brown, Project Manager II
(615)301-5031
Shali.Brown@Eurofinset.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

PA Lab ID: 02-00416

Table of Contents

Job ID: 180-133600-1

Laboratory: Eurofins Pittsburgh

Narrative

Job Narrative
180-133600-1

Receipt
The samples were received on 2/11/2022 9:30 AM and 2/12/2022 12:45 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 12 coolers at receipt time were 1.7°C, 2.1°C, 2.1°C, 2.4°C, 2.6°C, 3.3°C, 3.5°C, 3.8°C, 4.4°C, 4.4°C, 4.6°C and 4.6°C

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.
The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. The COC was not relinquished.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 7470A: The continuing calibration verification (CCV), low level continuing calibration verification (CCVL) and the laboratory control samples (LCS) and MS/MSD associated with batch 180-389210 recovered above the upper control limit for mercury. The samples associated with these QC were below the reporting limit for the affected analyte; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Field Service / Mobile Lab
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
^3+	Reporting Limit Check Standard is outside acceptance limits, high biased
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Southern Company
Job ID: 180-133600-1
Project/Site: Plant Scherer AP1 Assessment

Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-22
California	State	2891	04-30-22
Connecticut	State	PH-0688	09-30-22
Florida	NELAP	E871008	06-30-22
Georgia	State	PA 02-00416	04-30-22
Illinois	NELAP	004375	06-30-22
Kansas	NELAP	E-10350	01-31-22 *
Kentucky (UST)	State	162013	04-30-22
Kentucky (WW)	State	KY98043	12-31-22
Louisiana	NELAP	04041	06-30-22
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-22
Nevada	State	PA00164	08-31-22
New Hampshire	NELAP	2030	04-05-22
New Jersey	NELAP	PA005	06-30-23
New York	NELAP	11182	04-02-22
North Carolina (WW/SW)	State	434	12-31-22
North Dakota	State	R-227	04-30-22
Oregon	NELAP	PA-2151	02-06-22 *
Pennsylvania	NELAP	02-00416	04-30-22
Rhode Island	State	LAO00362	12-31-21 *
South Carolina	State	89014	06-30-22
Texas	NELAP	T104704528	03-31-22
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-22
Virginia	NELAP	10043	09-15-22
West Virginia DEP	State	142	01-31-23
Wisconsin	State	998027800	08-31-22

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0200	09-30-22
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-01-23
Georgia	State	12028 (NJ)	06-30-22
Massachusetts	State	M-NJ312	06-30-22
New Jersey	NELAP	12028	07-01-23
New York	NELAP	11452	04-01-22
Pennsylvania	NELAP	68-00522	02-28-23
Rhode Island	State	LAO00376	12-31-22
USDA	US Federal Programs	P330-20-00244	11-03-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Southern Company
Job ID: 180-133600-1
Project/Site: Plant Scherer AP1 Assessment

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-133600-1	PZ-13S	Water	02/08/22 16:20	02/11/22 09:30
180-133600-2	PZ-14S	Water	02/08/22 16:50	02/11/22 09:30
180-133600-3	PZ-17I	Water	02/09/22 13:10	02/11/22 09:30
180-133600-4	PZ-39S	Water	02/09/22 10:15	02/11/22 09:30
180-133600-5	PZ-41S	Water	02/09/22 15:25	02/11/22 09:30
180-133600-6	PZ-42I	Water	02/09/22 13:10	02/11/22 09:30
180-133600-7	PZ-43S	Water	02/09/22 10:30	02/11/22 09:30
180-133600-8	PZ-44I	Water	02/09/22 15:45	02/11/22 09:30
180-133600-9	FB-1	Water	02/09/22 13:35	02/11/22 09:30
180-133600-10	EB-1	Water	02/09/22 16:30	02/11/22 09:30
180-133600-11	DUP-1	Water	02/09/22 00:00	02/11/22 09:30
180-133641-1	PZ-40I	Water	02/10/22 11:27	02/12/22 12:45
180-133641-2	PZ-69I	Water	02/10/22 11:27	02/12/22 12:45

Method Summary

Client: Southern Company
Project/Site: Plant Scherer AP1 Assessment

Job ID: 180-133600-1

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
EPA 6020B	Metals (ICP/MS)	SW846	TAL PIT
EPA 7470A	Mercury (CVAA)	SW846	TAL PIT
EPA 9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	TAL PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
SM 3500	Iron, Ferric	SM	TAL EDI
SM 3500 FE D	Iron, Ferrous and Ferric	SM	TAL EDI
SM2320 B	Alkalinity, Total	SM18	TAL PIT
Field Sampling	Field Sampling	EPA	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT
7470A	Preparation, Mercury	SW846	TAL PIT
9030B	Sulfide, Distillation (Acid Soluble and Insoluble)	SW846	TAL PIT

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SM18 = "Standard Methods For The Examination Of Water And Wastewater", 18th Edition, 1992.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Client Sample ID: PZ-13S

Date Collected: 02/08/22 16:20
Date Received: 02/11/22 09:30

Lab Sample ID: 180-133600-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			388044	02/12/22 15:48	JRB	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			25 mL	25 mL	388280	02/15/22 10:05	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388563	02/16/22 14:29	RSK	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	388493	02/16/22 11:34	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			389466	02/24/22 13:37	RJR	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	9030B			50 mL	50 mL	388278	02/15/22 12:00	HEK	TAL PIT
Total/NA	Analysis	EPA 9034		1			388385	02/15/22 16:28	HEK	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	388075	02/12/22 14:58	SNR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 3500		1			829800	02/22/22 17:05	TJW	TAL EDI
	Instrument ID: Konelab1									
Total/NA	Analysis	SM 3500 FE D		1			829718	02/22/22 17:05	HTV	TAL EDI
	Instrument ID: Konelab1									
Total/NA	Analysis	SM2320 B		1			388836	02/17/22 22:19	CMT	TAL PIT
	Instrument ID: PCTITRATOR									
Total/NA	Analysis	Field Sampling		1			388945	02/08/22 16:20	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: PZ-14S

Date Collected: 02/08/22 16:50
Date Received: 02/11/22 09:30

Lab Sample ID: 180-133600-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			388044	02/12/22 16:53	JRB	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			25 mL	25 mL	388280	02/15/22 10:05	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388563	02/16/22 14:41	RSK	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	388493	02/16/22 11:34	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			389466	02/24/22 13:40	RJR	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	9030B			50 mL	50 mL	388278	02/15/22 12:00	HEK	TAL PIT
Total/NA	Analysis	EPA 9034		1			388385	02/15/22 16:37	HEK	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	388075	02/12/22 14:58	SNR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 3500		1			829800	02/22/22 17:05	TJW	TAL EDI
	Instrument ID: Konelab1									
Total/NA	Analysis	SM 3500 FE D		1			829718	02/22/22 17:05	HTV	TAL EDI
	Instrument ID: Konelab1									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer AP1 Assessment

Job ID: 180-133600-1

Client Sample ID: PZ-14S

Date Collected: 02/08/22 16:50
Date Received: 02/11/22 09:30

Lab Sample ID: 180-133600-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM2320 B		1			388836	02/17/22 22:26	CMT	TAL PIT
Total/NA	Analysis	Field Sampling		1			388945	02/08/22 16:50	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: PZ-17I

Date Collected: 02/09/22 13:10
Date Received: 02/11/22 09:30

Lab Sample ID: 180-133600-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			388044	02/12/22 17:36	JRB	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			25 mL	25 mL	388280	02/15/22 10:05	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388563	02/16/22 14:43	RSK	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	388493	02/16/22 11:34	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			389466	02/24/22 13:41	RJR	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	9030B			50 mL	50 mL	388278	02/15/22 12:00	HEK	TAL PIT
Total/NA	Analysis	EPA 9034		1			388385	02/15/22 16:45	HEK	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	388075	02/12/22 14:58	SNR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 3500		1			829800	02/22/22 17:05	TJW	TAL EDI
	Instrument ID: Konelab1									
Total/NA	Analysis	SM 3500 FE D		1			829718	02/22/22 17:05	HTV	TAL EDI
	Instrument ID: Konelab1									
Total/NA	Analysis	SM2320 B		1			388836	02/17/22 22:33	CMT	TAL PIT
	Instrument ID: PCTITRATOR									
Total/NA	Analysis	Field Sampling		1			388945	02/09/22 13:10	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: PZ-39S

Date Collected: 02/09/22 10:15
Date Received: 02/11/22 09:30

Lab Sample ID: 180-133600-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			388044	02/12/22 17:51	JRB	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			25 mL	25 mL	388280	02/15/22 10:05	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388563	02/16/22 14:46	RSK	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	388493	02/16/22 11:34	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			389466	02/24/22 13:42	RJR	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: PZ-39S

Lab Sample ID: 180-133600-4

Date Collected: 02/09/22 10:15

Matrix: Water

Date Received: 02/11/22 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9030B			50 mL	50 mL	388282	02/16/22 12:00	HEK	TAL PIT
Total/NA	Analysis	EPA 9034		1			388532	02/16/22 13:58	HEK	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	388075	02/12/22 14:58	SNR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 3500		1			829800	02/22/22 17:13	TJW	TAL EDI
	Instrument ID: Konelab1									
Total/NA	Analysis	SM 3500 FE D		1			829718	02/22/22 17:13	HTV	TAL EDI
	Instrument ID: Konelab1									
Total/NA	Analysis	SM2320 B		1			388836	02/17/22 22:53	CMT	TAL PIT
	Instrument ID: PCTITRATOR									
Total/NA	Analysis	Field Sampling		1			388945	02/09/22 10:15	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: PZ-41S

Lab Sample ID: 180-133600-5

Date Collected: 02/09/22 15:25

Matrix: Water

Date Received: 02/11/22 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			388044	02/12/22 18:05	JRB	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			25 mL	25 mL	388280	02/15/22 10:05	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388563	02/16/22 14:54	RSK	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	388493	02/16/22 11:34	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			389466	02/24/22 13:43	RJR	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	9030B			50 mL	50 mL	388282	02/16/22 12:00	HEK	TAL PIT
Total/NA	Analysis	EPA 9034		1			388532	02/16/22 14:19	HEK	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	388075	02/12/22 14:58	SNR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 3500		1			829800	02/22/22 17:13	TJW	TAL EDI
	Instrument ID: Konelab1									
Total/NA	Analysis	SM 3500 FE D		1			829718	02/22/22 17:13	HTV	TAL EDI
	Instrument ID: Konelab1									
Total/NA	Analysis	SM2320 B		1			388836	02/17/22 23:08	CMT	TAL PIT
	Instrument ID: PCTITRATOR									
Total/NA	Analysis	Field Sampling		1			388945	02/09/22 10:15	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer AP1 Assessment

Job ID: 180-133600-1

Client Sample ID: PZ-42I

Date Collected: 02/09/22 13:10
Date Received: 02/11/22 09:30

Lab Sample ID: 180-133600-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			388044	02/12/22 18:34	JRB	TAL PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 300.0 R2.1		5			388044	02/12/22 18:48	JRB	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			25 mL	25 mL	388280	02/15/22 10:05	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388563	02/16/22 15:01	RSK	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	388493	02/16/22 11:34	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			389466	02/24/22 13:44	RJR	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	9030B			50 mL	50 mL	388282	02/16/22 12:00	HEK	TAL PIT
Total/NA	Analysis	EPA 9034		1			388532	02/16/22 14:26	HEK	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	388075	02/12/22 14:58	SNR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 3500		1			829800	02/22/22 17:13	TJW	TAL EDI
	Instrument ID: Konelab1									
Total/NA	Analysis	SM 3500 FE D		1			829718	02/22/22 17:13	HTV	TAL EDI
	Instrument ID: Konelab1									
Total/NA	Analysis	SM2320 B		1			388836	02/17/22 23:15	CMT	TAL PIT
	Instrument ID: PCTITRATOR									
Total/NA	Analysis	Field Sampling		1			388945	02/09/22 13:10	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: PZ-43S

Date Collected: 02/09/22 10:30
Date Received: 02/11/22 09:30

Lab Sample ID: 180-133600-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			388044	02/12/22 19:03	JRB	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			25 mL	25 mL	388280	02/15/22 10:05	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388563	02/16/22 15:09	RSK	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	388493	02/16/22 11:34	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			389466	02/24/22 13:48	RJR	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	9030B			50 mL	50 mL	388282	02/16/22 12:00	HEK	TAL PIT
Total/NA	Analysis	EPA 9034		1			388532	02/16/22 14:33	HEK	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	388075	02/12/22 14:58	SNR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 3500		1			829800	02/22/22 17:13	TJW	TAL EDI
	Instrument ID: Konelab1									

Client Sample ID: PZ-43S

Lab Sample ID: 180-133600-7

Date Collected: 02/09/22 10:30

Matrix: Water

Date Received: 02/11/22 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 3500 FE D		1			829718	02/22/22 17:13	HTV	TAL EDI
Total/NA	Analysis	SM2320 B		1			388836	02/17/22 23:22	CMT	TAL PIT
	Instrument ID: PCTITRATOR									
Total/NA	Analysis	Field Sampling		1			388945	02/09/22 10:30	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: PZ-44I

Lab Sample ID: 180-133600-8

Date Collected: 02/09/22 15:45

Matrix: Water

Date Received: 02/11/22 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			388044	02/12/22 19:46	JRB	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			25 mL	25 mL	388280	02/15/22 10:05	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388563	02/16/22 15:12	RSK	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	388493	02/16/22 11:34	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			389466	02/24/22 13:49	RJR	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	9030B			50 mL	50 mL	388282	02/16/22 12:00	HEK	TAL PIT
Total/NA	Analysis	EPA 9034		1			388532	02/16/22 14:40	HEK	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	388075	02/12/22 14:58	SNR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 3500		1			829800	02/22/22 17:13	TJW	TAL EDI
	Instrument ID: Konelab1									
Total/NA	Analysis	SM 3500 FE D		1			829718	02/22/22 17:13	HTV	TAL EDI
	Instrument ID: Konelab1									
Total/NA	Analysis	SM2320 B		1			388836	02/17/22 23:29	CMT	TAL PIT
	Instrument ID: PCTITRATOR									
Total/NA	Analysis	Field Sampling		1			388945	02/09/22 15:45	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FB-1

Lab Sample ID: 180-133600-9

Date Collected: 02/09/22 13:35

Matrix: Water

Date Received: 02/11/22 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			388044	02/12/22 20:01	JRB	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			25 mL	25 mL	388280	02/15/22 10:05	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388563	02/16/22 15:14	RSK	TAL PIT
	Instrument ID: NEMO									

Client Sample ID: FB-1

Lab Sample ID: 180-133600-9

Date Collected: 02/09/22 13:35

Matrix: Water

Date Received: 02/11/22 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			25 mL	25 mL	388493	02/16/22 11:34	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			389466	02/24/22 13:50	RJR	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	9030B			50 mL	50 mL	388282	02/16/22 12:00	HEK	TAL PIT
Total/NA	Analysis	EPA 9034		1			388532	02/16/22 14:47	HEK	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	388075	02/12/22 14:58	SNR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 3500		1			829800	02/22/22 17:13	TJW	TAL EDI
	Instrument ID: Konelab1									
Total/NA	Analysis	SM 3500 FE D		1			829718	02/22/22 17:13	HTV	TAL EDI
	Instrument ID: Konelab1									
Total/NA	Analysis	SM2320 B		1			388836	02/17/22 23:34	CMT	TAL PIT
	Instrument ID: PCTITRATOR									

Client Sample ID: EB-1

Lab Sample ID: 180-133600-10

Date Collected: 02/09/22 16:30

Matrix: Water

Date Received: 02/11/22 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			388044	02/12/22 20:15	JRB	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			25 mL	25 mL	388280	02/15/22 10:05	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388563	02/16/22 15:17	RSK	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	388493	02/16/22 11:34	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			389466	02/24/22 13:52	RJR	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	9030B			50 mL	50 mL	388282	02/16/22 12:00	HEK	TAL PIT
Total/NA	Analysis	EPA 9034		1			388532	02/16/22 15:08	HEK	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	388075	02/12/22 14:58	SNR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 3500		1			829800	02/22/22 17:13	TJW	TAL EDI
	Instrument ID: Konelab1									
Total/NA	Analysis	SM 3500 FE D		1			829718	02/22/22 17:13	HTV	TAL EDI
	Instrument ID: Konelab1									
Total/NA	Analysis	SM2320 B		1			388836	02/17/22 23:39	CMT	TAL PIT
	Instrument ID: PCTITRATOR									

Client Sample ID: DUP-1

Lab Sample ID: 180-133600-11

Date Collected: 02/09/22 00:00

Matrix: Water

Date Received: 02/11/22 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			388044	02/12/22 20:29	JRB	TAL PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 300.0 R2.1		5			388044	02/12/22 20:44	JRB	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			25 mL	25 mL	388280	02/15/22 10:05	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388563	02/16/22 15:20	RSK	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	388494	02/16/22 11:35	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			388686	02/17/22 14:32	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Prep	9030B			50 mL	50 mL	388282	02/16/22 12:00	HEK	TAL PIT
Total/NA	Analysis	EPA 9034		1			388532	02/16/22 15:15	HEK	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	388075	02/12/22 14:58	SNR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 3500		1			829800	02/22/22 17:13	TJW	TAL EDI
	Instrument ID: Konelab1									
Total/NA	Analysis	SM 3500 FE D		1			829718	02/22/22 17:13	HTV	TAL EDI
	Instrument ID: Konelab1									
Total/NA	Analysis	SM2320 B		1			388836	02/17/22 23:46	CMT	TAL PIT
	Instrument ID: PCTITRATOR									

Client Sample ID: PZ-40I

Lab Sample ID: 180-133641-1

Date Collected: 02/10/22 11:27

Matrix: Water

Date Received: 02/12/22 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			388136	02/15/22 05:27	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		5			388136	02/15/22 05:40	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			25 mL	25 mL	388283	02/15/22 10:07	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388563	02/16/22 16:19	RSK	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	388987	02/21/22 12:03	KEM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			389210	02/22/22 13:19	RJR	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	9030B			50 mL	50 mL	388545	02/17/22 10:30	CMR	TAL PIT
Total/NA	Analysis	EPA 9034		1			388646	02/17/22 16:58	HEK	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	388541	02/16/22 16:17	JCR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 3500		1			829801	02/22/22 19:25	TJW	TAL EDI
	Instrument ID: Konelab1									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Scherer AP1 Assessment

Job ID: 180-133600-1

Client Sample ID: PZ-40I

Date Collected: 02/10/22 11:27
Date Received: 02/12/22 12:45

Lab Sample ID: 180-133641-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 3500 FE D		1			829723	02/22/22 19:25	HTV	TAL EDI
Total/NA	Analysis	SM2320 B		1			389075	02/19/22 14:00	CMT	TAL PIT
	Instrument ID: PCTITRATOR									
Total/NA	Analysis	Field Sampling		1			389113	02/10/22 11:27	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: PZ-69I

Date Collected: 02/10/22 11:27
Date Received: 02/12/22 12:45

Lab Sample ID: 180-133641-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			388136	02/15/22 03:48	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			25 mL	25 mL	388283	02/15/22 10:07	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388563	02/16/22 16:27	RSK	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	388987	02/21/22 12:03	KEM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			389210	02/22/22 13:20	RJR	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	9030B			50 mL	50 mL	388545	02/17/22 10:30	CMR	TAL PIT
Total/NA	Analysis	EPA 9034		1			388646	02/17/22 17:12	HEK	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	388541	02/16/22 16:17	JCR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 3500		1			829801	02/22/22 19:25	TJW	TAL EDI
	Instrument ID: Konelab1									
Total/NA	Analysis	SM 3500 FE D		1			829723	02/22/22 19:25	HTV	TAL EDI
	Instrument ID: Konelab1									
Total/NA	Analysis	SM2320 B		1			389075	02/19/22 14:06	CMT	TAL PIT
	Instrument ID: PCTITRATOR									
Total/NA	Analysis	Field Sampling		1			389113	02/10/22 11:27	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Laboratory References:

TAL EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Client: Southern Company
Project/Site: Plant Scherer AP1 Assessment

Job ID: 180-133600-1

Analyst References:

Lab: TAL EDI

Batch Type: Analysis

HTV = Huan Vu

TJW = Tiffany Wallace

Lab: TAL PIT

Batch Type: Prep

CMR = Carl Reagle

HEK = Hope Kiesling

KEM = Kimberly Mahoney

RGM = Rebecca Manns

RJR = Ron Rosenbaum

Batch Type: Analysis

CMT = Cassandra Tlumac

FDS = Sampler Field

HEK = Hope Kiesling

JCR = Jessica Rodgers

JRB = James Burzio

KEM = Kimberly Mahoney

RJR = Ron Rosenbaum

RSK = Robert Kurtz

SNR = Sabra Richart

Client: Southern Company
Project/Site: Plant Scherer AP1 Assessment

Job ID: 180-133600-1

Client Sample ID: PZ-13S

Date Collected: 02/08/22 16:20
Date Received: 02/11/22 09:30

Lab Sample ID: 180-133600-1

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.9**		1.0	0.71	mg/L			02/12/22 15:48	1
Fluoride	<0.026		0.10	0.026	mg/L			02/12/22 15:48	1
Sulfate	<0.76		1.0	0.76	mg/L			02/12/22 15:48	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/15/22 10:05	02/16/22 14:29	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/15/22 10:05	02/16/22 14:29	1
Barium	**0.049**		0.010	0.0031	mg/L		02/15/22 10:05	02/16/22 14:29	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/15/22 10:05	02/16/22 14:29	1
Boron	<0.060		0.080	0.060	mg/L		02/15/22 10:05	02/16/22 14:29	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/15/22 10:05	02/16/22 14:29	1
Calcium	**4.7**		0.50	0.13	mg/L		02/15/22 10:05	02/16/22 14:29	1
Chromium	**0.0030**		0.0020	0.0015	mg/L		02/15/22 10:05	02/16/22 14:29	1
Cobalt	**0.0052**		0.0025	0.00026	mg/L		02/15/22 10:05	02/16/22 14:29	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/15/22 10:05	02/16/22 14:29	1
Lithium	**0.0025**	**J**	0.0050	0.00083	mg/L		02/15/22 10:05	02/16/22 14:29	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/15/22 10:05	02/16/22 14:29	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/15/22 10:05	02/16/22 14:29	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/15/22 10:05	02/16/22 14:29	1
Sodium	**5.0**		0.50	0.18	mg/L		02/15/22 10:05	02/16/22 14:29	1
Potassium	**0.39**	**J**	0.50	0.16	mg/L		02/15/22 10:05	02/16/22 14:29	1
Magnesium	**1.6**		0.50	0.050	mg/L		02/15/22 10:05	02/16/22 14:29	1
Manganese	**0.051**		0.0050	0.0013	mg/L		02/15/22 10:05	02/16/22 14:29	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00022**		0.00020	0.00013	mg/L		02/16/22 11:34	02/24/22 13:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	**2.7**	**J**	3.0	2.1	mg/L		02/15/22 12:00	02/15/22 16:28	1
Total Dissolved Solids	**37**		10	10	mg/L			02/12/22 14:58	1
Ferric Iron	**0.22**		0.10	0.10	mg/L			02/22/22 17:05	1
Ferrous Iron	<0.081	HF	0.10	0.081	mg/L			02/22/22 17:05	1
Total Alkalinity as CaCO3 to pH 4.5	**16**		5.0	5.0	mg/L			02/17/22 22:19	1
Bicarbonate Alkalinity as CaCO3	**16**		5.0	5.0	mg/L			02/17/22 22:19	1
Carbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/17/22 22:19	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**4.92**				SU			02/08/22 16:20	1

Client: Southern Company
Project/Site: Plant Scherer AP1 Assessment

Job ID: 180-133600-1

Client Sample ID: PZ-14S

Date Collected: 02/08/22 16:50
Date Received: 02/11/22 09:30

Lab Sample ID: 180-133600-2

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.1**		1.0	0.71	mg/L			02/12/22 16:53	1
Fluoride	<0.026		0.10	0.026	mg/L			02/12/22 16:53	1
Sulfate	<0.76		1.0	0.76	mg/L			02/12/22 16:53	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/15/22 10:05	02/16/22 14:41	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/15/22 10:05	02/16/22 14:41	1
Barium	**0.033**		0.010	0.0031	mg/L		02/15/22 10:05	02/16/22 14:41	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/15/22 10:05	02/16/22 14:41	1
Boron	<0.060		0.080	0.060	mg/L		02/15/22 10:05	02/16/22 14:41	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/15/22 10:05	02/16/22 14:41	1
Calcium	**4.0**		0.50	0.13	mg/L		02/15/22 10:05	02/16/22 14:41	1
Chromium	**0.0018**	**J**	0.0020	0.0015	mg/L		02/15/22 10:05	02/16/22 14:41	1
Cobalt	**0.00028**	**J**	0.0025	0.00026	mg/L		02/15/22 10:05	02/16/22 14:41	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/15/22 10:05	02/16/22 14:41	1
Lithium	**0.0015**	**J**	0.0050	0.00083	mg/L		02/15/22 10:05	02/16/22 14:41	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/15/22 10:05	02/16/22 14:41	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/15/22 10:05	02/16/22 14:41	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/15/22 10:05	02/16/22 14:41	1
Sodium	**1.9**		0.50	0.18	mg/L		02/15/22 10:05	02/16/22 14:41	1
Potassium	**0.60**		0.50	0.16	mg/L		02/15/22 10:05	02/16/22 14:41	1
Magnesium	**2.5**		0.50	0.050	mg/L		02/15/22 10:05	02/16/22 14:41	1
Manganese	**0.0097**		0.0050	0.0013	mg/L		02/15/22 10:05	02/16/22 14:41	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		02/16/22 11:34	02/24/22 13:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		02/15/22 12:00	02/15/22 16:37	1
Total Dissolved Solids	**48**		10	10	mg/L			02/12/22 14:58	1
Ferric Iron	<0.10		0.10	0.10	mg/L			02/22/22 17:05	1
Ferrous Iron	<0.081	HF	0.10	0.081	mg/L			02/22/22 17:05	1
Total Alkalinity as CaCO3 to pH 4.5	**22**		5.0	5.0	mg/L			02/17/22 22:26	1
Bicarbonate Alkalinity as CaCO3	**22**		5.0	5.0	mg/L			02/17/22 22:26	1
Carbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/17/22 22:26	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.42**				SU			02/08/22 16:50	1

Client: Southern Company
Project/Site: Plant Scherer AP1 Assessment

Job ID: 180-133600-1

Client Sample ID: PZ-17I

Date Collected: 02/09/22 13:10
Date Received: 02/11/22 09:30

Lab Sample ID: 180-133600-3

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.9**		1.0	0.71	mg/L			02/12/22 17:36	1
Fluoride	**0.028**	**J**	0.10	0.026	mg/L			02/12/22 17:36	1
Sulfate	**100**		1.0	0.76	mg/L			02/12/22 17:36	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.00061**	**J**	0.0020	0.00051	mg/L		02/15/22 10:05	02/16/22 14:43	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/15/22 10:05	02/16/22 14:43	1
Barium	**0.060**		0.010	0.0031	mg/L		02/15/22 10:05	02/16/22 14:43	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/15/22 10:05	02/16/22 14:43	1
Boron	**0.16**		0.080	0.060	mg/L		02/15/22 10:05	02/16/22 14:43	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/15/22 10:05	02/16/22 14:43	1
Calcium	**35**		0.50	0.13	mg/L		02/15/22 10:05	02/16/22 14:43	1
Chromium	**0.0036**		0.0020	0.0015	mg/L		02/15/22 10:05	02/16/22 14:43	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/15/22 10:05	02/16/22 14:43	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/15/22 10:05	02/16/22 14:43	1
Lithium	<0.00083		0.0050	0.00083	mg/L		02/15/22 10:05	02/16/22 14:43	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/15/22 10:05	02/16/22 14:43	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/15/22 10:05	02/16/22 14:43	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/15/22 10:05	02/16/22 14:43	1
Sodium	**11**		0.50	0.18	mg/L		02/15/22 10:05	02/16/22 14:43	1
Potassium	**2.0**		0.50	0.16	mg/L		02/15/22 10:05	02/16/22 14:43	1
Magnesium	**15**		0.50	0.050	mg/L		02/15/22 10:05	02/16/22 14:43	1
Manganese	**0.0016**	**J**	0.0050	0.0013	mg/L		02/15/22 10:05	02/16/22 14:43	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		02/16/22 11:34	02/24/22 13:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		02/15/22 12:00	02/15/22 16:45	1
Total Dissolved Solids	**240**		10	10	mg/L			02/12/22 14:58	1
Ferric Iron	<0.10		0.10	0.10	mg/L			02/22/22 17:05	1
Ferrous Iron	<0.081	HF	0.10	0.081	mg/L			02/22/22 17:05	1
Total Alkalinity as CaCO3 to pH 4.5	**62**		5.0	5.0	mg/L			02/17/22 22:33	1
Bicarbonate Alkalinity as CaCO3	**62**		5.0	5.0	mg/L			02/17/22 22:33	1
Carbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/17/22 22:33	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.71**				SU			02/09/22 13:10	1

Client: Southern Company
Project/Site: Plant Scherer AP1 Assessment

Job ID: 180-133600-1

Client Sample ID: PZ-39S

Date Collected: 02/09/22 10:15
Date Received: 02/11/22 09:30

Lab Sample ID: 180-133600-4

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.8**		1.0	0.71	mg/L			02/12/22 17:51	1
Fluoride	<0.026		0.10	0.026	mg/L			02/12/22 17:51	1
Sulfate	**38**		1.0	0.76	mg/L			02/12/22 17:51	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/15/22 10:05	02/16/22 14:46	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/15/22 10:05	02/16/22 14:46	1
Barium	**0.040**		0.010	0.0031	mg/L		02/15/22 10:05	02/16/22 14:46	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/15/22 10:05	02/16/22 14:46	1
Boron	<0.060		0.080	0.060	mg/L		02/15/22 10:05	02/16/22 14:46	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/15/22 10:05	02/16/22 14:46	1
Calcium	**22**		0.50	0.13	mg/L		02/15/22 10:05	02/16/22 14:46	1
Chromium	**0.028**		0.0020	0.0015	mg/L		02/15/22 10:05	02/16/22 14:46	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/15/22 10:05	02/16/22 14:46	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/15/22 10:05	02/16/22 14:46	1
Lithium	**0.012**		0.0050	0.00083	mg/L		02/15/22 10:05	02/16/22 14:46	1
Molybdenum	**0.0011**	**J**	0.015	0.00061	mg/L		02/15/22 10:05	02/16/22 14:46	1
Selenium	**0.0022**	**J**	0.0050	0.00074	mg/L		02/15/22 10:05	02/16/22 14:46	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/15/22 10:05	02/16/22 14:46	1
Sodium	**6.6**		0.50	0.18	mg/L		02/15/22 10:05	02/16/22 14:46	1
Potassium	**1.6**		0.50	0.16	mg/L		02/15/22 10:05	02/16/22 14:46	1
Magnesium	**9.1**		0.50	0.050	mg/L		02/15/22 10:05	02/16/22 14:46	1
Manganese	**0.14**		0.0050	0.0013	mg/L		02/15/22 10:05	02/16/22 14:46	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		02/16/22 11:34	02/24/22 13:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		02/16/22 12:00	02/16/22 13:58	1
Total Dissolved Solids	**150**		10	10	mg/L			02/12/22 14:58	1
Ferric Iron	<0.10		0.10	0.10	mg/L			02/22/22 17:13	1
Ferrous Iron	<0.081	HF	0.10	0.081	mg/L			02/22/22 17:13	1
Total Alkalinity as CaCO3 to pH 4.5	**75**		5.0	5.0	mg/L			02/17/22 22:53	1
Bicarbonate Alkalinity as CaCO3	**75**		5.0	5.0	mg/L			02/17/22 22:53	1
Carbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/17/22 22:53	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.55**				SU			02/09/22 10:15	1

Client: Southern Company
Project/Site: Plant Scherer AP1 Assessment

Job ID: 180-133600-1

Client Sample ID: PZ-41S

Date Collected: 02/09/22 15:25
Date Received: 02/11/22 09:30

Lab Sample ID: 180-133600-5

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.8**		1.0	0.71	mg/L			02/12/22 18:05	1
Fluoride	<0.026		0.10	0.026	mg/L			02/12/22 18:05	1
Sulfate	<0.76		1.0	0.76	mg/L			02/12/22 18:05	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/15/22 10:05	02/16/22 14:54	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/15/22 10:05	02/16/22 14:54	1
Barium	**0.026**		0.010	0.0031	mg/L		02/15/22 10:05	02/16/22 14:54	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/15/22 10:05	02/16/22 14:54	1
Boron	**3.2**		0.080	0.060	mg/L		02/15/22 10:05	02/16/22 14:54	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/15/22 10:05	02/16/22 14:54	1
Calcium	**120**		0.50	0.13	mg/L		02/15/22 10:05	02/16/22 14:54	1
Chromium	**0.0058**		0.0020	0.0015	mg/L		02/15/22 10:05	02/16/22 14:54	1
Cobalt	**0.00093**	**J**	0.0025	0.00026	mg/L		02/15/22 10:05	02/16/22 14:54	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/15/22 10:05	02/16/22 14:54	1
Lithium	<0.00083		0.0050	0.00083	mg/L		02/15/22 10:05	02/16/22 14:54	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/15/22 10:05	02/16/22 14:54	1
Selenium	**0.0061**		0.0050	0.00074	mg/L		02/15/22 10:05	02/16/22 14:54	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/15/22 10:05	02/16/22 14:54	1
Sodium	**45**		0.50	0.18	mg/L		02/15/22 10:05	02/16/22 14:54	1
Potassium	**3.7**		0.50	0.16	mg/L		02/15/22 10:05	02/16/22 14:54	1
Magnesium	**42**		0.50	0.050	mg/L		02/15/22 10:05	02/16/22 14:54	1
Manganese	**0.011**		0.0050	0.0013	mg/L		02/15/22 10:05	02/16/22 14:54	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		02/16/22 11:34	02/24/22 13:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	**2.3**	**J**	3.0	2.1	mg/L		02/16/22 12:00	02/16/22 14:19	1
Total Dissolved Solids	**820**		10	10	mg/L			02/12/22 14:58	1
Ferric Iron	**0.21**		0.10	0.10	mg/L			02/22/22 17:13	1
Ferrous Iron	<0.081	HF	0.10	0.081	mg/L			02/22/22 17:13	1
Total Alkalinity as CaCO3 to pH 4.5	**21**		5.0	5.0	mg/L			02/17/22 23:08	1
Bicarbonate Alkalinity as CaCO3	**21**		5.0	5.0	mg/L			02/17/22 23:08	1
Carbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/17/22 23:08	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.95**				SU			02/09/22 15:25	1

Client: Southern Company
Project/Site: Plant Scherer AP1 Assessment

Job ID: 180-133600-1

Client Sample ID: PZ-42I

Date Collected: 02/09/22 13:10
Date Received: 02/11/22 09:30

Lab Sample ID: 180-133600-6

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11**		1.0	0.71	mg/L			02/12/22 18:34	1
Fluoride	**0.033**	**J**	0.10	0.026	mg/L			02/12/22 18:34	1
Sulfate	**240**		5.0	3.8	mg/L			02/12/22 18:48	5

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/15/22 10:05	02/16/22 15:01	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/15/22 10:05	02/16/22 15:01	1
Barium	**0.056**		0.010	0.0031	mg/L		02/15/22 10:05	02/16/22 15:01	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/15/22 10:05	02/16/22 15:01	1
Boron	**2.7**		0.080	0.060	mg/L		02/15/22 10:05	02/16/22 15:01	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/15/22 10:05	02/16/22 15:01	1
Calcium	**68**		0.50	0.13	mg/L		02/15/22 10:05	02/16/22 15:01	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/15/22 10:05	02/16/22 15:01	1
Cobalt	**0.00061**	**J**	0.0025	0.00026	mg/L		02/15/22 10:05	02/16/22 15:01	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/15/22 10:05	02/16/22 15:01	1
Lithium	**0.0026**	**J**	0.0050	0.00083	mg/L		02/15/22 10:05	02/16/22 15:01	1
Molybdenum	**0.0057**	**J**	0.015	0.00061	mg/L		02/15/22 10:05	02/16/22 15:01	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/15/22 10:05	02/16/22 15:01	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/15/22 10:05	02/16/22 15:01	1
Sodium	**27**		0.50	0.18	mg/L		02/15/22 10:05	02/16/22 15:01	1
Potassium	**3.5**		0.50	0.16	mg/L		02/15/22 10:05	02/16/22 15:01	1
Magnesium	**27**		0.50	0.050	mg/L		02/15/22 10:05	02/16/22 15:01	1
Manganese	**0.14**		0.0050	0.0013	mg/L		02/15/22 10:05	02/16/22 15:01	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		02/16/22 11:34	02/24/22 13:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	**2.3**	**J**	3.0	2.1	mg/L		02/16/22 12:00	02/16/22 14:26	1
Total Dissolved Solids	**470**		10	10	mg/L			02/12/22 14:58	1
Ferric Iron	<0.10		0.10	0.10	mg/L			02/22/22 17:13	1
Ferrous Iron	**0.24**	**HF**	0.10	0.081	mg/L			02/22/22 17:13	1
Total Alkalinity as CaCO3 to pH 4.5	**76**		5.0	5.0	mg/L			02/17/22 23:15	1
Bicarbonate Alkalinity as CaCO3	**76**		5.0	5.0	mg/L			02/17/22 23:15	1
Carbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/17/22 23:15	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.25**				SU			02/09/22 13:10	1

Client: Southern Company
Project/Site: Plant Scherer AP1 Assessment

Job ID: 180-133600-1

Client Sample ID: PZ-43S

Date Collected: 02/09/22 10:30
Date Received: 02/11/22 09:30

Lab Sample ID: 180-133600-7

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.5**		1.0	0.71	mg/L			02/12/22 19:03	1
Fluoride	**0.028**	**J**	0.10	0.026	mg/L			02/12/22 19:03	1
Sulfate	**150**		1.0	0.76	mg/L			02/12/22 19:03	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/15/22 10:05	02/16/22 15:09	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/15/22 10:05	02/16/22 15:09	1
Barium	**0.085**		0.010	0.0031	mg/L		02/15/22 10:05	02/16/22 15:09	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/15/22 10:05	02/16/22 15:09	1
Boron	**0.90**		0.080	0.060	mg/L		02/15/22 10:05	02/16/22 15:09	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/15/22 10:05	02/16/22 15:09	1
Calcium	**54**		0.50	0.13	mg/L		02/15/22 10:05	02/16/22 15:09	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/15/22 10:05	02/16/22 15:09	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/15/22 10:05	02/16/22 15:09	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/15/22 10:05	02/16/22 15:09	1
Lithium	**0.0031**	**J**	0.0050	0.00083	mg/L		02/15/22 10:05	02/16/22 15:09	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/15/22 10:05	02/16/22 15:09	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/15/22 10:05	02/16/22 15:09	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/15/22 10:05	02/16/22 15:09	1
Sodium	**10**		0.50	0.18	mg/L		02/15/22 10:05	02/16/22 15:09	1
Potassium	**3.4**		0.50	0.16	mg/L		02/15/22 10:05	02/16/22 15:09	1
Magnesium	**15**		0.50	0.050	mg/L		02/15/22 10:05	02/16/22 15:09	1
Manganese	**0.025**		0.0050	0.0013	mg/L		02/15/22 10:05	02/16/22 15:09	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		02/16/22 11:34	02/24/22 13:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	**4.9**		3.0	2.1	mg/L		02/16/22 12:00	02/16/22 14:33	1
Total Dissolved Solids	**310**		10	10	mg/L			02/12/22 14:58	1
Ferric Iron	<0.10		0.10	0.10	mg/L			02/22/22 17:13	1
Ferrous Iron	<0.081	HF	0.10	0.081	mg/L			02/22/22 17:13	1
Total Alkalinity as CaCO3 to pH 4.5	**54**		5.0	5.0	mg/L			02/17/22 23:22	1
Bicarbonate Alkalinity as CaCO3	**54**		5.0	5.0	mg/L			02/17/22 23:22	1
Carbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/17/22 23:22	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.66**				SU			02/09/22 10:30	1

Client: Southern Company
Project/Site: Plant Scherer AP1 Assessment

Job ID: 180-133600-1

Client Sample ID: PZ-44I

Date Collected: 02/09/22 15:45
Date Received: 02/11/22 09:30

Lab Sample ID: 180-133600-8

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.5**		1.0	0.71	mg/L			02/12/22 19:46	1
Fluoride	<0.026		0.10	0.026	mg/L			02/12/22 19:46	1
Sulfate	**0.76**	**J**	1.0	0.76	mg/L			02/12/22 19:46	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/15/22 10:05	02/16/22 15:12	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/15/22 10:05	02/16/22 15:12	1
Barium	**0.0078**	**J**	0.010	0.0031	mg/L		02/15/22 10:05	02/16/22 15:12	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/15/22 10:05	02/16/22 15:12	1
Boron	<0.060		0.080	0.060	mg/L		02/15/22 10:05	02/16/22 15:12	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/15/22 10:05	02/16/22 15:12	1
Calcium	**20**		0.50	0.13	mg/L		02/15/22 10:05	02/16/22 15:12	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/15/22 10:05	02/16/22 15:12	1
Cobalt	**0.0024**	**J**	0.0025	0.00026	mg/L		02/15/22 10:05	02/16/22 15:12	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/15/22 10:05	02/16/22 15:12	1
Lithium	**0.010**		0.0050	0.00083	mg/L		02/15/22 10:05	02/16/22 15:12	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/15/22 10:05	02/16/22 15:12	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/15/22 10:05	02/16/22 15:12	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/15/22 10:05	02/16/22 15:12	1
Sodium	**5.5**		0.50	0.18	mg/L		02/15/22 10:05	02/16/22 15:12	1
Potassium	**1.9**		0.50	0.16	mg/L		02/15/22 10:05	02/16/22 15:12	1
Magnesium	**9.7**		0.50	0.050	mg/L		02/15/22 10:05	02/16/22 15:12	1
Manganese	**0.20**		0.0050	0.0013	mg/L		02/15/22 10:05	02/16/22 15:12	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		02/16/22 11:34	02/24/22 13:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		02/16/22 12:00	02/16/22 14:40	1
Total Dissolved Solids	**120**		10	10	mg/L			02/12/22 14:58	1
Ferric Iron	**0.31**		0.10	0.10	mg/L			02/22/22 17:13	1
Ferrous Iron	**0.28**	**HF**	0.10	0.081	mg/L			02/22/22 17:13	1
Total Alkalinity as CaCO3 to pH 4.5	**100**		5.0	5.0	mg/L			02/17/22 23:29	1
Bicarbonate Alkalinity as CaCO3	**100**		5.0	5.0	mg/L			02/17/22 23:29	1
Carbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/17/22 23:29	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.57**				SU			02/09/22 15:45	1

Client: Southern Company
Project/Site: Plant Scherer AP1 Assessment

Job ID: 180-133600-1

Client Sample ID: FB-1

Date Collected: 02/09/22 13:35
Date Received: 02/11/22 09:30

Lab Sample ID: 180-133600-9

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			02/12/22 20:01	1
Fluoride	<0.026		0.10	0.026	mg/L			02/12/22 20:01	1
Sulfate	<0.76		1.0	0.76	mg/L			02/12/22 20:01	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/15/22 10:05	02/16/22 15:14	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/15/22 10:05	02/16/22 15:14	1
Barium	<0.0031		0.010	0.0031	mg/L		02/15/22 10:05	02/16/22 15:14	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/15/22 10:05	02/16/22 15:14	1
Boron	<0.060		0.080	0.060	mg/L		02/15/22 10:05	02/16/22 15:14	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/15/22 10:05	02/16/22 15:14	1
Calcium	<0.13		0.50	0.13	mg/L		02/15/22 10:05	02/16/22 15:14	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/15/22 10:05	02/16/22 15:14	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/15/22 10:05	02/16/22 15:14	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/15/22 10:05	02/16/22 15:14	1
Lithium	<0.00083		0.0050	0.00083	mg/L		02/15/22 10:05	02/16/22 15:14	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/15/22 10:05	02/16/22 15:14	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/15/22 10:05	02/16/22 15:14	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/15/22 10:05	02/16/22 15:14	1
Sodium	<0.18		0.50	0.18	mg/L		02/15/22 10:05	02/16/22 15:14	1
Potassium	<0.16		0.50	0.16	mg/L		02/15/22 10:05	02/16/22 15:14	1
Magnesium	<0.050		0.50	0.050	mg/L		02/15/22 10:05	02/16/22 15:14	1
Manganese	<0.0013		0.0050	0.0013	mg/L		02/15/22 10:05	02/16/22 15:14	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		02/16/22 11:34	02/24/22 13:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		02/16/22 12:00	02/16/22 14:47	1
Total Dissolved Solids	<10		10	10	mg/L			02/12/22 14:58	1
Ferric Iron	<0.10		0.10	0.10	mg/L			02/22/22 17:13	1
Ferrous Iron	<0.081	HF	0.10	0.081	mg/L			02/22/22 17:13	1
Total Alkalinity as CaCO3 to pH 4.5	<5.0		5.0	5.0	mg/L			02/17/22 23:34	1
Bicarbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/17/22 23:34	1
Carbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/17/22 23:34	1

Client: Southern Company
Project/Site: Plant Scherer AP1 Assessment

Job ID: 180-133600-1

Client Sample ID: EB-1

Date Collected: 02/09/22 16:30
Date Received: 02/11/22 09:30

Lab Sample ID: 180-133600-10

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			02/12/22 20:15	1
Fluoride	<0.026		0.10	0.026	mg/L			02/12/22 20:15	1
Sulfate	<0.76		1.0	0.76	mg/L			02/12/22 20:15	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/15/22 10:05	02/16/22 15:17	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/15/22 10:05	02/16/22 15:17	1
Barium	<0.0031		0.010	0.0031	mg/L		02/15/22 10:05	02/16/22 15:17	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/15/22 10:05	02/16/22 15:17	1
Boron	<0.060		0.080	0.060	mg/L		02/15/22 10:05	02/16/22 15:17	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/15/22 10:05	02/16/22 15:17	1
Calcium	<0.13		0.50	0.13	mg/L		02/15/22 10:05	02/16/22 15:17	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/15/22 10:05	02/16/22 15:17	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/15/22 10:05	02/16/22 15:17	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/15/22 10:05	02/16/22 15:17	1
Lithium	<0.00083		0.0050	0.00083	mg/L		02/15/22 10:05	02/16/22 15:17	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/15/22 10:05	02/16/22 15:17	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/15/22 10:05	02/16/22 15:17	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/15/22 10:05	02/16/22 15:17	1
Sodium	<0.18		0.50	0.18	mg/L		02/15/22 10:05	02/16/22 15:17	1
Potassium	<0.16		0.50	0.16	mg/L		02/15/22 10:05	02/16/22 15:17	1
Magnesium	<0.050		0.50	0.050	mg/L		02/15/22 10:05	02/16/22 15:17	1
Manganese	<0.0013		0.0050	0.0013	mg/L		02/15/22 10:05	02/16/22 15:17	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		02/16/22 11:34	02/24/22 13:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		02/16/22 12:00	02/16/22 15:08	1
Total Dissolved Solids	<10		10	10	mg/L			02/12/22 14:58	1
Ferric Iron	<0.10		0.10	0.10	mg/L			02/22/22 17:13	1
Ferrous Iron	**0.14**	**HF**	0.10	0.081	mg/L			02/22/22 17:13	1
Total Alkalinity as CaCO3 to pH 4.5	<5.0		5.0	5.0	mg/L			02/17/22 23:39	1
Bicarbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/17/22 23:39	1
Carbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/17/22 23:39	1

Client: Southern Company
Project/Site: Plant Scherer AP1 Assessment

Job ID: 180-133600-1

Client Sample ID: DUP-1

Date Collected: 02/09/22 00:00
Date Received: 02/11/22 09:30

Lab Sample ID: 180-133600-11

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.7**		1.0	0.71	mg/L			02/12/22 20:29	1
Fluoride	<0.026		0.10	0.026	mg/L			02/12/22 20:29	1
Sulfate	**520**		5.0	3.8	mg/L			02/12/22 20:44	5

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/15/22 10:05	02/16/22 15:20	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/15/22 10:05	02/16/22 15:20	1
Barium	**0.026**		0.010	0.0031	mg/L		02/15/22 10:05	02/16/22 15:20	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/15/22 10:05	02/16/22 15:20	1
Boron	**3.2**		0.080	0.060	mg/L		02/15/22 10:05	02/16/22 15:20	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/15/22 10:05	02/16/22 15:20	1
Calcium	**120**		0.50	0.13	mg/L		02/15/22 10:05	02/16/22 15:20	1
Chromium	**0.0053**		0.0020	0.0015	mg/L		02/15/22 10:05	02/16/22 15:20	1
Cobalt	**0.00090**	**J**	0.0025	0.00026	mg/L		02/15/22 10:05	02/16/22 15:20	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/15/22 10:05	02/16/22 15:20	1
Lithium	<0.00083		0.0050	0.00083	mg/L		02/15/22 10:05	02/16/22 15:20	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/15/22 10:05	02/16/22 15:20	1
Selenium	**0.0060**		0.0050	0.00074	mg/L		02/15/22 10:05	02/16/22 15:20	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/15/22 10:05	02/16/22 15:20	1
Sodium	**45**		0.50	0.18	mg/L		02/15/22 10:05	02/16/22 15:20	1
Potassium	**3.7**		0.50	0.16	mg/L		02/15/22 10:05	02/16/22 15:20	1
Magnesium	**42**		0.50	0.050	mg/L		02/15/22 10:05	02/16/22 15:20	1
Manganese	**0.012**		0.0050	0.0013	mg/L		02/15/22 10:05	02/16/22 15:20	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		02/16/22 11:35	02/17/22 14:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		02/16/22 12:00	02/16/22 15:15	1
Total Dissolved Solids	**790**		10	10	mg/L			02/12/22 14:58	1
Ferric Iron	**0.22**		0.10	0.10	mg/L			02/22/22 17:13	1
Ferrous Iron	<0.081	HF	0.10	0.081	mg/L			02/22/22 17:13	1
Total Alkalinity as CaCO3 to pH 4.5	**22**		5.0	5.0	mg/L			02/17/22 23:46	1
Bicarbonate Alkalinity as CaCO3	**22**		5.0	5.0	mg/L			02/17/22 23:46	1
Carbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/17/22 23:46	1

Client Sample ID: PZ-40I
Date Collected: 02/10/22 11:27
Date Received: 02/12/22 12:45

Lab Sample ID: 180-133641-1
Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10**		1.0	0.71	mg/L			02/15/22 05:27	1
Fluoride	<0.026		0.10	0.026	mg/L			02/15/22 05:27	1
Sulfate	**720**		5.0	3.8	mg/L			02/15/22 05:40	5

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/15/22 10:07	02/16/22 16:19	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/15/22 10:07	02/16/22 16:19	1
Barium	**0.042**		0.010	0.0031	mg/L		02/15/22 10:07	02/16/22 16:19	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/15/22 10:07	02/16/22 16:19	1
Boron	**4.1**		0.080	0.060	mg/L		02/15/22 10:07	02/16/22 16:19	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/15/22 10:07	02/16/22 16:19	1
Calcium	**150**		0.50	0.13	mg/L		02/15/22 10:07	02/16/22 16:19	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/15/22 10:07	02/16/22 16:19	1
Cobalt	**0.0025**		0.0025	0.00026	mg/L		02/15/22 10:07	02/16/22 16:19	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/15/22 10:07	02/16/22 16:19	1
Lithium	**0.010**		0.0050	0.00083	mg/L		02/15/22 10:07	02/16/22 16:19	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/15/22 10:07	02/16/22 16:19	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/15/22 10:07	02/16/22 16:19	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/15/22 10:07	02/16/22 16:19	1
Sodium	**56**		0.50	0.18	mg/L		02/15/22 10:07	02/16/22 16:19	1
Potassium	**8.1**		0.50	0.16	mg/L		02/15/22 10:07	02/16/22 16:19	1
Magnesium	**60**		0.50	0.050	mg/L		02/15/22 10:07	02/16/22 16:19	1
Manganese	**0.38**		0.0050	0.0013	mg/L		02/15/22 10:07	02/16/22 16:19	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013	^3+ ^+ *+	0.00020	0.00013	mg/L		02/21/22 12:03	02/22/22 13:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		02/17/22 10:30	02/17/22 16:58	1
Total Dissolved Solids	**1200**		10	10	mg/L			02/16/22 16:17	1
Ferric Iron	**0.43**		0.10	0.10	mg/L			02/22/22 19:25	1
Ferrous Iron	**0.97**	**HF**	0.10	0.081	mg/L			02/22/22 19:25	1
Total Alkalinity as CaCO3 to pH 4.5	**33**		5.0	5.0	mg/L			02/19/22 14:00	1
Bicarbonate Alkalinity as CaCO3	**33**		5.0	5.0	mg/L			02/19/22 14:00	1
Carbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/19/22 14:00	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.11**				SU			02/10/22 11:27	1

Client: Southern Company
Project/Site: Plant Scherer AP1 Assessment

Job ID: 180-133600-1

Client Sample ID: PZ-69I
Date Collected: 02/10/22 11:27
Date Received: 02/12/22 12:45

Lab Sample ID: 180-133641-2
Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		1.0	0.71	mg/L			02/15/22 03:48	1
Fluoride	0.15		0.10	0.026	mg/L			02/15/22 03:48	1
Sulfate	110		1.0	0.76	mg/L			02/15/22 03:48	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/15/22 10:07	02/16/22 16:27	1
Arsenic	0.00059	J	0.0010	0.00028	mg/L		02/15/22 10:07	02/16/22 16:27	1
Barium	0.14		0.010	0.0031	mg/L		02/15/22 10:07	02/16/22 16:27	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/15/22 10:07	02/16/22 16:27	1
Boron	0.44		0.080	0.060	mg/L		02/15/22 10:07	02/16/22 16:27	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/15/22 10:07	02/16/22 16:27	1
Calcium	46		0.50	0.13	mg/L		02/15/22 10:07	02/16/22 16:27	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/15/22 10:07	02/16/22 16:27	1
Cobalt	0.0020	J	0.0025	0.00026	mg/L		02/15/22 10:07	02/16/22 16:27	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/15/22 10:07	02/16/22 16:27	1
Lithium	0.0029	J	0.0050	0.00083	mg/L		02/15/22 10:07	02/16/22 16:27	1
Molybdenum	0.0017	J	0.015	0.00061	mg/L		02/15/22 10:07	02/16/22 16:27	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/15/22 10:07	02/16/22 16:27	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/15/22 10:07	02/16/22 16:27	1
Sodium	20		0.50	0.18	mg/L		02/15/22 10:07	02/16/22 16:27	1
Potassium	5.8		0.50	0.16	mg/L		02/15/22 10:07	02/16/22 16:27	1
Magnesium	12		0.50	0.050	mg/L		02/15/22 10:07	02/16/22 16:27	1
Manganese	1.4		0.0050	0.0013	mg/L		02/15/22 10:07	02/16/22 16:27	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013	^3+ ^+ *+	0.00020	0.00013	mg/L		02/21/22 12:03	02/22/22 13:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	2.1	J B	3.0	2.1	mg/L		02/17/22 10:30	02/17/22 17:12	1
Total Dissolved Solids	320		10	10	mg/L			02/16/22 16:17	1
Ferric Iron	0.71		0.10	0.10	mg/L			02/22/22 19:25	1
Ferrous Iron	0.29	HF	0.10	0.081	mg/L			02/22/22 19:25	1
Total Alkalinity as CaCO3 to pH 4.5	94		5.0	5.0	mg/L			02/19/22 14:06	1
Bicarbonate Alkalinity as CaCO3	94		5.0	5.0	mg/L			02/19/22 14:06	1
Carbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/19/22 14:06	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.61				SU			02/10/22 11:27	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 180-388044/7
Matrix: Water
Analysis Batch: 388044

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			02/12/22 08:55	1
Fluoride	<0.026		0.10	0.026	mg/L			02/12/22 08:55	1
Sulfate	<0.76		1.0	0.76	mg/L			02/12/22 08:55	1

Lab Sample ID: LCS 180-388044/6
Matrix: Water
Analysis Batch: 388044

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.9		mg/L		100	90 - 110
Fluoride	2.50	2.64		mg/L		106	90 - 110
Sulfate	50.0	49.8		mg/L		100	90 - 110

Lab Sample ID: 180-133600-2 MS
Matrix: Water
Analysis Batch: 388044

Client Sample ID: PZ-14S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	4.1		50.0	54.1		mg/L		100	90 - 110
Fluoride	<0.026		2.50	2.59		mg/L		104	90 - 110
Sulfate	<0.76		50.0	50.2		mg/L		100	90 - 110

Lab Sample ID: 180-133600-2 MSD
Matrix: Water
Analysis Batch: 388044

Client Sample ID: PZ-14S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	4.1		50.0	54.1		mg/L		100	90 - 110	0	20
Fluoride	<0.026		2.50	2.60		mg/L		104	90 - 110	0	20
Sulfate	<0.76		50.0	50.2		mg/L		100	90 - 110	0	20

Lab Sample ID: MB 180-388136/51
Matrix: Water
Analysis Batch: 388136

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			02/15/22 00:41	1
Fluoride	<0.026		0.10	0.026	mg/L			02/15/22 00:41	1
Sulfate	<0.76		1.0	0.76	mg/L			02/15/22 00:41	1

Lab Sample ID: LCS 180-388136/50
Matrix: Water
Analysis Batch: 388136

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.7		mg/L		99	90 - 110
Fluoride	2.50	2.55		mg/L		102	90 - 110
Sulfate	50.0	47.8		mg/L		96	90 - 110

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 180-133644-C-1 MS
Matrix: Water
Analysis Batch: 388136

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	11		50.0	65.3		mg/L		110	90 - 110		
Fluoride	0.030	J	2.50	2.76		mg/L		109	90 - 110		
Sulfate	2.1		50.0	54.7		mg/L		105	90 - 110		

Lab Sample ID: 180-133644-C-1 MSD
Matrix: Water
Analysis Batch: 388136

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	11		50.0	60.5		mg/L		100	90 - 110	8	20
Fluoride	0.030	J	2.50	2.55		mg/L		101	90 - 110	8	20
Sulfate	2.1		50.0	50.0		mg/L		96	90 - 110	9	20

Method: EPA 6020B - Metals (ICP/MS)

Lab Sample ID: MB 180-388280/1-A
Matrix: Water
Analysis Batch: 388563

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 388280

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/15/22 10:05	02/16/22 14:14	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/15/22 10:05	02/16/22 14:14	1
Barium	<0.0031		0.010	0.0031	mg/L		02/15/22 10:05	02/16/22 14:14	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/15/22 10:05	02/16/22 14:14	1
Boron	<0.060		0.080	0.060	mg/L		02/15/22 10:05	02/16/22 14:14	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/15/22 10:05	02/16/22 14:14	1
Calcium	<0.13		0.50	0.13	mg/L		02/15/22 10:05	02/16/22 14:14	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/15/22 10:05	02/16/22 14:14	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/15/22 10:05	02/16/22 14:14	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/15/22 10:05	02/16/22 14:14	1
Lithium	<0.00083		0.0050	0.00083	mg/L		02/15/22 10:05	02/16/22 14:14	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/15/22 10:05	02/16/22 14:14	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/15/22 10:05	02/16/22 14:14	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/15/22 10:05	02/16/22 14:14	1
Sodium	<0.18		0.50	0.18	mg/L		02/15/22 10:05	02/16/22 14:14	1
Potassium	<0.16		0.50	0.16	mg/L		02/15/22 10:05	02/16/22 14:14	1
Magnesium	<0.050		0.50	0.050	mg/L		02/15/22 10:05	02/16/22 14:14	1
Manganese	<0.0013		0.0050	0.0013	mg/L		02/15/22 10:05	02/16/22 14:14	1

Lab Sample ID: LCS 180-388280/2-A
Matrix: Water
Analysis Batch: 388563

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 388280

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Antimony			0.250	0.235		mg/L		94	80 - 120		
Arsenic			1.00	0.956		mg/L		96	80 - 120		
Barium			1.00	0.995		mg/L		99	80 - 120		
Beryllium			0.500	0.495		mg/L		99	80 - 120		
Boron			1.25	1.12		mg/L		89	80 - 120		

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 180-388280/2-A
Matrix: Water
Analysis Batch: 388563

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 388280

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.500	0.488		mg/L		98	80 - 120
Calcium	25.0	28.0		mg/L		112	80 - 120
Chromium	0.500	0.491		mg/L		98	80 - 120
Cobalt	0.500	0.471		mg/L		94	80 - 120
Lead	0.500	0.497		mg/L		99	80 - 120
Lithium	0.500	0.479		mg/L		96	80 - 120
Molybdenum	0.500	0.519		mg/L		104	80 - 120
Selenium	1.00	0.968		mg/L		97	80 - 120
Thallium	1.00	0.999		mg/L		100	80 - 120
Sodium	25.0	24.4		mg/L		97	80 - 120
Potassium	25.0	24.4		mg/L		98	80 - 120
Magnesium	25.0	24.0		mg/L		96	80 - 120
Manganese	0.500	0.468		mg/L		94	80 - 120

Lab Sample ID: 180-133600-1 MS
Matrix: Water
Analysis Batch: 388563

Client Sample ID: PZ-13S
Prep Type: Total Recoverable
Prep Batch: 388280

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.00051		0.250	0.240		mg/L		96	75 - 125
Arsenic	<0.00028		1.00	0.954		mg/L		95	75 - 125
Barium	0.049		1.00	1.06		mg/L		101	75 - 125
Beryllium	<0.00027		0.500	0.509		mg/L		102	75 - 125
Boron	<0.060		1.25	1.16		mg/L		93	75 - 125
Cadmium	<0.00022		0.500	0.500		mg/L		100	75 - 125
Calcium	4.7		25.0	33.1		mg/L		113	75 - 125
Chromium	0.0030		0.500	0.501		mg/L		100	75 - 125
Cobalt	0.0052		0.500	0.475		mg/L		94	75 - 125
Lead	<0.00017		0.500	0.509		mg/L		102	75 - 125
Lithium	0.0025	J	0.500	0.484		mg/L		96	75 - 125
Molybdenum	<0.00061		0.500	0.510		mg/L		102	75 - 125
Selenium	<0.00074		1.00	0.964		mg/L		96	75 - 125
Thallium	<0.00047		1.00	1.02		mg/L		102	75 - 125
Sodium	5.0		25.0	29.8		mg/L		99	75 - 125
Potassium	0.39	J	25.0	25.6		mg/L		101	75 - 125
Magnesium	1.6		25.0	25.9		mg/L		97	75 - 125
Manganese	0.051		0.500	0.519		mg/L		94	75 - 125

Lab Sample ID: 180-133600-1 MSD
Matrix: Water
Analysis Batch: 388563

Client Sample ID: PZ-13S
Prep Type: Total Recoverable
Prep Batch: 388280

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	<0.00051		0.250	0.244		mg/L		97	75 - 125	1	20
Arsenic	<0.00028		1.00	0.993		mg/L		99	75 - 125	4	20
Barium	0.049		1.00	1.09		mg/L		104	75 - 125	2	20
Beryllium	<0.00027		0.500	0.516		mg/L		103	75 - 125	1	20
Boron	<0.060		1.25	1.23		mg/L		98	75 - 125	5	20
Cadmium	<0.00022		0.500	0.515		mg/L		103	75 - 125	3	20

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-133600-1 MSD
Matrix: Water
Analysis Batch: 388563

Client Sample ID: PZ-13S
Prep Type: Total Recoverable
Prep Batch: 388280

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	4.7		25.0	33.5		mg/L		115	75 - 125	1	20
Chromium	0.0030		0.500	0.513		mg/L		102	75 - 125	2	20
Cobalt	0.0052		0.500	0.495		mg/L		98	75 - 125	4	20
Lead	<0.00017		0.500	0.512		mg/L		102	75 - 125	1	20
Lithium	0.0025	J	0.500	0.477		mg/L		95	75 - 125	1	20
Molybdenum	<0.00061		0.500	0.525		mg/L		105	75 - 125	3	20
Selenium	<0.00074		1.00	1.01		mg/L		101	75 - 125	5	20
Thallium	<0.00047		1.00	1.03		mg/L		103	75 - 125	1	20
Sodium	5.0		25.0	30.2		mg/L		101	75 - 125	1	20
Potassium	0.39	J	25.0	25.8		mg/L		102	75 - 125	1	20
Magnesium	1.6		25.0	26.8		mg/L		101	75 - 125	3	20
Manganese	0.051		0.500	0.535		mg/L		97	75 - 125	3	20

Lab Sample ID: MB 180-388283/1-A
Matrix: Water
Analysis Batch: 388563

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 388283

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/15/22 10:07	02/16/22 15:48	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/15/22 10:07	02/16/22 15:48	1
Barium	<0.0031		0.010	0.0031	mg/L		02/15/22 10:07	02/16/22 15:48	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/15/22 10:07	02/16/22 15:48	1
Boron	<0.060		0.080	0.060	mg/L		02/15/22 10:07	02/16/22 15:48	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/15/22 10:07	02/16/22 15:48	1
Calcium	<0.13		0.50	0.13	mg/L		02/15/22 10:07	02/16/22 15:48	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/15/22 10:07	02/16/22 15:48	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/15/22 10:07	02/16/22 15:48	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/15/22 10:07	02/16/22 15:48	1
Lithium	<0.00083		0.0050	0.00083	mg/L		02/15/22 10:07	02/16/22 15:48	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/15/22 10:07	02/16/22 15:48	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/15/22 10:07	02/16/22 15:48	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/15/22 10:07	02/16/22 15:48	1
Sodium	<0.18		0.50	0.18	mg/L		02/15/22 10:07	02/16/22 15:48	1
Potassium	<0.16		0.50	0.16	mg/L		02/15/22 10:07	02/16/22 15:48	1
Magnesium	<0.050		0.50	0.050	mg/L		02/15/22 10:07	02/16/22 15:48	1
Manganese	<0.0013		0.0050	0.0013	mg/L		02/15/22 10:07	02/16/22 15:48	1

Lab Sample ID: LCS 180-388283/2-A
Matrix: Water
Analysis Batch: 388563

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 388283

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Antimony			0.250	0.243		mg/L		97	80 - 120		
Arsenic			1.00	0.989		mg/L		99	80 - 120		
Barium			1.00	1.05		mg/L		105	80 - 120		
Beryllium			0.500	0.504		mg/L		101	80 - 120		
Boron			1.25	1.12		mg/L		89	80 - 120		
Cadmium			0.500	0.516		mg/L		103	80 - 120		
Calcium			25.0	28.7		mg/L		115	80 - 120		

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 180-388283/2-A
Matrix: Water
Analysis Batch: 388563

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 388283

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	0.500	0.518		mg/L		104	80 - 120
Cobalt	0.500	0.493		mg/L		99	80 - 120
Lead	0.500	0.519		mg/L		104	80 - 120
Lithium	0.500	0.479		mg/L		96	80 - 120
Molybdenum	0.500	0.537		mg/L		107	80 - 120
Selenium	1.00	0.988		mg/L		99	80 - 120
Thallium	1.00	1.05		mg/L		105	80 - 120
Sodium	25.0	25.1		mg/L		100	80 - 120
Potassium	25.0	24.9		mg/L		100	80 - 120
Magnesium	25.0	25.0		mg/L		100	80 - 120
Manganese	0.500	0.495		mg/L		99	80 - 120

Lab Sample ID: 180-133461-K-5-B MS
Matrix: Water
Analysis Batch: 388563

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 388283

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.00051		0.250	0.246		mg/L		98	75 - 125
Arsenic	<0.00028		1.00	0.994		mg/L		99	75 - 125
Barium	0.098		1.00	1.19		mg/L		109	75 - 125
Beryllium	<0.00027		0.500	0.488		mg/L		98	75 - 125
Boron	<0.060		1.25	1.14		mg/L		91	75 - 125
Cadmium	<0.00022		0.500	0.518		mg/L		104	75 - 125
Calcium	91	F1	25.0	126	F1	mg/L		139	75 - 125
Chromium	<0.0015		0.500	0.510		mg/L		102	75 - 125
Cobalt	<0.00026		0.500	0.483		mg/L		97	75 - 125
Lead	0.00021	J	0.500	0.523		mg/L		104	75 - 125
Lithium	0.0049	J	0.500	0.507		mg/L		100	75 - 125
Molybdenum	<0.00061		0.500	0.558		mg/L		112	75 - 125
Selenium	<0.00074		1.00	1.01		mg/L		101	75 - 125
Thallium	<0.00047		1.00	1.04		mg/L		104	75 - 125
Sodium	3.6		25.0	29.3		mg/L		103	75 - 125
Potassium	1.6		25.0	27.3		mg/L		103	75 - 125
Magnesium	10		25.0	35.2		mg/L		100	75 - 125
Manganese	0.17		0.500	0.681		mg/L		102	75 - 125

Lab Sample ID: 180-133461-K-5-C MSD
Matrix: Water
Analysis Batch: 388563

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 388283

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	<0.00051		0.250	0.240		mg/L		96	75 - 125	2	20
Arsenic	<0.00028		1.00	0.967		mg/L		97	75 - 125	3	20
Barium	0.098		1.00	1.14		mg/L		104	75 - 125	4	20
Beryllium	<0.00027		0.500	0.487		mg/L		97	75 - 125	0	20
Boron	<0.060		1.25	1.17		mg/L		93	75 - 125	3	20
Cadmium	<0.00022		0.500	0.499		mg/L		100	75 - 125	4	20
Calcium	91	F1	25.0	117		mg/L		102	75 - 125	8	20
Chromium	<0.0015		0.500	0.501		mg/L		100	75 - 125	2	20

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-133461-K-5-C MSD
Matrix: Water
Analysis Batch: 388563

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 388283

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cobalt	<0.00026		0.500	0.472		mg/L		94	75 - 125	2	20
Lead	0.00021	J	0.500	0.504		mg/L		101	75 - 125	4	20
Lithium	0.0049	J	0.500	0.505		mg/L		100	75 - 125	0	20
Molybdenum	<0.00061		0.500	0.521		mg/L		104	75 - 125	7	20
Selenium	<0.00074		1.00	0.935		mg/L		94	75 - 125	7	20
Thallium	<0.00047		1.00	1.02		mg/L		102	75 - 125	2	20
Sodium	3.6		25.0	28.2		mg/L		99	75 - 125	4	20
Potassium	1.6		25.0	26.4		mg/L		99	75 - 125	4	20
Magnesium	10		25.0	33.4		mg/L		93	75 - 125	5	20
Manganese	0.17		0.500	0.637		mg/L		93	75 - 125	7	20

Method: EPA 7470A - Mercury (CVAA)

Lab Sample ID: MB 180-388493/1-A
Matrix: Water
Analysis Batch: 389466

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 388493

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		02/16/22 11:34	02/24/22 13:35	1

Lab Sample ID: LCS 180-388493/2-A
Matrix: Water
Analysis Batch: 389466

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 388493

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00250	0.00254		mg/L		101	80 - 120		

Lab Sample ID: 180-133600-1 MS
Matrix: Water
Analysis Batch: 389466

Client Sample ID: PZ-13S
Prep Type: Total/NA
Prep Batch: 388493

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.00022		0.00100	0.00122		mg/L		100	75 - 125		

Lab Sample ID: 180-133600-1 MSD
Matrix: Water
Analysis Batch: 389466

Client Sample ID: PZ-13S
Prep Type: Total/NA
Prep Batch: 388493

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00022		0.00100	0.00119		mg/L		97	75 - 125	2	20

Lab Sample ID: MB 180-388494/1-A
Matrix: Water
Analysis Batch: 388686

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 388494

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		02/16/22 11:35	02/17/22 14:07	1

Method: EPA 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 180-388494/2-A
Matrix: Water
Analysis Batch: 388686

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 388494

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00250	0.00245		mg/L		98	80 - 120		

Lab Sample ID: 180-133638-F-1-C MS
Matrix: Water
Analysis Batch: 388686

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 388494

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	<0.00013		0.00100	0.000896		mg/L		90	75 - 125		

Lab Sample ID: 180-133638-F-1-D MSD
Matrix: Water
Analysis Batch: 388686

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 388494

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.00013		0.00100	0.000961		mg/L		96	75 - 125	7	20

Lab Sample ID: MB 180-388987/1-A
Matrix: Water
Analysis Batch: 389210

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 388987

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013	^3+ ^+	0.00020	0.00013	mg/L		02/21/22 12:01	02/22/22 13:00	1

Lab Sample ID: LCS 180-388987/2-A
Matrix: Water
Analysis Batch: 389210

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 388987

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00250	0.00385	^3+ ^+ *+	mg/L		154	80 - 120		

Lab Sample ID: 680-211038-D-7-C MSD
Matrix: Water
Analysis Batch: 389210

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 388987

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.00013	F1 ^3+ ^+ *+	0.00100	0.00152	F1 ^3+ ^+	mg/L		152	75 - 125	2	20

Lab Sample ID: 680-211038-D-7-D MS
Matrix: Water
Analysis Batch: 389210

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 388987

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	<0.00013	F1 ^3+ ^+ *+	0.00100	0.00148	F1 ^3+ ^+	mg/L		148	75 - 125		

Method: EPA 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 180-388278/1-A
Matrix: Water
Analysis Batch: 388385

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 388278

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		02/15/22 12:00	02/15/22 13:47	1

Lab Sample ID: LCS 180-388278/2-A
Matrix: Water
Analysis Batch: 388385

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 388278

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	13.1	12.6		mg/L		97	85 - 115

Lab Sample ID: 180-133613-A-1-B MS
Matrix: Water
Analysis Batch: 388385

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 388278

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	<2.1		13.1	12.1		mg/L		93	75 - 125

Lab Sample ID: 180-133613-A-1-C MSD
Matrix: Water
Analysis Batch: 388385

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 388278

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	<2.1		13.1	12.4		mg/L		95	75 - 125	3	20

Lab Sample ID: MB 180-388282/1-A
Matrix: Water
Analysis Batch: 388532

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 388282

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		02/16/22 12:00	02/16/22 13:44	1

Lab Sample ID: LCS 180-388282/2-A
Matrix: Water
Analysis Batch: 388532

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 388282

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	12.8	12.7		mg/L		99	85 - 115

Lab Sample ID: 180-133600-4 MS
Matrix: Water
Analysis Batch: 388532

Client Sample ID: PZ-39S
Prep Type: Total/NA
Prep Batch: 388282

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	<2.1		12.8	12.9		mg/L		101	75 - 125

Lab Sample ID: 180-133600-4 MSD
Matrix: Water
Analysis Batch: 388532

Client Sample ID: PZ-39S
Prep Type: Total/NA
Prep Batch: 388282

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	<2.1		12.8	13.6		mg/L		106	75 - 125	5	20

Method: EPA 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 180-388545/1-A
Matrix: Water
Analysis Batch: 388646

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 388545

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	2.44	J	3.0	2.1	mg/L		02/17/22 10:30	02/17/22 12:27	1

Lab Sample ID: LCS 180-388545/2-A
Matrix: Water
Analysis Batch: 388646

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 388545

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	13.1	11.9		mg/L		91	85 - 115

Lab Sample ID: 180-133638-E-4-B MS
Matrix: Water
Analysis Batch: 388646

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 388545

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	<2.1		13.1	13.8		mg/L		105	75 - 125

Lab Sample ID: 180-133638-E-4-C MSD
Matrix: Water
Analysis Batch: 388646

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 388545

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	<2.1		13.1	14.3		mg/L		109	75 - 125	3	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 180-388075/2
Matrix: Water
Analysis Batch: 388075

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			02/12/22 14:58	1

Lab Sample ID: LCS 180-388075/1
Matrix: Water
Analysis Batch: 388075

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	150	130		mg/L		87	85 - 115

Lab Sample ID: 180-133600-1 DU
Matrix: Water
Analysis Batch: 388075

Client Sample ID: PZ-13S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	37		37.0		mg/L		0	10

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: 180-133600-11 DU
Matrix: Water
Analysis Batch: 388075

Client Sample ID: DUP-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	790			826		mg/L				4	10

Lab Sample ID: MB 180-388541/2
Matrix: Water
Analysis Batch: 388541

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			02/16/22 16:17	1

Lab Sample ID: LCS 180-388541/1
Matrix: Water
Analysis Batch: 388541

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			469	452		mg/L		96	85 - 115		

Lab Sample ID: 180-133538-AO-2 DU
Matrix: Water
Analysis Batch: 388541

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	130			124		mg/L				4	10

Method: SM 3500 FE D - Iron, Ferrous and Ferric

Lab Sample ID: MB 460-829718/12
Matrix: Water
Analysis Batch: 829718

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	<0.081		0.10	0.081	mg/L			02/22/22 17:05	1

Lab Sample ID: LCS 460-829718/13
Matrix: Water
Analysis Batch: 829718

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ferrous Iron			0.500	0.496		mg/L		99	85 - 115		

Lab Sample ID: MRL 460-829718/11
Matrix: Water
Analysis Batch: 829718

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits		
Ferrous Iron			0.100	0.111		mg/L		111	50 - 150		

Method: SM 3500 FE D - Iron, Ferrous and Ferric (Continued)

Lab Sample ID: 460-252723-E-1 MS
Matrix: Water
Analysis Batch: 829718

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ferrous Iron	0.31		2.00	2.01		mg/L		85	85 - 115

Lab Sample ID: 460-252723-E-1 MSD
Matrix: Water
Analysis Batch: 829718

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ferrous Iron	0.31		2.00	2.13		mg/L		91	85 - 115	6	12

Lab Sample ID: MB 460-829723/35
Matrix: Water
Analysis Batch: 829723

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	<0.081		0.10	0.081	mg/L			02/22/22 19:25	1

Lab Sample ID: MB 460-829723/4
Matrix: Water
Analysis Batch: 829723

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	<0.081		0.10	0.081	mg/L			02/22/22 18:52	1

Lab Sample ID: LCS 460-829723/36
Matrix: Water
Analysis Batch: 829723

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ferrous Iron	0.500	0.456		mg/L		91	85 - 115

Lab Sample ID: LCS 460-829723/5
Matrix: Water
Analysis Batch: 829723

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ferrous Iron	0.500	0.472		mg/L		94	85 - 115

Lab Sample ID: MRL 460-829723/3
Matrix: Water
Analysis Batch: 829723

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Ferrous Iron	0.100	<0.081		mg/L		62	50 - 150

Lab Sample ID: 180-133638-D-1 MS
Matrix: Water
Analysis Batch: 829723

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ferrous Iron	<0.081		2.00	1.98		mg/L		99	85 - 115

Method: SM 3500 FE D - Iron, Ferrous and Ferric

Lab Sample ID: 180-133638-D-1 MSD
Matrix: Water
Analysis Batch: 829723

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ferrous Iron	<0.081		2.00	1.99		mg/L		99	85 - 115	0	12

Method: SM2320 B - Alkalinity, Total

Lab Sample ID: MB 180-388836/53
Matrix: Water
Analysis Batch: 388836

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	<5.0		5.0	5.0	mg/L			02/17/22 18:59	1
Bicarbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/17/22 18:59	1
Carbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/17/22 18:59	1

Lab Sample ID: MB 180-388836/77
Matrix: Water
Analysis Batch: 388836

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	<5.0		5.0	5.0	mg/L			02/17/22 21:41	1
Bicarbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/17/22 21:41	1
Carbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/17/22 21:41	1

Lab Sample ID: LCS 180-388836/76
Matrix: Water
Analysis Batch: 388836

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3 to pH 4.5	265	242		mg/L		91	90 - 110

Lab Sample ID: LLCS 180-388836/75
Matrix: Water
Analysis Batch: 388836

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3 to pH 4.5	15.9	14.6		mg/L		92	75 - 125

Lab Sample ID: 180-133600-4 DU
Matrix: Water
Analysis Batch: 388836

Client Sample ID: PZ-39S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity as CaCO3 to pH 4.5	75		75.1		mg/L		0.2	20
Bicarbonate Alkalinity as CaCO3	75		75.1		mg/L		0.2	20
Carbonate Alkalinity as CaCO3	<5.0		<5.0		mg/L		NC	20

Method: SM2320 B - Alkalinity, Total (Continued)

Lab Sample ID: MB 180-389075/6
Matrix: Water
Analysis Batch: 389075

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	<5.0		5.0	5.0	mg/L			02/19/22 12:01	1
Bicarbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/19/22 12:01	1
Carbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/19/22 12:01	1

Lab Sample ID: LCS 180-389075/5
Matrix: Water
Analysis Batch: 389075

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Alkalinity as CaCO3 to pH 4.5			265	258		mg/L		98	90 - 110		

Lab Sample ID: LLCS 180-389075/4
Matrix: Water
Analysis Batch: 389075

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Alkalinity as CaCO3 to pH 4.5			15.9	15.4		mg/L		97	75 - 125		

Lab Sample ID: 180-133638-C-6 DU
Matrix: Water
Analysis Batch: 389075

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Alkalinity as CaCO3 to pH 4.5	<5.0			<5.0		mg/L				NC	20
Bicarbonate Alkalinity as CaCO3	<5.0			<5.0		mg/L				NC	20
Carbonate Alkalinity as CaCO3	<5.0			<5.0		mg/L				NC	20

HPLC/IC

Analysis Batch: 388044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133600-1	PZ-13S	Total/NA	Water	EPA 300.0 R2.1	
180-133600-2	PZ-14S	Total/NA	Water	EPA 300.0 R2.1	
180-133600-3	PZ-17I	Total/NA	Water	EPA 300.0 R2.1	
180-133600-4	PZ-39S	Total/NA	Water	EPA 300.0 R2.1	
180-133600-5	PZ-41S	Total/NA	Water	EPA 300.0 R2.1	
180-133600-6	PZ-42I	Total/NA	Water	EPA 300.0 R2.1	
180-133600-6	PZ-42I	Total/NA	Water	EPA 300.0 R2.1	
180-133600-7	PZ-43S	Total/NA	Water	EPA 300.0 R2.1	
180-133600-8	PZ-44I	Total/NA	Water	EPA 300.0 R2.1	
180-133600-9	FB-1	Total/NA	Water	EPA 300.0 R2.1	
180-133600-10	EB-1	Total/NA	Water	EPA 300.0 R2.1	
180-133600-11	DUP-1	Total/NA	Water	EPA 300.0 R2.1	
180-133600-11	DUP-1	Total/NA	Water	EPA 300.0 R2.1	
MB 180-388044/7	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-388044/6	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-133600-2 MS	PZ-14S	Total/NA	Water	EPA 300.0 R2.1	
180-133600-2 MSD	PZ-14S	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 388136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133641-1	PZ-40I	Total/NA	Water	EPA 300.0 R2.1	
180-133641-1	PZ-40I	Total/NA	Water	EPA 300.0 R2.1	
180-133641-2	PZ-69I	Total/NA	Water	EPA 300.0 R2.1	
MB 180-388136/51	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-388136/50	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-133644-C-1 MS	Matrix Spike	Total/NA	Water	EPA 300.0 R2.1	
180-133644-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	EPA 300.0 R2.1	

Metals

Prep Batch: 388280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133600-1	PZ-13S	Total Recoverable	Water	3005A	
180-133600-2	PZ-14S	Total Recoverable	Water	3005A	
180-133600-3	PZ-17I	Total Recoverable	Water	3005A	
180-133600-4	PZ-39S	Total Recoverable	Water	3005A	
180-133600-5	PZ-41S	Total Recoverable	Water	3005A	
180-133600-6	PZ-42I	Total Recoverable	Water	3005A	
180-133600-7	PZ-43S	Total Recoverable	Water	3005A	
180-133600-8	PZ-44I	Total Recoverable	Water	3005A	
180-133600-9	FB-1	Total Recoverable	Water	3005A	
180-133600-10	EB-1	Total Recoverable	Water	3005A	
180-133600-11	DUP-1	Total Recoverable	Water	3005A	
MB 180-388280/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-388280/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-133600-1 MS	PZ-13S	Total Recoverable	Water	3005A	
180-133600-1 MSD	PZ-13S	Total Recoverable	Water	3005A	

Prep Batch: 388283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133641-1	PZ-40I	Total Recoverable	Water	3005A	

Metals (Continued)

Prep Batch: 388283 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133641-2	PZ-69I	Total Recoverable	Water	3005A	
MB 180-388283/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-388283/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-133461-K-5-B MS	Matrix Spike	Total Recoverable	Water	3005A	
180-133461-K-5-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Prep Batch: 388493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133600-1	PZ-13S	Total/NA	Water	7470A	
180-133600-2	PZ-14S	Total/NA	Water	7470A	
180-133600-3	PZ-17I	Total/NA	Water	7470A	
180-133600-4	PZ-39S	Total/NA	Water	7470A	
180-133600-5	PZ-41S	Total/NA	Water	7470A	
180-133600-6	PZ-42I	Total/NA	Water	7470A	
180-133600-7	PZ-43S	Total/NA	Water	7470A	
180-133600-8	PZ-44I	Total/NA	Water	7470A	
180-133600-9	FB-1	Total/NA	Water	7470A	
180-133600-10	EB-1	Total/NA	Water	7470A	
MB 180-388493/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-388493/2-A	Lab Control Sample	Total/NA	Water	7470A	
180-133600-1 MS	PZ-13S	Total/NA	Water	7470A	
180-133600-1 MSD	PZ-13S	Total/NA	Water	7470A	

Prep Batch: 388494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133600-11	DUP-1	Total/NA	Water	7470A	
MB 180-388494/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-388494/2-A	Lab Control Sample	Total/NA	Water	7470A	
180-133638-F-1-C MS	Matrix Spike	Total/NA	Water	7470A	
180-133638-F-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 388563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133600-1	PZ-13S	Total Recoverable	Water	EPA 6020B	388280
180-133600-2	PZ-14S	Total Recoverable	Water	EPA 6020B	388280
180-133600-3	PZ-17I	Total Recoverable	Water	EPA 6020B	388280
180-133600-4	PZ-39S	Total Recoverable	Water	EPA 6020B	388280
180-133600-5	PZ-41S	Total Recoverable	Water	EPA 6020B	388280
180-133600-6	PZ-42I	Total Recoverable	Water	EPA 6020B	388280
180-133600-7	PZ-43S	Total Recoverable	Water	EPA 6020B	388280
180-133600-8	PZ-44I	Total Recoverable	Water	EPA 6020B	388280
180-133600-9	FB-1	Total Recoverable	Water	EPA 6020B	388280
180-133600-10	EB-1	Total Recoverable	Water	EPA 6020B	388280
180-133600-11	DUP-1	Total Recoverable	Water	EPA 6020B	388280
180-133641-1	PZ-40I	Total Recoverable	Water	EPA 6020B	388283
180-133641-2	PZ-69I	Total Recoverable	Water	EPA 6020B	388283
MB 180-388280/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	388280
MB 180-388283/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	388283
LCS 180-388280/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	388280
LCS 180-388283/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	388283
180-133461-K-5-B MS	Matrix Spike	Total Recoverable	Water	EPA 6020B	388283

Metals (Continued)

Analysis Batch: 388563 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133461-K-5-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	EPA 6020B	388283
180-133600-1 MS	PZ-13S	Total Recoverable	Water	EPA 6020B	388280
180-133600-1 MSD	PZ-13S	Total Recoverable	Water	EPA 6020B	388280

Analysis Batch: 388686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133600-11	DUP-1	Total/NA	Water	EPA 7470A	388494
MB 180-388494/1-A	Method Blank	Total/NA	Water	EPA 7470A	388494
LCS 180-388494/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	388494
180-133638-F-1-C MS	Matrix Spike	Total/NA	Water	EPA 7470A	388494
180-133638-F-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	EPA 7470A	388494

Prep Batch: 388987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133641-1	PZ-40I	Total/NA	Water	7470A	
180-133641-2	PZ-69I	Total/NA	Water	7470A	
MB 180-388987/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-388987/2-A	Lab Control Sample	Total/NA	Water	7470A	
680-211038-D-7-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	
680-211038-D-7-D MS	Matrix Spike	Total/NA	Water	7470A	

Analysis Batch: 389210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133641-1	PZ-40I	Total/NA	Water	EPA 7470A	388987
180-133641-2	PZ-69I	Total/NA	Water	EPA 7470A	388987
MB 180-388987/1-A	Method Blank	Total/NA	Water	EPA 7470A	388987
LCS 180-388987/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	388987
680-211038-D-7-C MSD	Matrix Spike Duplicate	Total/NA	Water	EPA 7470A	388987
680-211038-D-7-D MS	Matrix Spike	Total/NA	Water	EPA 7470A	388987

Analysis Batch: 389466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133600-1	PZ-13S	Total/NA	Water	EPA 7470A	388493
180-133600-2	PZ-14S	Total/NA	Water	EPA 7470A	388493
180-133600-3	PZ-17I	Total/NA	Water	EPA 7470A	388493
180-133600-4	PZ-39S	Total/NA	Water	EPA 7470A	388493
180-133600-5	PZ-41S	Total/NA	Water	EPA 7470A	388493
180-133600-6	PZ-42I	Total/NA	Water	EPA 7470A	388493
180-133600-7	PZ-43S	Total/NA	Water	EPA 7470A	388493
180-133600-8	PZ-44I	Total/NA	Water	EPA 7470A	388493
180-133600-9	FB-1	Total/NA	Water	EPA 7470A	388493
180-133600-10	EB-1	Total/NA	Water	EPA 7470A	388493
MB 180-388493/1-A	Method Blank	Total/NA	Water	EPA 7470A	388493
LCS 180-388493/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	388493
180-133600-1 MS	PZ-13S	Total/NA	Water	EPA 7470A	388493
180-133600-1 MSD	PZ-13S	Total/NA	Water	EPA 7470A	388493

General Chemistry

Analysis Batch: 388075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133600-1	PZ-13S	Total/NA	Water	SM 2540C	
180-133600-2	PZ-14S	Total/NA	Water	SM 2540C	
180-133600-3	PZ-17I	Total/NA	Water	SM 2540C	
180-133600-4	PZ-39S	Total/NA	Water	SM 2540C	
180-133600-5	PZ-41S	Total/NA	Water	SM 2540C	
180-133600-6	PZ-42I	Total/NA	Water	SM 2540C	
180-133600-7	PZ-43S	Total/NA	Water	SM 2540C	
180-133600-8	PZ-44I	Total/NA	Water	SM 2540C	
180-133600-9	FB-1	Total/NA	Water	SM 2540C	
180-133600-10	EB-1	Total/NA	Water	SM 2540C	
180-133600-11	DUP-1	Total/NA	Water	SM 2540C	
MB 180-388075/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-388075/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-133600-1 DU	PZ-13S	Total/NA	Water	SM 2540C	
180-133600-11 DU	DUP-1	Total/NA	Water	SM 2540C	

Prep Batch: 388278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133600-1	PZ-13S	Total/NA	Water	9030B	
180-133600-2	PZ-14S	Total/NA	Water	9030B	
180-133600-3	PZ-17I	Total/NA	Water	9030B	
MB 180-388278/1-A	Method Blank	Total/NA	Water	9030B	
LCS 180-388278/2-A	Lab Control Sample	Total/NA	Water	9030B	
180-133613-A-1-B MS	Matrix Spike	Total/NA	Water	9030B	
180-133613-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	9030B	

Prep Batch: 388282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133600-4	PZ-39S	Total/NA	Water	9030B	
180-133600-5	PZ-41S	Total/NA	Water	9030B	
180-133600-6	PZ-42I	Total/NA	Water	9030B	
180-133600-7	PZ-43S	Total/NA	Water	9030B	
180-133600-8	PZ-44I	Total/NA	Water	9030B	
180-133600-9	FB-1	Total/NA	Water	9030B	
180-133600-10	EB-1	Total/NA	Water	9030B	
180-133600-11	DUP-1	Total/NA	Water	9030B	
MB 180-388282/1-A	Method Blank	Total/NA	Water	9030B	
LCS 180-388282/2-A	Lab Control Sample	Total/NA	Water	9030B	
180-133600-4 MS	PZ-39S	Total/NA	Water	9030B	
180-133600-4 MSD	PZ-39S	Total/NA	Water	9030B	

Analysis Batch: 388385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133600-1	PZ-13S	Total/NA	Water	EPA 9034	388278
180-133600-2	PZ-14S	Total/NA	Water	EPA 9034	388278
180-133600-3	PZ-17I	Total/NA	Water	EPA 9034	388278
MB 180-388278/1-A	Method Blank	Total/NA	Water	EPA 9034	388278
LCS 180-388278/2-A	Lab Control Sample	Total/NA	Water	EPA 9034	388278
180-133613-A-1-B MS	Matrix Spike	Total/NA	Water	EPA 9034	388278
180-133613-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	EPA 9034	388278

General Chemistry

Analysis Batch: 388532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133600-4	PZ-39S	Total/NA	Water	EPA 9034	388282
180-133600-5	PZ-41S	Total/NA	Water	EPA 9034	388282
180-133600-6	PZ-42I	Total/NA	Water	EPA 9034	388282
180-133600-7	PZ-43S	Total/NA	Water	EPA 9034	388282
180-133600-8	PZ-44I	Total/NA	Water	EPA 9034	388282
180-133600-9	FB-1	Total/NA	Water	EPA 9034	388282
180-133600-10	EB-1	Total/NA	Water	EPA 9034	388282
180-133600-11	DUP-1	Total/NA	Water	EPA 9034	388282
MB 180-388282/1-A	Method Blank	Total/NA	Water	EPA 9034	388282
LCS 180-388282/2-A	Lab Control Sample	Total/NA	Water	EPA 9034	388282
180-133600-4 MS	PZ-39S	Total/NA	Water	EPA 9034	388282
180-133600-4 MSD	PZ-39S	Total/NA	Water	EPA 9034	388282

Analysis Batch: 388541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133641-1	PZ-40I	Total/NA	Water	SM 2540C	
180-133641-2	PZ-69I	Total/NA	Water	SM 2540C	
MB 180-388541/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-388541/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-133538-AO-2 DU	Duplicate	Total/NA	Water	SM 2540C	

Prep Batch: 388545

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133641-1	PZ-40I	Total/NA	Water	9030B	
180-133641-2	PZ-69I	Total/NA	Water	9030B	
MB 180-388545/1-A	Method Blank	Total/NA	Water	9030B	
LCS 180-388545/2-A	Lab Control Sample	Total/NA	Water	9030B	
180-133638-E-4-B MS	Matrix Spike	Total/NA	Water	9030B	
180-133638-E-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	9030B	

Analysis Batch: 388646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133641-1	PZ-40I	Total/NA	Water	EPA 9034	388545
180-133641-2	PZ-69I	Total/NA	Water	EPA 9034	388545
MB 180-388545/1-A	Method Blank	Total/NA	Water	EPA 9034	388545
LCS 180-388545/2-A	Lab Control Sample	Total/NA	Water	EPA 9034	388545
180-133638-E-4-B MS	Matrix Spike	Total/NA	Water	EPA 9034	388545
180-133638-E-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	EPA 9034	388545

Analysis Batch: 388836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133600-1	PZ-13S	Total/NA	Water	SM2320 B	
180-133600-2	PZ-14S	Total/NA	Water	SM2320 B	
180-133600-3	PZ-17I	Total/NA	Water	SM2320 B	
180-133600-4	PZ-39S	Total/NA	Water	SM2320 B	
180-133600-5	PZ-41S	Total/NA	Water	SM2320 B	
180-133600-6	PZ-42I	Total/NA	Water	SM2320 B	
180-133600-7	PZ-43S	Total/NA	Water	SM2320 B	
180-133600-8	PZ-44I	Total/NA	Water	SM2320 B	
180-133600-9	FB-1	Total/NA	Water	SM2320 B	
180-133600-10	EB-1	Total/NA	Water	SM2320 B	

General Chemistry (Continued)

Analysis Batch: 388836 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133600-11	DUP-1	Total/NA	Water	SM2320 B	
MB 180-388836/53	Method Blank	Total/NA	Water	SM2320 B	
MB 180-388836/77	Method Blank	Total/NA	Water	SM2320 B	
LCS 180-388836/76	Lab Control Sample	Total/NA	Water	SM2320 B	
LLCS 180-388836/75	Lab Control Sample	Total/NA	Water	SM2320 B	
180-133600-4 DU	PZ-39S	Total/NA	Water	SM2320 B	

Analysis Batch: 389075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133641-1	PZ-40I	Total/NA	Water	SM2320 B	
180-133641-2	PZ-69I	Total/NA	Water	SM2320 B	
MB 180-389075/6	Method Blank	Total/NA	Water	SM2320 B	
LCS 180-389075/5	Lab Control Sample	Total/NA	Water	SM2320 B	
LLCS 180-389075/4	Lab Control Sample	Total/NA	Water	SM2320 B	
180-133638-C-6 DU	Duplicate	Total/NA	Water	SM2320 B	

Analysis Batch: 829718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133600-1	PZ-13S	Total/NA	Water	SM 3500 FE D	
180-133600-2	PZ-14S	Total/NA	Water	SM 3500 FE D	
180-133600-3	PZ-17I	Total/NA	Water	SM 3500 FE D	
180-133600-4	PZ-39S	Total/NA	Water	SM 3500 FE D	
180-133600-5	PZ-41S	Total/NA	Water	SM 3500 FE D	
180-133600-6	PZ-42I	Total/NA	Water	SM 3500 FE D	
180-133600-7	PZ-43S	Total/NA	Water	SM 3500 FE D	
180-133600-8	PZ-44I	Total/NA	Water	SM 3500 FE D	
180-133600-9	FB-1	Total/NA	Water	SM 3500 FE D	
180-133600-10	EB-1	Total/NA	Water	SM 3500 FE D	
180-133600-11	DUP-1	Total/NA	Water	SM 3500 FE D	
MB 460-829718/12	Method Blank	Total/NA	Water	SM 3500 FE D	
LCS 460-829718/13	Lab Control Sample	Total/NA	Water	SM 3500 FE D	
MRL 460-829718/11	Lab Control Sample	Total/NA	Water	SM 3500 FE D	
460-252723-E-1 MS	Matrix Spike	Total/NA	Water	SM 3500 FE D	
460-252723-E-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 3500 FE D	

Analysis Batch: 829723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133641-1	PZ-40I	Total/NA	Water	SM 3500 FE D	
180-133641-2	PZ-69I	Total/NA	Water	SM 3500 FE D	
MB 460-829723/35	Method Blank	Total/NA	Water	SM 3500 FE D	
MB 460-829723/4	Method Blank	Total/NA	Water	SM 3500 FE D	
LCS 460-829723/36	Lab Control Sample	Total/NA	Water	SM 3500 FE D	
LCS 460-829723/5	Lab Control Sample	Total/NA	Water	SM 3500 FE D	
MRL 460-829723/3	Lab Control Sample	Total/NA	Water	SM 3500 FE D	
180-133638-D-1 MS	Matrix Spike	Total/NA	Water	SM 3500 FE D	
180-133638-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 3500 FE D	

Analysis Batch: 829800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133600-1	PZ-13S	Total/NA	Water	SM 3500	
180-133600-2	PZ-14S	Total/NA	Water	SM 3500	

General Chemistry (Continued)

Analysis Batch: 829800 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133600-3	PZ-17I	Total/NA	Water	SM 3500	
180-133600-4	PZ-39S	Total/NA	Water	SM 3500	
180-133600-5	PZ-41S	Total/NA	Water	SM 3500	
180-133600-6	PZ-42I	Total/NA	Water	SM 3500	
180-133600-7	PZ-43S	Total/NA	Water	SM 3500	
180-133600-8	PZ-44I	Total/NA	Water	SM 3500	
180-133600-9	FB-1	Total/NA	Water	SM 3500	
180-133600-10	EB-1	Total/NA	Water	SM 3500	
180-133600-11	DUP-1	Total/NA	Water	SM 3500	

Analysis Batch: 829801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133641-1	PZ-40I	Total/NA	Water	SM 3500	
180-133641-2	PZ-69I	Total/NA	Water	SM 3500	

Field Service / Mobile Lab

Analysis Batch: 388945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133600-1	PZ-13S	Total/NA	Water	Field Sampling	
180-133600-2	PZ-14S	Total/NA	Water	Field Sampling	
180-133600-3	PZ-17I	Total/NA	Water	Field Sampling	
180-133600-4	PZ-39S	Total/NA	Water	Field Sampling	
180-133600-5	PZ-41S	Total/NA	Water	Field Sampling	
180-133600-6	PZ-42I	Total/NA	Water	Field Sampling	
180-133600-7	PZ-43S	Total/NA	Water	Field Sampling	
180-133600-8	PZ-44I	Total/NA	Water	Field Sampling	

Analysis Batch: 389113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133641-1	PZ-40I	Total/NA	Water	Field Sampling	
180-133641-2	PZ-69I	Total/NA	Water	Field Sampling	

TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238-2907
phone 412.963.7058 fax 412.963.2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Dawn Prell	Site Contact: Dawn Prell	Date: 2/10/2022	COC No:
Joju Abraham	Tel/Fax: 248-536-5445	Lab Contact: Shali Brown	Carrier:	__1__ of __1__ COCs
Southern Company	Analysis Turnaround Time			Sampler:
241 Ralph McGill Blvd SE B10185	☑ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Atlanta, GA 30308	TAT if different from Below ___3-5 days___			Walk-in Client:
JAbraham@southernco.com	☐ 2 weeks			Lab Sampling:
Project Name: CCR - Plant Scherer AP1 Assessment	☐ 1 week			
Site: Georgia	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	App III/IV Total Metals	Cl, F, SO4, TDS	Radium 226/228	Mg, Na, K, Mn	Alkalinity (total, CO3, HCO3)	Sulfide	Fe2, Fe3	Sample Specific Notes:
PZ-13S	2/8/2022	16:20	G	GW	6			X	X	X	X	X	X	X	pH= 4.92
PZ-14S	2/8/2022	16:50	G	GW	6			X	X	X	X	X	X	X	pH= 5.42
PZ-17I	2/9/2022	13:10	G	GW	6			X	X	X	X	X	X	X	pH= 6.71
PZ-39S	2/9/2022	10:15	G	GW	6			X	X	X	X	X	X	X	pH= 6.55
PZ-41S	2/9/2022	15:25	G	GW	6			X	X	X	X	X	X	X	pH= 5.95
PZ-42I	2/9/2022	13:10	G	GW	6			X	X	X	X	X	X	X	pH= 6.25
PZ-43S	2/9/2022	10:30	G	GW	8			X	X	X	X	X	X	X	pH= 6.66
PZ-44I	2/9/2022	15:45	G	GW	6			X	X	X	X	X	X	X	pH= 6.57
FB-1	2/9/2022	13:35	G	GW	6			X	X	X	X	X	X	X	
EB-1	2/9/2022	16:30	G	GW	6			X	X	X	X	X	X	X	
DUP-1	2/9/2022	--	G	GW	6			X	X	X	X	X	X	X	
								4	4	4	1	1	5	1	

244-ATLANTA

180-133600 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples ar

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____		
Relinquished by:	Company: GNSP-GAPOW	Date/Time: 02/10/22 825	Received by: Elaine Cook	Company: Courier Nav	Date/Time: 2/10/22
Relinquished by: Dee Moore	Company:	Date/Time: 2/10/22 1000	Received by: Dee Moore	Company:	Date/Time: 2/10/22 1000
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: D Watts	Company: TestAmerica	Date/Time: 2-11-22

Form No. CA-C-WI-002, Rev. 4.20, dated 2/28/2019

TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238-2907
phone 412.963.7058 fax 412.963.2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Dawn Prell	Site Contact: Dawn Prell	Date: 2/11/2022	COC No:
Joju Abraham	Tel/Fax: 248-536-5445	Lab Contact: Shali Brown	Carrier:	__1__ of __1__ COCs
Southern Company	**Analysis Turnaround Time**			Sampler:
241 Ralph McGill Blvd SE B10185	☑ CALENDAR DAYS ☐ WORKING DAYS			**For Lab Use Only:**
Atlanta, GA 30308	TAT if different from Below ___3-5 days___			Walk-in Client:
JAbraham@southernco.com	☐ 2 weeks			Lab Sampling:
Project Name: CCR - Plant Scherer AP1 Assessment	☐ 1 week			
Site: Georgia	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	App III/IV Total Metals	Cl, F, SO4, TDS	Radium 226/228	Mg, Na, K, Mn	Alkalinity (total, CO3, HCO3)	Sulfide	Fe2, Fe3	Sample Specific Notes:
PZ-40I	2/10/2022	11:27	G	GW	6			X	X	X	X	X	X	X	pH= 6.11
PZ-69I	2/10/2022	11:27	G	GW	6			X	X	X	X	X	X	X	pH= 6.61
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____								4	1	4	1	1	5	4	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company: Golder	Date/Time: 2/11/22 16:03	Received by:	Company: ETA	Date/Time: 2/16/22 16:03
Relinquished by:	Company: ETA	Date/Time: 2/16/22 16:30	Received by:	Company: E.E.I. & P.H.	Date/Time: 2/17/22 1245
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 4.20, dated 2/28/2019

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TestAmerica

1 A
10.30 1680 02.11
RT 98 FZ

180-133600 Waybill

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 10FEB22
ACTWGT: 59.25 LB
CAD: 859116/CAFE3510

BILL THIRD PARTY

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058 REF:
INV:
PO: DEPT:

FedEx Express

1 of 6

TRK# 0201 5220 7116 1680

FRI - 11 FEB 10:30A
PRIORITY OVERNIGHT

MASTER

NA AGCA

15238
PA-US PIT

Uncorrected temp 3.5 °C
Thermometer ID 16
CF 0 Initials [illegible]

PT-WI-SR-001 effective 11/8/18

2/28/2022

eurofins | Environment Testing TestAmerica

Part # 159469-434 MTW EXP 09/22

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 10FEB22
ACTWGT: 59.25 LB
CAD: 859116/CAFE3510

BILL THIRD PARTY

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058

REF:
INV:
PO#:
DEPT:

FedEx Express

2 of 6
MPS# 0263 5220 7116 1690
Mstr# 5220 7116 1680 0201

FRI - 11 FEB 10:30A
PRIORITY OVERNIGHT

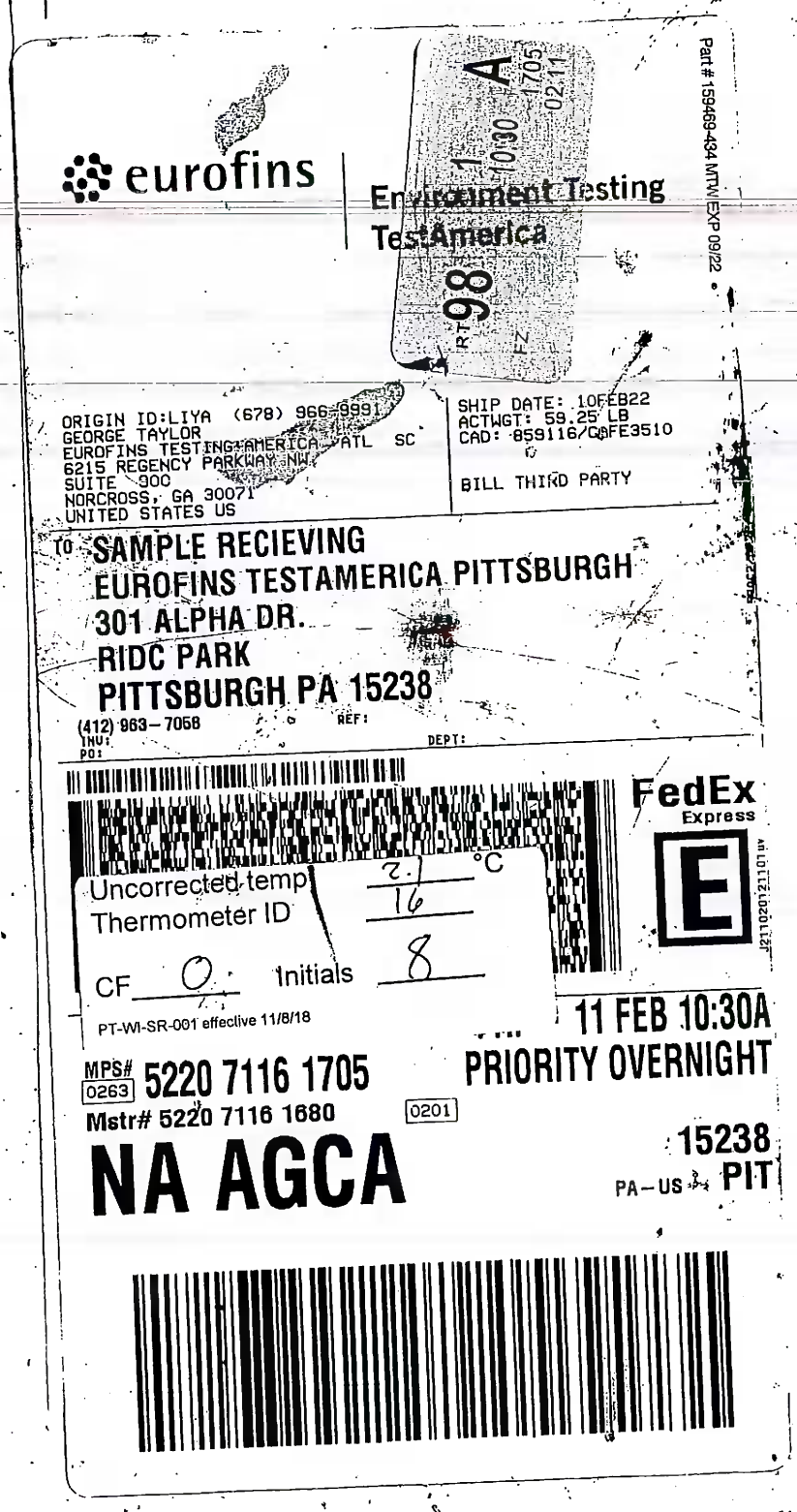
NA AGCA

15238
PA-US PIT

Uncorrected temp 2.1 °C
Thermometer ID 16
CF 0 Initials 8

PT-WI-SR-001 effective 11/8/18

Do not lift using this tag.



eurofins | Environment Testing TestAmerica

Part # 159469-434 MTW EXP 09/22

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 300
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 10FEB22
ACTWGT: 59.25 LB
CAD: 859116/CAFE3510

BILL THIRD PARTY

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058 REF:
INV: DEPT:
PO:

FedEx Express

Uncorrected temp 2.1 °C
Thermometer ID 16
CF 0.0 Initials 8
PT-WI-SR-001 effective 11/8/18

11 FEB 10:30A
PRIORITY OVERNIGHT

MPS# 0263 5220 7116 1705
Mstr# 5220 7116 1680
0201

NA AGCA

15238
PA-US PIT

FedEx®

Do not lift using this tag.

eurofins | Environment Testing TestAmerica

Part # 159469-434-MTW EXP 09/22

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 10FEB22
ACTWGT: 59.25 LB
CAD: 859116/CAFE3510

BILL THIRD PARTY

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238

(412) 963-7058 REF:
INV:
PO: DEPT:

Uncorrected temp 4.6
Thermometer ID 11
CF 0 Initials

PT-WI-SR-001 effective 1-JUL-18

FedEx Express

4 of 6

MPS# 0283 5220 7116 1716

Mstr# 5220 7116 1680

0201

FRI - 11 FEB 10:30A
PRIORITY OVERNIGHT

NA AGCA

15238
PA-US PIT

FZ

eurofins | Environment Testing TestAmerica

Part # 159469-434 MTW EXP 09/22

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 10FEB22
ACTWGT: 59.25 LB
CAD: 859116/CAFE3510

BILL THIRD PARTY

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058

INV:
PO:
REF:
DEPT:

FedEx Express

5 of 6

MPS# 0263 5220 7116 1727

Mstr# 5220 7116 1680

0201

FRI - 11 FEB 10:30A
PRIORITY OVERNIGHT

NA AGCA

15238
PIT
PA-US

°C

Uncorrected temp 4.4
Thermometer ID 16
CF 0 Initials

PT-WI-SR-001 effective 11/8/18

eurofins | Environment Testing TestAmerica

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 10FEB22
ACTWGT: 59.25 LB
CAD: 859116/CAFE3510

BILL THIRD PARTY

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058

INV:
PO:
REF:
DEPT:

°C

Uncorrected temp
Thermometer ID
Initials

FedEx Express

SR-001 effective 11/8/18

1 of 6

FRI - 11 FEB 10:30A
PRIORITY OVERNIGHT

5220 7116 1738

Mstr# 5220 7116 1680

0201

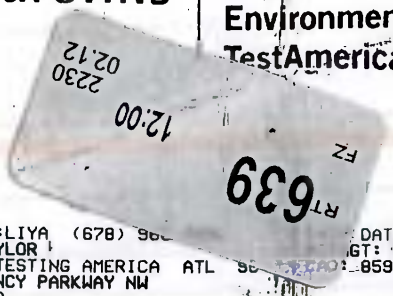
NA-AGCA

15238
PA-US PIT

2/28/2022

Part # 159469-434 MTW EXP 09/22

eurofins | Environment Testing TestAmerica



ORIGIN ID:LIYA (678) 96[illegible]
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SE[illegible]
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

DATE: 11FEB22
GT: 51.15 LB
[illegible]859116/CAFE3510

BILL RECIPIENT

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF: GOLDER - SCHERER

FedEx Express

1 of 6

TRK# 0201 5220 7116 2230

SATURDAY 12:00P
PRIORITY OVERNIGHT

MASTER

NO AGCA

15238
PA-US PIT

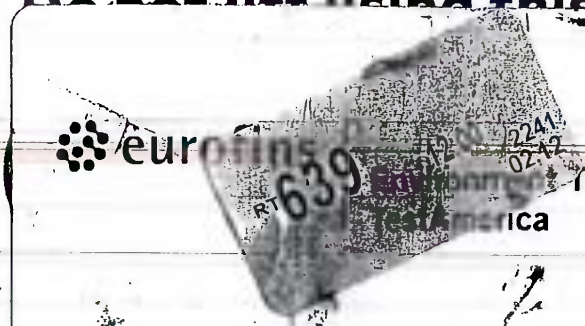
Uncorrected temp 3.3 °C
Thermometer ID 10
CF 0 Initials 8

PT-WI-SR-001 effective 11/8/18

180-133641 Waybill

2/28/2022

Do not lift using this tag



Part # 159469-434 MTW EXP 03/22

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 11FEB22
ACTWGT: 51.15 LB
CAD: 859116/CAFE3510

BILL RECIPIENT

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF: GOLDER -- SCHERER

FedEx Express

2 of 6
MPS# 0263 5220 7116 2241
Mstr# 5220 7116 2230 0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

NO AGCA

15238
PA-US PIT

Uncorrected temp 35 °C
Thermometer ID 16
CF 0 Initials
PT-WI-SR-001 effective 11/8/18

FedEx®

2/28/2022

Part # 159469-494 MTW EXP 09/22

eurofins | Environment Testing TestAmerica

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 11FEB22
ACTWGT: 51.15 LB
CAD: 859116/CAFE3510

BILL RECIPIENT

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF: GOLDER - SCHERER

FedEx Express

J211020121101uv

3 of 6

MPS# 0263 5220 7116 2252

Mstr# 5220 7116 2230

0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

NO AGCA

15238
PA-US PIT

Uncorrected temp 4.6 °C
Thermometer ID 16
CF 0 Initials RB

PT-WI-SR-001 effective 11/8/18

eurofins | Environment Testing America

Part # 159469-434 MTW EXP 09/22

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 11FEB22
ACTWGT: 51.15 LB
CAD: [illegible]/CAFE3510

BILL RECIPIENT

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF: GOLDER – SCHERER

FedEx Express

J211020121101uv

4 of 6

MPS# 0263 5220 7116 2263

Mstr# 5220 7116 2230

0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

NO AGCA

15238
PA-US PIT

Uncorrected temp 2.9 °C
Thermometer ID 16
CF 0 Initials B
PT-WI-SR-001 effect 11/8/16

eurofins Environment Testing America

Part # 159469-434 MTW EXP 09/22

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 11FEB22
ACTWGT: 51.15 LB
CAD: 859116/CAFE3510

BILL RECIPIENT

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF: GOLDER - SCHERER

FedEx Express

5 of 6
MPS# 0263 5220 7116 2274
Mstr# 5220 7116 2230

SATURDAY 12:00P
PRIORITY OVERNIGHT

0201

NO AGCA

15238
PA-US PIT

Uncorrected temp 2.4 °C
Thermometer ID 16
CF 0 Initials 8
PT-WI-SR-001 effective 11/8/18

2/28/2022

Part # 159469-434 MTW EXP 09/22

eurofins | Environment Testing TestAmerica

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 11FEB22
ACTWGT: 51.15 LB
CAD: 859116/CAFE3510

BILL RECIPIENT

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF: GOLDER - SCHERER

FedEx Express

6 of 6
MPS# 0263 5220 7116 2285
Mstr# 5220 7116 2230 0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

NO AGCA

15238
PA-US PIT

Uncorrected temp 4.7 °C
Thermometer ID 16
CF 0 Initials

PT-WI-SR-001 effective 11/8/18

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-454808.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: Georgia	Page: Page 1 of 2
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note):		Job #: 180-133600-1
Address: 777 New Durham Road, ,	Due Date Requested: 2/24/2022	Analysis Requested		Preservation Codes:
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			
Email:	WO #:			
Project Name: Plant Scherer AP1 Assessment	Project #: 18019884			
Site: CCR Plant Scherer	SSOW#:			Other:

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	3500_Fe+3_D_Cal/ Iron, Ferric	3500_FE_D/ Iron, Ferrous	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
PZ-13S (180-133600-1)	2/8/22	16:20 Eastern		Water			X	X	1	
PZ-14S (180-133600-2)	2/8/22	16:50 Eastern		Water			X	X	1	
PZ-17I (180-133600-3)	2/9/22	13:10 Eastern		Water			X	X	1	
PZ-39S (180-133600-4)	2/9/22	10:15 Eastern		Water			X	X	1	
PZ-41S (180-133600-5)	2/9/22	15:25 Eastern		Water			X	X	1	
PZ-42I (180-133600-6)	2/9/22	13:10 Eastern		Water			X	X	1	
PZ-43S (180-133600-7)	2/9/22	10:30 Eastern		Water			X	X	1	
PZ-44I (180-133600-8)	2/9/22	15:45 Eastern		Water			X	X	1	
FB-1 (180-133600-9)	2/9/22	13:35 Eastern		Water			X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Pittsburgh.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ______ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: [signature]	Date/Time: 2/14/22 1700	Company: [signature]	Received by: [signature] FedEx	Date/Time: 2/15/22 1005	Company: EETAEL
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: 10 CS		Cooler Temperature(s) °C and Other Remarks: 1.5/1.4, 2.4/2.3 °C IR9		

Ver: 06/08/2021

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-454808.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: Georgia	Page: Page 2 of 2
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note):		Job #: 180-133600-1
Address: 777 New Durham Road, ,	Due Date Requested: 2/24/2022			
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			
Email:	WO #:			
Project Name: Plant Scherer AP1 Assessment	Project #: 18019884			
Site: CCR Plant Scherer	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	3500_Fe+3_D_Cal/ Iron, Ferric	3500_FE_D/ Iron, Ferrous	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
EB-1 (180-133600-10)	2/9/22	16:30 Eastern		Water			X	X	1	
DUP-1 (180-133600-11)	2/9/22	Eastern		Water			X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Pittsburgh.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		2/11/22 1700		FedEx	2/15/22 1005	EETAcct.
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-133600-1

Login Number: 133600

List Source: Eurofins Pittsburgh

List Number: 1

Creator: Watson, Debbie

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-133600-1

Login Number: 133600
List Number: 2
Creator: Armbruster, Chris

List Source: Eurofins Edison
List Creation: 02/15/22 12:01 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.4, 2.3°C IR9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-133600-1

Login Number: 133641

List Source: Eurofins Pittsburgh

List Number: 1

Creator: Jodis, Matthew V

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-133600-1

Login Number: 133641
List Number: 2
Creator: Armbruster, Chris

List Source: Eurofins Edison
List Creation: 02/15/22 12:01 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.4, 2.3°C IR9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX C

Sen’s Slope / Mann Kendall Trends

Appendix IV Trend Tests - Significant Results

Plant Scherer Client: Southern Company Data: Scherer AP Printed 12/13/2021, 10:05 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Cobalt (mg/L)	**SGWA-1 (bg)**	**-0.003452**	**-134**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Cobalt (mg/L)	**SGWA-25 (bg)**	**-0.002372**	**-137**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Cobalt (mg/L)	**SGWC-11**	**-0.003186**	**-157**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Cobalt (mg/L)	**SGWC-20**	**-0.02466**	**-109**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix IV Trend Tests - All Results

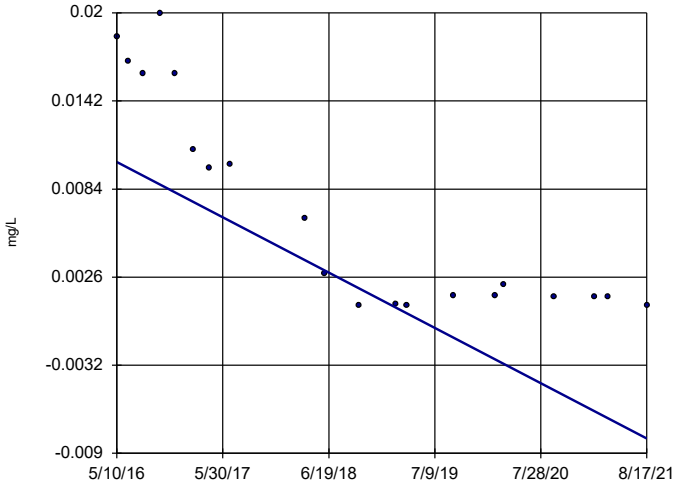
Plant Scherer Client: Southern Company Data: Scherer AP Printed 12/13/2021, 10:05 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Cobalt (mg/L)	**SGWA-1 (bg)**	**-0.003452**	**-134**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Cobalt (mg/L)	SGWA-2 (bg)	0	-1	-81	No	20	90	n/a	n/a	0.01	NP
Cobalt (mg/L)	SGWA-24 (bg)	0	-39	-81	No	20	60	n/a	n/a	0.01	NP
Cobalt (mg/L)	**SGWA-25 (bg)**	**-0.002372**	**-137**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Cobalt (mg/L)	SGWA-3 (bg)	0	15	81	No	20	95	n/a	n/a	0.01	NP
Cobalt (mg/L)	SGWA-4 (bg)	0	3	81	No	20	90	n/a	n/a	0.01	NP
Cobalt (mg/L)	SGWA-5 (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Cobalt (mg/L)	SGWC-10	0	7	81	No	20	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	**SGWC-11**	**-0.003186**	**-157**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Cobalt (mg/L)	SGWC-15	0	5	81	No	20	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	SGWC-18	-0.0002105	-9	-81	No	20	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	**SGWC-20**	**-0.02466**	**-109**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

SGWA-1 (bg)



n = 20

Slope = -0.003452 units per year.

Mann-Kendall statistic = -134
critical = -81

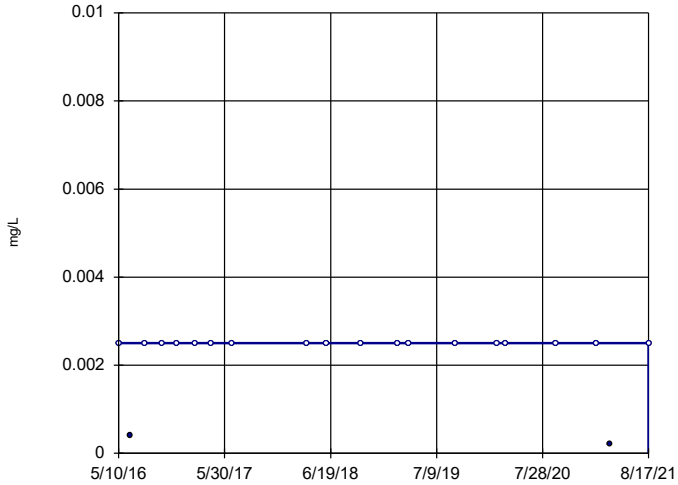
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 12/13/2021 10:04 AM View: Appendix IV - Trend Tests
Plant Scherer Client: Southern Company Data: Scherer AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

SGWA-2 (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = -1
critical = -81

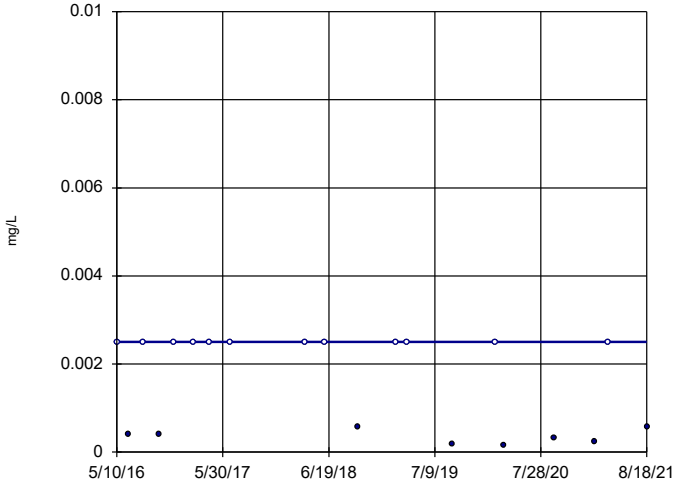
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 12/13/2021 10:04 AM View: Appendix IV - Trend Tests
Plant Scherer Client: Southern Company Data: Scherer AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

SGWA-24 (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = -39
critical = -81

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

Constituent: Cobalt Analysis Run 12/13/2021 10:04 AM View: Appendix IV - Trend Tests
Plant Scherer Client: Southern Company Data: Scherer AP

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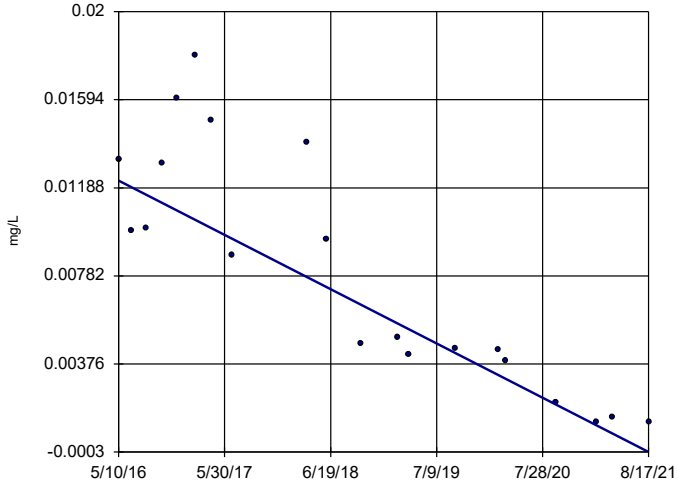
Sen's Slope Estimator

SGWA-25 (bg)



n = 20

Slope = -0.002372 units per year.

Mann-Kendall statistic = -137
critical = -81

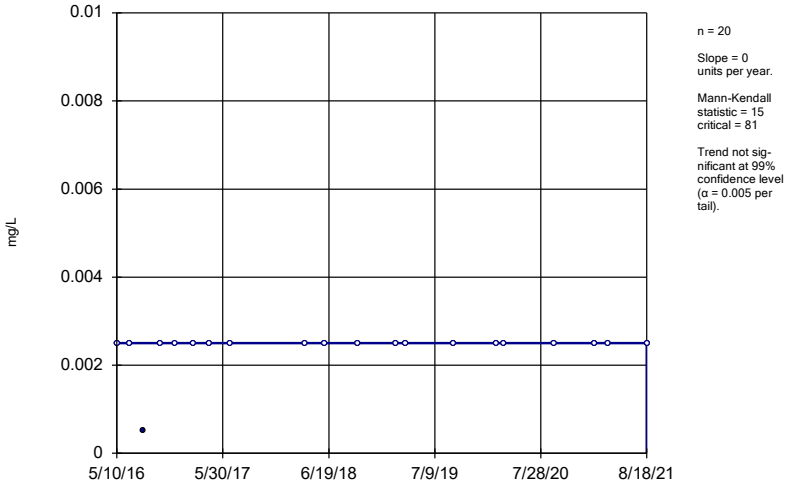
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 12/13/2021 10:04 AM View: Appendix IV - Trend Tests
Plant Scherer Client: Southern Company Data: Scherer AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

SGWA-3 (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 15
critical = 81

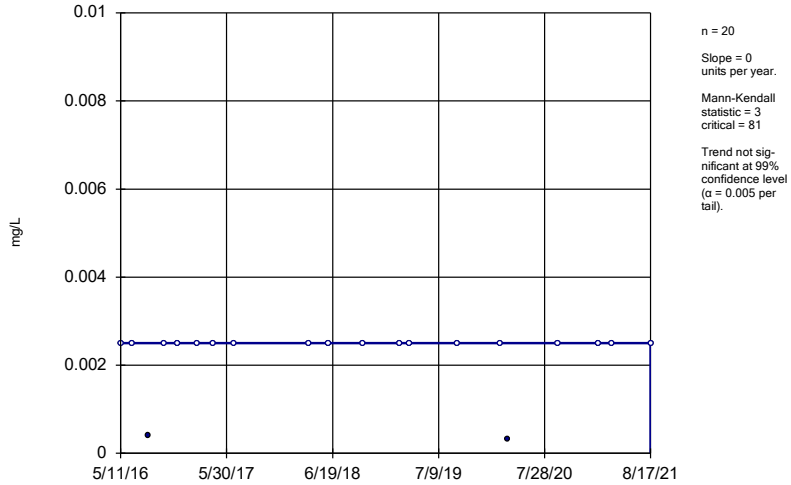
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 12/13/2021 10:04 AM View: Appendix IV - Trend Tests
Plant Scherer Client: Southern Company Data: Scherer AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

SGWA-4 (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 3
critical = 81

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

Constituent: Cobalt Analysis Run 12/13/2021 10:04 AM View: Appendix IV - Trend Tests
Plant Scherer Client: Southern Company Data: Scherer AP

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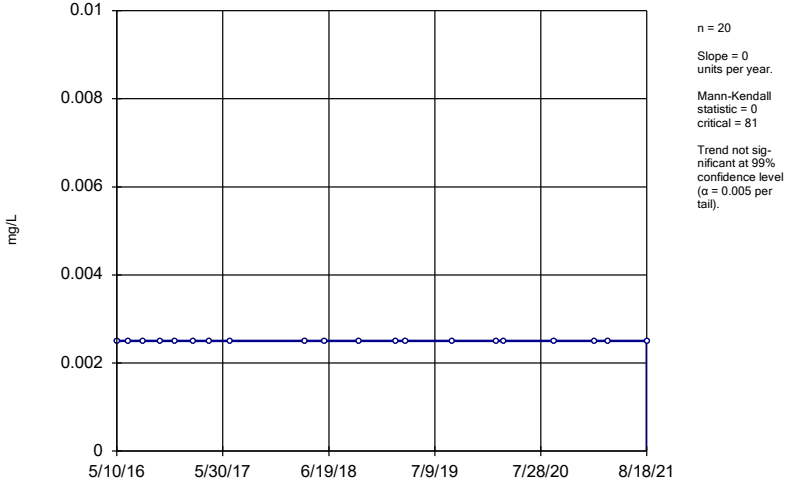
Hollow symbols indicate censored values.

Sen's Slope Estimator

SGWA-5 (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 81

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

Constituent: Cobalt Analysis Run 12/13/2021 10:04 AM View: Appendix IV - Trend Tests
Plant Scherer Client: Southern Company Data: Scherer AP

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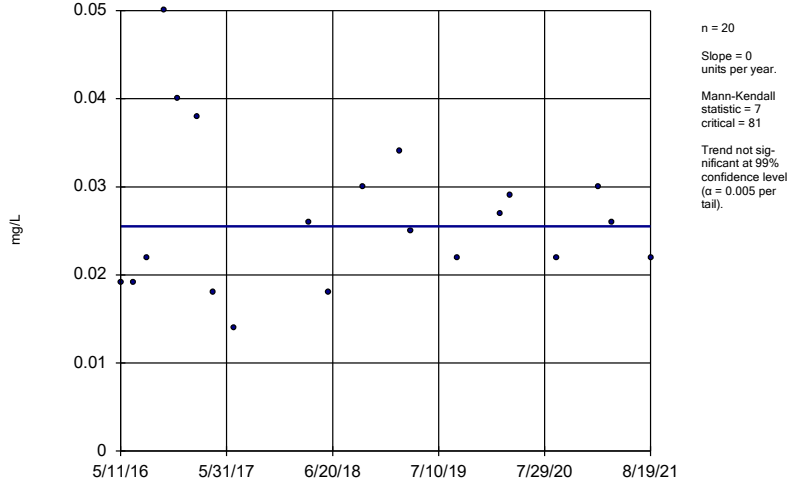
Sen's Slope Estimator

SGWC-10



n = 20

Slope = 0 units per year.

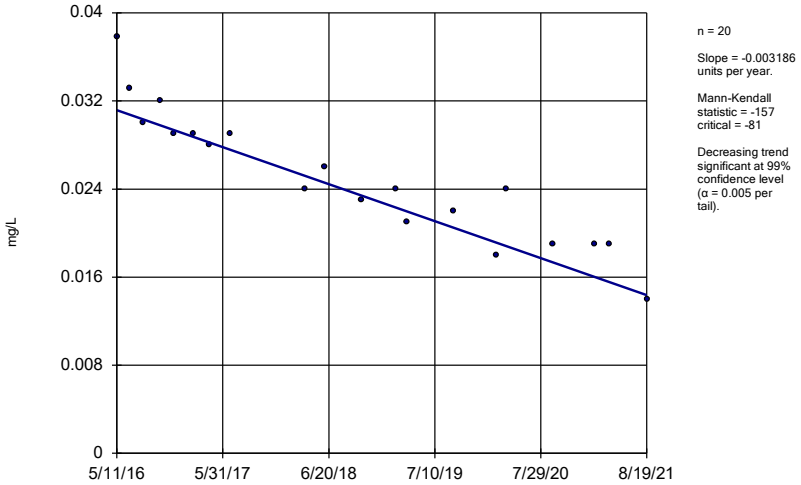
Mann-Kendall statistic = 7
critical = 81

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

Constituent: Cobalt Analysis Run 12/13/2021 10:04 AM View: Appendix IV - Trend Tests
Plant Scherer Client: Southern Company Data: Scherer AP

Sen's Slope Estimator

SGWC-11



n = 20

Slope = -0.003186 units per year.

Mann-Kendall statistic = -157
critical = -81

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

Constituent: Cobalt Analysis Run 12/13/2021 10:04 AM View: Appendix IV - Trend Tests
Plant Scherer Client: Southern Company Data: Scherer AP

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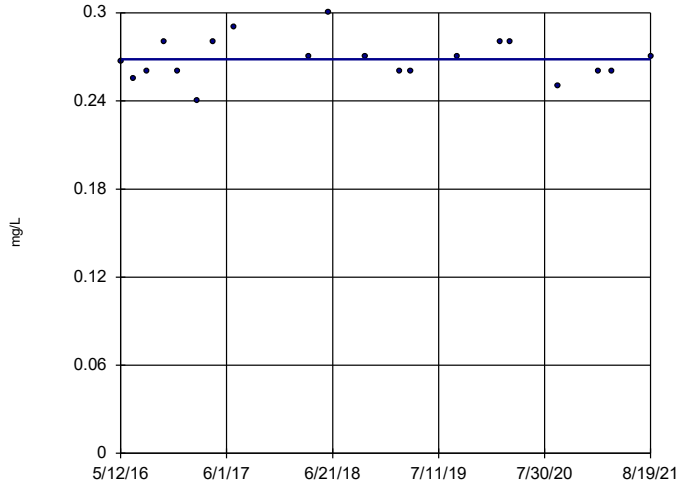
Sen's Slope Estimator

SGWC-15



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 5
critical = 81

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

Constituent: Cobalt Analysis Run 12/13/2021 10:04 AM View: Appendix IV - Trend Tests
Plant Scherer Client: Southern Company Data: Scherer AP

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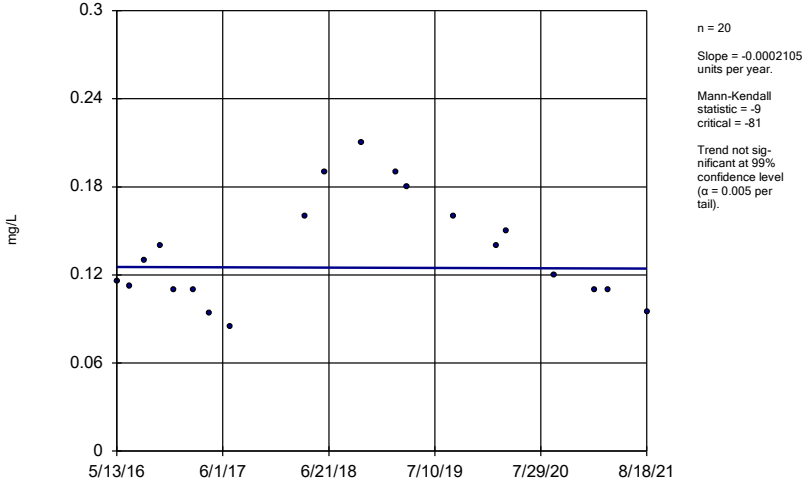
Sen's Slope Estimator

SGWC-18



n = 20

Slope = -0.0002105 units per year.

Mann-Kendall statistic = -9
critical = -81

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

Constituent: Cobalt Analysis Run 12/13/2021 10:04 AM View: Appendix IV - Trend Tests
Plant Scherer Client: Southern Company Data: Scherer AP

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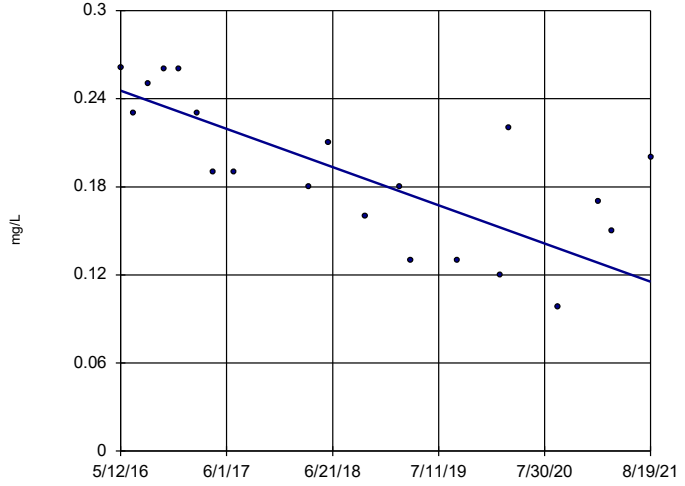
Sen's Slope Estimator

SGWC-20



n = 20

Slope = -0.02466 units per year.

Mann-Kendall statistic = -109
critical = -81

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

Constituent: Cobalt Analysis Run 12/13/2021 10:04 AM View: Appendix IV - Trend Tests
Plant Scherer Client: Southern Company Data: Scherer AP

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