Texas Commission on Environmental Quality

Waste Permits Division Correspondence Cover Sheet

Date: January 31, 2022
Facility Name: San Miguel Electric Cooperative, Inc.
Permit or Registration No.: SWR 31434

Nature of Correspondence:
☒ Initial/New
☐ Response/Revision to TCEQ Tracking No.: _____ (from subject line of TCEQ letter regarding initial submission)

Affix this cover sheet to the front of your submission to the Waste Permits Division. Check appropriate box for type of correspondence. Contact WPD at (512) 239-2335 if you have questions regarding this form.

Table 1 - Municipal Solid Waste Correspondence

Applications	Reports and Notifications
☐ New Notice of Intent	☐ Alternative Daily Cover Report
☐ Notice of Intent Revision	☐ Closure Report
☐ New Permit (including Subchapter T)	☐ Compost Report
☐ New Registration (including Subchapter T)	☐ Groundwater Alternate Source Demonstration
☐ Major Amendment	☐ Groundwater Corrective Action
☐ Minor Amendment	☐ Groundwater Monitoring Report
☐ Limited Scope Major Amendment	☐ Groundwater Background Evaluation
☐ Notice Modification	☐ Landfill Gas Corrective Action
☐ Non-Notice Modification	☐ Landfill Gas Monitoring
☐ Transfer/Name Change Modification	☐ Liner Evaluation Report
☐ Temporary Authorization	☐ Soil Boring Plan
☐ Voluntary Revocation	☐ Special Waste Request
☐ Subchapter T Disturbance Non-Enclosed Structure	☐ Other:
☐ Other:	

Table 2 - Industrial & Hazardous Waste Correspondence

Applications	Reports and Responses
☐ New	☐ Annual/Biennial Site Activity Report
☐ Renewal	☐ CPT Plan/Result
☐ Post-Closure Order	☐ Closure Certification/Report
☐ Major Amendment	☐ Construction Certification/Report
☐ Minor Amendment	☐ CPT Plan/Result
☐ CCR Registration	☐ Extension Request
☐ CCR Registration Major Amendment	☒ Groundwater Monitoring Report
☐ CCR Registration Minor Amendment	☐ Interim Status Change
☐ Class 3 Modification	☐ Interim Status Closure Plan
☐ Class 2 Modification	☐ Soil Core Monitoring Report
☐ Class 1 ED Modification	☐ Treatability Study
☐ Class 1 Modification	☐ Trial Burn Plan/Result
☐ Endorsement	☐ Unsaturated Zone Monitoring Report
☐ Temporary Authorization	☐ Waste Minimization Report
☐ Voluntary Revocation	☐ Other:
☐ 335.6 Notification	
☐ Other:	

2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

San Miguel Electric Cooperative, Inc.
Christine, Atascosa County, Texas

Issued: 31 January 2022

Prepared for: San Miguel Electric Cooperative, Inc.

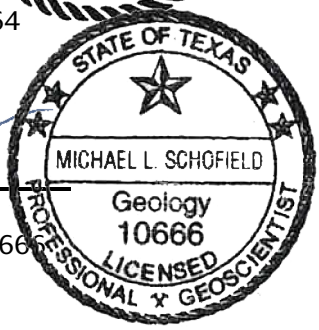
GSI Environmental Inc.

9600 Great Hills Trail, Suite 350E, Austin, Texas 78759-6387 ■ P: 512.346.4474

2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

San Miguel Electric Cooperative, Inc.
Christine, Atascosa County, Texas

Stephen D. Richardson, PhD, PE
Texas Professional Engineer, #116664



Michael L. Schofield, PG
Texas Professional Geoscientist, #10666

Prepared for:

SAN MIGUEL ELECTRIC COOPERATIVE, INC.

Prepared by:

GSI Environmental Inc.
9600 Great Hills Trail, Suite 350E
Austin, TX 78759

GSI Job No. 5076
Issued: 31 January 2022

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1.0 INTRODUCTION

On behalf of San Miguel Electric Cooperative, Inc. (San Miguel), GSI Environmental Inc. (GSI) has prepared this Coal Combustion Residuals (CCR) Annual Groundwater Monitoring and Corrective Action Report for the San Miguel Electric Plant (the Plant) located near Christine, Atascosa County, Texas. This report, prepared in accordance with requirements specified in 40 Code of Federal Regulations (CFR) § 257.90(e) and 30 Texas Administrative Code (TAC) § 352.901 (which incorporates § 257.90 by reference), summarizes activities conducted during the period of 1 January to 31 December 2021 for the CCR management units at the Plant.

1.1 Plant Overview

The Plant has three units used for the management of CCR that are subject to requirements in 40 CFR Part 257, Subpart D and 30 TAC § 352 (herein, "the CCR Rule"): the Ash Pile, the Combined Ash Transport Ponds (Ash Ponds), and the East Equalization Pond (Figure 1).

Ash Pile: The Ash Pile, located northwest of the Plant operations area and east of the Lignite Storage Pile, is a CCR landfill as defined by 40 CFR § 257.53/30 TAC § 352.3 with an area of approximately one acre. It is used for temporary storage of CCR, specifically a stabilized mixture of fly ash and flue gas desulfurization (FGD) scrubber waste treatment sludge. CCR materials are collected from the Ash Pile, typically on a daily basis, and are transported to the mine.

Ash Ponds (Combined Ash Transport Ponds): In 2019-2020, Ash Pond A and Ash Pond B, located along the southern boundary of the Plant and east of the Yard Drainage Retention Pond, were retrofitted to meet the requirements in 40 CFR § 257.70(b)/ 30 TAC § 352.701. Ash Ponds A and B were retrofitted as follows: i) dewatering and removal of all CCR from the ponds (staged at the Ash pile and transported to the mine), ii) regrading and compacting of the ponds to obtain slopes and surfaces conducive to installation of liner elements, and iii) installation of a 60-mil HDPE liner as required by 40 CFR § 257.101(a)(1)/ 30 TAC § 352.1211. The retrofitted Ash Pond A occupies the same footprint as the original Ash Pond A, while Ash Pond B was divided into two parts during the retrofit process, with the current Ash Pond B on the east side of the original footprint, and the South Equalization Basin on the west. The South Equalization Basin replaces the East Equalization Pond which is currently undergoing closure (discussed below). Overall, the retrofitted Ash Ponds and South Equalization Pond (referred to collectively as the Combined Ash Transport Ponds) occupy the same footprint of former Ash Ponds A and B.

Ash Ponds A and B receive process flows from bottom ash transport, the Lignite Yard Retention Pond, cooling tower blowdown, plant floor drainage, direct precipitation, stormwater runoff, and boiler feeder treatment wastewater (ERM 2016). The South Equalization Basin accepted water from dewatering activities at the East Equalization Pond in 2020-2021, and now accepts CCR wastes that formerly entered the East Equalization Pond.

East Equalization Pond: The East Equalization Pond, formerly known as the Equalization Pond, is located on the eastern boundary of the Plant property and was formerly used to receive flue gas desulfurization scrubber wastewater (a spent limestone slurry) and treated sewage wastewater from the San Miguel Plant. San Miguel is conducting closure activities at the East Equalization Pond, which consist

of dewatering, grading, and compaction of the existing sediments, and the installation of the final cap system. The final cap will consist of at least 18 inches of compacted clay with a permeability of less than 1 x 10^{-7} cm/s overlain by at least 6 inches of topsoil, in accordance with 40 CFR § 257.102(d)(3)/ 30 TAC § 352.1221. Installation of the final clay cap and overlain topsoil was nearing completion in December 2021. It is anticipated that final closure of the East Equalization Pond will be completed in 2022.

1.2 Geology & Hydrogeology

Shallow geologic units at the San Miguel Plant consist of unconsolidated Eocene age sediments of the Jackson Group, with Quaternary alluvium present along surface drainages. The Jackson Group sediments typically comprise surficial and shallow stiff clays overlying a shallow silty to clayey water-bearing sand. This sand is designated as "Unit 22." Unit 22 meets the definition of an "uppermost aquifer" at the Plant based on the CCR Rule (40 CFR § 257.53/30 TAC § 352.3) and is therefore the focus of San Miguel's groundwater monitoring under the CCR Rule. Unit 22 is a green-gray fine-grained sand unit. In the immediate Plant area, the upper contact of Unit 22 varies from 5 to 30 ft below ground surface (bgs) and has a thickness ranging from 5 to 25 ft. Unit 22 is discontinuous in the area northwest of the plant, and the water-bearing portion of this stratum terminates along a boundary located northwest of the Ash Pile area (see Section 4.2).

2.0 GROUNDWATER MONITORING PROGRAM HIGHLIGHTS, 40 CFR § 257.90(E) AND (E)(1)/ 30 TAC § 352.901

2.1 Status of Groundwater Monitoring Program

The Ash Pile is currently in detection monitoring, while the Ash Ponds and East Equalization Pond are in corrective action monitoring that meets the requirements of assessment monitoring pursuant to 40 CFR § 257.98(a)(1)(i)/ 30 TAC §352.981. Groundwater at the three CCR units is monitored on a semiannual basis. A map of the Plant showing the three CCR units and all Plant upgradient and downgradient monitoring wells is provided in Figure 1. Figure 1 also depicts observation wells, groundwater extraction wells and off-Plant (non-CCR) network monitoring wells.

2.2 Summary of Key Actions Completed

Key actions completed for the three CCR units during this reporting period included:

- February 2021 and August 2021 Semiannual Groundwater Monitoring Events, as required by 40 CFR § 257.94 and 30 TAC § 352.941 (Ash Pile) and 40 CFR § 257.95/§ 257.98 and 30 TAC § 352.951/§ 352.981 (Ash Ponds and East Equalization Pond).

- Transition to Hydrologic Monitoring LLC (HMI Groundwater) as sampling consultant. GSI performed semiannual sampling in February 2021, and HMI Groundwater conducted the August 2021 semiannual groundwater monitoring event under GSI direction and oversight.

Additional activities at the Ash Pile included:

- pH Re-Testing Event. pH field parameter readings collected at the Ash Pile in August 2021 event were biased low and were below background comparison criteria at wells SP-34, SP-02, SP-03, and SP-32. A re-testing event was conducted in October 2021, consistent with the 1-of-3 re-

testing approach outlined in the Background Comparison Value Update for the unit (GSI 2021), designed to ensure a sitewide false positive rate (SWPFR) of less than 10% (or 5% for each of the two semiannual sampling events; TCEQ 2020, USEPA 2009). Results from the re-testing event did not confirm the August pH measurements, indicating that the August results were likely influenced by equipment calibration issues.

Additional actions for the Ash Ponds and East Equalization Pond included:

- Continued Implementation of the Groundwater Remedy for the Ash Ponds and East Equalization Pond. Continued implementation of the remedy was performed via operation and maintenance of six solar-powered groundwater extraction wells, placed at areas of elevated COC concentrations in groundwater downgradient of the referenced units. This work was performed in accordance with the requirements of 40 CFR § 257.98/ 30 TAC § 352.981.

- Source Control & Closure Activities at the East Equalization Pond. San Miguel is currently performing closure activities at the East Equalization Pond. Closure of the unit is anticipated in 2022. Source control was identified as a component of the final groundwater remedy in the *Selection of Groundwater Remedy* report dated 26 May 2020 prepared by GSI.

2.3 Description of Problems Encountered and Resolution

During the reporting period, one issue was identified and resolved at the Ash Pile:

- pH Re-Testing Event. Initial pH measurements at several Ash Pile monitoring wells were outside the background range in August 2021. This potential issue, however, was resolved after a re-testing event in October. The August 2021 deviations from background were determined to result from instrument calibration problems. Future sampling events will continue to be performed in accordance with the Groundwater Sampling and Analysis Plan (GSI, 2019) and re-calibration of the instrument will be conducted to improve the reliability of the measurements.

During the reporting period, one issue was identified and is in the process of being resolved at the Ash Ponds and East Equalization Pond:

- Combined Radium Results. A systematic increase in combined radium results was noted at the Ash Pond and East Equalization Pond monitoring networks in August 2021. The increase appeared in both upgradient and downgradient wells and was likely related to the laboratory subcontractor transition between the February and August sampling events. February 2021 radium analyses were performed by Pace Analytical National, Mount Juliet, TN on behalf of DHL Analytical, Austin, TX, and August 2021 radium analyses were performed by Eurofins TestAmerica, St. Louis, MO on behalf of Eurofins Xenco, Stafford, TX. Eurofins TestAmerica noted in the laboratory job narrative that August 2021 results were produced using Method 901.1, which infers Radium-226 from Bismuth-214 and infers Radium-228 from Actinium-228. February 2021 and prior results were generated from Methods 904 and SM 7500 Ra B, which use different tracers (Ra-226 is inferred from Ba-133 and Ra-228 is inferred from a combination of Barium & Yttrium). Methods 904 and SM 7500 Ra B (used in February 2021) are the approved methods per the SAP, and GSI is actively working with the laboratories to understand the discrepancy between semiannual radium results and to resolve any deviations from the SAP analyte list for future sampling events.

2.4 Projected Key Activities for the Upcoming Year

In 2022, projected key activities include:

- Semiannual groundwater monitoring at the CCR units, as required by 40 CFR § 257.94/ 30 TAC § 352.941 (Ash Pile) and § 257.98(a)(1)(i) (Ash Ponds and East Equalization Pond).
- Continued Implementation of the Groundwater Remedy for the Ash Ponds and East Equalization Pond in accordance with the requirements of 40 CFR § 257.98/ 30 TAC § 352.981.
- Closure of the East Equalization Pond.
- In 2021, USEPA approved the Texas partial CCR state permit program, which allows the Texas Commission on Environmental Quality (TCEQ) to enforce rules promulgated under its solid waste statute related to CCR activities. San Miguel intends to submit a Registration Application to the TCEQ for the three CCR units at the Plant that are subject to regulation under Title 40, Code of Federal Regulations, Part 257 (40 CFR § 257) and 30 TAC § 352.

3.0 GROUNDWATER MONITORING WELL NETWORK, 40 CFR § 257.90(E)(2)/ 30 TAC § 352.901

3.1 CCR Unit-Specific Monitoring Wells

The groundwater monitoring well network for the CCR units at the Plant consists of 31 monitoring wells installed between July 2015 and October 2016 (AECOM, 2018; ERM, 2017) (Figure 1). The well network includes: five monitoring wells for the Ash Pile, 11 monitoring wells for the Ash Ponds, nine monitoring wells for the East Equalization Pond, and six groundwater observation wells (Table 1). The wells are screened in Unit 22.

Pursuant to 40 TAC § 257.91(c)(1)/ 30 TAC § 352.911, each CCR unit has a minimum of one upgradient and three downgradient wells. Semiannual monitoring continues to be conducted, as described in Section 5.0. The purpose of this monitoring is to measure groundwater elevations across the Plant and to evaluate possible changes in groundwater quality associated with each unit. The observation wells are used principally for groundwater elevation measurements.

No monitoring wells were added or removed from the CCR unit-specific monitoring well network in 2021. Maintenance of existing wells was performed by San Miguel in April 2021 to address issues identified during well inspections performed during the February 2021 semiannual sampling event, including replacement of well locks and repair of well labels and traffic bollards. All wells were found to be in good working condition during the August 2021 sampling event.

3.2 Additional Groundwater Monitoring at the Plant

There were no changes to the CCR unit-specific monitoring well network in 2021. Routine monitoring of the Ash Pond and East Equalization Pond extraction wells is ongoing to assess performance of the system (see Section 6.5).

4.0 GROUNDWATER MONITORING DATA, 40 CFR § 257.90(E)(3)/ 30 TAC § 352.901

4.1 Summary of Groundwater Samples Collected

Field measurements and groundwater sampling were performed in general accordance with the Groundwater Sampling and Analysis Plan (GSI, 2019). The sample collection and analytical procedures presented in the Sampling and Analysis Plan are consistent with current industry standards and practices and meet the requirements in § 257.93.

A summary of groundwater samples collected for the CCR unit semiannual monitoring events is provided in Table 1. Specifically, this table provides the number of groundwater samples that were collected for analysis from each upgradient and downgradient well, the sampling date, and regulatory program, as required by 40 CFR § 257.90(e)(3)/ 30 TAC §352.901.

4.2 Groundwater Flow Direction

The semiannual groundwater monitoring events were conducted in February 2021 and August 2021. Upgradient, downgradient, and observation wells were gauged prior to sampling, and the resulting groundwater elevation data are summarized in Table 2. In general, a hydrologic high in the northwest corner of the Plant causes localized radial groundwater flow in the vicinity of the Ash Pile, and southeast to easterly flow in the vicinity of the Ash Ponds and East Equalization Pond (Figures 2 and 3). The Ash Pile is in a transitional zone where Unit 22 thins and rises in elevation westward, with the water-bearing portion of this stratum terminating along a boundary northwest of observation well SP-33 (Figures 2 and 3).

4.3 Semiannual Groundwater Monitoring Results

In addition to water level gauging, the semiannual groundwater monitoring events included measurement of field parameters prior to sample collection. Field measurements included temperature, pH, specific conductance, oxidation-reduction potential, dissolved oxygen, and turbidity (Table 3). Results from the February 2021 and August 2021 groundwater monitoring events at the CCR upgradient and downgradient wells are summarized in Tables 4A – 4C. Cumulative results for all CCR network wells are provided in Appendix A.

- Ash Pile: At the Ash Pile, the upgradient and downgradient wells were sampled and analyzed for Appendix III constituents, consistent with the requirements for detection monitoring (40 CFR § 257.94(a)/ 30 TAC § 352.941). Results are summarized in Table 4A. Potential statistical outliers to the background pH range were identified in August 2021 but were rejected after re-testing (see Section 2.3).

- Ash Ponds: At the Ash Ponds, the upgradient and downgradient wells were sampled and analyzed for Appendix III and IV constituents, consistent with the requirements for assessment (40 CFR § 257.95/ 30 TAC §352.951) and corrective action monitoring (40 CFR § 257.98(a)(i)/ 30 TAC § 352.981). The 2021 semiannual monitoring results for the Ash Ponds are summarized in Table 4B. As noted above in Section 2.3, a systematic increase in combined radium results was noted at the Ash Pond monitoring network in August 2021, likely caused by laboratory methods. The Appendix IV constituents with exceedances of the groundwater protection standard (GWPS) in wells in 2021 were antimony (upgradient well PZ-03), lead (PZ-03, AP-32,

AP-33, and AP-34), mercury (AP-32, AP-33, AP-34, and AP-35) selenium (PZ-03, AP-33, AP-34), and combined radium (PZ-02, AP-31, AP-32, AP-33, AP-34, AP-35, MW-03, PZ-05, and PZ-06).

- East Equalization Pond: At the East Equalization Pond, the upgradient and downgradient wells were sampled and analyzed for Appendix III and IV constituents, consistent with the requirements for assessment 40 CFR § 257.95/ 30 TAC §352.951) and corrective action monitoring (40 CFR § 257.98(a)(i)/ 30 TAC § 352.981). As noted above in Section 2.3, a systematic increase in combined radium results was noted at the East Equalization Pond monitoring network in August 2021, likely caused by laboratory methods. The Appendix IV constituents with exceedances of GWPS in 2021 were arsenic (EP-31 and EP-38), selenium (EP-31), thallium (EP-31), and combined radium (EP-31, EP-32, EP-33, EP-34, EP-35, EP-36, EP-37, EP-38, and MW-04).

Data validation was completed on all laboratory analytical results. Any variances between sampling and analytical procedures and the specifications in the SAP, along with an evaluation of any potential impact of those variances on data usability, are discussed in the Data Usability Summaries provided in Appendix B.

5.0 MONITORING PROGRAM TRANSITIONS, 40 CFR § 257.90(E)(4)/ 30 TAC § 352.901

Groundwater monitoring programs continued unchanged in 2021. For reference, the status of monitoring program at each unit is summarized below:

- Ash Pile. In 2021, detection monitoring continued.

- Ash Ponds. In 2021, corrective action monitoring continued. This unit transitioned to assessment monitoring in 2018 based on an SSI evaluation (Zephyr, 2018). It continued to be addressed in the assessment monitoring program in the first and second quarter of 2020, until July 2020, when remedy construction began. Construction of the retrofit liner system in the Combined Ash Transport Ponds was completed in November 2020, at which point the unit transitioned to corrective action monitoring. Future corrective action monitoring will be conducted pursuant to (40 CFR § 257.98(a)(i)/ 30 TAC § 352.981). This monitoring will be done in a manner consistent with the assessment monitoring process described in 40 CFR § 257.95/ 30 TAC §352.951.

- East Equalization Pond. In 2021, corrective action monitoring continued. This unit transitioned to assessment monitoring in 2018 based on an SSI determination (Zephyr, 2018). As with the Ash Ponds, it was transitioned to corrective action monitoring in 2020. The 2021 semiannual monitoring results are summarized in Table 4C. Future corrective action monitoring will be conducted pursuant to (40 CFR § 257.98(a)(i)/ 30 TAC § 352.981). This monitoring will be done in a manner consistent with the assessment monitoring process, as required by 40 CFR § 257.95/ 30 TAC §352.951.

6.0 OTHER INFORMATION, § 257.90(E)(5)/ 30 TAC § 352.901

There is no other information to report pertinent to 40 CFR § 257.90/ 30 TAC§ 352.901 through 40 CFR § 257.98/ 30 TAC § 352.981 in this reporting period.

6.1 Detection Monitoring Program, § 257.94/ 30 TAC §352.941

The following information applies to the Ash Pile. 30 TAC §352.941 adopts by reference 40 CFR §257.94 (Detection monitoring program) as amended through the April 17, 2015, issue of the Federal Register (80 FR 21301), therefore the citations in this section refer directly to the federal rule text.

- Target Analytes, § 257.94(a). Laboratory analyses were performed for all constituents listed in Appendix III of the CCR Rule, as required by § 257.94(a).
- Monitoring Frequency, § 257.94(b) and (d). Semiannual detection monitoring was completed in 2021 and is ongoing. No alternative monitoring frequency has been developed or proposed.
- Number and Location of Samples, § 257.94(c). At least one sample was collected from each upgradient and downgradient well during each semiannual monitoring event, as required by § 257.94(c).
- Data Evaluation, § 257.94(e). Results from semiannual detection monitoring are provided in Table 4A. Results below background pH comparison values were observed in August 2021 but were not attributed to a release, as confirmed by re-testing.
- Recordkeeping, § 257.94(f). The 2020 annual groundwater monitoring report was posted to the San Miguel website on 26 February 2021.

6.2 Assessment Monitoring Program, 40 CFR § 257.95/ 30 TAC § 352.951

The following information applies to the Ash Ponds and East Equalization Pond. The Ash Ponds and East Equalization Pond were formerly under assessment monitoring but transitioned from assessment to corrective action monitoring in 2020. See section 6.5 for details on the Corrective Action Monitoring Program (which complies with the assessment monitoring requirements of 30 TAC § 352.951, which adopts by reference § 257.95 as amended through the April 17, 2015, issue of the Federal Register (80 FR 21301).

6.3 Assessment of Corrective Measures, 40 CFR § 257.96/ 30 TAC § 352.961

Not applicable for this reporting period.

6.4 Selection of Remedy, 40 CFR § 257.97/ 30 TAC § 352.971

Not applicable for this reporting period.

6.5 Implementation of Corrective Action Program, 40 CFR § 257.98/ 30 TAC § 352.981

In 2021, several corrective actions related to the selected remedy at the Ash Ponds and East Equalization Pond were performed pursuant to 40 CFR § 257.98(a)/ 30 TAC § 352.981. 30 TAC § 352.981 adopts by reference 40 CFR § 257.98 (Implementation of the corrective action program) as amended through the April 17, 2015, issue of the Federal Register (80 FR 21301), therefore the citations in this section refer directly to the federal rule text.

- Corrective Action Groundwater Monitoring Program: Corrective action monitoring has the same requirements as those set forth in assessment monitoring. As required by § 257.98(a)(1)(i), the program complies with the requirements of § 257.95, including:

  - Target Analytes, § 257.95(a) and (b). Laboratory analysis was performed for all constituents listed in Appendix III and IV of the CCR Rule. Although the CCR Rule allows for some flexibility, the semiannual monitoring event included all Appendix III and IV constituents.
  - Monitoring Frequency, § 257.95(b), (c) and (d)(1). Semiannual corrective action monitoring was completed in February 2021 and August 2021. No alternative monitoring frequency has been developed or proposed for the Ash Ponds or Equalization Pond.
  - Number and Location of Samples, § 257.95(d)(1). At least one sample was collected from each upgradient and downgradient well during each semiannual monitoring event, as required by § 257.95(d)(1).
  - Data Evaluation, § 257.95(d)(2) through (h). Results are provided in Table 4B and 4C. As noted in Section 4.3, the key constituents exceeding Appendix IV GWPS in 2021 were antimony, lead, mercury, selenium, and combined radium for the Ash Ponds, and arsenic, selenium, thallium, and combined radium for the East Equalization Pond.
  - Recordkeeping, § 257.95(i). The 2020 annual groundwater monitoring report was posted to the San Miguel website on 26 February 2021.

- Source Control: San Miguel is currently performing closure activities at the East Equalization Pond. Closure of the unit is anticipated in 2022. Source control was identified as a component of the final groundwater remedy in the Selection of Groundwater Remedy report dated 26 May 2020 prepared by GSI. In addition to source control measures, an interceptor trench was installed in November 2020 to receive seepage from the East Equalization Pond. The interceptor trench is a temporary measure and does not intercept Unit 22.

- Hydraulic Control: Six groundwater extraction wells (EW-01 to -06; see Figure 1) were operated downgradient of the Combined Ash Transport Ponds and East Equalization Pond in areas of elevated boron and other metals concentrations to remove the groundwater containing the greatest mass of metals. Although boron is an Appendix III constituent, and therefore does not drive the extent of groundwater cleanup, it is both associated with CCR releases to groundwater and can be considered a conservative "tracer" of such releases. The groundwater extraction system operated throughout 2021, with periods of shutdown for maintenance and water management. Extracted groundwater previously pumped back to the Ash Pond (from EW-01 to -04) and East Equalization Pond (from EW-05 and EW-06) was re-routed in 2021 to the Combined Ash Transport Ponds to facilitate decommissioning of the East Equalization Pond. Once closure of the East Equalization Pond is completed, groundwater extraction is expected to reduce the concentrations of metals in groundwater to such a degree that MNA can achieve GWPSs in a reasonable timeframe. Performance monitoring of the extraction system, including data collection and evaluation, is ongoing at the Ash Ponds and East Equalization Pond, as required by § 257.98(b).

7.0 REFERENCES

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United States Environmental Protection Agency (USEPA), 2009. Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance. Office of Resource Conservation and Recovery.

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Job No. 5076
Issued: 31 January 2022

2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

San Miguel Electric Cooperative, Inc.
Christine, Atascosa County, Texas

Tables

TABLE 1
Groundwater Sampling Event Summary - 2021

San Miguel Electric Cooperative, Inc.
Christine, Atacosa County, Texas

Well ID	Installation Date	Well Type	Hydraulic Location	Number of Samples	Sample Date	Monitoring Program
Ash Pile						
SP-34	10/19/2016	Upgradient Monitoring Well	Upgradient	2	2/24/2021	Detection
					8/18/2021	Detection
SP-01	11/12/2015	Downgradient Monitoring Well	Downgradient	2	2/25/2021	Detection
					8/18/2021	Detection
SP-02	11/13/2015	Downgradient Monitoring Well	Downgradient	2	2/25/2021	Detection
					8/18/2021	Detection
SP-03	11/11/2015	Downgradient Monitoring Well	Downgradient	2	2/25/2021	Detection
					8/18/2021	Detection
SP-32	5/5/2016	Downgradient Monitoring Well	Downgradient	2	2/25/2021	Detection
					8/18/2021	Detection
Ash Ponds						
PZ-02	11/14/2015	Upgradient Monitoring Well	Upgradient	2	2/24/2021	Assessment
					8/18/2021	Assessment
PZ-03	11/18/2015	Upgradient Monitoring Well	Upgradient	2	2/24/2021	Assessment
					8/18/2021	Assessment
AP-31	4/30/2016	Downgradient Monitoring Well	Downgradient	2	2/24/2021	Assessment
					8/18/2021	Assessment
AP-32	4/29/2016	Downgradient Monitoring Well	Downgradient	2	2/24/2021	Assessment
					8/18/2021	Assessment
AP-33	4/29/2016	Downgradient Monitoring Well	Downgradient	2	2/24/2021	Assessment
					8/18/2021	Assessment
AP-34	4/28/2016	Downgradient Monitoring Well	Downgradient	2	2/25/2021	Assessment
					8/18/2021	Assessment
AP-35	4/28/2016	Downgradient Monitoring Well	Downgradient	2	2/25/2021	Assessment
					8/18/2021	Assessment
AP-36	4/27/2016	Downgradient Monitoring Well	Downgradient	2	2/25/2021	Assessment
					8/18/2021	Assessment
MW-03	7/30/2015	Downgradient Monitoring Well	Downgradient	2	2/24/2021	Assessment
					8/18/2021	Assessment
PZ-05	11/16/2015	Downgradient Monitoring Well	Downgradient	2	2/24/2021	Assessment
					8/18/2021	Assessment
PZ-06	11/20/2015	Downgradient Monitoring Well	Downgradient	2	2/25/2021	Assessment
					8/18/2021	Assessment

TABLE 1
Groundwater Sampling Event Summary - 2021

San Miguel Electric Cooperative, Inc.
Christine, Atacosa County, Texas

Well ID	Installation Date	Well Type	Hydraulic Location	Number of Samples	Sample Date	Monitoring Program
East Equalization Pond						
EP-31	5/4/2016	Upgradient Monitoring Well	Upgradient	2	2/24/2021	Assessment
					8/18/2021	Assessment
EP-32	5/4/2016	Downgradient Monitoring Well	Downgradient	2	2/24/2021	Assessment
					8/18/2021	Assessment
EP-33	5/3/2016	Downgradient Monitoring Well	Downgradient	2	2/24/2021	Assessment
					8/18/2021	Assessment
EP-34	5/3/2016	Downgradient Monitoring Well	Downgradient	2	2/24/2021	Assessment
					8/18/2021	Assessment
EP-35	5/2/2016	Downgradient Monitoring Well	Downgradient	2	2/24/2021	Assessment
					8/18/2021	Assessment
EP-36	5/2/2016	Downgradient Monitoring Well	Downgradient	2	2/24/2021	Assessment
					8/18/2021	Assessment
EP-37	4/26/2016	Downgradient Monitoring Well	Downgradient	2	2/25/2021	Assessment
					8/18/2021	Assessment
EP-38	4/27/2016	Downgradient Monitoring Well	Downgradient	2	2/25/2021	Assessment
					8/18/2021	Assessment
MW-04	7/31/2015	Downgradient Monitoring Well	Downgradient	2	2/25/2021	Assessment
					8/18/2021	Assessment
Groundwater Observation Wells						
MW-01	7/30/2015	Observation Well (Equalization pond)	Crossgradient	n/a; Observation Wells not sampled in 2021		
MW-02	7/28/2015	Observation Well (Ash pond)	Crossgradient			
PZ-04	11/14/2015	Observation Well (Ash pond)	Crossgradient			
PZ-07	11/19/2015	Observation Well (Equalization pond)	Crossgradient			
SP-31	5/5/2016	Observation Well (Ash pile)	Crossgradient			
SP-33	10/18/2016	Observation Well (Ash pile)	Upgradient			

Notes:
1. East Equalization Pond closure activities occurred throughout 2021.
2. For the observation wells, the nearest CCR unit is provided for reference. Gradients listed are relative to that unit.
3. Number of samples does not include field duplicates.
4. n/a = not applicable.
5. HMI Groundwater became the sampling consultant at the site in August 2021 (previously GSI Environmental, Inc.).

TABLE 2
Groundwater Elevation Data - 2021

San Miguel Electric Cooperative, Inc.
Christine, Atascosa County, Texas

Well ID	Top of Casing Elevation (ft amsl)	Date	Total Depth (ft btoc)	Depth to water (SWL) (ft btoc)	Groundwater Elevation (ft amsl)
Ash Pile					
SP-34 (upgradient)	334.62	2/23/2021	51.62	30.15	304.47
		8/18/2021	51.70	28.51	306.11
SP-01	325.25	2/23/2021	44.66	26.74	302.51
		8/18/2021	47.78	25.30	303.95
SP-02	333.48	2/23/2021	47.60	28.50	304.98
		8/18/2021	50.74	27.63	305.85
SP-03	332.00	2/23/2021	49.74	28.73	303.27
		8/18/2021	52.58	28.42	303.58
SP-32	327.89	2/23/2021	44.68	25.86	302.03
		8/18/2021	45.54	24.81	303.08
Ash Ponds					
PZ-02 (upgradient)	318.92	2/23/2021	68.06	30.94	287.98
		8/18/2021	66.75	30.07	288.85
PZ-03 (upgradient)	323.19	2/23/2021	57.30	31.75	291.44
		8/18/2021	55.82	30.65	292.54
AP-31	292.80	2/23/2021	26.22	9.07	283.73
		8/18/2021	25.79	6.28	286.52
AP-32	297.94	2/23/2021	36.60	16.70	281.24
		8/18/2021	36.66	14.27	283.67
AP-33	304.67	2/23/2021	45.05	23.03	281.64
		8/18/2021	44.53	21.00	283.67
AP-34	296.32	2/23/2021	41.41	15.28	281.04
		8/18/2021	40.65	13.65	282.67
AP-35	298.36	2/23/2021	47.51	15.91	282.45
		8/18/2021	46.61	14.49	283.87
AP-36	288.75	2/23/2021	45.20	7.27	281.48
		8/18/2021	43.35	6.42	282.33
MW-03	295.90	2/23/2021	42.16	13.87	282.03
		8/18/2021	42.65	11.22	284.68
PZ-05	302.77	2/23/2021	51.47	20.54	282.23
		8/18/2021	50.08	18.73	284.04
PZ-06	297.42	2/23/2021	54.63	15.03	282.39
		8/18/2021	53.59	14.20	283.22

TABLE 2
Groundwater Elevation Data - 2021

San Miguel Electric Cooperative, Inc.
Christine, Atascosa County, Texas

Well ID	Top of Casing Elevation (ft amsl)	Date	Total Depth (ft btoc)	Depth to water (SWL) (ft btoc)	Groundwater Elevation (ft amsl)
East Equalization Pond					
EP-31 (upgradient)	316.70	2/23/2021	66.47	24.46	292.24
		8/18/2021	64.70	23.16	293.54
EP-32	277.44	2/23/2021	45.18	3.14	274.30
		8/18/2021	44.45	5.73	271.71
EP-33	278.00	2/23/2021	45.34	2.08	275.92
		8/18/2021	44.33	3.33	274.67
EP-34	278.71	2/23/2021	50.09	2.14	276.57
		8/18/2021	49.16	2.61	276.10
EP-35	279.86	2/23/2021	48.15	3.34	276.52
		8/18/2021	46.97	3.34	276.52
EP-36	278.50	2/23/2021	47.92	3.75	274.75
		8/18/2021	47.46	3.38	275.12
EP-37	277.80	2/23/2021	47.78	4.66	273.14
		8/18/2021	48.69	2.50	275.30
EP-38	279.35	2/23/2021	42.38	2.15	277.20
		8/18/2021	42.55	1.44	277.91
MW-04	278.58	2/23/2021	47.75	2.27	276.31
		8/18/2021	47.50	1.74	276.84
Groundwater Observation Wells					
MW-01	289.16	2/23/2021	53.94	8.94	280.22
		8/18/2021	52.22	11.12	278.04
MW-02	317.68	2/23/2021	64.95	32.43	285.25
		8/18/2021	64.12	31.60	286.08
PZ-04	303.21	2/23/2021	34.58	13.64	289.57
		8/18/2021	33.90	11.75	291.46
PZ-07	281.99	2/23/2021	46.45	3.42	278.57
		8/18/2021	46.60	2.78	279.21
SP-31	335.01	2/23/2021	59.62	31.57	303.44
		8/18/2021	59.79	28.67	306.34
SP-33	329.96	2/23/2021	31.60	22.04	307.92
		8/18/2021	31.75	21.79	308.17

Notes:

1. Table includes wells in CCR unit monitoring network as well as Observation Wells, which are not part of the CCR monitoring program.
2. Measurements correspond to gauging completed for semiannual CCR monitoring program.
3. ft amsl = feet above mean sea level; ft btoc = feet below top of casing; SWL = static water level.
4. Top of casing elevations from AECOM Groundwater Sampling Report - Event 8 - August 2017.

TABLE 3
Field Parameter Results - 2021

San Miguel Electric Cooperative, Inc.
Christine, Atascosa County, Texas

Well ID	Sample Date	Temperature (°C)	pH (SU)	Specific Conductance (uS/cm)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
Ash Pile							
SP-34 (upgradient)	2/24/2021	23.9	3.39	11000	434	0.40	2.66
	8/18/2021	28.2	2.07	10880	460.3	1.50	25.1
	10/7/2021	-	2.98	-	-	-	-
SP-01	2/25/2021	23.5	4.33	14590	309.1	0.33	7.3
	8/18/2021	28.6	2.19	15490	306.2	1.40	3.5
	10/7/2021	-	2.99	-	-	-	-
SP-02	2/25/2021	25.1	6.46	11810	186.8	0.29	1.91
	8/18/2021	28.2	4.66	12330	235.8	1.00	9.2
	10/7/2021	-	5.11	-	-	-	-
SP-03	2/25/2021	24.9	3.79	15290	411.2	0.53	15.5
	8/18/2021	27.7	2.76	15330	424.3	1.40	16.3
	10/7/2021	-	3.32	-	-	-	-
SP-32	2/25/2021	23.1	3.58	14370	437.3	0.85	19.3
	8/18/2021	27.8	2.74	10970	407.9	1.30	20.8
	10/7/2021	-	3.48	-	-	-	-
Ash Ponds							
PZ-02 (upgradient)	2/24/2021	26.7	5.95	12960	84.7	1.01	41
	8/18/2021	27.5	5.67	18810	41.5	2.20	42.9
PZ-03 (upgradient)	2/24/2021	25.3	3.24	19000	422.6	0.13	13.4
	8/18/2021	26.6	3.06	24400	382	2.30	66
AP-31	2/24/2021	23.7	3.68	10180	537.7	0.69	3.26
	8/18/2021	30.8	3.68	9520	543	3.80	22.1
AP-32	2/24/2021	25	3.35	12700	433.8	5.13	4.11
	8/18/2021	29.8	3.35	11690	470	6.00	20.1
AP-33	2/24/2021	24.6	3.19	16170	402	0.16	6.1
	8/18/2021	30.6	3.2	14880	397.2	3.30	19.7
AP-34	2/25/2021	23.2	4.49	10760	375.3	0.21	1.37
	8/18/2021	30.1	3.15	11030	349.3	3.00	19.5
AP-35	2/25/2021	23.5	4.72	9450	283.7	0.22	5.8
	8/18/2021	26.7	2.56	9570	415.2	1.40	6.8
AP-36	2/25/2021	23.4	5.2	7880	265.9	0.23	6.15
	8/18/2021	25.8	3.27	8470	269.2	1.40	8.7
MW-03	2/24/2021	25.1	3.49	11900	468.1	3.45	3.08
	8/18/2021	31.3	3.48	11010	455	3.80	22.6
PZ-05	2/24/2021	24.3	3.32	11000	336	0.23	19.3
	8/18/2021	30.9	3.31	10650	352.7	3.20	27.2
PZ-06	2/25/2021	23	6.71	8220	16	0.22	6.28
	8/18/2021	27.7	5.39	11810	58.7	2.30	51.1

TABLE 3
Field Parameter Results - 2021

San Miguel Electric Cooperative, Inc.
Christine, Atascosa County, Texas

Well ID	Sample Date	Temperature (°C)	pH (SU)	Specific Conductance (uS/cm)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
East Equalization Pond							
EP-31 (upgradient)	2/24/2021	23.8	3.9	5530	380.1	0.72	8.71
	8/18/2021	25.8	3.37	7190	305.3	1.20	19.9
EP-32	2/24/2021	22.6	6.89	11570	-53.3	0.47	3.38
	8/18/2021	27.7	6.6	17840	-92.5	2.80	14.4
EP-33	2/24/2021	23.9	7.01	12770	-32.9	0.42	5.97
	8/18/2021	28	6.45	14030	-69.9	3.00	18.8
EP-34	2/24/2021	23.4	6.64	13880	2.6	0.89	6.08
	8/18/2021	28.6	6.81	15710	80.1	1.70	9.3
EP-35	2/24/2021	22.9	6.54	14270	20.1	0.30	4.22
	8/18/2021	27.7	6.28	14610	-16.1	1.70	27
EP-36	2/24/2021	22.2	6.57	13670	-33.8	0.29	2.03
	8/18/2021	28	6.22	13050	-13.2	1.90	8.9
EP-37	2/25/2021	25.3	6.65	13640	-10.9	0.15	15.5
	8/18/2021	27.3	6.36	13610	-57.5	1.80	9.5
EP-38	2/25/2021	23	5.87	7510	84.4	0.19	1.52
	8/18/2021	27.7	5.84	7410	39.5	1.70	32.5
MW-04	2/25/2021	22.1	6.46	8740	82.3	0.53	39.8
	8/18/2021	29.5	6.22	8040	13	1.50	39.7

Notes:

1. °C = degrees Celsius; SU - standard unit; mV = millivolts; uS/cm = microsiemens per centimeter; mg/L = milligrams per liter; NTU = nephelometric turbidity unit; > = greater than
2. "--" = not measured;
3. Decreases below pH background were noted in Ash Pile wells SP-02, SP-03, SP-32, and SP-34 in August 2021. Confirmation re-testing was performed at all Ash Pile wells in October 2021 and derivations from the background range were not confirmed.
4. February 2021 sampling was performed by GSI Environmental, Inc. February pH values were collected with a YSI Professional Plus Multiparameter Instrument. HMI Groundwater became the sampling consultant in August 2021, and collected pH values with a Hanna Instruments HI9125 meter. October 2021 confirmation re-testing was performed with the YSI Professional meter.
5. Observation wells were gauged in 2021 but were not sampled; observation wells are not part of the CCR monitoring network.

TABLE 4A
Ash Pile Groundwater Analytical Results - 2021

San Miguel Electric Cooperative, Inc.
Christine, Atascosa County, Texas

			Appendix III Constituents						
		Analyte:	pH (field)	Boron	Calcium	Chloride	Fluoride	Sulfate	TDS
		Units:	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Well ID	Sample Date	Type							
SP-34	Background:		2.23 - 3.73	21	827	3380	<10	3900	9000
(upgradient)	2/24/2021	N	3.39	11.2	751	2730	3.99	2610	8300
	8/18/2021	N	2.07	10.4	812	2810	5.18 JH	2490	6430
	10/7/2021	Re-Test	2.98	-	-	-	-	-	-
SP-01	Background:		2.07 - 5.52	11.3	694	3690	22	8530	16900
	2/25/2021	N	4.33	7.8	547	3290	5.91	6950	15200
	2/25/2021	Dup	-	8.08	551	3280	6	7120	15500
	8/18/2021	N	2.19	4.79	581	3210	16.8 JH	7200	4960
	10/7/2021	Re-Test	2.99	-	-	-	-	-	-
SP-02	Background:		5.09 - 6.6	13.1	1420	5320	<10	2580	17100
	2/25/2021	N	6.46	10.5	1060	3830	<0.5	1810	9040
	8/18/2021	N	4.66	10.5	1060	3750	<5	1840	8740
	8/18/2021	Dup	-	10.4	1070	3770	<5	1830	8930
	10/7/2021	Re-Test	5.11	-	-	-	-	-	-
SP-03	Background:		3.3 - 5.15	9	924	4810	<10	3730	13500
	2/25/2021	N	3.79	7.32	838	4620	<0.5	2560	11700
	8/18/2021	N	2.76	6.97	913	4710	<5	2530	10100
	10/7/2021	Re-Test	3.32	-	-	-	-	-	-
SP-32	Background:		2.81 - 3.94	11.1	510	1930	17.5	11800	18600
	2/25/2021	N	3.58	8.72	474	1930	4.22	9220	16000
	8/18/2021	N	2.74	7.92	497	1570	8.51 JH	6950	11800
	10/7/2021	Re-Test	3.48	-	-	-	-	-	-

Notes:
1. This table includes semiannual detection monitoring (Appendix III) results from the upgradient and downgradient wells at the Ash Pile for the reporting year.
2. See GSI 2021 (Appendix B.2) for development of background comparison values.
3. Cells in orange indicate exceedances of background comparison values. pH measurements in August 2021 were biased low. Decreases below pH background were noted in Ash Pile wells SP-02, SP-03, SP-32, and SP-34 in August 2021. Confirmation re-testing was performed at all Ash Pile wells in October 2021 and background exceedances were not confirmed.
4. February 2021 sampling was performed by GSI Environmental, Inc. February pH values were collected with a YSI Professional Plus Multiparameter Instrument. HMI Groundwater became the sampling consultant in August 2021, and collected pH values with a Hanna Instruments HI9125 meter. October 2021 confirmation re-testing was performed with both meters; reported results are from the Hanna HI9125.
5. Fluoride is included in both Appendix III and Appendix IV analyte lists.
6. TDS = Total Dissolved Solids; mg/L = milligrams per liter; SU = standard units; SDL = sample detection limit; RL = reporting limit.
7. N = normal sample; Dup = field duplicate; "<" = not detected at the SDL; J = analyte detected between the SDL and RL.
8. See Appendix A for cumulative results from all CCR groundwater monitoring network wells.

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TABLE 4B
Ash Ponds Groundwater Analytical Results - 2021

San Miguel Electric Cooperative, Inc.
Christine, Atascosa County, Texas

			Appendix III Constituents							Appendix IV Constituents														
Analyte:			**pH, field**	**Boron**	**Calcium**	**Chloride**	**Fluoride**	**Sulfate**	**Total Dissolved Solids**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Chromium**	**Cobalt**	**Lead**	**Lithium**	**Mercury**	**Molybdenum**	**Selenium**	**Thallium**	**Radium-226**	**Radium-228**	**Combined Radium**
Units:			SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	pCi/L
MCL:			-	-	-	-	4	-	-	0.006	0.01	2	0.004	0.005	0.1	0.006	0.015	0.04	0.002	0.1	0.05	0.002	-	-	5
Background (Note 5):			3.43 - 4.09	15.01	908.6	4430	9.837	5630	15819	0.004	0.0868	0.0403	0.584	0.618	0.067	1.94	0.006	3.911	0.00008	0.006	0.528	0.02	3.567	4.991	8.558
ASD Comparison Values (Note 6):			4.33 - 7.72	21.19	1610	14000	67	6380	27000	-	-	-	-	-	-	-	-	See Note 6	-	-	-	-	-	-	-
GWPS (Note 7):			3.43	21.19	1610	14000	67	6380	27000	0.006	0.0868	2	0.584	0.618	0.1	1.94	0.015	3.911	0.002	0.1	0.528	0.02	n/a	n/a	8.558
Well ID	**Sample Date**	**Type**																							
PZ-02	2/24/2021	N	5.95	7.15	799	3900	<0.5	2620	10500	<0.0008	0.00513	0.0702	0.00285	<0.0003	0.0137	0.0132	0.00743	1.4	<0.00008	<0.002	0.00566	0.0017	0.596 ± 0.29 JH	-1.14 ± 0.377	0.596 ± 0.667 JH
(upgradient)	8/18/2021	N	5.67	6.74	949	4010	0.11 J	2910	9970	<0.00589	<0.0055	0.0195 JL	0.00224 JL	<0.00243	0.0538	0.00881 J	<0.00237 JL	2.48	<0.0000263	0.00788 J	<0.00439	<0.00621 JL	11.6 ± 16.7	8.53 ± 28.6	20.13 ± 45.3
PZ-03	2/24/2021	N	3.24	9.49	798	5310	3.77	4010	14200	<0.0008	0.0678	0.0243	0.189	0.477	0.00424 J	1.48	0.0032	1.84	<0.00008	<0.002	0.711	0.00627	0.939 ± 0.38 JH	4.22 ± 0.39 JH	5.16 ± 0.77 JH
(upgradient)	8/18/2021	N	3.06	7.48	979	5300	5.38	4120	12700	0.00762 J	0.0311	0.0141 JL	0.196 JL	0.428	<0.000811	1.09	0.0218 JL	2.2	<0.0000263	0.00939 J	<0.00439	<0.00621 JL	-17.3 ± 23.1	6.31 ± 17.1	-10.99 ± 40.2
AP-31	2/24/2021	N	3.68	47.6	586	1950	<0.5	3050	8000	<0.0008	0.0133	0.0135	0.00975	0.00487	<0.002	0.232	0.000361 J	0.679	0.000479	<0.002	0.129	0.00236	1.09 ± 0.39 JH	0.852 ± 0.349 JH	1.94 ± 0.739 JH
	8/18/2021	N	3.68	55.8	708	1960	0.45 J	3300	7150	<0.00589	<0.0055	0.00948 JL	0.0129 JL	0.00581	0.0341	0.242	<0.00237	1.25	0.000464	0.0157	<0.00439	<0.00621 JL	22.4 ± 17.9	3.69 ± 7.08	26.09 ± 24.98
AP-32	2/24/2021	N	3.35	19.7	677	2930	1.37 J	3290	9740	<0.0008	0.0484	0.0183	0.0457	0.0729	<0.002	0.471	0.00052 J	1.21	0.00164	<0.002	0.487	0.00448	1.13 ± 0.376 JH	8.46 ± 0.446	9.59 ± 0.822 JH
	8/18/2021	N	3.35	19.5	860	2850	1.46	3530	9080	<0.00589	0.0296	0.0101 JL	0.0517 JL	0.0719	0.0133	0.512	0.0159 JL	1.75	0.00566	0.00707 J	<0.00439	<0.00621 JL	15.7 ± 11.1	19.7 ± 23.4	35.4 ± 34.5
AP-33	2/24/2021	N	3.19	61.2	782	4500	3.88	3300	12200	<0.0008	0.0751	0.0186	0.214	0.114	<0.002	1.05	0.000578 J	0.873	0.00466	<0.002	0.772	0.00569	0.843 ± 0.361 JH	5.86 ± 0.447 JH	6.7 ± 0.808 JH
	8/18/2021	N	3.2	70.5	922	4360	1.78	3450 B	11000	<0.00589	0.0325	0.00827 JL	0.197 JL	0.0951	<0.000811	1.14	0.0233 JL	1.18	0.00667	0.00762 J	<0.00439	<0.00621 JL	38.2 ± 17.7	18.7 ± 25.6	56.9 ± 43.3
AP-34	2/25/2021	N	4.49	24.1	693	2950	4.58	3350	8980	<0.0008	0.0544	0.0139	0.218	0.0242	0.00418 J	0.963	<0.0003	0.988	0.00265	<0.002	0.583	0.00203	0.267 ± 0.23 JH	3.86 ± 0.43	4.12 ± 0.66 JH
	8/18/2021	N	3.15	18.4	848	2990	1.57	3470 B	9590	<0.00589	0.026	0.00839 JL	0.23 JL	0.0222	<0.000811	0.962	0.0166 JL	1.35	0.0106	0.0118	<0.00439	<0.00621 JL	27.8 ± 18.5	11.6 ± 33	39.4 ± 51.5
AP-35	2/25/2021	N	4.72	26.1	629	2200	3.82	2900	8300	<0.0008	0.0177	0.0218	0.147	0.00906	<0.002	0.13	0.00517	0.989	0.00149	<0.002	0.183	0.00666	6.4 ± 1.03	23.2 ± 0.641	29.6 ± 1.67
	2/25/2021	Dup	--	28.8	632	2220	4.33	2900	8300	<0.0008	0.017	0.0206	0.134	0.00938	<0.002	0.133	0.00486	0.996	0.000935	<0.002	0.189	0.00675	3.05 ± 0.694	23.3 ± 0.647	26.3 ± 1.34
	8/18/2021	N	2.56	55.5	810	2250	0.868	2670 B	6640	<0.00589	<0.0055	0.0115 JL	0.0673 JL	0.0218	0.0362	0.157	<0.00237	1.48	0.0192	0.0064 J	<0.00439	<0.00621 JL	32.9 ± 20.9	31.2 ± 29.5	64.1 ± 50.4
AP-36	2/25/2021	N	5.2	2.38	629	1780	1.06 J	2640	6760	<0.0008	0.0069	0.0185	0.00818	0.000383 J	<0.002	0.0592	0.000386 J	0.744	<0.00008	<0.002	0.0444	0.000937 J	0.863 ± 0.371 JH	2.66 ± 0.443	3.53 ± 0.814 JH
	8/18/2021	N	3.27	2.27	782	1720	0.171 J	2730	6280	<0.00589	0.00725 J	0.0137 JL	0.0117 JL	<0.00243	0.0313	0.069	<0.00237	1.49	<0.0000263	0.00541 J	<0.00439	<0.00621 JL	-29.5 ± 17.7	34.7 ± 23.8	5.2 ± 41.5
MW-03	2/24/2021	N	3.49	12.8	555	1990	1.39 J	4170	9280	<0.0008	0.0246	0.012	0.0189	0.048	<0.002	0.294	0.000398 J	1.41	<0.00008	<0.002	0.23	0.00211	0.809 ± 0.356 JH	3.89 ± 0.389 JH	4.7 ± 0.745 JH
	8/18/2021	N	3.48	12.3	632	1860	<5	4040	7980	<0.00589	0.00985 J	0.00533 JL	0.0251 JL	0.0519	0.0195	0.326	<0.00237	2	0.000055 J	0.0047 J	<0.00439	<0.00621 JL	-27.7 ± 19.4	7.02 ± 20.6	-20.68 ± 40
	8/18/2021	Dup	--	11.8	709	2070	<5	4150	8610	<0.00589	0.0164	0.00691 JL	0.0239 JL	0.0505	0.021	0.316	<0.00237	2.23	0.000085 J	0.00448 J	<0.00439	<0.00621 JL	37.8 ± 18.7	7.57 ± 11.9	45.37 ± 30.6
PZ-05	2/24/2021	N	3.32	26.4	651	2480	1.09 J	2930	8360	<0.0008	0.0438	0.0173	0.159	0.0659	0.00302 J	0.782	0.000747 J	0.756	0.000745	<0.002	0.519	0.0027	0.548 ± 0.289 JH	2.94 ± 0.385 JH	3.48 ± 0.674 JH
	8/18/2021	N	3.31	33.9	733	2700	7.45 J	41200	7140	<0.00589	0.0236	0.0102 JL	0.188 JL	0.0518	0.00793 J	0.737	0.013 JL	1.03	0.00121	0.00519 J	<0.00439	<0.00621 JL	82.9 ± 22.4	42.8 ± 18.8	125.7 ± 41.2
PZ-06	2/25/2021	N	6.71	2.79	648	1720	1.07 J	2840	7090	<0.0008	<0.002	0.0208	0.00181	<0.0003	<0.002	<0.003	0.000303 J	0.771	<0.00008	<0.002	<0.002	<0.0005	0.328 ± 0.25 JH	2.22 ± 0.384	2.55 ± 0.634 JH
	8/18/2021	N	5.39	2.66	773	1810	<5	3170	6550	<0.00589	<0.0055	0.0168 JL	0.00331 JL	<0.00243	0.0456	0.00713 J	<0.00237 JL	1.48	<0.0000263	0.00417 JH	<0.00439	<0.00621 JL	25.5 ± 18.7	14.2 ± 22.7	39.7 ± 41.4

Notes:
1. This table includes semiannual assessment/corrective action monitoring (Appendix III and IV) results from the upgradient and downgradient wells at the Ash Ponds, for the reporting year. See report text for details.
2. Fluoride is included in both Appendix III and Appendix IV analyte lists.
3. TDS = Total Dissolved Solids; mg/L = milligrams per liter; pCi/L = picocuries per liter; SU = standard units; SDL = sample detection limit; RL = reporting limit.
4. N = normal sample; Dup = field duplicate; "<" = not detected at the SDL; J = analyte detected between the SDL and RL. Bias codes: B = analyte detected in method blank; JH = estimated result is biased high; Dash ("-") = not available or not applicable.
5. Background based on Zephyr 2018 (UTL), and Power 2019 "Groundwater Statistics Report for RY 2018", Table 3.
6. Values from PBW 2018 ASD Report (maximum value from historic Unit 22 monitoring).
7. GWPS is the higher of the MCL or background, and takes ASDs into consideration. GWPS for pH is the lower background value. Shaded cells indicate results greater than the GWPS.
8. See Appendix A for cumulative results from all CCR groundwater monitoring network wells.
9. A systematic increase in combined radium results was noted at the Ash Pond and East Equalization Pond monitoring networks in August 2021. The increase appeared in both upgradient and downgradient wells and was related to the laboratory subcontractor transition between the February and August sampling events. February 2021 results were produced with Methods 904 and SM 7500 Ra B (the approved methods per the SAP), whereas August 2021 results were via Method 901.1, which uses different tracers. GSI is actively working with the laboratories to understand the discrepancy between semiannual radium results and to resolve any deviations from the SAP analyte list for future sampling events.

GSI ENVIRONMENTAL

TABLE 4C
East Equalization Pond Groundwater Analytical Results - 2021

San Miguel Electric Cooperative, Inc.
Christine, Atascosa County, Texas

			Appendix III Constituents							Appendix IV Constituents															
Analyte:			**pH (field)**	**Boron**	**Calcium**	**Chloride**	**Fluoride**	**Sulfate**	**TDS**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Chromium**	**Cobalt**	**Lead**	**Lithium**	**Mercury**	**Molybdenum**	**Selenium**	**Thallium**	**Radium-226**	**Radium-228**	**Combined Radium**
Units:			SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	pCi/L
MCL:			-	-	-	-	4	-	-	0.006	0.01	2	0.004	0.005	0.1	0.006	0.015	0.04	0.002	0.1	0.05	0.002	-	-	5
Background (Note 5):			2.78-6.11	4.829	493.2	282.5	4.839	3982	8114	0.004	0.0222	0.0182	0.148	0.0291	0.002	0.146	0.0015	1.111	0.00008	0.006	0.103	0.00157	0.738	2.346	3.084
ASD Comparison Values (Note 6):			4.33 - 7.72	21.19	1610	14000	67	6380	27000	-	-	-	-	-	-	-	-	See Note 6	-	-	-	-	-	-	-
GWPS (Note 7):			2.78	21.19	1610	14000	67	6380	27000	0.006	0.0222	2	0.148	0.0291	0.1	0.146	0.015	3.68	0.002	0.1	0.103	0.002	n/a	n/a	5
Well ID	**Sample Date**	**Type**																							
EP-31	2/24/2021	N	3.9	5.75	492	191	1.42 J	3070	5340	<0.0008	0.0206	0.00606 J	0.0865	0.0255	<0.002	0.125	0.00225	0.904	<0.00008	<0.002	0.147	0.00212	0.349 ± 0.244	1.36 ± 0.437B	1.71 ± 0.681 B
	8/18/2021	N	3.37	5.4 B	645	217	2.01	3190	4890	<0.00589	0.0465	0.00175 J	0.07	0.0182	<0.000811	0.114	0.00427 J	0.664	<0.0000526	0.0102	<0.00439	<0.00621	-6.08 ± 31	11.5 ± 30.2	5.42 ± 61.2
EP-32	2/24/2021	N	6.89	20.9	406	1820	<0.5	4300	9800	<0.0008	<0.002	0.0147	<0.0015	<0.0003	<0.002	<0.003	<0.0003	1.09	<0.00008	0.0112	<0.002	<0.0005	1.05 ± 0.39	4.19 ± 0.439 B	5.23 ± 0.829 B
	2/24/2021	Dup	--	23.6	428	1900	1.01 J	4290	9480	<0.0008	<0.002	0.0135	<0.0015	<0.0003	<0.002	<0.003	<0.0003	1.05	<0.00008	0.0127	<0.002	<0.0005	0.884 ± 0.407	2.31 ± 0.537 B	3.2 ± 0.944 B
	8/18/2021	N	6.6	28.3 B	660	3220	<0.1	4310	12100	<0.00589	<0.0055	0.0101	0.00122 J	<0.00243	<0.000811	0.00584 J	<0.00237	1.27	<0.0000263	0.0116	<0.00439	<0.00621	25.7 ± 15.9	16.9 ± 24.2	42.6 ± 40.1
EP-33	2/24/2021	N	7.01	82.7	556	3210	1.36 J	2970	10200	<0.0008	<0.002	0.0165	<0.0015	<0.0003	<0.002	<0.003	<0.0003	0.594	<0.00008	0.0363	0.00226 J	<0.0005	0.501 ± 0.285	1.48 ± 0.457 B	1.98 ± 0.742 B
	8/18/2021	N	6.45	93.7 B	721	2980	0.235 J	3330	9210	<0.00589	0.00972 J	0.00932 J	0.00136 J	<0.00243	<0.000811	0.00627 J	<0.00237	0.672	<0.0000263	0.0267	<0.00439	<0.00621	33.3 ± 17.2	13.6 ± 21.9	46.9 ± 39.1
	8/18/2021	Dup	--	95.7 B	788	2920	0.231 J	3270	9110	<0.00589	0.00618 J	0.0098 J	0.00145 J	<0.00243	<0.000811	0.00683 J	<0.00237	0.707	<0.0000263	0.0299	<0.00439	<0.00621	11.5 ± 18.4	8.82 ± 24.2	20.32 ± 42.6
EP-34	2/24/2021	N	6.64	66.3	489	3790	1.58 J	2960	11100	<0.0008	<0.002	0.0173	<0.0015	<0.0003	<0.002	<0.003	<0.0003	0.799	<0.00008	0.0229	<0.002	<0.0005	1.31 ± 0.473	6.04 ± 0.423	7.35 ± 0.896
	8/18/2021	N	6.81	32.4 B	668	4070	<0.1	3600	11400	<0.00589	<0.0055	0.0123	0.00123 J	<0.00243	<0.000811	0.00646 J	<0.00237	1.22	<0.0000263	0.00911 J	<0.00439	<0.00621	-5.62 ± 7.73	20.3 ± 30	14.68 ± 37.73
EP-35	2/24/2021	N	6.54	40	343	3670	1.65 J	2940	11000	<0.0008	<0.002	0.0193	<0.0015	<0.0003	<0.002	<0.003	0.000316 J	1.12	<0.00008	<0.002	<0.002	<0.0005	0.686 ± 0.308	1.1 ± 0.421 B	1.78 ± 0.729 B
	8/18/2021	N	6.28	43.4 B	433	3710	<0.1	3170	10000	<0.00589	<0.0055	0.0202	0.00114 J	<0.00243	<0.000811	0.00438 J	<0.00237	1.17	<0.0000263	0.00321 J	<0.00439	<0.00621	77.4 ± 23.7	6.61 ± 18.5	84.01 ± 42.2
EP-36	2/24/2021	N	6.57	24.2	436	3830	<0.5	2490	10500	<0.0008	<0.002	0.0222	<0.0015	<0.0003	<0.002	<0.003	0.000386 J	1.17	<0.00008	<0.002	<0.002	<0.0005	0.686 ± 0.323	3.47 ± 0.385 B	4.15 ± 0.708 B
	8/18/2021	N	6.22	40.1 B	596	3900	<0.1	2520	8700	<0.00589	0.00972 J	0.0188	0.0013 J	<0.00243	<0.000811	0.00586 J	<0.00237	1.22	<0.0000263	0.00266 J	<0.00439	<0.00621	65.2 ± 23.9 JH	15.5 ± 25.5	80.7 ± 49.4 JH
EP-37	2/25/2021	N	6.65	7.8	426	3750	2.39	2740	10300	<0.0008	<0.002	0.0194	<0.0015	<0.0003	<0.002	<0.003	<0.0003	1.3	<0.00008	<0.002	<0.002	<0.0005	0.798 ± 0.389	3.83 ± 0.687 B	4.63 ± 1.08 B
	8/18/2021	N	6.36	7.74 B	557	3570	<0.1	2810	9110	<0.00589	0.0116	0.0246	0.0013 J	<0.00243	<0.000811	0.0056 J	<0.00237	1.34	<0.0000263	0.00387 J	<0.00439	<0.00621	31.3 ± 21.5	21.1 ± 25.6	52.4 ± 47.1
EP-38	2/25/2021	N	5.87	2.48	437	1600	0.728 J	2070	5830	<0.0008	<0.002	0.016	<0.0015	<0.0003	<0.002	<0.003	<0.0003	0.718	<0.00008	<0.01	<0.002	<0.0005	0.521 ± 0.304	-1.05 ± 0.647 B	0.521 ± 0.951 JB
	8/18/2021	N	5.84	2.4 B	556	1320	0.121 J	2300	5120	<0.00589	0.324 J	0.0156	0.00197 J	<0.00243	<0.000811	0.00699 J	<0.00237	0.693	<0.0000263	0.00527 J	<0.00439	<0.00621	31.5 ± 18.6	14.1 ± 23.5	45.6 ± 42.1
MW-04	2/25/2021	N	6.46	8.63	326	1920	1.32 J	2330	6610	<0.0008	<0.002	0.0151	<0.0015	<0.0003	<0.002	<0.003	0.000806 J	0.766	<0.00008	<0.01	<0.002	<0.0005	0.545 ± 0.298	4.96 ± 0.586 B	5.5 ± 0.884 B
	8/18/2021	N	6.22	8.62 B	445	1690	0.122 J	2400	6220	<0.00589	<0.0055	0.017 JH	0.00138 J	<0.00243	<0.000811	0.00357 JH	<0.00237	0.789	<0.0000263	0.00337 J	<0.00439	<0.00621	36 ± 19.3 JH	17.5 ± 28.3	53.5 ± 47.6 JH

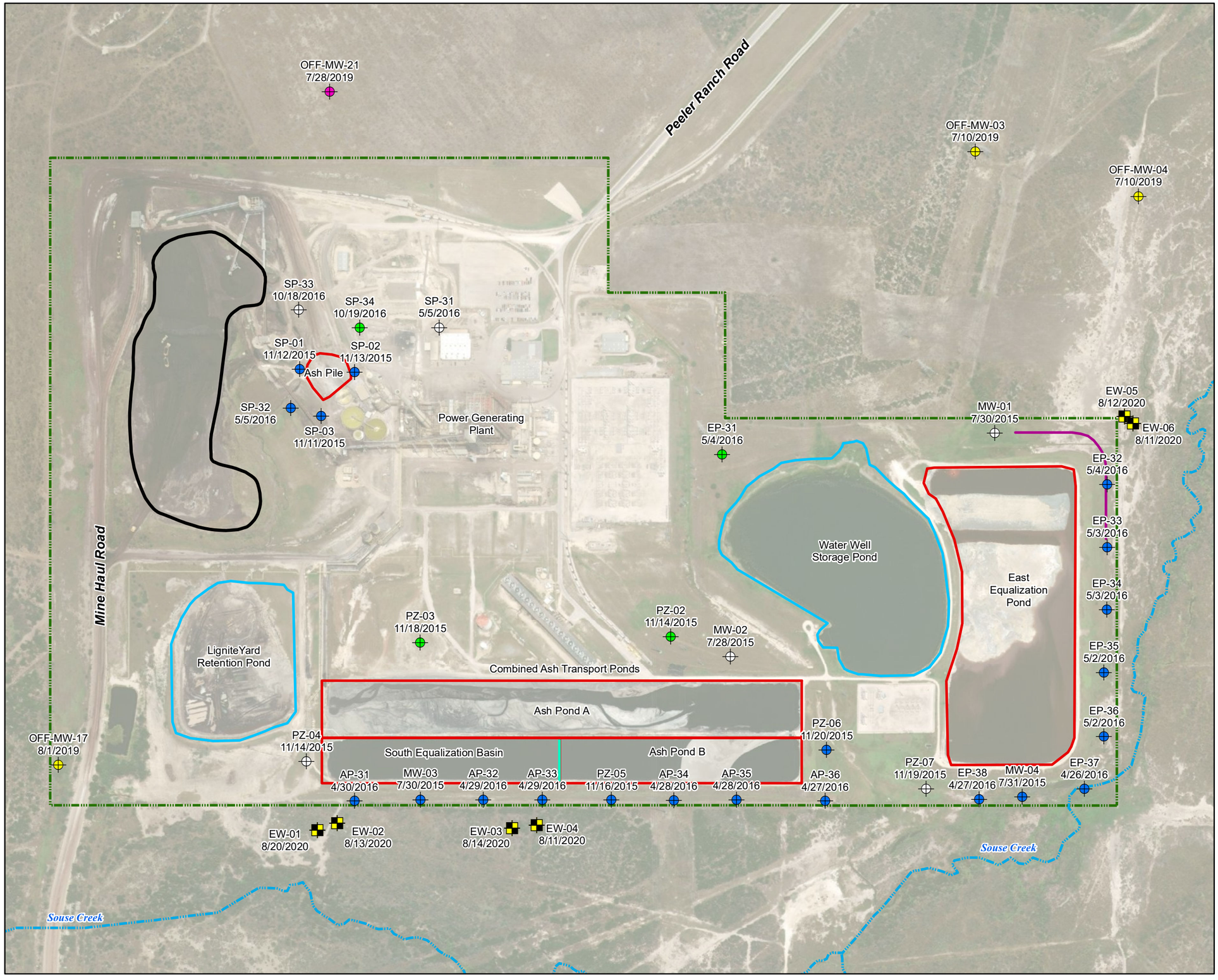
Notes:
1. This table includes semiannual assessment/corrective action monitoring (Appendix III and IV) results from the upgradient and downgradient wells at the East Equalization Pond (EEP), for the reporting year. The EEP was in the process of closure in 2021. See report text for details.
2. Fluoride is included in both Appendix III and Appendix IV analyte lists.
3. TDS = Total Dissolved Solids; mg/L = milligrams per liter; SU = standard units; SDL = sample detection limit; RL = reporting limit.
4. N = normal sample; Dup = field duplicate; "<" = not detected at the SDL; J = analyte detected between the SDL and RL. Bias codes: B = analyted detetced in method blank; JH = estimated result is biased high; Dash ("-") = not available or not applicable.
5. Background based on Zephyr 2018 (UTL), and Power 2019 "Groundwater Statistics Report for RY 2018", Table 2.
6. Appendix III values from PBW 2018 ASD Report (maximum value from historic Unit 22 monitoring). For lithium, see discussion of background levels in GSI 2019 ASD Report (value of 3.68 mg/L based on maximum result from PZ-03).
7. GWPS is the higher of the MCL or background, and takes ASDs into consideration. GWPS for pH is the lower of background value. Shaded cells indicate results greater than the GWPS.
8. See Appendix A for cumulative results from all CCR groundwater monitoring network wells.
9. A systematic increase in combined radium results was noted at the Ash Pond and East Equalization Pond monitoring networks in August 2021. The increase appeared in both upgradient and downgradient wells and was related to the laboratory subcontractor transition between the February and August sampling events. February 2021 results were produced with Methods 904 and SM 7500 Ra B (the approved methods per the SAP), whereas August 2021 results were via Method 901.1, which uses different tracers. GSI is actively working with the laboratories to understand the discrepancy between semiannual radium results and to resolve any deviations from the SAP analyte list for future sampling events.

Job No. 5076
Issued: 31 January 2022

2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

San Miguel Electric Cooperative, Inc.
Christine, Atascosa County, Texas

Figures



N

LEGEND

- Location of Groundwater Extraction Well
- Off-Site Unit 22 Assessment Monitoring Well
- Off-Site Deeper Sand Monitoring Well
- Upgradient Coal Combustion Residual (CCR) Monitoring Well
- Downgradient CCR Monitoring Well
- Groundwater Elevation Observation Well
- Approximate Plant Property Boundary
- CCR Management Unit
- Non-CCR Impoundment
- Lignite Storage Pile
- Interim Interceptor Trench
- 10/19/2016 Well Installation Date

Note

Aerial imagery provided by Esri ArcGIS Online, July 2018.

Feet
0 250 500

Projected Coordinate System
Datum: NAD 83
State Plane Texas South Central
Units: Feet

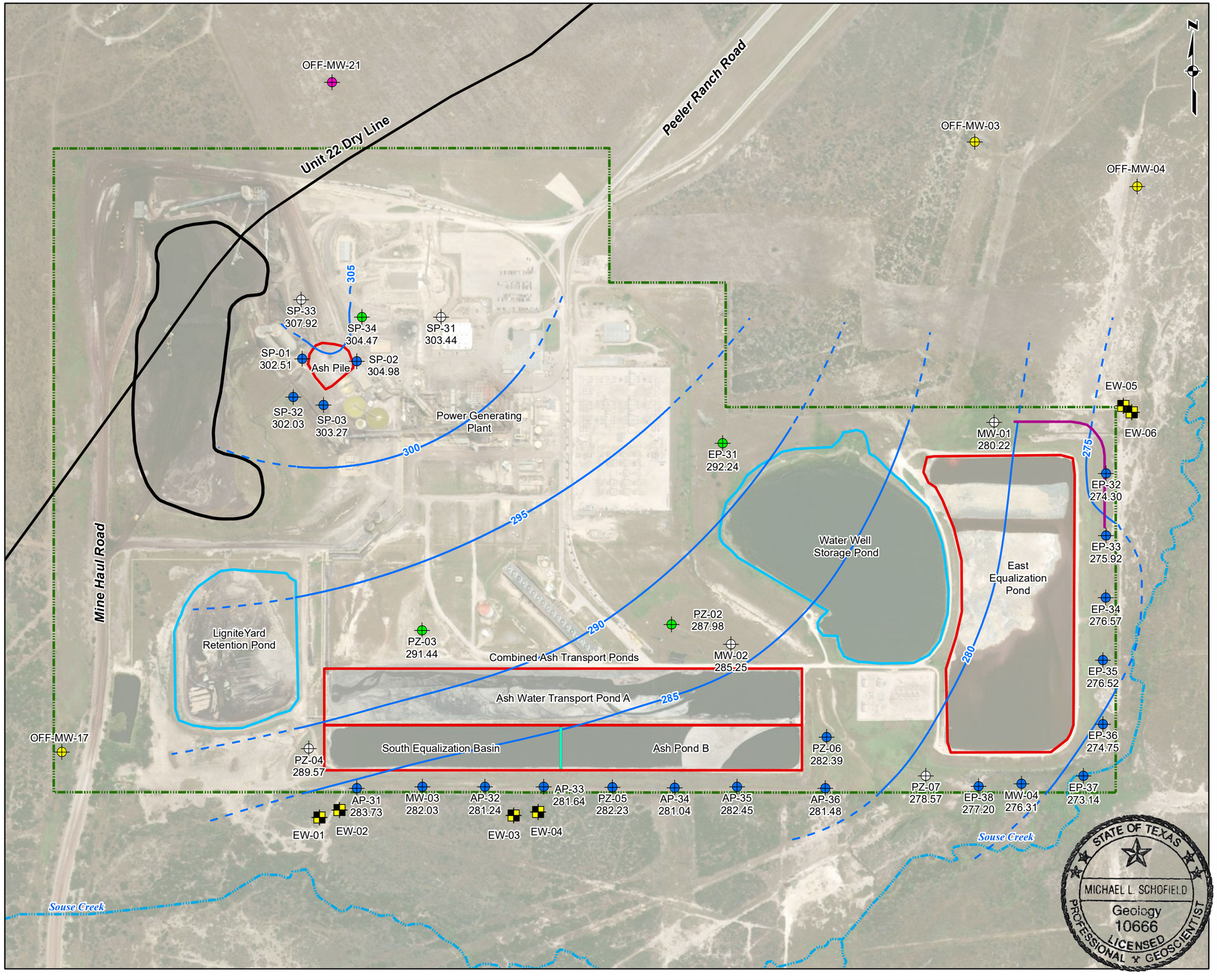
GSI ENVIRONMENTAL

SITE MAP

San Miguel Electric Cooperative, Inc. Plant
Atascosa County, Texas

GSI Job No. 5076	Drawn By: AV
Issued: 13-Jan-2022	Chk'd By: ARD
Map ID: SMEC_GWMR2021SiteMap	Appv'd By: SDR

FIGURE 1



LEGEND

- Location of Groundwater Extraction Well
- Off-Site Unit 22 Assessment Monitoring Well
- Off-Site Deeper Sand Monitoring Well
- Upgradient Coal Combustion Residual (CCR) Monitoring Well
- Downgradient CCR Monitoring Well
- Groundwater Elevation Observation Well
- Approximate Plant Property Boundary
- CCR Unit
- Non-CCR Impoundment
- Lignite Storage Pile
- Interim Interceptor Trench
- 307.92 Groundwater Elevation (ft amsl)
- Groundwater Potentiometric Surface, Dashed where Inferred
- Unit 22 Dry Boundary, Dashed where Inferred (wells NW of this line are interpreted to be screened in the Deeper Sand)

Notes

1) Aerial imagery provided by Esri ArcGIS Online, July 2018.
2) Groundwater elevations from onsite wells are calculated using top of casing elevations reported in “Groundwater Sampling Report - Event 8 - August 2017” (AECOM, 2017). All onsite depth to water measurements were collected by GSI Environmental Inc., February 23, 2021.
3) The off-site monitoring wells are shown for reference only. These wells are not included in the CCR semi-annual groundwater monitoring program.
4) ft amsl = feet above mean sea level.
5) Groundwater extraction wells were installed by GSI Environmental Inc., August 8-20, 2020.

Feet
0 250 500

Projected Coordinate System
Datum: NAD 83
State Plane Texas South Central
Units: Feet

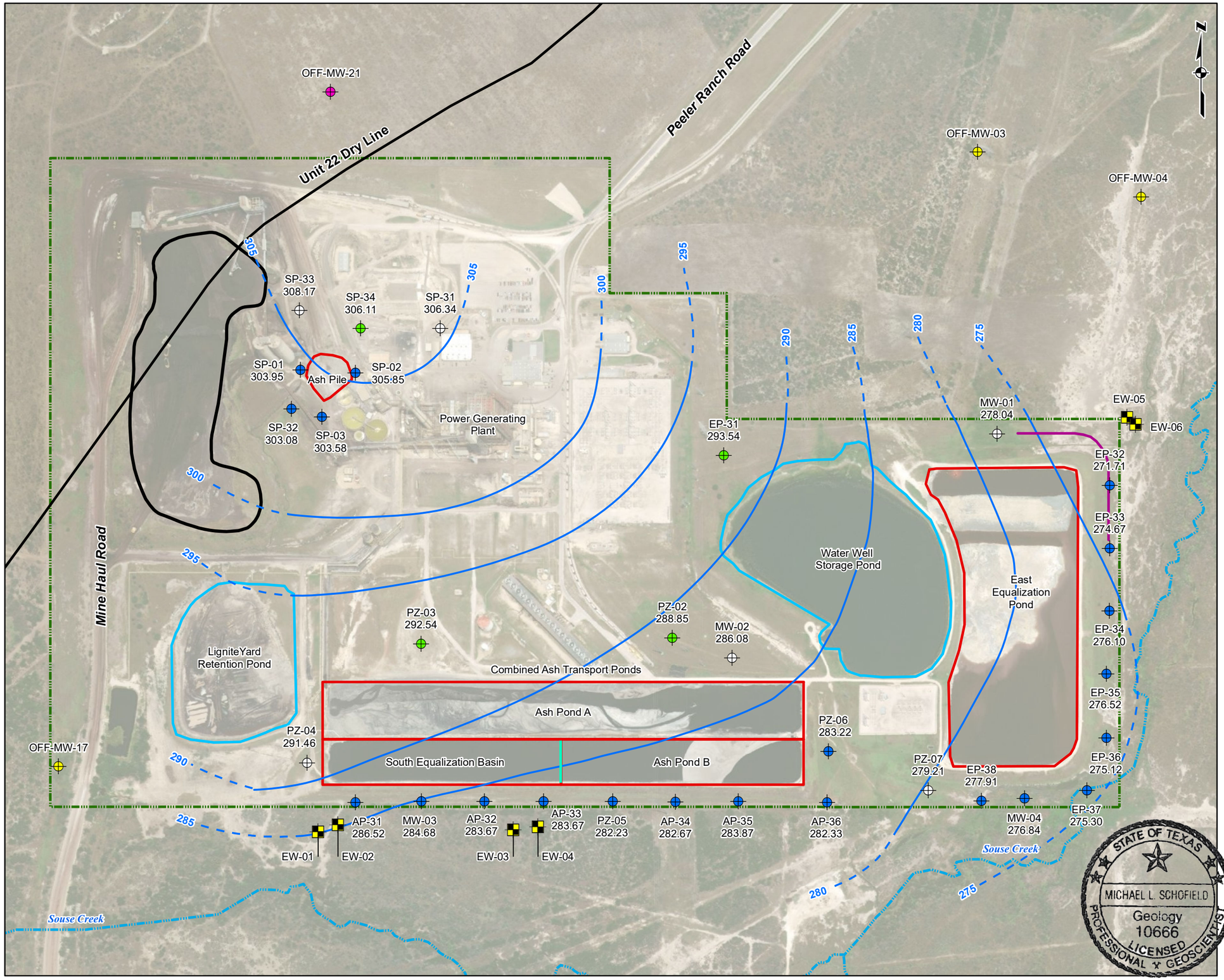
GSI ENVIRONMENTAL

UNIT 22 POTENTIOMETRIC SURFACE MAP - FEBRUARY 2021

San Miguel Electric Cooperative, Inc. Plant
Atascosa County, Texas

GSI Job No. 5076	Drawn By: AV
Issued: 13-Jan-2022	Chk'd By: ARD
Map ID: **SMEC_GWE_0221**	Appv'd By: SDR

FIGURE 2



LEGEND

- Location of Groundwater Extraction Well
- Off-Site Unit 22 Assessment Monitoring Well
- Off-Site Deeper Sand Monitoring Well
- Upgradient Coal Combustion Residual (CCR) Monitoring Well
- Downgradient CCR Monitoring Well
- Groundwater Elevation Observation Well
- Approximate Plant Property Boundary
- CCR Unit
- Non-CCR Impoundment
- Lignite Storage Pile
- Interim Interceptor Trench
- 253.31 Groundwater Elevation (ft amsl)
- Groundwater Potentiometric Surface, Dashed where Inferred
- Unit 22 Dry Boundary, Dashed where Inferred (wells NW of this line are interpreted to be screened in the Deeper Sand)

Notes

1) Aerial imagery provided by Esri ArcGIS Online, July 2018.
2) Groundwater elevations from onsite wells are calculated using top of casing elevations reported in "Groundwater Sampling Report -Event 8 - August 2017" (AECOM, 2017). All onsite depth to water measurements were collected by GSI Environmental Inc., August 18, 2021.
3) The off-site monitoring wells are shown for reference only. These wells are not included in the CCR semi-annual groundwater monitoring program.
4) ft amsl = feet above mean sea level.
5) Groundwater extraction wells were installed by GSI Environmental Inc., August 8-20, 2020.

Feet
0 250 500

Projected Coordinate System
Datum: NAD 83
State Plane Texas South Central
Units: Feet

GSI ENVIRONMENTAL

UNIT 22 POTENTIOMETRIC SURFACE MAP - AUGUST 2021

San Miguel Electric Cooperative, Inc. Plant
Atascosa County, Texas

GSI Job No.	5076	Drawn By:	CDM/AV
Issued:	14-Jan-2022	Chk'd By:	ARD
Map ID:	SMEC_GWE_0821	Appv'd By:	SDR

FIGURE 3

STATE OF TEXAS
MICHAEL L. SCHOFIELD
Geology
10666
LICENSED
PROFESSIONAL GEOSCIENTIST

Job No. 5076
Issued: 31 January 2022

2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

San Miguel Electric Cooperative, Inc.
Christine, Atascosa County, Texas

Appendices

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GSI ENVIRONMENTAL

2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

San Miguel Electric Cooperative, Inc.
Christine, Atascosa County, Texas

Appendix A. Cumulative Groundwater Analytical Results for CCR

GSI ENVIRONMENTAL

APPENDIX A
Cumulative Groundwater Analytical Results for CCR Monitoring Network Wells

San Miguel Electric Cooperative, Inc.
Christine, Atascosa County, Texas

					Appendix III Constituents							Appendix IV Constituents														
				Analyte:	pH (field)	Boron	Calcium	Chloride	Fluoride*	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium-226	Radium-228	Combined Radium
				Units:	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	pCi/L
Area	Well ID	Well Type	Sample Date	Type																						
Ash Pile	SP-34	Upgradient	10/26/2016	N	3.6	12	715	2370	4.57	3070	8420	<0.004	0.0139 J	0.0535	0.164	0.161	0.0045 J	0.558	0.0089 J	1.17	<0.00004	0.0068 J	0.109	0.0127 J	1.03 ± 0.37	2.97 ± 0.87	4
			1/11/2017	N	3.53	12.3	636	2300	<0.1	2790	8500	0.000948 J	0.0228	0.0337	0.141	0.162	0.0022 J	0.592	0.00718	1.07 J-	<0.00008	0.00426 J	0.17	0.0178	0.715 ± 0.204	5.16 ± 0.515	5.88
			2/14/2017	N	2.23	11.9 J	670	2350	2.55	2730	8040	<0.0008	0.0234	0.0228	0.164	0.181	0.00306 J	0.648	0.00732	1.22	<0.00008	<0.002	0.216	0.0195	1.39 ± 0.57	6.46 ± 0.584	7.85
			3/21/2017	N	3.09	12 J	602	1780	2.34	2690 J-	8080	<0.0008	0.0295	0.0335	0.119 J	0.171	0.00435 J	0.572	0.00827	0.966	<0.00008	<0.002	0.191 J	0.0197	0.796 ± 0.534 U	6.70 ± 0.624	7.5
			5/10/2017	N	3.41	13.6 J	672	2140	<0.1	2560	8820	<0.0008	0.018	0.0168	0.148	0.189	0.00353 J	0.619	0.00427	1.29	<0.00008	<0.002	0.161	0.0187	1.33 ± 0.378	7.19 ± 0.543	8.52
			6/13/2017	N	3.23	12.4	647	2370	<0.5 J	2860	7980	<0.0008	0.0177	0.0182	0.142	0.19	0.00452 J	0.649	0.00574	1.27	<0.00008	<0.002	0.176	0.0176	6.41 ± 0.694	7.00 ± 0.641	13.4
			7/25/2017	N	3.34	21 J	758	2370	1.37 J	3900	8820	<0.0008	0.0238 J	0.0155	0.157	0.203	0.00627	0.602 J	0.00353	1.26	<0.00008	<0.002	0.21 J	0.0201	1.53 ± 0.449	7.84 ± 0.655	9.37
			8/22/2017	N	3.26	10.5 J	656	2320	1.09 J	2880	8080	<0.0008	0.0343	0.0169	0.132 J	0.185	0.00604	0.605	0.0054	1.07	<0.00008	<0.002	0.203 J	0.0194	1.82 ± 0.520	6.33 ± 0.466	8.15
			3/21/2018	N	3.03	12.1	691	2050 J+	<10	2910	7880	<0.01	0.0323	0.0211	0.172	0.195	--	0.682	<0.01	1.21	<0.0002 J	<0.025	0.244	0.0187	0.65 ± 0.31	6.1 ± 1.6	6.75
			6/7/2018	N	3.2	12.9	651	2350	1.09	3210	7960	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			9/6/2018	N	2.67	11.2	711	2120	4.98	2770	8420	<0.01	0.0139	<0.02	0.171	0.197	<0.02	0.702	<0.01	1.38	0.000262 J-	<0.025	0.122	0.0187	--	--	--
			2/19/2019	N	3.56	14.4	758	2330	5.12	2690	8240	0.000789 J	0.016	0.02	0.146 JL	0.25	0.0087	0.772	0.00821	1.22	<0.00003	<0.00049	0.129	0.0231	0.87 ± 0.4 J	9.6 ± 2.3	10.47 ± 2.7 J
			8/19/2019	N	2.93	9.43	804	3380	4.04	2670	9000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			2/25/2020	N	3.08	8.85	770	3340	3.4	2600	8740	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			7/30/2020	N	--	10.8	825	2780	1.94 J	2400	8200	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			7/30/2020	Dup	--	10.6	822	2860	1.74 J	2450	8340	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			8/4/2020	N	2.91	10.3	827	2750	2.74	2610	8260	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			2/24/2021	N	3.39	11.2	751	2730	3.99	2610	8300	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			8/18/2021	N	2.07	10.4	812	2810	5.18 JH	2490	6430	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			10/7/2021	N	2.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ash Pile	SP-01	Downgradient	5/26/2016	N	2.86	10.3	577	3330	22	7570	16900	<0.004	0.0387 J	0.0254 J	0.746	0.662	0.0115 J	3.01	<0.006	4.03	<0.00004	<0.006	0.0769	0.0162 J	0.66 ± 0.23	8.2 ± 2	8.86
			8/17/2016	N	3.02	8.8	509	3270	15.4	7190	15600	<0.002	0.0344	0.0245 J	0.612	0.57	0.00713 J	2.82	<0.003	3.16	<0.00004	<0.003	0.0995	0.0167	0.87 ± 0.29	10.1 ± 2.4	10.97
			10/26/2016	N	3.16	11.3	694	3470	8.14	6530	15100	<0.004	0.0435 J	0.0245 J	0.76	0.633	0.0101 J	3.24	<0.006	4.09	<0.00004	<0.006	0.132	0.0211	0.89 ± 0.32	11.3 ± 2.7	12.19
			1/10/2017	N	3.21	8	525	3430	<0.1	6750	14500	<0.0008	0.0623	0.0228	0.437	0.524	0.007	3.17	0.00141	2.76 J-	<0.00008	<0.002	0.317	0.0182	2.37 ± 0.377	10.6 ± 0.566	13
			1/10/2017	Dup	--	7.48	517	3290	<0.1	7200	16400	<0.0008	0.0649	0.0231	0.483	0.595	0.00595	3.37	0.00144	3.04 J-	<0.00008	<0.002	0.336	0.0184	2.32 ± 0.333	13.3 ± 0.632	15.6
			2/14/2017	N	2.07	7.64 J	508	3190	16.8	7310	15300	<0.0008	0.0632	0.0209	0.504	0.637	0.00641	3.51	0.00129	3.03	<0.00008	<0.002	0.52	0.018	1.29 ± 0.510	12.5 ± 0.673	13.8
			2/14/2017	Dup	--	7.76 J	503	3160	17	7630	15900	<0.0008	0.0646	0.0213	0.514	0.656	0.00786	3.47	0.00144	3	<0.00008	<0.002	0.527	0.0183	1.26 ± 0.51	12.9 ± 0.693	14.2
			3/21/2017	N	2.95	7.56 J	461	3120	16.1	8200 J-	15600	<0.0008	0.0855	0.02	0.396 J	0.596	0.00707	3.29	0.00137 J+	3.09	<0.00008	<0.002	0.416 J	0.0191	1.01 ± 0.322	12.0 ± 0.688 J	13.0 J
			3/21/2017	Dup	--	7.63 J	473	3170	16	8420 J-	15500	<0.0008	0.086	0.0197	0.398 J	0.598	0.00666	3.38	0.00136 J+	3.12	<0.00008	<0.002	0.417 J	0.0195	1.13 ± 0.284	14.1 ± 0.786 J	15.2 J
			5/9/2017	N	3.43	7.71 J	537	3120	11.5	7270	16100	<0.0008	0.0599	0.0192	0.559	0.665	0.00607	3.35	0.00117	3.29	<0.00008	<0.002	0.412	0.018	1.33 ± 0.444	12.7 ± 0.715	14
			6/13/2017	N	3.3	7.64	523	3200	8.53 J-	7060	15500	<0.0008	0.081	0.0189	0.568	0.646	0.0052	3.15	<0.0003	3.1	<0.00008	<0.002	0.565	0.0183	2.95 ± 0.472	14.8 ± 0.864	17.8
			7/25/2017	N	3.3	11 J	640	3550	<0.5	8530	15700	<0.0008	0.088 J	0.0183	0.529	0.603	0.00695	2.21 J	0.00101	2.88	<0.00008	<0.002	0.659 J	0.0196	1.11 ± 0.408	14.1 ± 0.698	15.2
			8/22/2017	N	3.16	7.65 J	529	3310	3.58	7680	15700	<0.0008	0.0981	0.0181	0.428 J	0.591	0.00412 J	3.14	0.00121	2.89	<0.00008	<0.002	0.486 J	0.0189	1.24 ± 0.414	15.2 ± 0.624	16.4
			3/21/2018	N	5.52	3.88	280	3020 J+	11.9	6280	13900	<0.01	0.0518	<0.02	0.292	0.28	--	1.45	<0.01	1.58	<0.0002 J	<0.025	0.375	<0.01	0.65 ± 0.3	1.85 ± 0.67	2.5
			6/7/2018	N	4.42	7.96	545	3690	1.25	7330	14500	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			9/6/2018	N	3	5.3	423	2540	14	5340	11300	<0.01	0.0377	<0.02	0.348	0.413	<0.02	2.16	<0.01	1.82	<0.0002 J	<0.025	0.113	0.0113	--	--	--
			2/20/2019	N	3.42	11.3	515	3220	17	7560	15800	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			8/19/2019	N	2.95	8	486	3200	5.65	7780	15900	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			2/25/2020	N	3.04	8.5	499	3400	2.54	7210	16000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			7/30/2020	N	--	7.61	580	3460	1.35 J	6620	14700	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			8/20/2020	N	3.72	7.75	572	3140	1.23 J	7930	16200	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			2/25/2021	N	4.33	7.8	547	3290	5.91	6950	15200	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			2/25/2021	Dup	--	8.08	551	3280	6	7120	15500	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			8/18/2021	N	2.19	4.79	581	3210	16.8 JH	7200	4960	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			10/7/2021	N	2.99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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APPENDIX A
Cumulative Groundwater Analytical Results for CCR Monitoring Network Wells

San Miguel Electric Cooperative, Inc.
Christine, Atascosa County, Texas

					Appendix III Constituents							Appendix IV Constituents														
				Analyte:	pH (field)	Boron	Calcium	Chloride	Fluoride*	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium-226	Radium-228	Combined Radium
				Units:	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	pCi/L
Area	Well ID	Well Type	Sample Date	Type																						
Ash Pile	SP-02	Downgradient	5/27/2016	N	5.68	8.01	1280	4980	<0.5	1660	15000	<0.0004	0.00229 J	0.0106	0.0173	0.0169	0.000806 J	0.000805 J	<0.0006	1.61	0.000469	<0.0006	0.0957	0.00287	0.81 ± 0.28	4.2 ± 1.1	5.01
			8/16/2016	N	5.88	8.88	1210	5230	<0.5	1680	17100	<0.002	<0.002	0.0118 J	0.00684 J	0.0169	<0.002	0.00132 J	<0.003	0.623	0.000499	<0.003	0.0929	0.00315 J	0.82 ± 0.28	4.5 ± 1.2	5.32
			10/27/2016	N	5.63	10.7	1420	4680	0.513 J	1560	14500	<0.004	<0.004	<0.019	0.00928 J	0.0182 J	<0.004	<0.002	<0.006	0.678	0.000529	<0.006	0.0973	0.0036 J	1.03 ± 0.36	5 ± 1.4	6.03
			1/11/2017	N	5.74	9.33	1240	5320	<0.1	1660	12600	<0.0008	0.00252 J	0.0152	0.00827	0.0162	<0.002	<0.003	0.00189	0.572 J-	0.00125	<0.002	0.113	0.00342	0.909 ± 0.361	3.33 ± 0.455 U	4.24
			2/14/2017	N	5.09	9.18 J	1190	4850	<0.5	1610	12500	<0.0008	<0.002	0.0111	0.00699	0.0156	<0.002	<0.003	<0.0003	0.596	0.000526	<0.002	0.101	0.00337	1.21 ± 0.704	5.14 ± 0.477	6.35
			3/22/2017	N	5.54	8.14	1180	4770	<0.5	1610	12600	<0.0008	<0.002	0.0103	0.00653	0.0156	<0.002	<0.003	<0.0003	0.564 J-	0.000437	<0.002	0.104	0.00333	1.08 ± 0.355	3.31 ± 0.767	4.39
			5/10/2017	N	5.66	10.5 J	1240	4720	<0.2	1570	11500	<0.0008	<0.002	0.0103	0.00809	0.0161	<0.002	<0.003	<0.0003	0.576	0.000459	<0.002	0.094	0.00326	1.20 ± 0.337	3.38 ± 0.577	4.58
			6/13/2017	N	5.66	9.35	1210	4730	<0.5 J	1720	11000	<0.0008	<0.002	0.0103	0.00879	0.0164	<0.002	<0.003	<0.0003	0.642	0.000483	<0.01	0.1	0.00322	0.253 ± 0.226	4.72 ± 0.757	4.97
			7/25/2017	N	5.65	11.7 J	1310	4950	<0.5	2580	11800	<0.0008	<0.002 J	0.0116	0.0102	0.0155	<0.002	<0.003 J	<0.0003	0.564	0.000401	<0.002	0.107 J	0.00346	0.833 ± 0.364	4.19 ± 0.626 U	5.02
			8/22/2017	N	5.56	8.77 J	1190	4770	<0.5	1700	11700	<0.0008	<0.002	0.0113	0.0073 J	0.0145	<0.002	<0.003	<0.0003	0.533	0.000378	<0.002	0.107 J	0.00344	0.198 ± 0.206 U	3.64 ± 0.549	3.84
			3/21/2018	N	5.65	9.13	1200	4430 J+	<10	1660	13100	<0.01	<0.01	<0.02	0.0116	0.0164	--	<0.025	<0.01	0.65	0.00101 J-	<0.025	0.107	<0.01	0.63 ± 0.44 U	4 ± 1.1	4
			6/7/2018	N	5.68	10.6	1220	4980	0.163	1790	13100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			9/6/2018	N	5.21	8.92	1070	4420	<0.5	1710	13300	<0.01	<0.01	<0.02	0.0146	0.016	<0.02	<0.025	<0.01	0.646	0.000511 J-	<0.025	0.114	<0.01	--	--	--
			2/20/2019	N	5.68	13.1	1180	4390	<0.5	1790	12300	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			2/20/2019	Dup	--	10.9	1170	4140	<0.5	1700	12000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			8/20/2019	N	5.44	9.92	1060	4430	<0.5	1880	12200	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			2/25/2020	N	5.58	10.7	986	4220	<0.5	1710	9600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			7/31/2020	N	--	10.6	1100	4060	<0.5	1830	9600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			8/20/2020	N	6.6	10.5	1140	4010	<0.5	1770	9160	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			2/25/2021	N	6.46	10.5	1060	3830	<0.5	1810	9040	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			8/18/2021	N	4.66	10.5	1060	3750	<5	1840	8740	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			8/18/2021	Dup	--	10.4	1070	3770	<5	1830	8930	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			10/7/2021	N	5.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ash Pile	SP-03	Downgradient	5/26/2016	N	3.81	7.66	815	4260	1.09	2870	11500	<0.004	0.00481 J	0.031 J	0.0544	0.0589	0.0161 J	0.166	<0.006	1.94	<0.00004	<0.006	0.0335 J	0.00552 J	1.37 ± 0.41	8 ± 1.9	9.37
			8/17/2016	N	5.15	7.12	693	4230	0.975 J	3040	13500	<0.002	<0.002	0.0252	0.0446	0.0479	<0.002	0.151	<0.003	1.73	<0.00004	<0.003	0.0357	0.00529 J	1.13 ± 0.35	7 ± 1.7	8.13
			10/26/2016	N	4.65	7.54	826	3240	0.552 J	3010	9620	<0.004	<0.004	0.0269 J	0.0274	0.0324	<0.004	0.0952	<0.006	1.69	<0.00004	<0.006	0.0261 J	0.00554 J	0.8 ± 0.3	7.3 ± 1.8	8.1
			1/11/2017	N	3.9	7.1	751	4230	<0.1	2750	11500	<0.0008	0.00584	0.0266	0.0402	0.0506	0.00214 J	0.171	0.000807 J	1.47 J-	<0.00008	<0.002	0.0595	0.00632	1.33 ± 0.491	7.28 ± 0.519	8.61
			2/14/2017	N	3.3	6.41 J	732	4050	1.16 J	2610	10800	<0.0008	0.00502	0.0246	0.0381	0.0487	0.00224 J	0.163	0.000412 J	1.56	<0.00008	<0.002	0.0668	0.00627	1.04 ± 0.472	7.95 ± 0.578	8.99
			3/21/2017	N	3.53	6.36 J	694	4110	0.905 J	3200 J-	10600	<0.0008	0.00645	0.0229	0.0303 J	0.0442	<0.002	0.154	<0.0003	1.23	<0.00008	<0.002	0.0613 J	0.00662	1.71 ± 0.415	5.70 ± 0.519	7.41
			5/10/2017	N	3.89	6.6 J	781	3980	<0.5	2420	11500	<0.0008	0.0049 J	0.0221	0.0416	0.051	<0.002	0.165	<0.0003	1.65	<0.00008	<0.002	0.0615	0.00618	1.35 ± 0.358	6.20 ± 0.617	7.55
			6/13/2017	N	3.92	6.52	767	4380	<0.5 J	2830	10800	<0.0008	0.00472 J	0.0218	0.0434	0.0519	<0.002	0.173	<0.0003	1.72	<0.00008	<0.002	0.064	0.00611	1.37 ± 0.263	6.26 ± 0.753	7.63
			6/13/2017	Dup	--	6.95	765	4440	<0.5 J	2890	10800	<0.0008	0.00462 J	0.0216	0.0419	0.0513	<0.002	0.171	<0.0003	1.7	<0.00008	<0.002	0.0658	0.00594	1.57 ± 0.340	5.94 ± 0.555	7.51
			7/25/2017	N	4.53	8 J	846	4100	<0.5	3600	11200	<0.0008	0.00528 J	0.0224	0.0417	0.0532	0.00413 J	0.156 J	0.00032 J	1.58	<0.00008	<0.002	0.0653 J	0.00657	1.39 ± 0.442	5.00 ± 0.527 J	6.39 J
			7/25/2017	Dup	--	9 J	829	4360	<0.5	3730	11400	<0.0008	0.0055 J	0.024	0.0418	0.053	0.00383 J	0.156 J	0.000306 J	1.62	<0.00008	<0.002	0.0651 J	0.00639	1.24 ± 0.429	7.80 ± 0.524 J	9.04 J
			8/22/2017	N	4.27	6.26 J	762	4150	<0.5	2660	11000	<0.0008	0.00726	0.0232	0.0328 J	0.0462	<0.002	0.158	0.000384 J	1.33	<0.00008	<0.002	0.0632 J	0.00619	1.74 ± 0.462	7.83 ± 0.565	9.57
			3/21/2018	N	4.78	6.75	786	3960 J+	<10	2520	11100	<0.01	<0.01	0.0235	0.0491	0.0482	--	0.16	<0.01	2	<0.0002 J	<0.025	0.0897	<0.01	1.58 ± 0.52	7.6 ± 1.9	9.18
			6/7/2018	N	3.83	7.34	761 J	4760	0.901	2930	11900	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			6/7/2018	Dup	--	6.78	447 J	4810	0.854	2920	11400	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			9/6/2018	N	4.9	6.7	876	4250	0.846	2680	11900	<0.01	<0.01	0.0251	<0.1	0.0525 J	<0.02	0.154 J	<0.01	1.59	<0.0002 J	<0.025	0.0464	<0.01	--	--	--
			9/6/2018	Dup	--	7.71	791	3730	0.517	2700	11400	<0.01	<0.01	0.0229	<0.1	0.0339 J	<0.02	0.109 J	<0.01	1.37	<0.0002	<0.025	0.0367 J	<0.01	--	--	--
			2/20/2019	N	3.91	7.56	880	4580	1.05	2680	11800	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			8/20/2019	N	3.56	6.7	819	4600	0.655 J	2670	11800	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			2/25/2020	N	3.51	7.46	761	4800	<0.5	2530	11300	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			7/30/2020	N	--	7.72	873	4610	<0.5	2600	11800	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			8/20/2020	N	4.46	7.56	924	4780	<0.5	2550	11500	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			2/25/2021	N	3.79	7.32	838	4620	<0.5	2560	11700	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			8/18/2021	N	2.76	6.97	913	4710	<5	2530	10100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			10/7/2021	N	3.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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APPENDIX A
Cumulative Groundwater Analytical Results for CCR Monitoring Network Wells

San Miguel Electric Cooperative, Inc.
Christine, Atascosa County, Texas

					Appendix III Constituents							Appendix IV Constituents														
				Analyte:	pH (field)	Boron	Calcium	Chloride	Fluoride*	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium-226	Radium-228	Combined Radium
				Units:	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	pCi/L
Area	Well ID	Well Type	Sample Date	Type																						
Ash Pile	SP-32	Downgradient	5/26/2016	N	3.45	11.1	468	1800	17.5	9370	16700	<0.004	0.0397 J	0.0248 J	0.537	0.434	0.0402 J	3.08	<0.006	4.36	<0.00004	<0.006	0.074	0.0117 J	0.93 ± 0.31	5.7 ± 1.4	6.63
			8/17/2016	N	3.45	10.6	420	1700	13	9040	18600	<0.002	0.0362	0.0213 J	0.504	0.411	0.0602	2.94	0.00546 J	4.05	<0.00004	<0.003	0.0988	0.0126	0.63 ± 0.22	0.92 ± 0.39	1.55
			10/26/2016	N	3.54	10.9	510	1780	9.38	9680	16100	<0.004	0.0438 J	0.0224 J	0.563	0.462	0.0549	3.19	<0.006	4.68	<0.00004	<0.006	0.117	0.014 J	1.6 ± 0.52	ND ± 0.48	1.6
			1/11/2017	N	3.61	8.89	430	1650	<0.1	9760	16700	<0.0008	0.0703	0.0219	0.394	0.382	0.0506	3.54	0.0045	3.73 J-	<0.00008	<0.002	0.342	0.0156	0.949 ± 0.247	0.625 ± 0.413 U	1.57
			2/14/2017	N	3.1	8.69 J	432	1620	4.08	9710	15900	<0.0008	0.0668	0.0167	0.394	0.401	0.043	3.62	0.00268	3.47	<0.00008	<0.002	0.527	0.0159	1.29 ± 0.449	1.54 ± 0.536	2.83
			3/21/2017	N	3.15	8.18 J	393	1630	13.2	10700 J-	15900	<0.0008	0.0882	0.0139	0.311 J	0.364	0.0316	3.28	0.00204 J+	3.41	<0.00008	<0.002	0.404 J	0.0168	0.258 ± 0.161 U	1.18 ± 0.491	1.44
			5/10/2017	N	3.55	9 J	434	1590	9.97	9550	16600	<0.0008	0.0626	0.0126	0.432	0.411	0.024	3.19	0.00177	3.73	<0.00008	<0.002	0.411	0.0155	0.860 ± 0.295	2.69 ± 0.555 J	3.55 J
			5/10/2017	Dup	--	9.02 J	438	1540	10.3	9360	17000	<0.0008	0.0632	0.0128	0.435	0.419	0.0227	3.21	0.00186	3.66	<0.00008	<0.002	0.411	0.016	1.44 ± 0.489	4.20 ± 0.503 J	5.64 J
			6/13/2017	N	3.49	9.07	437	1720	6.55 J-	9710	17400	<0.0008	0.0897	0.0125	0.459	0.417	0.0278	3.03	<0.0003	3.63	<0.00008	<0.002	0.601	0.016	0.438 ± 0.191	3.95 ± 0.494	4.39
			7/25/2017	N	3.49	8.28 J	501	1750	<0.5 J	11800	16300	<0.0008	0.102 J	0.0128	0.44	0.43	0.0207	1.99 J	0.00148	3.77	<0.00008	<0.002	0.753 J	0.0166	0.430 ± 0.280	4.53 ± 0.497 U	4.96
			8/22/2017	N	3.35	7.57 J	429	1640	<0.5	10100	16500	<0.0008	0.101	0.012	0.319 J	0.372	0.0194	2.1 J	0.00106	2.54	<0.00008	<0.002	0.467 J	0.0157	0.302 ± 0.356	3.46 ± 0.519 J	3.76
			8/22/2017	Dup	--	7.6 J	434	1640	<0.5	10100	16400	<0.0008	0.1	0.0117	0.317 J	0.37	0.0187	2.1 J	0.00102	2.56	<0.00008	<0.002	0.468 J	0.0158	0.595 ± 0.369	4.61 ± 0.465 J	5.21
			3/21/2018	N	3.13	8.54	431	1470 J+	11	9720	17600	<0.01	0.116	<0.02	0.449	0.402	--	2.55	<0.01	3.3	<0.0002 J	<0.025	0.806	0.0167	0.43 ± 0.25	1.86 ± 0.72	2.29
			6/7/2018	N	3.19	9.2	422	1720	0.89	10100	16600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			9/6/2018	N	2.76	7.54	465	1560	15.2	9450	17900	<0.01	0.0589	<0.02	0.346	0.414	<0.02	2.66	<0.01	3.03	<0.0002 J	<0.025	0.169	0.0141	--	--	--
			2/20/2019	N	3.48	8.1	428	1680	13.9	10700	16600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			8/20/2019	N	3.06	7.99	436	1930	4	10100	16700	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			8/20/2019	Dup	--	7.88	464	1700	4.86	9550	16800	<0.0008	0.0721	0.0118	0.366	0.377	0.0107	1.76	0.000744 JH	3.31	<0.00008	<0.002	0.614	0.0157	--	--	--
			2/25/2020	N	2.81	8.8	399	1770	1.42 J	9370	16400	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			7/30/2020	N	--	8.58	476	1860	0.576 J	9760	16600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			8/20/2020	N	3.74	8.65	496	1890	<0.5	9660	15800	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			2/25/2021	N	3.58	8.72	474	1930	4.22	9220	16000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			8/18/2021	N	2.74	7.92	497	1570	8.51 JH	6950	11800	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			10/7/2021	N	3.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ash Pile	SP-31	Observation	5/26/2016	N	3.71	7.99	441	486	9.94	4840	8740	<0.004	0.0168 J	0.0248 J	0.377	0.15	0.00785 J	0.723	<0.006	3.17	<0.00004	<0.006	0.0366 J	<0.002	1.31 ± 0.4	2.07 ± 0.59	3.38
			8/17/2016	N	3.48	5.7	436	320	11	4720	8040	<0.0004	0.0125	0.0281	0.39	0.144	0.00445 J	0.565	0.00519	3.08	<0.00004	0.000803 J	0.0368	0.00134 J	1.34 ± 0.4	1.88 ± 0.58	3.22
			2/19/2019	N	4.07	7.25	444	453	9.33	5090	7640	<0.0053 JL	0.0283	0.0264 J	0.314	0.16	0.00679 JH	0.611	0.00522 J	2.54	<0.00003	0.0157 J	0.0676	0.00174 J	0.75 ± 0.42 J	5 ± 1.3	5.75 ± 1.72 J
			8/19/2019	N	3.18	4.78	437	465	7.92	4910	7520	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			2/25/2020	N	3.08	5.08	414	515	6.05	4580	7760	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			7/31/2020	N	--	5.18	480	488	5.51	4700	7680	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			8/20/2020	N	4.05	5.18	492	537	8.32	4800	7640	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ash Pile	SP-33	Observation	10/27/2016	N	--	--	--	--	--	--	12400	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			2/18/2019	N	6.2	5.45	1280	4230	0.614 J	1560	10700	0.000615 J	0.00277	0.0613	0.0138 J	0.0146	0.11	0.0582	0.00084 JH	0.793	<0.00003	0.00151 J	0.0205	0.00844	2.89 ± 0.95	8.4 ± 2	11.29 ± 2.95
			8/21/2019	N	4.17	5.81	1270	4340	0.798 J	1500	9120	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			2/25/2020	N	3.41	6.07	1120	4460	<0.5	1480	9920	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			7/30/2020	N	--	6.9	1320	4540	<0.5	1540	9940	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			8/5/2020	N	3.6	6.18	1340	4520	<0.5	1570	9680	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ash Pond	PZ-02	Upgradient	5/26/2016	N	5.77	6.89	823	4050	<0.5	2830	11400	<0.004	0.00444 J	0.0293 J	<0.002	<0.002	<0.004	<0.002	<0.006	2.38	<0.00004	<0.006	<0.011	<0.002	0.91 ± 0.3	3.84 ± 0.98	4.75
			8/17/2016	N	5.74	4.39	681	4040	<0.5	2840	12600	<0.002	<0.002	0.0259	<0.001	<0.001	<0.002	0.00157 J	<0.003	2.42	<0.00004	<0.003	0.00555 J	<0.001	0.83 ± 0.27	2.43 ± 0.68	3.26
			10/27/2016	N	6.07	6.49	807	4140	0.563 J	2950	11000	<0.004	0.00503 J	0.0403 J	<0.002	<0.002	0.00436 J	0.00305 J	<0.006	2.27	<0.00004	<0.006	0.0128 J	<0.002	1.09 ± 0.35	3.6 ± 1	4.69
			2/15/2017	N	4.73	5.45 J	741	3740	<0.5	2640	10500	<0.0008	<0.002	0.0265	<0.0003	<0.0003	<0.002	<0.003	<0.0003	1.77	<0.00008	<0.002	<0.002	<0.0005	0.657 ± 0.360 U	2.25 ± 0.500	2.91
			3/21/2017	N	5.49	5.34 J	706	3820	<0.5	3120 J-	10300	<0.0008	<0.002	0.0275	<0.0003 J	<0.0003	<0.002	<0.003	<0.0003	1.41	<0.00008	<0.002	<0.002 J	<0.0005	2.05 ± 0.481	2.74 ± 0.475	4.79
			5/10/2017	N	5.89	5.67 J	778	3880	<0.1	2720	10800	<0.0008	<0.002	0.0257	<0.0003	<0.0003	<0.002	<0.003	<0.0003	2.06	<0.00008	<0.002	<0.002	<0.0005	0.774 ± 0.299	3.21 ± 0.522	3.98
			7/26/2017	N	6.11	5.43 J	790	4050	<0.5	3010	10000	<0.0008	<0.002	0.0257	<0.0003 J	<0.0003	<0.002	<0.003	<0.0003	1.88	<0.00008	<0.002	<0.002	<0.0005	2.29 ± 0.595	3.70 ± 0.507 U	5.99
			8/22/2017	N	5.76	5.42	767	3830	<0.5	2720	10800	<0.0008	<0.002	0.027	<0.0003	<0.0003	<0.002	<0.003	<0.0003	1.82	<0.00008	<0.002	<0.002	<0.0005	0.704 ± 0.303	2.93 ± 0.460	3.63
			3/21/2018	N	5.79	5.13	726	3000 J+	<10	2600	9760	<0.01	<0.01	0.0272	<0.01	<0.01	--	<0.025	<0.01	1.87	<0.0002 J	<0.025	<0.01	<0.01	0.34 ± 0.16 U	1.11 ± 0.56	1.11
			6/6/2018	N	5.77	5.23	715	3790	0.26	2880	10200	<0.01	<0.01	0.0266	<0.1	<0.01	--	<0.025	<0.01	1.59	<0.0002 J	<0.025	<0.01	<0.01	0.46 ± 0.25 U	2.07 ± 0.62	2.53
			9/6/2018	N	5.34	5.97	801	3600	<0.5	2660	10600	<0.01	<0.01	0.0309	<0.1	<0.01	<0.02	<0.025	<0.01	1.71	<0.0002 J	<0.025	<0.01	<0.01	0.6 ± 0.34 U	2.23 ± 0.7 U	2.83 U
			2/19/2019	N	6.26	8.68	838	4040	<0.5	2970	10900	<0.0053 JL	<0.0025	0.0267 J	<0.00091	<0.00077	<0.00251 JH	0.00238 J	<0.0012	2.16	<0.00003	<0.0049	<0.0086	<0.00125 JH	0.73 ± 0.34 JH	3.14 ± 0.88	3.87 ± 1.22 JH
			8/19/2019	N	5.85	6.35	764	3980	<0.5	2840	10700	<0.0008	<0.002	0.0284	0.000438 JH	<0.0003 JH	<0.002	0.003 JH	0.000632 JH	1.99 JL	<0.00008	<0.002	<0.002	<0.0005	0.676 ± 0.504 J	0.862 ± 0.487 JH	1.54 ± 0.991 JH
			2/26/2020	N	5.85	7.79	763	3940	<0.5	2730	10800	<0.0008	0.00259 J	0.0421	0.000703 J	<0.0003	0.00423 J	0.00421 J	0.00316	1.84	<0.00008	<0.002	<0.002	<0.0005	0.717 ± 0.348	4.15 ± 0.658	4.87 ± 1.01
			8/11/2020	N	6.04	7.57	816	4010	<0.5	2780	10700	<0.0008	<0.002	0.0286	<0.0003	<0.0003	<0.002	<0.003	0.000635 J	1.9	<0.00008	<0.002	<0.002	<0.0005	0.835 ± 0.392	2.6 ± 0.65 JH	3.43 ± 1.04 JH
			2/24/2021	N	5.95	7.15	799	3900	<0.5	2620	10500	<0.0008	0.00513	0.0702	0.00285	<0.0003	0.0137	0.0132	0.00743	1.4	<0.00008	<0.002	0.00566	0.0017	0.596 ± 0.29 JH	-1.14 ± 0.377	0.596 ± 0.667 JH
			8/18/2021	N	5.67	6.74	949	4010	0.11 J	2910	9970	<0.00589	<0.0055	0.0195 JL	0.00224 JL	<0.00243	0.0538	0.00881 J	<0.00237 JL	2.48	<0.0000263	0.00788 J	<0.00439	<0.00621 JL	11.6 ± 16.7	8.53 ± 28.6	20.13 ± 45.3

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Cumulative Groundwater Analytical Results for CCR Monitoring Network Wells

San Miguel Electric Cooperative, Inc.
Christine, Atascosa County, Texas

					Appendix III Constituents							Appendix IV Constituents														
				Analyte:	pH (field)	Boron	Calcium	Chloride	Fluoride*	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium-226	Radium-228	Combined Radium
				Units:	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	pCi/L
Area	Well ID	Well Type	Sample Date	Type																						
Ash Pond	PZ-03	Upgradient	5/26/2016	N	3.17	13.5	635	4010	8.26	4590	13900	<0.004	0.026 J	<0.019	0.365	0.34	0.00485 J	1.89	<0.006	3.21	<0.00004	<0.006	0.0527	0.00309 J	0.35 ± 0.16	3.63 ± 0.96	3.98
			8/18/2016	N	3.4	8.43	565	4140	7.41	4720	13700	<0.002	0.0248 J	0.0143 J	0.463	0.319	0.00448 J	1.66	<0.003	3.68	<0.00004	<0.003	0.0666	0.00291 J	0.5 ± 0.18	3.78 ± 0.98	4.28
			10/26/2016	N	3.26	12.3	670	4210	5.56	4720	13400	<0.004	0.0324 J	<0.019	0.371	0.379	0.00514 J	1.92	<0.006	3.28	<0.00004	<0.006	0.093	0.00499 J	0.48 ± 0.2	3.9 ± 1.1	4.38
			2/14/2017	N	2.78	9.67 J	590	3980	5.76	4410	12600	<0.0008	0.0588	0.0142	0.275	0.344	0.00416 J	1.84	0.000306 J	2.44	<0.00008	<0.002	0.424 J	0.00338	0.701 ± 0.417	3.57 ± 0.513	4.27
			3/22/2017	N	3.16	9.82 J	567	4200	6.04	5120 J-	12500	<0.0008	0.058	0.015	0.295 J	0.326	0.00369 J	1.94	0.000355 J+	2.57	<0.00008	<0.002	0.265 J	0.00366	1.25 ± 0.296	4.38 ± 0.710	5.63
			5/10/2017	N	3.47	10.3 J	630	4130	<0.1	4430	14100	<0.0008	0.0421	0.0137	0.294	0.371	0.00443 J	1.52	<0.0003	2.69	<0.00008	<0.002	0.274	0.00344	0.641 ± 0.282	3.41 ± 0.511	4.05
			7/24/2017	N	3.42	10.1 J	709	4200	1.14 J	5630	13800	<0.0008	0.0606 J	0.0149	0.281	0.382	0.00555	1.42 J	0.00041 J	2.3	<0.00008	<0.002	0.453 J	0.00357	0.934 ± 0.346	3.92 ± 0.585	4.85
			8/21/2017	N	3.49	9.16 J	633	4230	0.526 J	4470	13200	<0.0008	0.0684	0.0142	0.225 J	0.337	0.00375 J	1.53	<0.0003	1.98	<0.00008	<0.002	0.331 J	0.00337	0.565 ± 0.280	4.32 ± 0.472	4.89
			3/21/2018	N	2.98	10.2	694	4390 J+	<10	4160	14000	<0.01	0.0743	0.0245	0.425	0.463	--	1.69	<0.01	3.57	<0.0002 J	<0.025	0.518	<0.01	0.54 ± 0.28	3.7 ± 1.1	4.24
			6/7/2018	N	2.87	10.6	686	5050	1.44	4610	14100	<0.01	0.0838	0.399	0.289	0.501	--	1.78	0.109	2.41	<0.0002	<0.025	0.146	<0.01	0.54 ± 0.26	4.9 ± 1.2	5.44
			9/6/2018	N	2.88	5.48	818	3500	<0.5	2650	10500	<0.01	<0.01	0.03	<0.1	<0.01	<0.02	<0.025	<0.01	1.68	<0.0002 J	<0.025	<0.01	<0.01	0.31 ± 0.21 U	0.79 ± 0.37 U	ND
			2/19/2019	N	3.66	10.2	719	4910	7.12	3870	14900	<0.0053 JL	0.052	0.057	0.29	0.601	0.00571 JH	1.73	0.0175 J	2.85	0.00009 J	<0.0049	0.122	0.00672 J	0.62 ± 0.34 JH	3.8 ± 0.99	4.42 ± 1.33 JH
			8/19/2019	N	3.07	9.66	727	5300	3.89	4180	14500	<0.0008	0.0515	0.0171	0.262	0.538	0.005	1.2	0.00145 JH	2.61 JL	<0.00008	<0.002	0.444	0.00402	1.93 ± 0.738 J	0.649 ± 0.44 JH	2.58 ± 1.18 B
			2/26/2020	N	3.13	10.6	659	4780	3.35	4320	14200	<0.0008	0.0694	0.0483	0.222	0.42	0.0131	1.17	0.00966	2.58	<0.00008	<0.002	0.475	0.00389	1.06 ± 0.457	6.59 ± 0.649	7.66 ± 1.11
			8/11/2020	N	3.37	10.8	790	5830	<0.5	3920	14100	<0.0008	0.0854	0.0183	0.23	0.512	0.0061	1.17	0.00142	2.71	<0.00008	<0.002	0.502	0.00496	0.767 ± 0.363	5.93 ± 0.725	6.69 ± 1.09
			2/24/2021	N	3.24	9.49	798	5310	3.77	4010	14200	<0.0008	0.0678	0.0243	0.189	0.477	0.00424 J	1.48	0.0032	1.84	<0.00008	<0.002	0.711	0.00627	0.939 ± 0.38 JH	4.22 ± 0.39 JH	5.16 ± 0.77 JH
			8/18/2021	N	3.06	7.48	979	5300	5.38	4120	12700	0.00762 J	0.0311	0.0141 JL	0.196 JL	0.428	<0.000811	1.09	0.0218 JL	2.2	<0.0000263	0.00939 J	<0.00439	<0.00621 JL	-17.3 ± 23.1	6.31 ± 17.1	-10.99 ± 40.2
Ash Pond	AP-31	Downgradient	5/25/2016	N	3.93	37.6	547	1550	<0.5	3310	7990	<0.004	0.00639 J	<0.019	0.0089 J	0.00403 J	<0.004	0.218	<0.006	0.757	0.000685	<0.006	0.0173 J	<0.002	0.21 ± 0.14	1.24 ± 0.47	1.45
			8/17/2016	N	3.75	35.5	505	1760	0.579 J	3590	9580	<0.002	0.00322 J	0.0128 J	0.011	0.00432 J	0.00286 J	0.237	<0.003	0.908	0.000766	<0.003	0.0258	0.00199 J	0.49 ± 0.18	2.37 ± 0.67	2.86
			10/27/2016	N	3.84	44.6	602	1550	0.725 J	3300	7820	0.00787 J	0.00542 J	<0.019	0.0107 J	0.00427 J	<0.004	0.219	<0.006	0.826	0.000689	<0.006	0.0309 J	0.00286 J	0.32 ± 0.16	1.15 ± 0.49	1.47
			2/16/2017	N	3.56	44.3	592	1560	0.288 J-	3190	7310	<0.0008	0.0115	0.0124 J	0.00834	0.00377	0.00243 J	0.235	<0.0003	0.717	0.000723	<0.002	0.0631 J+	0.00252	0.447 ± 0.313	0.540 ± 0.625 U	0.987 U
			3/23/2017	N	3.66	40.8	499	1550	<0.5	3310	7010	<0.0008	0.00806	0.0114	0.00805	0.00361	0.00236 J	0.214	<0.0003	0.739 J-	0.000814	<0.002	0.0609	0.00205	1.39 ± 0.384	0.512 ± 0.492 U	1.9
			5/15/2017	N	2.96	42.3 J	534	1580	<0.1	3180	7590	<0.0008	0.00779	0.0116	0.00938	0.00398	0.00236 J	0.225	<0.0003	0.814	0.000816	<0.002	0.0511	0.00213	0.623 ± 0.276	1.55 ± 0.899 U	2.17
			7/26/2017	N	3.98	45.1 J	510	1720	<0.2	3730	7740	<0.0008	0.0128	0.0119	0.00715	0.00369	0.00239 J	0.238	<0.0003	0.717	0.000665	<0.002	0.0579	0.00244	0.741 ± 0.318	1.20 ± 0.379 U	1.94 U
			8/23/2017	N	3.72	41.4	530	1680	<0.2	3260	7800	<0.0008	0.0113	0.013	0.00876	0.00392	0.00239 J	0.253	<0.0003	0.846	0.000681	<0.002	0.0704	0.00222	0.491 ± 0.260	2.40 ± 0.489 U	2.89
			3/19/2018	N	3.58	43.3	566	1570	<5	3260	7580	<0.01	<0.01	<0.02	<0.02	<0.01	--	0.253	<0.02	0.883	0.000505 J-	<0.025	0.0372	<0.01	0.44 ± 0.25	1.13 ± 0.54	1.57
			6/5/2018	N	3.89	43.1	562	1620	0.308	3220	7740	<0.01	<0.01	<0.02	0.0123	<0.01	--	0.234	<0.01	0.771	0.000457	<0.025	0.0329	<0.01	0.47 ± 0.29 U	0.99 ± 0.4	0.99
			9/4/2018	N	3.19	34.7	601	1550	0.406	3020	8220	<0.01	<0.01	<0.02	0.011 J	<0.01 J	<0.02	0.229 J	<0.01	0.947	0.000403	<0.025	0.0243 J	<0.01	0.35 ± 0.27 U	1.38 ± 0.53 U	1.73 U
			2/21/2019	N	3.94	58.2	476	1590	0.609 J	3090	7780	<0.00106 JH	0.00674	0.012	0.00893 J	0.00441	0.00255 JH	0.257	<0.00024 JH	0.871	0.000504	<0.00098	0.0285	0.00215 J	0.49 ± 0.28 JH	1.45 ± 0.52	1.94 ± 0.8 JH
			2/21/2019	Dup	--	60.2	399	1630	0.601 J	3140	7780	<0.00106 JH	0.00642	0.0123	0.00846 J	0.00494	0.0022 JH	0.247	<0.00024 JH	0.837	0.0005	<0.00098	0.025	0.00215 J	0.33 ± 0.26 JH	1.12 ± 0.47	1.45 ± 0.73 JH
			8/20/2019	N	3.52	48.1	534	1840	0.575 J	3320	7680	<0.0008	0.00966	0.013	0.0108	0.00492	0.00301 J	0.215	<0.0003 JH	0.981 JL	0.00055	<0.002	0.0662	0.00224	0.693 ± 0.556	2.45 ± 0.507 J	3.14 ± 1.06
			2/24/2020	N	3.59	50.1	500	1880	<0.5	3030	8060	<0.0008	0.0123	0.012	0.00963	0.004	<0.002	0.223	<0.0003	0.831	0.000467	<0.002	0.0734	0.00222	0.517 ± 0.328	1.47 ± 0.438	1.99 ± 0.766
			8/11/2020	N	3.81	51	588	1850	<0.5	3150	7860	<0.0008	0.0128	0.0137	0.0109	0.00508	0.002 J	0.244	<0.0003	0.919	0.000554	<0.002	0.087	0.00254	0.26 ± 0.23	1.02 ± 0.623 JH	1.28 ± 0.853 JH
			8/11/2020	Dup	--	51.1	583	1880	<0.5	3220	7920	<0.0008	0.0122	0.0137	0.0105	0.00467	0.00218 J	0.242	<0.0003	0.892	0.000563	<0.002	0.0866	0.00252	0.697 ± 0.406	0.479 ± 0.598 JH	1.18 ± 1 JH
			2/24/2021	N	3.68	47.6	586	1950	<0.5	3050	8000	<0.0008	0.0133	0.0135	0.00975	0.00487	<0.002	0.232	0.000361 J	0.679	0.000479	<0.002	0.129	0.00236	1.09 ± 0.39 JH	0.852 ± 0.349 JH	1.94 ± 0.739 JH
			8/18/2021	N	3.68	55.8	708	1960	0.45 J	3300	7150	<0.00589	<0.0055	0.00948 JL	0.0129 JL	0.00581	0.0341	0.242	<0.00237	1.25	0.000464	0.0157	<0.00439	<0.00621 JL	22.4 ± 17.9	3.69 ± 7.08	26.09 ± 24.98
Ash Pond	AP-32	Downgradient	5/25/2016	N	3.45	15.4	679	3120	1.42	3570	10200	<0.004	0.0154 J	0.0255 J	0.0588	0.077	<0.004	0.558	<0.006	1.71	0.000933	<0.006	0.0271 J	0.00414 J	1.28 ± 0.4	7.2 ± 1.8	8.48
			8/17/2016	N	3.49	14	589	3160	2.06	3500	10300	<0.002	0.0136 J	0.0181 J	0.068	0.0788	<0.002	0.553	<0.003	1.87	0.0019	<0.003	0.0404	0.004 J	0.32 ± 0.14	7.9 ± 1.9	8.22
			10/26/2016	N	3.75	15.8	698	3020	1.62	3360	9780	<0.0004	0.0134	0.0187	0.0548	0.0636	<0.004	0.411	0.000774 J	1.81	0.00156	<0.0006	0.0322	0.00331	0.82 ± 0.3	7.7 ± 1.9	8.52
			2/17/2017	N	3.31	15	726	2880	1.24 J-	3180	10400	<0.0008	0.0375	0.0184 J	0.0434	0.0707	0.00453 J	0.508	0.000478 J	1.56	0.00186	<0.002	0.188 J+	0.0048	1.64 ± 0.485	7.94 ± 0.596	9.58
			3/23/2017	N	3.4	19.8	636	2880	1.36 J	3210	8840	<0.0008	0.029	0.0182	0.0538	0.0797	0.00211 J	0.552	0.000447 J	1.34 J-	0.0028	<0.002	0.213	0.00446	1.95 ± 0.393	7.45 ± 0.637	9.4
			5/15/2017	N	2.7	15.2 J	658	2910	<0.1	3230	9600	<0.0008	0.0267	0.0179	0.053	0.0761	<0.002	0.525	0.000454 J	1.56	0.00197	<0.002	0.177	0.00414	0.775 ± 0.335	7.60 ± 0.927 U	8.38
			7/26/2017	N	3.75	16 J	637	2880	<0.5	3790	9760	<0.0008	0.0441	0.0177	0.0403	0.0712	<0.002	0.532	0.000436 J	1.25	0.00206	<0.002	0.203	0.0047	2.04 ± 0.513	7.97 ± 0.605	10
			8/23/2017	N	3.48	14.8	656	2960	<0.5	3320	9780	<0.0008	0.064	0.0186	0.0567	0.0769	<0.002	0.62	0.000436 J	1.62	0.00197	<0.002	0.282	0.00411	1.28 ± 0.438	8.33 ± 0.564	9.61
			3/19/2018	N	3.54	14	682	2730	<10	3240	9780	<0.01	0.0379	<0.02	0.0564	0.0817	--	0.559	<0.02	1.57	0.00194 J-	<0.025	0.116	<0.01	1.29 ± 0.52	9.6 ± 2.4	10.89
			6/5/2018	N	3.38	14.9	670	2870	0.383	3350	9720	<0.01	0.0191	<0.02	<0.1	0.0862	--	0.573	<0.01	1.36	0.00181	<0.025	0.0746	<0.01	0.61 ± 0.34	9.2 ± 2.2	9.81
			9/4/2018	N	2.91	19.3 J	673	2760	1.48	3230	10200	<0.01	0.0215	<0.02	<0.1 J	0.0859 J	<0.02	0.595 J	<0.01	1.51	0.00222	<0.025	0.0613 J	<0.01	0.99 ± 0.47 U	11.3 ± 2.7	12.29
			9/4/2018	Dup	--	15.6 J	718	2760	1.48	3210	10400	<0.01	0.0212	<0.02	<0.2 J	0.0917 J	<0.02	0.589 J	<0.01	1.35	0.00206	<0.025	0.0629 J	<0.01	1.29 ± 0.52 U	9.5 ± 2.3	10.79
			2/21/2019	N	3.64	19.3	700	2750	1.67	3230	9680	<0.00265 JH	0.0243	0.0185 J	0.0505	0.0893	<0.00126 JH	0.614	<0.0006 JH	1.71	0.00148	<0.00245	0.0613	0.00421 J	1.84 ± 0.66 JH	8.8 ± 2.1	10.64 ± 2.76 JH
			8/20/2019	N	3.22	14.8	654	2970	1.41 J	3420	9900	<0.0008	0.0318	0.0177	0.0518	0.0714	<0.002	0.403	<0.0003 JH	1.66 JL	0.00115	<0.002	0.23	0.00383	1.28 ± 0.611 J	10.8 ± 0.585 J	12 ± 1.2
			2/24/2020	N	3.31	15	591	2930	0.528 J	3260	9180	<0.0008	0.0418	0.0178	0.0435	0.0568	<0.002	0.421	0.000358 J	1.5	0.00105	<0.002	0.267	0.00378	1.3 ± 0.439	9.21 ± 0.537	10.5 ± 0.976
			8/12/2020	N	2.52	20.3	675	3000	<0.5	3390	10600	<0.0008	0.0452	0.0189	0.0509	0.0759	<0.002	0.495	<0.0003	1.51	0.00159	<0.002	0.33	0.00439	1.59 ± 0.529	10.4 ± 0.732	12 ± 1.26
			2/24/2021	N	3.35	19.7	677	2930	1.37 J	3290	9740	<0.0008	0.0484	0.0183	0.0457	0.0729	<0.002	0.471	0.00052 J	1.21	0.00164	<0.002	0.487	0.00448	1.13 ± 0.376 JH	8.46 ± 0.446	9.59 ± 0.822 JH
			8/18/2021	N	3.35	19.5	860	2850	1.46	3530	9080	<0.00589	0.0296	0.0101 JL	0.0517 JL	0.0719	0.0133	0.512	0.0159 JL	1.75	0.00566	0.00707 J	<0.00439	<0.00621 JL	15.7 ± 11.1	19.7 ± 23.4	35.4 ± 34.5

APPENDIX A
Cumulative Groundwater Analytical Results for CCR Monitoring Network Wells

San Miguel Electric Cooperative, Inc.
Christine, Atascosa County, Texas

					Appendix III Constituents							Appendix IV Constituents														
				Analyte:	pH (field)	Boron	Calcium	Chloride	Fluoride*	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium-226	Radium-228	Combined Radium
				Units:	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	pCi/L
Area	Well ID	Well Type	Sample Date	Type																						
Ash Pond	AP-33	Downgradient	5/25/2016	N	2.94	62.4	752	4390	7.36	3270	13400	<0.004	0.0274 J	0.0193 J	0.342	0.124	<0.004	1.17	<0.006	1.23	0.00343	<0.006	0.0499 J	0.0049 J	0.2 ± 0.12	6.2 ± 1.5	6.4
			8/17/2016	N	3.31	56.7	708	4820	7.3	3660	13400	<0.002	0.0269	0.019 J	0.372	0.12	0.00268 J	1.12	<0.003	1.36	0.00389	<0.003	0.0711	0.00467 J	0.79 ± 0.25	6.2 ± 1.5	6.99
			10/26/2016	N	3.58	53.5	820	4490	6.15	3380	12900	<0.0004	0.0267	0.0176	0.333	0.121	<0.004	0.933	<0.0006	1.39	0.0041	<0.0006	0.0664	0.00451	0.9 ± 0.32	6.1 ± 1.5	7
			2/17/2017	N	3.13	69.1	857	4170	3.16 J-	3020	13500	<0.0008	0.0655	0.0189 J	0.252	0.118	<0.002	1.03	0.00106	1.2	0.00382	<0.002	0.344 J+	0.00618	0.662 ± 0.307	6.20 ± 0.561	6.86
			3/23/2017	N	3.24	64.8	737	4300	5.56	3160	12000	<0.0008	0.0479	0.0177	0.282	0.121	<0.002	0.987	0.000331 J	1.03 J-	0.00345	<0.002	0.378	0.00527	1.97 ± 0.487	6.10 ± 0.613	8.07
			5/12/2017	N	3.4	71.4 J	793	4530	<0.1	3330	10500	<0.0008	0.0453	0.018	0.29	0.127	<0.002	1.01	0.000358 J	1.29	0.00424	<0.002	0.319	0.00525	0.617 ± 0.195	7.08 ± 1.07	7.7
			7/26/2017	N	3.58	65.5 J	736	4310	1.3 J	4150	11900	<0.0008	0.0768	0.03 J	0.222	0.116	0.00368 J	1.08	0.00307 J	0.932	0.00775	<0.002	0.367	0.00593	3.75 ± 0.687	8.61 ± 0.622	12.4
			7/26/2017	Dup	--	68.9 J	761	4400	1.26 J	4170	12600	<0.0008	0.0781	0.0404 J	0.232	0.119	0.00507	1.08	0.00512 J	0.961	0.00925	<0.002	0.366	0.00611	2.94 ± 0.801	9.34 ± 0.559	12.3
			8/23/2017	N	3.28	64.9	800	4310	1.12 J	3170	12500	<0.0008	0.12	0.0194	0.322	0.129	<0.002	1.35	0.000474 J	1.27	0.00425	<0.002	0.552	0.00544	1.42 ± 0.438	7.63 ± 0.562	9.05
			3/19/2018	N	3.02	56.1	839	4380	<10	3240	12900	<0.01	0.0707	<0.02	0.302	0.131	--	1.2	<0.02	1.09	0.00381 J-	<0.025	0.234	<0.01	0.93 ± 0.33	8.5 ± 2.1	9.43
			6/6/2018	N	3.07	59.2	770	4840	0.853	3520	13000	<0.01	0.0355	0.0212	0.311	0.141	--	1.31	<0.01	1.13	0.00398	<0.025	0.144	<0.01	1.17 ± 0.52	7.3 ± 1.8	8.47
			9/4/2018	N	2.72	55.3	812	4350	6.82	3160	12900	<0.01	0.0406	<0.02	0.309 J	0.139 J	<0.02	1.36 J	<0.01	1.19	0.00412	<0.025	0.112 J	<0.01	0.43 ± 0.28 U	8.2 ± 2	8.63
			2/21/2019	N	3.49	69.8	879	4340	6.61	3110	12500	<0.00265 JH	0.0433	0.0182 J	0.328	0.141	0.00226 JH	1.43	0.000692 JH	1.33	0.00266	<0.00245	0.109	0.00545 J	0.62 ± 0.39 JH	7.4 ± 1.8	8.02 ± 2.19 JH
			8/20/2019	N	3.02	65.2	786	4610	4.45	3370	12700	<0.0008	0.0552	0.0186	0.302	0.134	<0.002	1.04	0.000335 JH	1.27 JL	0.00407	<0.002	0.435	0.00538	1 ± 0.47 J	8.2 ± 0.521	9.2 ± 0.991
			2/24/2020	N	3.13	67.9	716	4430	3.56	3280	12200	<0.0008	0.0754	0.0202	0.253	0.111	0.00201 J	1.07	0.000793 J	1.15	0.00477	<0.002	0.506	0.0054	1.53 ± 0.45	7.69 ± 0.528	9.23 ± 0.978
			8/11/2020	N	3.39	69.2	762	4320	<0.5	3290	12200	<0.0008	0.0711	0.0186	0.246	0.121	<0.002	1.16	0.000392 J	1.18	0.0057	<0.002	0.527	0.00539	1.11 ± 0.483	7.73 ± 0.649	8.83 ± 1.13
			2/24/2021	N	3.19	61.2	782	4500	3.88	3300	12200	<0.0008	0.0751	0.0186	0.214	0.114	<0.002	1.05	0.000578 J	0.873	0.00466	<0.002	0.772	0.00569	0.843 ± 0.361 JH	5.86 ± 0.447 JH	6.7 ± 0.808 JH
			8/18/2021	N	3.2	70.5	922	4360	1.78	3450 B	11000	<0.00589	0.0325	0.00827 JL	0.197 JL	0.0951	<0.000811	1.14	0.0233 JL	1.18	0.00667	0.00762 J	<0.00439	<0.00621 JL	38.2 ± 17.7	18.7 ± 25.6	56.9 ± 43.3
Ash Pond	AP-34	Downgradient	5/25/2016	N	3.05	28.3	634	2700	7.72	3410	10100	<0.004	0.0185 J	0.025 J	0.232	0.0554	0.014 J	0.996	<0.006	1.31	0.000081 J	<0.006	0.0241 J	<0.002	0.51 ± 0.21	2.1 ± 0.63	2.61
			8/17/2016	N	3.32	27	610	2920	7.26	3790	9860	<0.002	0.0157 J	0.0171 J	0.288	0.0466	0.00518 J	0.996	<0.003	1.4	0.00177	<0.003	0.0367	0.00148 J	0.34 ± 0.14	2.8 ± 0.76	3.14
			10/25/2016	N	2.99	23	628	2790	5.71	3540	9780	<0.0004	0.0145	0.0142	0.221	0.0433	0.00403 J	0.799	<0.0006	1.31	0.0016	<0.0006	0.0319	0.00157 J	0.5 ± 0.22	2.42 ± 0.75	2.92
			2/17/2017	N	3.16	32.4	719	2540	2.81 J-	3170	11000	<0.0008	0.0371	0.0155 J	0.181	0.0444	0.00442 J	0.959	0.000722 J	1.29	0.000917	<0.002	0.184 J+	0.00236	0.350 ± 0.295	2.22 ± 0.694	2.57
			3/23/2017	N	3.25	31	727	3340	3.29	2470	10200	<0.0008	0.0132	0.0239	0.114	0.0356	<0.002	0.283	0.00845	0.934 J-	0.000677	<0.002	0.103	0.00533	3.43 ± 0.533	14.7 ± 0.658	18.1
			5/11/2017	N	3.43	32.1 J	649	2780	<0.1	3430	10100	<0.0008	0.0256	0.015	0.215	0.0433	0.00429 J	0.909	0.000838 J	1.38	0.00135	<0.002	0.172	0.00201	0.486 ± 0.208	3.05 ± 0.736	3.54
			7/26/2017	N	3.6	30.3 J	628	2760	1.21 J	4520	9160	<0.0008	0.044	0.0142	0.18	0.0404	0.00584	0.987	0.000421 J	0.98	0.00134	<0.002	0.207	0.00202	0.963 ± 0.402	2.71 ± 0.496 U	3.67
			8/24/2017	N	3.56	26.6	634	2720	0.789 J	3490	9460	<0.0008	0.062	0.0166	0.25	0.0451	0.00455 J	1.14	0.000348 J	1.22	0.00177	<0.002	0.282	0.00185	0.498 ± 0.279	3.23 ± 0.458	3.73
			8/24/2017	Dup	--	26.7	630	2730	0.88 J	3480	9660	<0.0008	0.0613	0.0164	0.24	0.0446	0.00451 J	1.13	0.000407 J	1.21	0.0018	<0.002	0.271	0.0018	0.680 ± 0.321	2.92 ± 0.552	3.6
			3/20/2018	N	3	25	704	2310	<10	3190	9840	<0.01	0.041	<0.02	0.252	0.0461	--	1.18	<0.02	1.19	0.00358 J-	<0.025	0.129	<0.01	0.24 ± 0.18 U	2.87 ± 0.86	2.87
			6/6/2018	N	3.19	27.7	608	2960	1.04	3990	9620	<0.01	0.0205	<0.02	0.242	0.0399	--	1.09	<0.01	1.13	0.00302 J-	<0.025	0.0715	<0.01	0.35 ± 0.25 U	3.23 ± 0.87	3.58
			9/4/2018	N	2.75	77.1	1690	2520	7.78	3330	10900	<0.02	0.0243	<0.04	0.281 J	0.0394 J	<0.04	1.14 J	<0.02	1.37	0.00217	<0.05	0.068 J	<0.02	1.99 ± 0.8	3.37 ± 0.91 U	5.36 U
			2/21/2019	N	3.43	33.1	816	2940	4.63	2710	9160	<0.00265 JH	0.0139	0.0188 J	0.149	0.0353	0.00333 JH	0.468	0.00892 J	1.23	0.00288	<0.00245	0.034	0.00468 J	1.02 ± 0.5 JH	6.1 ± 1.5	7.12 ± 2 JH
			8/20/2019	N	2.98	28.8	656	2910	5.5	3500	9780	<0.0008	0.0346	0.0143	0.266	0.0308	0.00392 J	0.908	0.000776 JH	1.32 JL	0.00186	<0.002	0.267	0.00198	0.493 ± 0.428 J	5.85 ± 0.457	6.34 ± 0.885
			2/26/2020	N	3.16	27.3	595	2870	4.59	3450	9820	<0.0008	0.0497	0.014	0.255	0.0247	0.00409 J	0.96	0.000424 J	1.2	0.00212	<0.002	0.344	0.00178	0.477 ± 0.306	3.74 ± 0.488	4.22 ± 0.794
			8/7/2020	N	2.48	23.6	732	3010	4.48	3540	9680	<0.0008	0.0504	0.0149	0.258	0.0269	0.00436 J	0.987	<0.0003	1.25	0.00206	<0.002	0.365	0.00191	0.552 ± 0.344	4.02 ± 0.703	4.58 ± 1.05
			2/25/2021	N	4.49	24.1	693	2950	4.58	3350	8980	<0.0008	0.0544	0.0139	0.218	0.0242	0.00418 J	0.963	<0.0003	0.988	0.00265	<0.002	0.583	0.00203	0.267 ± 0.23 JH	3.86 ± 0.43	4.12 ± 0.66 JH
			8/18/2021	N	3.15	18.4	848	2990	1.57	3470 B	9590	<0.00589	0.026	0.00839 JL	0.23 JL	0.0222	<0.000811	0.962	0.0166 JL	1.35	0.0106	0.0118	<0.00439	<0.00621 JL	27.8 ± 18.5	11.6 ± 33	39.4 ± 51.5
Ash Pond	AP-35	Downgradient	5/25/2016	N	3.22	41.5	628	2050	1.31	2710	8040	<0.004	0.00784 J	<0.019	0.0678	0.0198 J	<0.004	0.135	<0.006	1	0.0035	<0.006	0.0201 J	0.00709 J	4.5 ± 1.2	25 ± 5.8	29.5
			8/17/2016	N	3.61	37.5	538	2300	2.08	2890	7960	<0.002	0.00247 J	0.0149 J	0.0674	0.0188	<0.002	0.136	0.00416 J	1.01	0.00544	<0.003	0.0222 J	0.00612 J	4.4 ± 1.2	27.1 ± 6.3	31.5
			10/25/2016	N	3.76	38.1	688	2120	1.85	2740	7680	<0.0004	0.00448 J	0.0139	0.0647	0.0179	<0.004	0.129	0.00411 J	0.99	0.00552	<0.0006	0.0157	0.00583	4.1 ± 1.1	26.5 ± 6.2	30.6
			2/17/2017	N	3.26	48.2	677	1880	1.12 J-	2320	7200	<0.0008	0.00979	0.0153 J	0.0536	0.0181	<0.002	0.146	0.00532	1.01	0.0061	<0.002	0.0508 J+	0.00803	4.34 ± 1.02	20.6 ± 0.906	24.9
			3/23/2017	N	3.42	45.6	581	2060	1.3	2610	6540	<0.0008	0.00713	0.0144	0.0594	0.0181	<0.002	0.136	0.00473	0.884 J-	0.00685	<0.002	0.0514	0.00692	4.93 ± 0.565	21.6 ± 0.728	26.5
			5/11/2017	N	3.6	46.5 J	619	2120	<0.1	2630	6940	<0.0008	0.00698	0.0154	0.0592	0.0193	<0.002	0.139	0.00478	1.05	0.00635	<0.002	0.0456	0.00689	5.11 ± 0.65	24.6 ± 1.05	29.7
			7/26/2017	N	3.83	44.6 J	589	2070	<0.2	3590	6830	<0.0008	0.0112	0.0153	0.0514	0.0179	<0.002	0.149	0.00527	0.801	0.00565	<0.002	0.0534	0.00787	4.60 ± 0.823	20.8 ± 0.768	25.4
			8/24/2017	N	3.78	41.4	609	2100	<0.2	2610	7600	<0.0008	0.0105	0.0167	0.0675	0.0206	<0.002	0.157	0.00503	0.995	0.00595	<0.002	0.0619	0.00736	4.61 ± 0.783	28.0 ± 0.868	32.6
			3/20/2018	N	3.36	41.1	645	2000	<5	2670	7460	<0.01	<0.01	<0.02	0.0665	0.0195	--	0.148	<0.02	0.896	0.00972 J-	<0.025	0.0325	<0.01	5.1 ± 1.4	31.2 ± 7.3	36.3
			6/6/2018	N	3.47	47.1	631	2280	1.26	2970	7300	<0.01	<0.01	<0.02	<0.1	0.0219	--	0.149	<0.01	0.906	0.00679 J-	<0.025	0.0306	<0.01	7 ± 1.9	30.8 ± 7.2	37.8
			9/5/2018	N	3.05	44.4	652	1940	1.5	2470	8540	<0.01	<0.01	<0.02	0.0737 J	0.0213 J	<0.02	0.148 J	<0.01	1.17	0.0083	<0.025	0.0203 J	<0.01	3.4 ± 1.1	30.1 ± 7	33.5
			2/21/2019	N	3.81	55.3	676	2050	1.56	2590	7540	<0.00265 JH	0.00673 J	0.0162 J	0.0679	0.0229	<0.00126 JH	0.163	0.00512 J	1.13	0.00552	<0.00245	0.0226	0.00761 J	4.5 ± 1.3	26.9 ± 6.3	31.4 ± 7.6
			6/28/2019	N	--	74.3	687	1990	1.58	2520	7250	<0.00053	0.00597	0.0165	0.0756	0.021	0.00065 J	0.171	0.0056	1.19 n	0.00249	<0.00049	0.0174	0.00788	6.1 ± 1.8	28 ± 6.5	34.1 ± 8.3
			8/20/2019	N	3.25	49.5	617	2310	1.4 J	2700	7720	<0.0008	0.00849	0.0165	0.0665	0.0212	<0.002	0.13	0.00483	1.11 JL	0.0062	<0.002	0.0621	0.00717	5.73 ± 1.08 J	29.1 ± 0.822	34.9 ± 1.9
			2/26/2020	N	3.41	50.8	586	2260	0.714 J	2590	7700	<0.0008	0.0113	0.0159	0.0629	0.0181	<0.002	0.138	0.00513	0.992	0.00565	<0.002	0.0706	0.00733	4.81 ± 0.788	30.1 ± 0.742	34.9 ± 1.53
			8/7/2020	N	2.72	7.24	692	2270	6.28	3480	8540	<0.0008	0.0157	0.0219	0.0925	0.00253	0.00652	0.204	0.00607	1.56	0.00402	<0.002	0.102	0.00729	6.35 ± 0.847	29.5 ± 1	35.8 ± 1.85
			2/25/2021	N	4.72	26.1	629	2200	3.82	2900	8300	<0.0008	0.0177	0.0218	0.147	0.00906	<0.002	0.13	0.00517	0.989	0.00149	<0.002	0.183	0.00666	6.4 ± 1.03	23.2 ± 0.641	29.6 ± 1.67
			2/25/2021	Dup	--	28.8	632	2220	4.33	2900	8300	<0.0008	0.017	0.0206	0.134	0.00938	<0.002	0.133	0.00486	0.996	0.000935	<0.002	0.189	0.00675	3.05 ± 0.694	23.3 ± 0.647	26.3 ± 1.34
			8/18/2021	N	2.56	55.5	810	2250	0.868	2670 B	6640	<0.00589	<0.0055	0.0115 JL	0.0673 JL	0.0218	0.0362	0.157	<0.00237	1.48	0.0192	0.0064 J	<0.00439	<0.00621 JL	32.9 ± 20.9	31.2 ± 29.5	64.1 ± 50.4

GSI ENVIRONMENTAL

APPENDIX A
Cumulative Groundwater Analytical Results for CCR Monitoring Network Wells

San Miguel Electric Cooperative, Inc.
Christine, Atascosa County, Texas

					Appendix III Constituents							Appendix IV Constituents														
				Analyte:	pH (field)	Boron	Calcium	Chloride	Fluoride*	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium-226	Radium-228	Combined Radium
				Units:	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	pCi/L
Area	Well ID	Well Type	Sample Date	Type																						
Ash Pond	AP-36	Downgradient	5/25/2016	N	4.32	4.38	697	2180	0.55 J	2610	7920	<0.004	0.00885 J	0.0389 J	0.02 J	<0.002	<0.004	0.072	<0.006	1.03	<0.00004	<0.006	<0.011	<0.002	1.11 ± 0.37	2.58 ± 0.72	3.69
			8/16/2016	N	4.43	3.68	613	2320	1.13	2770	9200	<0.002	0.00482 J	0.0268	0.022	<0.001	<0.002	0.067	<0.003	1.07	<0.00004	<0.003	0.0162 J	<0.001	1.24 ± 0.37	2.52 ± 0.72	3.76
			10/25/2016	N	4.22	2.26	725	2150	1.11	2550	7420	<0.0004	0.00755	0.022	0.022	<0.0002	<0.004	0.0622	<0.0006	0.997	<0.00004	<0.0006	0.00687	0.000903 J	0.71 ± 0.28	2.18 ± 0.72	2.89
			2/17/2017	N	3.63	2.45	734	1970	0.517 J-	2350	6600	<0.0008	0.0111	0.0222 J	0.0177	<0.0003	<0.002	0.0695	0.00039 J	0.984	<0.00008	<0.002	0.0274 J+	0.00114 J	0.647 ± 0.405	1.38 ± 0.564	2.03
			3/23/2017	N	3.84	2.25	626	2000	0.658 J	2490	6540	<0.0008	0.00902	0.0222	0.0179	<0.0003	<0.002	0.0675	0.000389 J	0.977 J-	<0.00008	<0.002	0.0298	0.000956 J	0.482 ± 0.188 U	2.29 ± 0.475 U	2.77
			5/11/2017	N	3.97	3.19 J	672	2040	<0.1	2490	6510	<0.0008	0.00829	0.0216	0.0192	<0.0003	<0.002	0.0674	0.000363 J	0.938	<0.00008	<0.002	0.0262	0.00104 J	0.432 ± 0.205 U	2.07 ± 0.663	2.5
			7/27/2017	N	3.95	2.44 J	676	1980	<0.2	2400	6420	<0.0008	0.011	0.021	0.0152	<0.0003	<0.002	0.0695	0.000401 J	0.804	<0.00008	<0.002	0.0282	0.00111 J	0.844 ± 0.324	4.02 ± 0.596 U	4.86
			8/24/2017	N	4.15	2.32	647	2020	<0.2	2530	7010	<0.0008	0.011	0.0231	0.0202	<0.0003	<0.002	0.0715	0.0004 J	0.997	<0.00008	<0.002	0.0356	0.00106 J	0.475 ± 0.261	4.73 ± 0.569	5.21
			3/20/2018	N	3.8	2.28	650	1800	<10	2510	7280	<0.01	<0.01	<0.02	<0.02	<0.01	--	0.0689	<0.02	0.983	<0.0002 J	<0.025	<0.01	<0.01	0.81 ± 0.33	3.41 ± 0.97	4.22
			6/6/2018	N	4.03	3.23	678	1970	0.681	2700	6780	<0.01	<0.01	0.0217	<0.1	<0.01	--	0.0665	<0.01	0.888	<0.0002 J	<0.025	0.0119	<0.01	0.44 ± 0.32 U	2.93 ± 0.81	2.93
			9/5/2018	N	3.53	4.05	661	1730	0.652	2420	7760	<0.01	<0.01	0.0247	0.0187 J	<0.01	<0.02	0.0663 J	<0.01	1.18	<0.0002	<0.025	<0.01	<0.01	0.4 ± 0.3 U	3.21 ± 0.86 U	3.61 U
			2/21/2019	N	4.21	4.1	665	1800	0.775 J	2620	7000	<0.00265 JH	0.00691 J	0.0195 J	0.016 J	0.000412 J	<0.00126 JH	0.0759	0.000611 JH	1.11	<0.00003	<0.00245	0.00713 J	<0.00125 JH	0.81 ± 0.42 JH	2.66 ± 0.74	3.47 ± 1.16 JH
			8/20/2019	N	3.77	2.45	614	1870	<0.5	2710	7360	<0.0008	0.00619	0.0194	0.013	0.000337 JH	0.00202 J	0.0576 JH	0.000484 JH	1 JL	<0.00008	<0.002	0.0231	0.00102 J	0.622 ± 0.427 J	4.49 ± 0.475	5.11 ± 0.902
			2/27/2020	N	3.6	2.41	553	1870	<0.5	2610	6840	<0.0008	0.00701	0.0194	0.0122	0.000313 J	<0.002	0.0593	0.000425 JH	0.953	<0.00008	<0.002	0.0277	0.000967 J	0.676 ± 0.324	2.82 ± 0.492	3.5 ± 0.816
			8/7/2020	N	3.31	2.47	689	1920	<0.5	2780	6890	<0.0008	0.00701	0.0208	0.014	0.000343 J	<0.002	0.0648	0.000396 J	0.951	<0.00008	<0.002	0.0329	0.00114 J	0.517 ± 0.29	2.64 ± 0.661	3.16 ± 0.951
			2/25/2021	N	5.2	2.38	629	1780	1.06 J	2640	6760	<0.0008	0.0069	0.0185	0.00818	0.000383 J	<0.002	0.0592	0.000386 J	0.744	<0.00008	<0.002	0.0444	0.000937 J	0.863 ± 0.371 JH	2.66 ± 0.443	3.53 ± 0.814 JH
			8/18/2021	N	3.27	2.27	782	1720	0.171 J	2730	6280	<0.00589	0.00725 J	0.0137 JL	0.0117 JL	<0.00243	0.0313	0.069	<0.00237	1.49	<0.0000263	0.00541 J	<0.00439	<0.00621 JL	-29.5 ± 17.7	34.7 ± 23.8	5.2 ± 41.5
Ash Pond	MW-03	Downgradient	5/25/2016	N	3.18	15.6	535	2070	1.05	4260	9810	<0.004	0.00805 J	<0.019	0.0279	0.061	<0.004	0.328	<0.006	1.99	<0.00004	<0.006	0.0177 J	<0.002	0.56 ± 0.22	3.57 ± 0.94	4.13
			8/17/2016	N	3.56	13.9	478	2200	1.59	4560	9780	<0.002	0.00544 J	<0.0095	0.0343	0.0556	<0.002	0.325	<0.003	2.12	<0.00004	<0.003	0.0295	0.00178 J	0.41 ± 0.16	3.72 ± 0.99	4.13
			10/27/2016	N	3.66	17.8	563	1990	1.19	4270	9440	<0.004	0.00836 J	<0.019	0.0297	0.0625	<0.004	0.338	<0.006	2.13	<0.00004	<0.006	0.0278 J	<0.002	0.44 ± 0.19	3.7 ± 1	4.14
			2/16/2017	N	3.34	14.9	573	1980	0.54 J-	3990	9780	<0.0008	0.019	0.01 J	0.0211	0.0507	<0.002	0.321	<0.0003	1.87	<0.00008	<0.002	0.0928 J+	0.00229	0.263 ± 0.278 U	3.42 ± 0.508	3.68
			3/23/2017	N	3.45	15.5	488	1950	0.8 J	4110	9480	<0.0008	0.0142	0.00892 J	0.0226	0.052	<0.002	0.321	<0.0003	1.45 J-	<0.00008	<0.002	0.0991	0.00197	0.494 ± 0.394 U	2.45 ± 0.532 U	2.94
			5/15/2017	N	2.79	14.2 J	486	1880	<0.1	3990	9780	<0.0008	0.0138	0.00988 J	0.026	0.0558	<0.002	0.325	<0.0003	1.65	<0.00008	<0.002	0.0898	0.00204	0.241 ± 0.203 U	4.66 ± 0.877 U	4.9
			7/26/2017	N	3.82	16 J	515	1860	<0.1	4650	9200	<0.0008	0.0236	0.0101	0.0214	0.0529	<0.002	0.353	<0.0003	1.46	<0.00008	<0.002	0.102	0.00237	1.08 ± 0.391	3.89 ± 0.751 U	4.97
			8/23/2017	N	3.59	15.2	521	1870	<0.2	4100	9120	<0.0008	0.0318	0.0112	0.026 J	0.0629	<0.002	0.386	<0.0003	1.71	<0.00008	<0.002	0.133	0.00231	0.577 ± 0.277	4.68 ± 0.568	5.26
			3/19/2018	N	3.36	14.3	528	1720	<10	4010 J	9100	<0.01	0.0196	<0.02	0.0299	0.055	--	0.343	<0.02	1.6 J	<0.0002 J	<0.025	0.0409 J	<0.01	0.44 ± 0.27	5 ± 1.3	5.44
			3/19/2018	Dup	--	14.5	524	1530 J+	<10	3130 J	7780	<0.01	0.0226	<0.02	0.0337	0.0625	--	0.356	<0.01	2.08 J	0.000523 J-	<0.025	0.148 J	<0.01	0.62 ± 0.28	3.5 ± 1	4.12
			6/5/2018	N	3.46	17	528	1790	0.481	4180	9220	<0.01	0.0101 J	<0.02	0.0379	0.0633	--	0.37	<0.01	1.64	<0.0002	<0.025	0.0321	<0.01	0.76 ± 0.33	4.9 ± 1.2 J	5.66
			6/5/2018	Dup	--	15.3	489	1870	0.411	4310	9940	<0.01	<0.01 J	<0.02	<0.1	0.0541	--	0.332	<0.01	1.58	<0.0002 J	<0.025	0.0347	<0.01	0.44 ± 0.32	1.59 ± 0.53 J	2.03 J
			9/4/2018	N	2.99	13	518	1750	0.817	4150	9620	<0.01	0.0108	<0.02	0.0318 J	0.063 J	<0.02	0.355 J	<0.01	1.88	<0.0002	<0.025	0.0312 J	<0.01	0.54 ± 0.38 U	5 ± 1.3 U	5 U
			2/21/2019	N	3.67	17.4	575	1830	0.959 J	4100	9260	0.0037 JH	0.0124	0.0104 JH	0.023 J	0.0602	<0.00126 JH	0.371	<0.0006 JH	1.89	<0.00003	<0.00245	0.0336	0.00224 J	<0.32 ± 0.27 JH	4.8 ± 1.2	4.8 ± 1.47 JH
			8/20/2019	N	3.33	16.4	515	2010	0.951 J	4270	9540	<0.0008	0.0167	0.0108	0.0258	0.0549	<0.002	0.282	<0.0003 JH	1.74 JL	<0.00008	<0.002	0.118	0.00208	0.418 ± 0.386	6.01 ± 0.565 J	6.42 ± 0.951
			2/24/2020	N	3.41	16.1	467	1940	<0.5	4060	9080	<0.0008	0.0233	0.0107	0.024	0.0481	<0.002	0.315	<0.0003	1.59	<0.00008	<0.002	0.146	0.00204	0.434 ± 0.303	5.16 ± 0.46	5.6 ± 0.763
			8/12/2020	N	2.6	16.2	539	1890	<0.5	4140	9260	<0.0008	0.0236	0.0113	0.024	0.0526	<0.002	0.32	<0.0003	1.68	<0.00008	<0.002	0.158	0.00212	0.725 ± 0.383	5.84 ± 0.674 JH	6.56 ± 1.06 JH
			2/24/2021	N	3.49	12.8	555	1990	1.39 J	4170	9280	<0.0008	0.0246	0.012	0.0189	0.048	<0.002	0.294	0.000398 J	1.41	<0.00008	<0.002	0.23	0.00211	0.809 ± 0.356 JH	3.89 ± 0.389 JH	4.7 ± 0.745 JH
			8/18/2021	N	3.48	12.3	632	1860	<5	4040	7980	<0.00589	0.00985 J	0.00533 JL	0.0251 JL	0.0519	0.0195	0.326	<0.00237	2	0.000055 J	0.0047 J	<0.00439	<0.00621 JL	-27.7 ± 19.4	7.02 ± 20.6	-20.68 ± 40
			8/18/2021	Dup	--	11.8	709	2070	<5	4150	8610	<0.00589	0.0164	0.00691 JL	0.0239 JL	0.0505	0.021	0.316	<0.00237	2.23	0.000085 J	0.00448 J	<0.00439	<0.00621 JL	37.8 ± 18.7	7.57 ± 11.9	45.37 ± 30.6
Ash Pond	PZ-05	Downgradient	5/25/2016	N	3.29	46.5	663	2900	4.73	2870	9640	<0.004	0.0137 J	0.0219 J	0.282	0.0359	0.00489 J	0.569	<0.006	0.679	0.000086 J	<0.006	0.0259 J	0.00241 J	0.41 ± 0.18	3.24 ± 0.86	3.65
			8/17/2016	N	3.51	42.8	651	3100	4.86	3020	11300	0.00878 J	0.0114 J	0.0193 J	0.321	0.0472	0.00393 J	0.686	<0.003	0.81	0.000198 J	<0.003	0.0351	0.00298 J	0.28 ± 0.14	3.16 ± 0.84	3.44
			10/26/2016	N	3.63	41.2	724	3060	3.66	2950	9160	<0.0004	0.0125	0.0175	0.282	0.0394	<0.004	0.564	<0.0006	0.701	0.000153 J	<0.0006	0.0317	0.00251	0.73 ± 0.28	2.85 ± 0.84	3.58
			2/17/2017	N	3.22	50.4	752	2770	3.4 J-	2660	9900	<0.0008	0.03	0.0169 J	0.279	0.0366	0.00304 J	0.713	0.000731 J	0.742 J	0.000146 J	<0.002	0.169 J+	0.00315	0.151 ± 0.241 U	3.67 ± 0.590	3.82
			2/17/2017	Dup	--	51.9	768	2720	1.34 J-	2600	8780	<0.0008	0.0296	0.0172 J	0.215	0.0369	0.00289 J	0.619	0.000725 J	0.569 J	0.000142 J	<0.002	0.165 J+	0.00303	-0.048 ± 0.251 U	2.89 ± 0.552	2.89
			3/23/2017	N	3.37	48.8	632	2790	3.24	2760	8600	<0.0008	0.0206	0.0157	0.223	0.0328	0.00281 J	0.564	0.000648 J	0.605 J-	0.000117 J	<0.002	0.166	0.00251	0.656 ± 0.318 U	3.67 ± 0.696 U	4.33
			3/23/2017	Dup	--	49	637	2840	3.23	2800	9040	<0.0008	0.0204	0.016	0.228	0.0328	0.00278 J	0.566	0.00066 J	0.618 J-	0.000128 J	<0.002	0.169	0.00256	0.848 ± 0.343 U	4.11 ± 0.522 U	4.96
			5/11/2017	N	3.5	50.5 J	699	2950	<0.1	2860	8220	<0.0008	0.0223	0.0164	0.251	0.0439	0.00307 J	0.65	0.000719 J	0.83	0.000268	<0.002	0.164	0.00274	0.203 ± 0.125 U	2.59 ± 0.730	2.79
			7/26/2017	N	3.71	48.6 J	686	2920	<0.2	3720	8360	<0.0008	0.0358	0.0169	0.195	0.0372	0.00292 J	0.62	0.00102	0.578	0.000179 J	<0.002	0.181	0.00302	0.606 ± 0.290	2.88 ± 0.492 U	3.49
			8/23/2017	N	3.42	43.3	685	2970	<0.2	2910	9080	<0.0008	0.0516	0.0185	0.267	0.0505	0.00318 J	0.766	0.000929 J	0.751	0.000273	<0.002	0.26	0.0029	0.217 ± 0.201	3.80 ± 0.609	4.02
			3/20/2018	N	3.1	45	718	2710	<10	2880	9760	<0.01	0.0332	<0.02	0.232	0.0458	--	0.659	<0.02	0.724	0.000249 J-	<0.025	0.111	<0.01	0.28 ± 0.2 U	3.3 ± 0.94	3.3
			6/6/2018	N	3.25	41.7	695	2910	0.891	2980	9620	<0.01	0.0197	<0.02	0.246	0.0496	--	0.718	<0.01	0.708	0.000287 J-	<0.025	0.0722	<0.01	0.44 ± 0.26 U	3.14 ± 0.85	3.58
			9/4/2018	N	2.86	37.1	682	2680	3.56	2760	9980	<0.01	0.0202	<0.02	0.26 J	0.0462 J	<0.02	0.705 J	<0.01	0.82	0.00033	<0.025	0.0622 J	<0.01	0.24 ± 0.2 U	3.69 ± 0.98 U	3.69 U
			2/21/2019	N	3.45	52.5	768	2710	3.74	2840	8880	<0.00265 JH	0.0225	0.0159 J	0.272	0.0478	0.00359 JH	0.717	0.000656 JH	0.876	0.000148 J	<0.00245	0.063	0.00289 J	0.43 ± 0.29 JH	3.42 ± 0.9	3.85 ± 1.19 JH
			8/20/2019	N	3.13	33.8	636	2730	3.53	3030	9020	<0.0008	0.0317	0.0148	0.252	0.0645	0.00338 J	0.763	<0.0003 JH	0.945 JL	0.000681	<0.002	0.279	0.0025	0.488 ± 0.331 J	3.56 ± 0.48	4.04 ± 0.811
			2/26/2020	N	3.29	30.6	578	2610	2.12	2930	8680	<0.0008	0.0406	0.0142	0.196	0.0567	0.00266 J	0.746	<0.0003	0.879	0.000321	<0.002	0.313	0.00253	0.268 ± 0.244	3.41 ± 0.458	3.68 ± 0.702
			8/11/2020	N	3.59	27.4	664	2480	1.26 J	2950	8600	<0.0008	0.0409	0.0146	0.191	0.0715	0.00288 J	0.811	<0.0003	0.959	0.000746	<0.002	0.351	0.00271	1.06 ± 0.407	2.73 ± 0.706 JH	3.78 ± 1.11 JH
			2/24/2021	N	3.32	26.4	651	2480	1.09 J	2930	8360	<0.0008	0.0438	0.0173	0.159	0.0659	0.00302 J	0.782	0.000747 J	0.756	0.000745	<0.002	0.519	0.0027	0.548 ± 0.289 JH	2.94 ± 0.385 JH	3.48 ± 0.674 JH
			8/18/2021	N	3.31	33.9	733	2700	7.45 J	41200	7140	<0.00589	0.0236	0.0102 JL	0.188 JL	0.0518	0.00793 J	0.737	0.013 JL	1.03	0.00121	0.00519 J	<0.00439	<0.00621 JL	82.9 ± 22.4	42.8 ± 18.8	125.7 ± 41.2

GSI ENVIRONMENTAL

APPENDIX A
Cumulative Groundwater Analytical Results for CCR Monitoring Network Wells

San Miguel Electric Cooperative, Inc.
Christine, Atascosa County, Texas

					Appendix III Constituents							Appendix IV Constituents														
				Analyte:	pH (field)	Boron	Calcium	Chloride	Fluoride*	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium-226	Radium-228	Combined Radium
				Units:	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	pCi/L
Area	Well ID	Well Type	Sample Date	Type																						
Ash Pond	PZ-06	Downgradient	5/25/2016	N	5.65	5.94	598	1600	<0.5	3230	7560	<0.004	0.00418 J	<0.019	<0.002	<0.002	<0.004	<0.002	<0.006	0.932	<0.00004	<0.006	<0.011	<0.002	0.47 ± 0.2	3.04 ± 0.81	3.51
			8/16/2016	N	5.95	3.86	557	1610	0.669 J	3130	9020	0.00208 J	<0.002	0.019 J	0.00391 J	<0.001	<0.002	0.00341 J	<0.003	0.961	<0.00004	<0.003	0.00667 J	<0.001	0.34 ± 0.15	2.19 ± 0.63	2.53
			10/25/2016	N	5.98	3.13	653	1540	0.726 J	3030	7560	<0.0004	0.000719 J	0.0184	0.00266 J	<0.0002	<0.004	0.00211 J	<0.0006	0.911	<0.00004	<0.0006	0.00111 J	<0.0002	0.87 ± 0.31	1.94 ± 0.72	2.81
			2/17/2017	N	5.36	3.44	674	1420	<0.2 J	2760	6450	<0.0008	<0.002	0.0187 J	0.00215	<0.0003	<0.002	<0.003	<0.0003	0.919	<0.00008	<0.002	<0.002 J	<0.0005	0.096 ± 0.263 U	-1.05 ± 1.19 U	0.096 U
			3/21/2017	N	5.45	3.56 J	538	1480	0.316 J	3180 J-	6120	<0.0008	<0.002	0.0194	0.00135 J	<0.0003	<0.002	<0.003	<0.0003	0.714	<0.00008	<0.002	<0.002 J	<0.0005	0.297 ± 0.387 U	1.87 ± 0.484	2.17
			5/11/2017	N	5.71	5.5 J	592	1460	<0.1	2970	6500	<0.0008	<0.002	0.0173	0.00241	<0.0003	<0.002	<0.003	<0.0003	0.923	<0.00008	<0.002	<0.002	<0.0005	0.520 ± 0.226	0.429 ± 0.689 U	0.949 U
			5/11/2017	Dup	--	5.17 J	588	1550	<0.1	3090	6440	<0.0008	<0.002	0.0181	0.00268	<0.0003	<0.002	<0.003	<0.0003	0.985	<0.00008	<0.002	<0.002	<0.0005	0.451 ± 0.258 U	2.29 ± 0.550 J	2.74 J
			7/27/2017	N	5.75	3.34 J	610	1550	<0.2	3030	7360	<0.0008	<0.002	0.0183	0.0022	<0.0003	<0.002	<0.003	<0.0003	0.749	<0.00008	<0.002	<0.002	<0.0005	0.351 ± 0.213	2.06 ± 0.506 U	2.41
			8/24/2017	N	5.87	2.93	582	1550	<0.2	3160	6780	<0.0008	<0.002	0.0197	0.00207	<0.0003	<0.002	<0.003	<0.0003	0.905	<0.00008	<0.002	<0.002	<0.0005	0.613 ± 0.318	2.21 ± 0.673 U	2.82
			3/20/2018	N	5.92	2.93	578	1340	<10	2890	7260	<0.01	<0.01	<0.02	<0.02	<0.01	--	<0.025	<0.02	0.921	<0.0002 J	<0.025	<0.01	<0.01	0.47 ± 0.21	1.93 ± 0.68	2.4
			6/6/2018	N	5.8	3.38	569	1620	0.468	3390	6820	<0.01	<0.01	<0.02	<0.1	<0.01	--	<0.025	<0.01	0.842	<0.0002 J	<0.025	<0.01	<0.01	0.23 ± 0.15 U	1.89 ± 0.58	1.89
			9/5/2018	N	5.59	4.17	637	1370	<0.5	2850	7700	<0.01	<0.01	<0.02	<0.01	<0.01	<0.02	<0.025	<0.01	1.07	<0.0002	<0.025	<0.01	<0.01	0.25 ± 0.21 U	1.88 ± 0.58 U	2.12 U
			2/21/2019	N	6.05	4.51	649	1420	0.523 J	2860	7240	<0.00265 JH	<0.00125	0.0186 J	0.00218 J	<0.000385	0.00136 JH	0.00284 J	<0.0006 JH	1.08	<0.00003	<0.00245	<0.0043	<0.00125 JH	0.41 ± 0.31 JH	2.01 ± 0.62	2.42 ± 0.93 JH
			8/19/2019	N	5.74	3	610	1680	<0.5	3070	7140	<0.0008	<0.002	0.0212	0.00289	0.000565 J	<0.002	0.00502 JH	0.000426 JH	1.01 JL	<0.00008	<0.002	<0.002	<0.0005	0.726 ± 0.391 J	2.41 ± 0.49 J	3.14 ± 0.881
			2/27/2020	N	5.22	3.18	541	1740	<0.5	2800	7040	<0.0008	<0.002	0.0207	0.00586	<0.0003	<0.002	0.00622	<0.0003 JH	1.02	<0.00008	<0.002	<0.002	<0.0005	0.302 ± 0.218	1.31 ± 0.42	1.61 ± 0.638
			8/7/2020	N	5.22	3.01	655	1780	<0.5	3040	7040	<0.0008	<0.002	0.0197	0.00363	<0.0003	0.00261 J	0.00322 J	<0.0003	0.968	<0.00008	<0.002	<0.002	<0.0005	0.791 ± 0.329	2.81 ± 0.708	3.6 ± 1.04
			2/25/2021	N	6.71	2.79	648	1720	1.07 J	2840	7090	<0.0008	<0.002	0.0208	0.00181	<0.0003	<0.002	<0.003	0.000303 J	0.771	<0.00008	<0.002	<0.002	<0.0005	0.328 ± 0.25 JH	2.22 ± 0.384	2.55 ± 0.634 JH
			8/18/2021	N	5.39	2.66	773	1810	<5	3170	6550	<0.00589	<0.0055	0.0168 JL	0.00331 JL	<0.00243	0.0456	0.00713 J	<0.00237 JL	1.48	<0.0000263	0.00417 JH	<0.00439	<0.00621 JL	25.5 ± 18.7	14.2 ± 22.7	39.7 ± 41.4
Ash Pond	MW-02	Observation	2/19/2019	N	5.79	7.45	1040	5280	<0.5	2490	12800	<0.0053 JL	0.00371 J	0.0305 J	0.00604 J	0.0159 J	<0.00251 JH	0.0415 J	0.00169 J	1.27	0.000639	<0.0049	0.0138 J	0.00373 J	7.9 ± 2.1 J	26.3 ± 6.1	34.2 ± 8.2 J
			8/19/2019	N	5.3	5.26	912	4900	<0.5	2420	11700	<0.0008	0.00368 J	0.025	0.00465 JH	0.0135	<0.002	0.0303 JH	0.00293	1.1 JL	<0.00008	<0.002	0.00801	0.00286	4.23 ± 0.847 J	21.2 ± 0.768 J	25.4 ± 1.62
			2/26/2020	N	5.32	5.51	892	4930	<0.5	2340	11700	<0.0008	0.0276	0.149	0.0147	0.0125	0.033	0.0362	0.036	1.02	0.000122 J	0.00289 J	0.0181	0.00343	27.1 ± 1.92	56.9 ± 1.21	84 ± 3.13
			8/11/2020	N	5.71	5.69	943	4740	<0.5	2440	11300	<0.0008	0.00934	0.0267	0.00574	0.0126	<0.002	0.0311	0.00598	1.04	<0.00008	<0.002	0.0103	0.00267	11.5 ± 1.69	29.5 ± 0.978	41 ± 2.67
Ash Pond	PZ-04	Observation	2/19/2019	N	6.76	123	811	3000	0.693 J	2470	9320	<0.0053 JL	0.00496 J	0.0241 J	<0.00091	<0.00077	<0.00251 JH	0.0314 J	<0.0012	0.637	<0.00003	0.0586	<0.0086	<0.00125 JH	<0.3 ± 0.25 JH	1.13 ± 0.45	1.13 ± 0.7 JH
			8/20/2019	N	6.28	104	767	2860	1.16 J	2530	9500	<0.0008	<0.002	0.0222	<0.0003	0.000643 JH	<0.002	0.0248 JH	0.000318 JH	0.517	<0.00008	0.071	0.00294 J	0.000923 J	0.481 ± 0.326	2.64 ± 0.436 J	3.12 ± 0.762
			2/24/2020	N	6.2	137	802	3760	<0.5	2240	10300	<0.0008	<0.002	0.0256	<0.0003	0.000701 J	<0.002	0.0354	<0.0003	0.556	<0.00008	0.0525	0.00244 J	0.000847 J	0.609 ± 0.293	0.247 ± 0.369 JH	0.856 ± 0.662 B
			8/12/2020	N	5.3	140	1040	4240	<0.5	2130	10800	<0.0008	<0.002	0.0315	<0.0003	0.0011	<0.002	0.0393	<0.0003	0.611	<0.00008	0.0459	0.00298 J	0.00112 J	0.281 ± 0.236	2.12 ± 0.538 JH	2.4 ± 0.774 JH
			8/12/2020	Dup	--	143	1000	4260	<0.5	2120	11000	<0.0008	<0.002	0.03	<0.0003	0.0011	<0.002	0.0384	<0.0003	0.598	<0.00008	0.0448	0.00246 J	0.00109 J	0.35 ± 0.283	2.16 ± 0.617 JH	2.51 ± 0.9 JH
East Equalization Pond	EP-31	Upgradient	5/26/2016	N	3.56	4.14	438	156	2.65	3260	5820	<0.0004	0.00758	0.0139	0.0737	0.0181	0.0016 J	0.123	<0.0006	0.616	<0.00004	<0.0006	0.00934	0.00112 J	0.41 ± 0.17	1.38 ± 0.46	1.79
			8/17/2016	N	3.8	4.49	410	139	2.04	3430	7060	<0.0004	0.00918	0.00734	0.128	0.016	0.000816 J	0.107	0.000608 J	0.95	<0.00004	<0.0006	0.00903	0.00116 J	0.31 ± 0.2	1.28 ± 0.56	1.59
			10/25/2016	N	3.49	3.88	462	243	3.03	3180	5600	<0.0004	0.0103	0.0068	0.0818	0.0291	0.000872 J	0.146	0.000991 J	0.693	<0.00004	<0.0006	0.0148	0.00107 J	ND ± 0.13	0.76 ± 0.34	0.76
			2/13/2017	N	3.43	4.15 J	406	113	1.87	3100	4420	<0.0008	0.0115	0.00647 J	0.0699	0.0145	<0.002	0.111	0.000439 J	0.571	<0.00008	<0.002	0.0571	0.00126 J	0.253 ± 0.375	-0.188 ± 0.474 U	0.253 U
			3/21/2017	N	3.5	4.39 J	394	115	1.73	3660 J-	4360	<0.0008	0.015	0.00596 J	0.0571 J	0.0147	<0.002	0.106	0.000313 J	0.481	<0.00008	<0.002	0.0463 J	0.00134 J	0.521 ± 0.202 U	0.929 ± 0.517	1.45
			5/9/2017	N	3.8	4.34 J	426	107	<0.1	2950	4930	<0.0008	0.0114	0.00493 J	0.0738	0.0152	<0.002	0.107	<0.0003	0.572	<0.00008	<0.002	0.0448	0.00125 J	0.184 ± 0.169	0.907 ± 0.515	1.09
			7/26/2017	N	4.09	4.26 J	425	115	1.4 J	3420	4640	<0.0008	0.0163	0.00494 J	0.0611	0.0143	<0.002	0.109	<0.0003	0.499	<0.00008	<0.002	0.0583	0.00138 J	0.160 ± 0.250 U	0.837 ± 0.463 U	1 U
			7/26/2017	Dup	--	4.53 J	425	124	1.42 J	3590	4580	<0.0008	0.0162	0.00493 J	0.0625	0.0141	<0.002	0.11	<0.0003	0.505	<0.00008	<0.002	0.0569	0.0014 J	0.188 ± 0.195 U	1.25 ± 0.488 U	1.44 U
			8/22/2017	N	3.71	4.12 J	437	122	0.549 J	3220	4980	<0.0008	0.0155	0.00511 J	0.0596 J	0.0144	<0.002	0.102	<0.0003	0.464	<0.00008	<0.002	0.0462 J	0.00127 J	0.054 ± 0.139	0.817 ± 0.450	0.871
			3/21/2018	N	3.58	4.15	451	108 J+	<5	3160	4770	<0.01	0.0191	<0.02	0.0766	0.0156	--	0.112	<0.01	0.624	<0.0002 J	<0.025	0.0794	<0.01	0.23 ± 0.17 U	1.04 ± 0.48 U	ND
			3/21/2018	Dup	--	4.3	428	104 J+	<5	3050	4830	<0.01	0.0166	<0.02	0.0735	0.015	--	0.112	<0.01	0.587	<0.0002 J	<0.025	0.0699	<0.01	0.28 ± 0.19	0.92 ± 0.45 U	0.28
			6/7/2018	N	3.75	4.25	439	172	1.6	3520	4990	<0.01	<0.01	<0.02	<0.1	0.0162	--	0.1	<0.01	0.517	<0.0002 J	<0.025	0.0183	<0.01	0.24 ± 0.19 U	0.94 ± 0.4	0.94
			9/6/2018	N	3.27	4.46	411	146	1.79	3110	4920	<0.002	0.0118	0.00488	<0.1	0.0156 J	<0.004	0.101 J	<0.002	0.56	<0.0002 J	<0.005	0.0176 J	<0.002	0.39 ± 0.23 U	0.95 ± 0.44 U	ND
			2/19/2019	N	4.17	5.34	427	258	2.22	3360	4960	<0.00265 JL	0.0187	0.00705 J	0.0886	0.0258	<0.00126 JH	0.142	0.00161 J	0.827	0.000039 J	<0.00245	0.0196	0.00175 J	0.4 ± 0.28 J	<0.54 ± 0.35	0.4 ± 0.63 J
			8/20/2019	N	3.52	5.2	417	352	2.09	3340	5180	<0.0008	0.0195	0.00634 J	0.0804	0.0245	<0.002	0.122	0.000775 JH	0.833 JL	0.0000883 J	<0.002	0.0838	0.00172	0.0362 ± 0.159	1.25 ± 0.415 JH	1.29 ± 0.574 JH
			1/21/2020	N	--	5.46	432	266	0.74	3180	6100	<0.0008	0.0352	0.0107	0.0677	0.0215	<0.002	0.133	0.00157	0.633	<0.00008	<0.002	0.183	0.0017	0.261 ± 0.283	1.12 ± 0.437	1.38 ± 0.72
			2/26/2020	N	3.45	5.13	419	206	1.11 J	3110	5140	<0.0008	0.0191	0.0076 J	0.071	0.0149	<0.002	0.101	0.000775 J	0.674	<0.00008	<0.002	0.0788	0.00144 J	0.341 ± 0.224 JH	0.0197 ± 0.549 JH	0.341 ± 0.773 JH
			8/5/2020	N	3.57	5.56	501	449	1.61 J	3190	5250	<0.0008	0.0167	0.00626 J	0.0779	0.0224	<0.002	0.119	<0.0003	0.808	<0.00008	<0.002	0.0855	0.00214	0.204 ± 0.207	0.615 ± 0.567 B	0.819 ± 0.774 B
			2/24/2021	N	3.9	5.75	492	191	1.42 J	3070	5340	<0.0008	0.0206	0.00606 J	0.0865	0.0255	<0.002	0.125	0.00225	0.904	<0.00008	<0.002	0.147	0.00212	0.349 ± 0.244	1.36 ± 0.437B	1.71 ± 0.681 B
			8/18/2021	N	3.37	5.4 B	645	217	2.01	3190	4890	<0.00589	0.0465	0.00175 J	0.07	0.0182	<0.000811	0.114	0.00427 J	0.664	<0.0000526	0.0102	<0.00439	<0.00621	-6.08 ± 31	11.5 ± 30.2	5.42 ± 61.2

GSI ENVIRONMENTAL

APPENDIX A
Cumulative Groundwater Analytical Results for CCR Monitoring Network Wells

San Miguel Electric Cooperative, Inc.
Christine, Atascosa County, Texas

					Appendix III Constituents							Appendix IV Constituents														
				Analyte:	pH (field)	Boron	Calcium	Chloride	Fluoride*	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium-226	Radium-228	Combined Radium
				Units:	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	pCi/L
Area	**Well ID**	**Well Type**	**Sample Date**	**Type**																						
East Equalization Pond	EP-32	Downgradient	5/25/2016	N	6.76	29.1	501	2340	<0.5	4640	10600	<0.004	0.00771 J	0.0345 J	<0.002	<0.002	<0.004	<0.002	<0.006	0.949	<0.00004	0.0189 J	<0.011	<0.002	0.52 ± 0.21	1.85 ± 0.55	2.37
			8/18/2016	N	6.66	29.8	431	2290	0.709 J	4640	10200	<0.002	<0.002	0.0183 J	<0.001	<0.001	<0.002	<0.001	<0.003	0.915	<0.00004	0.023 J	<0.0055	<0.001	0.42 ± 0.24	2.17 ± 0.69	2.59
			10/26/2016	N	6.77	24.9	557	2280	0.765 J	4390	9960	<0.004	<0.004	<0.019	<0.002	<0.002	<0.004	<0.002	<0.006	0.948	<0.00004	0.0246 J	<0.011	<0.002	0.51 ± 0.23	2.58 ± 0.79	3.09
			2/15/2017	N	6.46	31.8 J	464	2210	<0.2	3950	9640	<0.0008	<0.002	0.0162	<0.0003	<0.0003	0.00328 J	<0.003	<0.0003	0.874	<0.00008	0.022	<0.002	<0.0005	1.76 ± 1.050	2.38 ± 0.435	4.14
			3/22/2017	N	6.45	29.8	436	2260	0.372 J	3990	9300	<0.0008	<0.002	0.0173	<0.0003	<0.0003	<0.002	<0.003	<0.0003	0.909	<0.00008	0.0193	<0.002	<0.0005	1.34 ± 0.288	1.93 ± 0.613	3.27
			5/11/2017	N	6.54	29.2 J	446	2230	<0.1	4070	9540	<0.0008	<0.002	0.0153	<0.0003	<0.0003	<0.002	<0.003	<0.0003	0.944	<0.00008	0.0192	<0.002	<0.0005	0.750 ± 0.268	2.75 ± 0.444	3.5
			7/25/2017	N	6.61	30.8 J	509	2170	<0.5	4360	9800	<0.0008	<0.002 J	0.0161	<0.0003	<0.0003	0.00365 J	<0.003 J	<0.0003	0.958	<0.00008	0.0177	<0.002 J	<0.0005	0.668 ± 0.291	1.65 ± 0.797 U	2.32
			8/22/2017	N	6.42	29.5 J	450	2090	<0.5	3930	9780	<0.0008	<0.002	0.0157	<0.0003 J	<0.0003	<0.002	<0.003	<0.0003	0.785	<0.00008	0.015	<0.002 J	<0.0005	0.710 ± 0.335	2.84 ± 0.537	3.55
			8/22/2017	Dup	--	30.6 J	447	2200	<0.5	4120	9800	<0.0008	<0.002	0.0156	<0.0003 J	<0.0003	<0.002	<0.003	<0.0003	0.783	<0.00008	0.0149	<0.002 J	<0.0005	0.417 ± 0.272	2.76 ± 0.448	3.18
			3/20/2018	N	7.16	28.6	454	2060 J+	<10	3770	9720	<0.01	<0.01	<0.02 J	<0.02	<0.01	--	<0.025	<0.02	1.01 J	<0.0002 J	<0.025	<0.01	<0.02	1.09 ± 0.4	3.49 ± 0.99 J	4.58 J
			3/20/2018	Dup	--	27	455	2070 J+	<10	3700	9700	<0.01	<0.01	0.0223 J	<0.01	<0.01	--	<0.025	<0.01	1.33 J	<0.0002 J	<0.025	<0.01	<0.01	0.4 ± 0.23	1.24 ± 0.58 J	1.64 J
			6/7/2018	N	6.75	25.4	450	2420	0.442	4220	10000	<0.01	<0.01	<0.02	<0.01	<0.01	--	<0.025	<0.01	1.02	<0.0002 J	<0.025	<0.01	<0.01	0.78 ± 0.35	2.04 ± 0.62	2.82
			9/5/2018	N	6.38	28.7	458	2120	<0.5	3510	9300	<0.01	<0.01	<0.02	<0.1	<0.01	<0.02	<0.025	<0.01	1.05	<0.0002 J	<0.025	<0.01	<0.01	0.45 ± 0.31 U	1.76 ± 0.56 U	1.76 U
			2/21/2019	N	6.44	41.5	471	2060	0.519 J	3650	9740	0.0128 J	0.00175 J	0.0158 J	0.00055 J	0.000542 J	0.00176 JH	0.00069 J	<0.0006 JH	1.23	<0.00003	0.0162 J	<0.0043	<0.00125	0.53 ± 0.38	1.81 ± 0.58	2.34 ± 0.96
			8/20/2019	N	6.3	40.6	421	2280	<0.5	4110	10100	<0.0008	<0.002	0.0148	<0.0003	<0.0003 JH	0.00283 J	<0.003 JH	<0.0003 JH	1.19 JL	<0.00008	0.0156	<0.002	<0.0005	0.599 ± 0.353	3.61 ± 0.44	4.21 ± 0.793
			1/21/2020	N	--	37.4	402	2220	<0.2	3710	10000	<0.0008	<0.002	0.018	<0.0003	<0.0003	<0.002	<0.003	0.000434 J	0.864	<0.00008	0.0168	<0.002	<0.0005	0.693 ± 0.346	3.63 ± 0.452	4.32 ± 0.798
			2/26/2020	N	6.2	36.6	394	2360	<0.5	3950	10100	<0.0008	<0.002	0.0169	<0.0003	<0.0003	0.00213 J	<0.003	<0.0003	1.14	<0.00008	0.0073	<0.002	<0.0005	1.62 ± 0.51	4.16 ± 0.492 JH	5.77 ± 1 JH
			8/5/2020	N	6.36	36.6	441	2260	<0.5	3850	9960	<0.0008	<0.002	0.0154	<0.0003	<0.0003	<0.002	<0.003	<0.0003	1.1	<0.00008	0.0173	<0.002	<0.0005	0.378 ± 0.265	3.17 ± 0.559	3.54 ± 0.824
			2/24/2021	N	6.89	20.9	406	1820	<0.5	4300	9800	<0.0008	<0.002	0.0147	<0.0015	<0.0003	<0.002	<0.003	<0.0003	1.09	<0.00008	0.0112	<0.002	<0.0005	1.05 ± 0.39	4.19 ± 0.439 B	5.23 ± 0.829 B
			2/24/2021	Dup	--	23.6	428	1900	1.01 J	4290	9480	<0.0008	<0.002	0.0135	<0.0015	<0.0003	<0.002	<0.003	<0.0003	1.05	<0.00008	0.0127	<0.002	<0.0005	0.884 ± 0.407	2.31 ± 0.537 B	3.2 ± 0.944 B
			8/18/2021	N	6.6	28.3 B	660	3220	<0.1	4310	12100	<0.00589	<0.0055	0.0101	0.00122 J	<0.00243	<0.000811	0.00584 J	<0.00237	1.27	<0.0000263	0.0116	<0.00439	<0.00621	25.7 ± 15.9	16.9 ± 24.2	42.6 ± 40.1
East Equalization Pond	EP-33	Downgradient	5/25/2016	N	6.69	68	598	2830	<0.5	3290	10300	<0.004	0.0113 J	0.0284 J	<0.002	<0.002	<0.004	0.00236 J	<0.006	0.439	<0.00004	0.0676	0.0128 J	<0.002	0.61 ± 0.24	0.75 ± 0.34	1.36
			8/18/2016	N	6.81	68.2	531	2980	0.781 J	3360	9940	<0.002	<0.002	0.0153 J	<0.001	<0.001	<0.002	<0.001	<0.003	0.403	<0.00004	0.0468	<0.0055	<0.001	0.53 ± 0.22	1.51 ± 0.57	2.04
			10/26/2016	N	6.88	57	608	2890	0.916 J	3320	9560	<0.004	<0.004	<0.019	<0.002	<0.002	<0.004	<0.002	<0.006	0.414	<0.00004	0.0401 J	<0.011	<0.002	0.45 ± 0.2	ND ± 0.42	0.45
			2/15/2017	N	6.53	69.9 J	577	2940	<0.2	2770	9440	<0.0008	<0.002	0.0159	<0.0003	<0.0003	0.00206 J	<0.003	<0.0003	0.544	<0.00008	0.0233	<0.002	<0.0005	0.646 ± 0.451 U	0.235 ± 0.456 U	0.88 U
			3/22/2017	N	6.57	69.3	587	3110	0.378 J	2880	9260	<0.0008	<0.002	0.0161	<0.0003	<0.0003	<0.002	<0.003	<0.0003	0.557 J-	<0.00008	0.0199	<0.002	<0.0005	1.03 ± 0.349	1.64 ± 0.440	2.67
			5/11/2017	N	6.69	78.3 J	618	3370	<0.1	2900	9960	<0.0008	<0.002	0.0178	<0.0003	<0.0003	<0.002	<0.003	<0.0003	0.8	<0.00008	0.0161	<0.002	<0.0005	0.358 ± 0.224	0.735 ± 0.544 U	1.09
			7/25/2017	N	6.66	69.9 J	709	3290	<0.5	3610	10200	<0.0008	<0.002 J	0.0165	<0.0003	<0.0003	0.0027 J	<0.003 J	<0.0003	0.745	<0.00008	0.0133	<0.002 J	<0.0005	0.326 ± 0.148	1.63 ± 0.545 U	1.96
			8/23/2017	N	6.47	70.2	605	3020	<0.5	3100	9860	<0.0008	<0.002	0.0157	<0.0003	<0.0003	<0.002	<0.003	<0.0003	0.712	<0.00008	0.0125	<0.002	<0.0005	0.237 ± 0.228	1.40 ± 0.521 U	1.64
			3/20/2018	N	7.16	85.8	577	2720 J+	<10	2760	9800	<0.01	<0.01	<0.02	<0.01	<0.01	--	<0.025	<0.01	0.696	<0.0002 J	0.0284	<0.01	<0.01	0.37 ± 0.22	1.18 ± 0.55	1.55
			6/7/2018	N	6.78	72.4	596	3250	0.442	3180	9820	<0.01	<0.01	<0.02	<0.1	<0.01	--	<0.025	<0.01	0.613	<0.0002 J	0.0427	0.0161	<0.01	0.3 ± 0.2	0.89 ± 0.39	1.19
			9/5/2018	N	6.3	63.8	660	2970	<0.5	2780	10300	<0.01	<0.01	<0.02	<0.01	<0.01	<0.02	<0.025	<0.01	0.718	<0.0002 J	0.0588	<0.01	<0.01	0.42 ± 0.28 UJ	0.97 ± 0.43 U	0.97 UJ
			9/5/2018	Dup	--	70.4	639	3480	<0.5	2930	10300	<0.01	<0.01	<0.02	<0.01	<0.01	<0.02	<0.025	<0.01	0.712	<0.0002	0.0588	<0.01	<0.01	2.15 ± 0.79 J	1.46 ± 0.55 U	3.61 J
			2/21/2019	N	6.8	98.2	650	2890	0.511 J	2950	10200	<0.00265 JH	<0.00125	0.0153 J	<0.000455	<0.000385	0.00187 JH	0.000382 JH	<0.0006 JH	0.734	<0.00003	0.0499	<0.0043	<0.00125	0.85 ± 0.39	0.79 ± 0.43	1.64 ± 0.82
			8/21/2019	N	6.41	100	624	3110	0.707 J	2830	10500	<0.0008	<0.002	0.0183	<0.0003	<0.0003 JH	0.00266 J	<0.003 JH	0.00245	0.595	<0.00008	0.0491	0.00331 J	<0.0005	0.972 ± 0.466	2.2 ± 0.481 J	3.17 ± 0.947
			2/26/2020	N	6.96	93.4	507	3190	<0.5	2930	10500	<0.0008	<0.002	0.014	<0.0003	<0.0003	0.00218 J	<0.003	0.00143	0.589	<0.00008	0.0556	<0.002	<0.0005	0.158 ± 0.234 JH	1.01 ± 0.407 JH	1.17 ± 0.641 JH
			2/26/2020	Dup	--	94.7	506	3250	<0.5	2990	10500	<0.0008	<0.002	0.0142	<0.0003	<0.0003	0.00245 J	<0.003	0.00145	0.598	<0.00008	0.0561	<0.002	<0.0005	0.291 ± 0.251 JH	0.49 ± 1.26 JH	0.78 ± 1.51 JH
			8/5/2020	N	6.54	82.7	580	3360	<0.5	3120	10500	<0.0008	<0.002	0.0162	<0.0003	<0.0003	0.00288 J	<0.003	<0.0003	0.629	<0.00008	0.0494	<0.002	<0.0005	0.472 ± 0.264	2.81 ± 0.615	3.28 ± 0.879
			2/24/2021	N	7.01	82.7	556	3210	1.36 J	2970	10200	<0.0008	<0.002	0.0165	<0.0015	<0.0003	<0.002	<0.003	<0.0003	0.594	<0.00008	0.0363	0.00226 J	<0.0005	0.501 ± 0.285	1.48 ± 0.457 B	1.98 ± 0.742 B
			8/18/2021	N	6.45	93.7 B	721	2980	0.235 J	3330	9210	<0.00589	0.00972 J	0.00932 J	0.00136 J	<0.00243	<0.000811	0.00627 J	<0.00237	0.672	<0.0000263	0.0267	<0.00439	<0.00621	33.3 ± 17.2	13.6 ± 21.9	46.9 ± 39.1
			8/18/2021	Dup	--	95.7 B	788	2920	0.231 J	3270	9110	<0.00589	0.00618 J	0.0098 J	0.00145 J	<0.00243	<0.000811	0.00683 J	<0.00237	0.707	<0.0000263	0.0299	<0.00439	<0.00621	11.5 ± 18.4	8.82 ± 24.2	20.32 ± 42.6
East Equalization Pond	EP-34	Downgradient	5/24/2016	N	6.79	50.2	517	3640	<0.5	2910	10800	<0.004	0.00596 J	0.0294 J	<0.002	<0.002	<0.004	<0.002	<0.006	0.874	<0.00004	0.0227 J	<0.011	<0.002	0.7 ± 0.26	1.51 ± 0.47	2.21
			8/18/2016	N	6.66	74.6	483	3900	0.589 J	3000	10700	<0.002	<0.002	0.0227 J	<0.001	<0.001	<0.002	0.00174 J	<0.003	0.698	<0.00004	0.029	<0.0055	<0.001	0.7 ± 0.29	1.79 ± 0.62	2.49
			10/26/2016	N	6.74	61.6	533	3780	0.651 J	3150	10700	<0.004	<0.004	<0.019	<0.002	<0.002	<0.004	<0.002	<0.006	0.78	<0.00004	0.0249 J	<0.011	<0.002	0.76 ± 0.3	1.61 ± 0.6	2.37
			2/15/2017	N	6.37	51.7 J	448	3660	<0.5	3100	11300	<0.0008	<0.002	0.02	<0.0003	<0.0003	0.00298 J	<0.003	<0.0003	0.852	<0.00008	0.0174	<0.002	<0.0005	1.17 ± 0.464 U	5.11 ± 0.541	6.28
			2/15/2017	Dup	--	54.6 J	457	3670	<0.5	3090	10700	<0.0008	<0.002	0.0189	<0.0003	<0.0003	<0.002	<0.003	<0.0003	0.823	<0.00008	0.0187	<0.002	<0.0005	0.721 ± 0.372 U	4.33 ± 0.476	5.05
			3/22/2017	N	6.41	53.5	447	3670	<0.5	3030	10300	<0.0008	<0.002	0.0164	<0.0003	<0.0003	<0.002	<0.003	<0.0003	0.727 J-	<0.00008	0.0175	<0.002	<0.0005	1.61 ± 0.489	3.21 ± 0.549	4.82
			3/22/2017	Dup	--	50.2	427	3710	<0.5	3110	12300	<0.0008	<0.002	0.0163	<0.0003	<0.0003	<0.002	<0.003	<0.0003	0.721 J-	<0.00008	0.0171	<0.002	<0.0005	1.51 ± 0.419	2.41 ± 0.574	3.92
			5/11/2017	N	6.49	52.1 J	476	3740	<0.1	3230	11100	<0.0008	<0.002	0.0168	<0.0003	<0.0003	<0.002	<0.003	<0.0003	0.983	<0.00008	0.0154	<0.002	<0.0005	0.696 ± 0.269	3.60 ± 0.632	4.3
			7/25/2017	N	6.59	55.8 J	510	3860	<0.5	3500	11400	<0.0008	<0.002 J	0.0173	<0.0003	<0.0003	0.00322 J	<0.003 J	<0.0003	0.862	<0.00008	0.0118	<0.002 J	<0.0005	0.971 ± 0.288	2.24 ± 0.618	3.21
			8/23/2017	N	6.46	53.5	489	3700	<0.5	3210	11300	<0.0008	<0.002	0.0172	<0.0003	<0.0003	<0.002	<0.003	<0.0003	0.887	<0.00008 J	0.0111	<0.002	<0.0005	0.574 ± 0.324	3.03 ± 0.459	3.6
			3/20/2018	N	6.62	50.8	483	3430 J+	<10	3160	11500	<0.01	<0.01	0.0208	<0.01	<0.01	--	<0.025	<0.01	1	<0.0002 J	<0.025	<0.01	<0.01	1.5 ± 0.5	4.9 ± 1.3	6.4
			6/7/2018	N	6.76	48.5	484	4130	0.169	3780	11500	<0.01	<0.01	0.0203	<0.1	<0.01	--	<0.025	<0.1	0.813	<0.0002 J	<0.025	0.0126	<0.1	1.78 ± 0.59	5 ± 1.3	6.78
			9/5/2018	N	6.37	46.9	492	3610	<0.5	3280	11500	<0.01	<0.01	<0.02	<0.01	<0.01	<0.02	<0.025	<0.01	0.961	<0.0002 J	<0.025	<0.01	<0.01	1.42 ± 0.6 U	5.4 ± 1.4 U	6.82 U
			2/20/2019	N	8.24	57.1	441	3890	<0.5	3640	11100	<0.0053	<0.0025	0.0193 J	<0.00091	<0.00077	0.00424 J	<0.0004 JH	<0.0012	1.15	<0.00003	0.00536 J	<0.0086	<0.00125	1.16 ± 0.48	6.1 ± 1.5	7.26 ± 1.98
			6/28/2019	N	--	95.5	509	3490	0.135 J	2930	11400	<0.00053	0.00178 J	0.0193	<0.000455	<0.000077	0.00218 J	0.000305 J	<0.0006	1.03 n	<0.00003	0.0165	0.0024	<0.00025	1.23 ± 0.58	3.6 ± 0.96	4.83 ± 1.54
			8/21/2019	N	6.28	52.6	488	3530	<0.5	2850	11600	<0.0008	<0.002	0.016	<0.0003	<0.0003 JH	<0.002	<0.003 JH	<0.0003 JH	0.909	<0.00008	0.00585	<0.002	<0.0005	0.893 ± 0.404	4.44 ± 0.654 J	5.33 ± 1.06
			2/26/2020	N	6.11	71.6	441	3870	<0.5	3170	11500	<0.0008	<0.002	0.0177	<0.0003	<0.0003	<0.002	<0.003	<0.0003	0.838	<0.00008	0.00822	<0.002	<0.0005	0.996 ± 0.418	3.42 ± 0.486 JH	4.41 ± 0.904 JH
			8/6/2020	N	5.6	67.7	515	3890	<0.5	3070	11200	<0.0008	<0.002	0.0171	<0.0003	<0.0003	<0.002	<0.003	<0.0003	0.847	<0.00008	0.0164	<0.002	<0.0005	1.04 ± 0.443	4.6 ± 0.654	5.64 ± 1.1
			2/24/2021	N	6.64	66.3	489	3790	1.58 J	2960	11100	<0.0008	<0.002	0.0173	<0.0015	<0.0003	<0.002	<0.003	<0.0003	0.799	<0.00008	0.0229	<0.002	<0.0005	1.31 ± 0.473	6.04 ± 0.423	7.35 ± 0.896
			8/18/2021	N	6.81	32.4 B	668	4070	<0.1	3600	11400	<0.00589	<0.0055	0.0123	0.00123 J	<0.00243	<0.000811	0.00646 J	<0.00237	1.22	<0.0000263	0.00911 J	<0.00439	<0.00621	-5.62 ± 7.73	20.3 ± 30	14.68 ± 37.73

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APPENDIX A
Cumulative Groundwater Analytical Results for CCR Monitoring Network Wells

San Miguel Electric Cooperative, Inc.
Christine, Atascosa County, Texas

					Appendix III Constituents							Appendix IV Constituents														
				Analyte:	pH (field)	Boron	Calcium	Chloride	Fluoride*	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium-226	Radium-228	Combined Radium
				Units:	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	pCi/L
Area	Well ID	Well Type	Sample Date	Type																						
East Equalization Pond	EP-35	Downgradient	5/24/2016	N	6.27	23.4	367	3170	<0.5	3450	10700	<0.004	0.0191 J	0.0392 J	<0.002	<0.002	0.00425 J	0.00554 J	<0.006	1.08	<0.00004	0.00701 J	<0.011	<0.002	0.77 ± 0.27	1.23 ± 0.41	2
			8/18/2016	N	6.48	33.7	276	3410	<0.5	3340	10100	<0.002	0.00211 J	0.0199 J	<0.001	<0.001	<0.002	0.00104 J	<0.003	1.16	<0.00004	0.00426 J	<0.0055	<0.001	0.61 ± 0.22	1.1 ± 0.4	1.71
			10/26/2016	N	6.51	25.2	298	3440	0.536 J	3340	9960	<0.004	<0.004	0.02 J	<0.002	<0.002	<0.004	<0.002	<0.006	1.02	<0.00004	<0.006	<0.011	<0.002	0.47 ± 0.22	1.19 ± 0.51	1.66
			2/15/2017	N	6.05	35.2 J	283	3130	<0.2	2870	9600	<0.0008	0.00263 J	0.0184	<0.0003	<0.0003	<0.002	<0.003	<0.0003	1.06	<0.00008	0.00407 J	<0.002	<0.0005	0.345 ± 0.305 U	1.65 ± 0.495	2 U
			3/22/2017	N	6.22	34.1	269	3230	<0.5	3170	10600	<0.0008	<0.002	0.0167	<0.0003	<0.0003	<0.002	<0.003	<0.0003	0.937 J-	<0.00008	0.00359 J	<0.002	<0.0005	1.36 ± 0.298	1.55 ± 0.440	2.91
			5/11/2017	N	6.35	36.7 J	294	3270	<0.1	3040	9720	<0.0008	<0.002	0.0174	<0.0003	<0.0003	0.00209 J	<0.003	<0.0003	1.06	<0.00008	0.00349 J	<0.002	<0.0005	0.544 ± 0.240	1.20 ± 0.539	1.74
			5/11/2017	Dup	--	36.1 J	283	3320	<0.1	3010	10200	<0.0008	<0.002	0.0168	<0.0003	<0.0003	0.00212 J	<0.003	<0.0003	1	<0.00008	0.00363 J	<0.002	<0.0005	0.606 ± 0.262	0.737 ± 0.510 U	1.34
			7/25/2017	N	6.4	34.6 J	265	3460	<0.5	3130	9860	<0.0008	<0.002	0.0176	<0.0003	<0.0003	<0.002	<0.003	<0.0003	0.893	<0.00008	0.00374 J	<0.002	<0.0005	0.708 ± 0.309	0.845 ± 0.459 U	1.55
			8/23/2017	N	6.27	32.8	271	3310	<0.5	2890	9660	<0.0008	<0.002	0.0161	<0.0003	<0.0003	<0.002	<0.003	<0.0003	1.06	<0.00008	0.00301 J	<0.002	<0.0005	0.299 ± 0.247	2.09 ± 0.537 U	2.39
			3/21/2018	N	6.6	32.3	273	3040 J+	<10	2610	10200	<0.01	<0.01	<0.02	<0.01	<0.01	--	<0.025	<0.01	1.23	<0.0002 J	<0.025	<0.01	<0.01	0.63 ± 0.27	0.92 ± 0.46 U	0.63
			6/7/2018	N	6.42	34.5	272	4000	0.174	3370	10200	<0.01	<0.01	0.0248	<0.1	<0.01	--	<0.025	<0.01	1.01	<0.0002 J	<0.025	0.013	<0.01	0.45 ± 0.27	1.54 ± 0.51	1.99
			9/6/2018	N	6.06	30.1	306	3310	<0.5	2730	10200	<0.01	<0.01	0.0221	<0.2	<0.01	<0.02	<0.025	<0.01	0.951	<0.0002 J	<0.025	<0.01	<0.01	0.57 ± 0.39 U	0.86 ± 0.46 U	0.57 U
			2/20/2019	N	8.03	41.1	325	3540	<0.5	3220	11100	<0.0053	0.00439 J	0.0574	0.00103 J	<0.00077	0.00635 J	0.00263 J	0.00699 J	1.24	<0.00003	<0.0049	<0.0086	<0.00125	0.75 ± 0.38	2.26 ± 0.65	3.01 ± 1.03
			8/21/2019	N	6.13	32.2	347	3480	<0.5	2860	10600	<0.0008	<0.002	0.0183	<0.0003	<0.0003 JH	<0.002	<0.003 JH	<0.0003 JH	1.16	<0.00008	<0.002	<0.002	<0.0005	0.498 ± 0.268	5.63 ± 0.684 J	6.13 ± 0.952
			2/27/2020	N	6.76	36.9	295	3790	<0.5	3080	10900	<0.0008	0.0038 J	0.117	0.000946 J	<0.0003	0.00729	<0.003	0.00752	1.09	<0.00008	0.00226 J	0.00277 J	<0.0005	0.703 ± 0.341 JH	3.5 ± 0.618 JH	4.2 ± 0.959 JH
			8/6/2020	N	5.5	40.9	352	3780	<0.5	3090	9400	<0.0008	<0.002	0.0196	<0.0003	<0.0003	0.00301 J	<0.003	0.000536 J	1.13	<0.00008	0.00216 J	<0.002	<0.0005	0.929 ± 0.386	1.86 ± 0.664	2.79 ± 1.05
			8/6/2020	Dup	--	34.4	350	3810	<0.5	3060	11000	<0.0008	<0.002	0.021	<0.0003	<0.0003	0.0029 J	<0.003	0.000712 J	1.14	<0.00008	0.00221 J	<0.002	<0.0005	0.768 ± 0.349	2.41 ± 0.609	3.18 ± 0.958
			2/24/2021	N	6.54	40	343	3670	1.65 J	2940	11000	<0.0008	<0.002	0.0193	<0.0015	<0.0003	<0.002	<0.003	0.000316 J	1.12	<0.00008	<0.002	<0.002	<0.0005	0.686 ± 0.308	1.1 ± 0.421 B	1.78 ± 0.729 B
			8/18/2021	N	6.28	43.4 B	433	3710	<0.1	3170	10000	<0.00589	<0.0055	0.0202	0.00114 J	<0.00243	<0.000811	0.00438 J	<0.00237	1.17	<0.0000263	0.00321 J	<0.00439	<0.00621	77.4 ± 23.7	6.61 ± 18.5	84.01 ± 42.2
East Equalization Pond	EP-36	Downgradient	5/24/2016	N	6.27	17.6	439	3350	<0.5	2470	10200	<0.004	0.014 J	0.0604	<0.002	<0.002	<0.004	0.00218 J	<0.006	1.26	<0.00004	<0.006	<0.011	<0.002	0.97 ± 0.32	2.07 ± 0.62	3.04
			8/18/2016	N	6.22	22.3	353	3810	<0.5	2600	9820	<0.002	0.00389 J	0.0239 J	<0.001	<0.001	<0.002	<0.001	<0.003	1.34	<0.00004	<0.003	<0.0055	<0.001	0.77 ± 0.3	1.47 ± 0.56	2.24
			10/26/2016	N	6.5	16.2	397	3740	<0.5	2580	9720	<0.004	0.00456 J	0.0232 J	<0.002	<0.002	<0.004	<0.002	<0.006	1.19	<0.00004	<0.006	<0.011	<0.002	0.93 ± 0.35	2.43 ± 0.76	3.36
			2/16/2017	N	5.88	24.6	434	3600	<0.5 J	2450	10700	<0.0008	0.00333 J	0.0224 J	<0.0003	<0.0003	<0.002	<0.003	<0.0003	1.2	<0.00008	<0.002	<0.002 J	<0.0005	0.368 ± 0.648	2.09 ± 0.699	2.46
			3/22/2017	N	6.04	23.4	382	3570	<0.5	2540	11000	<0.0008	0.00259 J	0.0231	<0.0003	<0.0003	<0.002	<0.003	<0.0003	1.11 J-	<0.00008	<0.002	<0.002	<0.0005	0.485 ± 0.374 U	1.81 ± 0.467	2.3
			5/11/2017	N	6.08	25.9 J	418	3650	<0.1	2530	9800	<0.0008	0.00228 J	0.0217	<0.0003	<0.0003	<0.002	<0.003	<0.0003	1.3	<0.00008	<0.002	<0.002	<0.0005	0.959 ± 0.288	2.67 ± 0.534	3.63
			7/25/2017	N	6.2	22.8 J	416	3830	<0.5	2700	9220	<0.0008	0.00238 J	0.0222	<0.0003	<0.0003	<0.002	<0.003	<0.0003	1.01	<0.00008	<0.002	<0.002	<0.0005	1.03 ± 0.359	1.13 ± 0.544 U	2.16
			8/23/2017	N	6.09	22.4	420	3660	<0.5	2520	10000	<0.0008	<0.002	0.0216	<0.0003	<0.0003	<0.002	<0.003	<0.0003	1.23	<0.00008	<0.002	<0.002	<0.0005	0.618 ± 0.288	1.54 ± 0.529 U	2.16
			3/21/2018	N	6.31	21.5	456	3500 J+	<10	2510	10200	<0.01	<0.01	0.0305	<0.01	<0.01	--	<0.025	<0.01	1.45	<0.0002 J	<0.025	<0.01	<0.01	0.89 ± 0.36	2.3 ± 0.79	3.19
			6/7/2018	N	6.28	21.5	435	3620	0.176	2580	10100	<0.01	<0.01	0.0251	<0.1	<0.01	--	<0.025	<0.01	1.07	<0.0002 J	<0.025	<0.01	<0.01	0.35 ± 0.27 U	3.46 ± 0.93	3.46
			9/6/2018	N	6.01	20.3	475	3850	<0.5	2720	10300	<0.01	<0.01	0.0245	<0.2	<0.01	<0.02	<0.025	<0.01	1.11	<0.0002 J	<0.025	<0.01	<0.01	0.94 ± 0.51 U	2.7 ± 0.78 U	3.64 U
			2/20/2019	N	7.25	33.2	439	3810	<0.5	2610	10300	<0.0053	<0.0025	0.0214 J	<0.00091	<0.00077	0.00395 J	0.000602 JH	<0.0012	1.35	<0.00003	<0.0049	<0.0086	0.00469 J	0.4 ± 0.3	2.26 ± 0.66	2.66 ± 0.96
			6/20/2019	N	--	29	450	3470	<0.1	2490	9420	<0.00265	0.00449 J	0.0285	<0.000455	<0.000385	<0.00126	0.000605 J	0.00451 J	1.09 n	0.00003 U	<0.00245	<0.0043	<0.00125	0.74 ± 0.52	2.55 ± 0.73	3.29 ± 1.25
			8/20/2019	N	6.01	26.1	455	3530	<0.5	2450	10600	<0.0008	<0.002	0.0238	<0.0003	<0.0003 JH	<0.002	<0.003 JH	<0.0003 JH	1.25	<0.00008	<0.002	<0.002	<0.0005	0.899 ± 0.46	4.03 ± 0.524 J	4.93 ± 0.984
			2/27/2020	N	6.75	27.2	387	3960	<0.5	2710	10800	<0.0008	<0.002	0.0241	<0.0003	<0.0003	<0.002	<0.003	0.00407	1.19	<0.00008	<0.002	<0.002	<0.0005	0.837 ± 0.375	4.46 ± 0.418 JH	5.3 ± 0.793 JH
			8/6/2020	N	5.58	25.7	462	3920	<0.5	2720	10600	<0.0008	<0.002	0.025	<0.0003	<0.0003	<0.002	<0.003	<0.0003	1.18	<0.00008	<0.002	<0.002	<0.0005	0.649 ± 0.343	2.92 ± 0.645	3.57 ± 0.988
			2/24/2021	N	6.57	24.2	436	3830	<0.5	2490	10500	<0.0008	<0.002	0.0222	<0.0015	<0.0003	<0.002	<0.003	0.000386 J	1.17	<0.00008	<0.002	<0.002	<0.0005	0.686 ± 0.323	3.47 ± 0.385 B	4.15 ± 0.708 B
			8/18/2021	N	6.22	40.1 B	596	3900	<0.1	2520	8700	<0.00589	0.00972 J	0.0188	0.0013 J	<0.00243	<0.000811	0.00586 J	<0.00237	1.22	<0.0000263	0.00266 J	<0.00439	<0.00621	65.2 ± 23.9 JH	15.5 ± 25.5	80.7 ± 49.4 JH
East Equalization Pond	EP-37	Downgradient	5/24/2016	N	6.56	7.15	534	4270	<0.5	3130	11700	<0.004	0.0092 J	0.0412 J	<0.002	<0.002	<0.004	0.00318 J	<0.006	1.46	<0.00004	<0.006	<0.011	<0.002	0.89 ± 0.29	3.67 ± 0.96	4.56
			8/18/2016	N	6.3	9.47	479	4500	<0.5	3040	11300	<0.002	0.00233 J	0.0232 J	<0.001	<0.001	<0.002	<0.001	<0.003	1.64	<0.00004	<0.003	<0.0055	<0.001	0.65 ± 0.27	0.85 ± 0.45	1.5
			10/24/2016	N	6.47	7.48	518	4340	0.528 J	3010	11300	<0.004	<0.004	0.0259 J	<0.002	<0.002	<0.004	<0.002	<0.006	1.47	<0.00004	<0.006	<0.011	<0.002	0.68 ± 0.29	1.95 ± 0.66	2.63
			2/16/2017	N	6.06	7.52	540	4040	<0.5 J	2750	11500	<0.0008	0.00269 J	0.0263 J	<0.0003	<0.0003	<0.002	<0.003	0.000346 J	1.35	<0.00008	<0.002	<0.002 J	<0.0005	0.460 ± 0.294	3.13 ± 0.482	3.59
			3/22/2017	N	6.17	7.69	481	4190	<0.5	2850	12500	<0.0008	<0.002	0.0216	<0.0003	<0.0003	<0.002	<0.003	<0.0003	1.14 J-	<0.00008	<0.002	<0.002	<0.0005	0.753 ± 0.341	3.61 ± 0.518	4.36
			5/10/2017	N	6.34	7.24 J	500	4120	<0.1	2770	9840	<0.0008	<0.002	0.0219	<0.0003	<0.0003	<0.002	<0.003	<0.0003	1.37	<0.00008	<0.002	<0.002	<0.0005	1.09 ± 0.326	3.27 ± 0.409	4.36
			7/26/2017	N	6.32	6.72 J	491	4330	<0.5	2990	9240	<0.0008	<0.002	0.0218	<0.0003	<0.0003	<0.002	<0.003	<0.0003	1.09	<0.00008	<0.002	<0.002	<0.0005	1.62 ± 0.499	2.62 ± 0.537 U	4.24
			8/23/2017	N	6.23	6.7	488	4070	<0.5	2810	11300	<0.0008	<0.002	0.0213	<0.0003	<0.0003	<0.002	<0.003	<0.0003	1.35	<0.00008	<0.002	<0.002	<0.0005	0.633 ± 0.286	3.90 ± 0.474	4.53
			3/21/2018	N	6.54	7.59	531	4040 J+	<10	2840	11200	<0.01	<0.01	0.0242	<0.01	<0.01	--	<0.025	<0.01	1.73	<0.0002 J	<0.025	<0.01	<0.01	0.63 ± 0.28	2.81 ± 0.89	3.44
			6/7/2018	N	6.51	8.94	495	4280	0.188	3090	10900	<0.01	<0.01	0.0238	<0.1	<0.01	--	<0.025	<0.01	1.32	<0.0002 J	<0.025	<0.01	<0.01	0.66 ± 0.28	3.53 ± 0.93	4.19
			9/6/2018	N	6.71	21	471	3410	<0.5	2480	10400	<0.01	<0.01	0.0251	<0.2	<0.01	<0.02	<0.025	<0.01	1.11	<0.0002 J	<0.025	<0.01	<0.01	0.57 ± 0.38 U	3.22 ± 0.88 U	3.79 U
			2/20/2019	N	7.3	8.22	473	4220	<0.5	3000	11600	<0.0053	<0.0025	0.0221 J	<0.00091	<0.00077	0.0168 J	<0.0004 JH	<0.0012	1.41	<0.00003	<0.0049	<0.0086	<0.00125	0.86 ± 0.42	<0.6 ± 0.41	0.86 ± 0.83
			2/20/2019	Dup	--	7.84	483	4210	<0.5	2970	11300	<0.0053	<0.0025	0.0215 J	<0.00091	<0.00077	0.0148 J	<0.0004 JH	<0.0012	1.43	<0.00003	<0.0049	<0.0086	<0.0025	1 ± 0.47	4.2 ± 1.1	5.2 ± 1.57
			8/21/2019	N	6.09	7.36	495	3860	<0.5	2630	11200	<0.0008	<0.002	0.0202	<0.0003	<0.0003 JH	<0.002	<0.003 JH	<0.0003 JH	1.4	<0.00008	<0.002	<0.002	<0.0005	0.613 ± 0.389	3.83 ± 1.2 J	4.44 ± 1.59
			2/27/2020	N	6.95	8.72	404	3950	<0.5	2760	11100	<0.0008	<0.002	0.021	<0.0003	<0.0003	<0.002	<0.003	<0.0003	1.29	<0.00008	<0.002	<0.002	<0.0005	0.488 ± 0.33 JH	5.48 ± 0.506 JH	5.97 ± 0.836 JH
			8/12/2020	N	5.55	8.12	452	3910	<0.5	2800	10800	<0.0008	<0.002	0.0215	<0.0003	<0.0003	<0.002	<0.003	<0.0003	1.37	<0.00008	<0.002	<0.002	<0.0005	0.967 ± 0.412	3.75 ± 0.632 JH	4.72 ± 1.04 JH
			2/25/2021	N	6.65	7.8	426	3750	2.39	2740	10300	<0.0008	<0.002	0.0194	<0.0015	<0.0003	<0.002	<0.003	<0.0003	1.3	<0.00008	<0.002	<0.002	<0.0005	0.798 ± 0.389	3.83 ± 0.687 B	4.63 ± 1.08 B
			8/18/2021	N	6.36	7.74 B	557	3570	<0.1	2810	9110	<0.00589	0.0116	0.0246	0.0013 J	<0.00243	<0.000811	0.0056 J	<0.00237	1.34	<0.0000263	0.00387 J	<0.00439	<0.00621	31.3 ± 21.5	21.1 ± 25.6	52.4 ± 47.1

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APPENDIX A
Cumulative Groundwater Analytical Results for CCR Monitoring Network Wells

San Miguel Electric Cooperative, Inc.
Christine, Atascosa County, Texas

					Appendix III Constituents							Appendix IV Constituents														
				Analyte:	pH (field)	Boron	Calcium	Chloride	Fluoride*	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium-226	Radium-228	Combined Radium
				Units:	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	pCi/L	pCi/L
Area	**Well ID**	**Well Type**	**Sample Date**	**Type**																						
East Equalization Pond	EP-38	Downgradient	5/25/2016	N	5.8	3.82	337	1380	<0.5	2140	5800	<0.004	0.00733 J	0.0306 J	<0.002	<0.002	<0.004	0.00311 J	<0.006	0.654	<0.00004	<0.006	<0.011	<0.002	0.65 ± 0.24	1.26 ± 0.42	1.91
			8/18/2016	N	5.92	2.71	307	1380	<0.5	2200	5420	<0.002	0.00205 J	0.0168 J	<0.001	<0.001	<0.002	0.00121 J	<0.003	0.683	<0.00004	<0.003	<0.0055	<0.001	0.53 ± 0.2	0.97 ± 0.38	1.5
			10/25/2016	N	5.9	2.49	286	1300	0.521 J	2070	5420	<0.004	<0.004	<0.019	<0.002	<0.002	<0.004	<0.002	<0.006	0.64	<0.00004	<0.006	<0.011	<0.002	0.18 ± 0.13	0.87 ± 0.47	1.05
			2/15/2017	N	5.48	3.06 J	291	1070	<0.2	1780	4690	<0.0008	<0.002	0.0147	<0.0003	<0.0003	<0.002	<0.003	<0.0003	0.65	<0.00008	<0.002	<0.002	<0.0005	0.218 ± 0.318 U	0.483 ± 0.461 U	0.701 U
			3/22/2017	N	5.58	2.72	289	1180	<0.2	2110	4840	<0.0008	<0.002	0.0138	<0.0003	<0.0003	<0.002	<0.003	<0.0003	0.589 J-	<0.00008	<0.002	<0.002	<0.0005	1.23 ± 0.310	1.17 ± 0.444 U	2.4
			5/10/2017	N	5.7	2.74 J	279	1100	<0.1	1780	7510	<0.0008	<0.002	0.0139	<0.0003	<0.0003	<0.002	<0.003	<0.0003	0.668	<0.00008	<0.002	<0.002	<0.0005	0.597 ± 0.292	0.912 ± 0.384	1.51
			7/27/2017	N	5.64	2.61 J	292	1140	<0.2	2240	4400	<0.0008	<0.002	0.0131	<0.0003	<0.0003	<0.002	<0.003	<0.0003	0.522	<0.00008	<0.002	<0.002	<0.0005	0.145 ± 0.205 U	0.668 ± 0.472 U	0.813 U
			8/24/2017	N	5.82	2.32	287	1130	<0.2	1970	4820	<0.0008	<0.002	0.0142	<0.0003	<0.0003	<0.002	<0.003	<0.0003	0.614	<0.00008	<0.002	<0.002	<0.0005	0.278 ± 0.194	0.656 ± 0.410 U	0.934
			3/20/2018	N	5.81	2.42	239	1030	<5	1910	4780	<0.01	<0.01	<0.02	<0.01	<0.01	--	<0.025	<0.01	0.591	<0.0002 J	<0.025	<0.01	<0.01	0.53 ± 0.24	0.94 ± 0.52 U	0.53
			6/6/2018	N	5.74	2.5	302	1170	0.235	1920	4780	<0.01	<0.01	<0.02	<0.1	<0.01	--	<0.025	<0.01	0.573	<0.0002 J	<0.025	<0.01	<0.01	0.71 ± 0.42	1.57 ± 0.53	2.28
			9/5/2018	N	5.42	3.21	310	1130	<0.5	1840	4950	<0.01	<0.01	<0.02	<0.01	<0.01	<0.02	<0.025	<0.01	0.685	<0.0002	<0.025	<0.01	<0.01	0.61 ± 0.37 U	1.22 ± 0.46 U	1.83 U
			2/20/2019	N	6.61	2.55	361	1220	<0.5	2050	5140	<0.0053	<0.0025	0.0164 J	<0.00091	<0.00077	0.0157 J	0.00126 J	<0.0012	0.767	<0.00003	<0.0049	<0.0086	<0.00125	0.47 ± 0.31	1.07 ± 0.47	1.54 ± 0.78
			8/21/2019	N	5.32	2.25	369	1290	<0.5	2000	5380	<0.0008	<0.002	0.0148	0.000414 J	<0.0003 JH	<0.002	<0.003 JH	<0.0003 JH	0.694	<0.00008	<0.002	<0.002	<0.0005	0.341 ± 0.23	2.05 ± 0.451 J	2.39 ± 0.681
			2/27/2020	N	5.15	2.15	358	1640	<0.5	2030	5720	<0.0008	<0.002	0.0144	<0.0003	<0.0003	<0.002	<0.003	<0.0003 JH	0.66	<0.00008	<0.002	<0.002	<0.0005	0.749 ± 0.349	3.83 ± 0.49 JH	4.57 ± 0.839 JH
			8/12/2020	N	4.9	2.24	415	1540	<0.5	2080	5700	<0.0008	<0.002	0.0148	0.000333 J	<0.0003	<0.002	<0.003	<0.0003	0.694	<0.00008	<0.002	<0.002	<0.0005	0.442 ± 0.351	0.431 ± 0.578 JH	0.873 ± 0.929 JH
			2/25/2021	N	5.87	2.48	437	1600	0.728 J	2070	5830	<0.0008	<0.002	0.016	<0.0015	<0.0003	<0.002	<0.003	<0.0003	0.718	<0.00008	<0.01	<0.002	<0.0005	0.521 ± 0.304	-1.05 ± 0.647 B	0.521 ± 0.951 JB
			8/18/2021	N	5.84	2.4 B	556	1320	0.121 J	2300	5120	<0.00589	0.324 J	0.0156	0.00197 J	<0.00243	<0.000811	0.00699 J	<0.00237	0.693	<0.0000263	0.00527 J	<0.00439	<0.00621	31.5 ± 18.6	14.1 ± 23.5	45.6 ± 42.1
East Equalization Pond	MW-04	Downgradient	5/25/2016	N	6.13	11	314	2050	<0.5	2510	7200	<0.004	0.00415 J	<0.019	<0.002	<0.002	<0.004	<0.002	<0.006	0.734	<0.00004	<0.006	<0.011	<0.002	0.85 ± 0.3	2.02 ± 0.58	2.87
			8/18/2016	N	6.29	11.7	303	2190	<0.5	2550	7280	<0.002	<0.002	0.0118 J	<0.001	<0.001	<0.002	<0.001	<0.003	0.767	<0.00004	<0.003	<0.0055	<0.001	0.78 ± 0.27	2.04 ± 0.6	2.82
			10/24/2016	N	6.32	10.8	366	2130	0.541 J	2520	6920	<0.004	<0.004	<0.019	<0.002	<0.002	<0.004	<0.002	<0.006	0.795	<0.00004	<0.006	<0.011	<0.002	0.44 ± 0.21	1.81 ± 0.64	2.25
			2/15/2017	N	5.85	10.6 J	325	1940	<0.2	2290	6730	<0.0008	<0.002	0.0132	<0.0003	<0.0003	<0.002	<0.003	<0.0003	0.752	<0.00008	<0.002	<0.002	<0.0005	0.350 ± 0.271 U	2.05 ± 0.476	2.4
			3/23/2017	N	5.85	9.72	296	1930	<0.2	2460	5850	<0.0008	<0.002	0.0125	<0.0003	<0.0003	<0.002	<0.003	<0.0003	0.683 J-	<0.00008	<0.002	<0.002	<0.0005	0.602 ± 0.227 U	0.743 ± 0.546 U	1.35 U
			5/10/2017	N	6.1	10.7 J	327	1770	<0.1	2130	4500	<0.0008	<0.002	0.0124	<0.0003	<0.0003	<0.002	<0.003	<0.0003	0.832	<0.00008	<0.002	<0.002	<0.0005	1.12 ± 0.349	1.87 ± 0.513	2.99
			7/27/2017	N	6.06	10.7 J	314	1740	<0.1	2650	4860	<0.0008	<0.002	0.0119	<0.0003	<0.0003	<0.002	<0.003	<0.0003	0.613 J-	<0.00008	<0.002	<0.002	<0.0005	0.447 ± 0.273	1.72 ± 0.485 U	2.17
			8/24/2017	N	6.22	9.15	297	1810	<0.2	2310	6460	<0.0008	<0.002	0.0136	<0.0003	<0.0003	<0.002	<0.003	<0.0003	0.709	<0.00008	<0.002	<0.002	<0.0005	0.471 ± 0.259	1.13 ± 0.493 U	1.6
			3/20/2018	N	6.3	8.91	278	1650	<5	2250	5940	<0.01	<0.01	<0.02	<0.02	<0.01	--	<0.025	<0.02	0.663	<0.0002 J	<0.025	<0.01	<0.01	0.34 ± 0.23	1.84 ± 0.66	2.18
			6/6/2018	N	6.2	8.17	297	1830	0.132	2440	6150	<0.01	<0.01	<0.02	<0.1	<0.01	--	<0.025	<0.01	0.619	<0.0002 J	<0.025	<0.01 J	<0.01	0.44 ± 0.25 U	2.9 ± 0.8	3.34
			6/6/2018	Dup	--	7.82	301	1780	0.128	2380	6120	<0.01	<0.01	<0.02	<0.1	<0.01	--	<0.025	<0.01	0.632	0.00181 J-	<0.025	0.0109 J	<0.01	0.51 ± 0.28 U	3.8 ± 1	4.31
			9/5/2018	N	5.9	8.82	309	1570	<0.5	2110	6460	<0.01	<0.01	<0.02	<0.01	<0.01	<0.02	<0.025	<0.01	0.737	<0.0002 J	<0.025	<0.01	<0.01	0.42 ± 0.29 U	1.92 ± 0.61 U	1.92 U
			2/20/2019	N	7.48	9.32	315	1810	<0.5	2480	6360	<0.0053	<0.0025	0.0137 J	<0.00091	<0.00077	0.00329 J	0.000533 JH	0.00143 J	0.787	<0.00003	<0.0049	<0.0086	<0.00125	0.32 ± 0.22	2.56 ± 0.74	2.88 ± 0.96
			8/21/2019	N	5.85	7.64	344	1740	<0.5	2180	6440	<0.0008	<0.002	0.0142	0.000705 J	0.000578 JH	<0.002	<0.003 JH	0.00069 JH	0.748	<0.00008	<0.002	<0.002	0.000641 J	0.629 ± 0.316	2.8 ± 0.509 J	3.42 ± 0.825
			2/27/2020	N	5.64	8.7	289	1900	<0.5	2320	6540	<0.0008	<0.002	0.0116	<0.0003	<0.0003	<0.002	<0.003	<0.0003 JH	0.709	<0.00008	<0.002	<0.002	<0.0005	0.633 ± 0.37	3.71 ± 0.443 JH	4.35 ± 0.813 JH
			8/12/2020	N	5.42	8.42	320	1790	<0.5	2280	6430	<0.0008	<0.002	0.0131	<0.0003	<0.0003	<0.002	<0.003	<0.0003	0.735	<0.00008	<0.002	<0.002	<0.0005	1.14 ± 0.467	1.14 ± 0.607 JH	2.28 ± 1.07 JH
			2/25/2021	N	6.46	8.63	326	1920	1.32 J	2330	6610	<0.0008	<0.002	0.0151	<0.0015	<0.0003	<0.002	<0.003	0.000806 J	0.766	<0.00008	<0.01	<0.002	<0.0005	0.545 ± 0.298	4.96 ± 0.586 B	5.5 ± 0.884 B
			8/18/2021	N	6.22	8.62 B	445	1690	0.122 J	2400	6220	<0.00589	<0.0055	0.017 JH	0.00138 J	<0.00243	<0.000811	0.00357 JH	<0.00237	0.789	<0.0000263	0.00337 J	<0.00439	<0.00621	36 ± 19.3 JH	17.5 ± 28.3	53.5 ± 47.6 JH
East Equalization Pond	MW-01	Observation	2/19/2019	N	6.63	2.81	490	1040	0.264 J	2790	6040	<0.00053	0.00392	0.0134	<0.000455	<0.000077	0.00181 JH	0.00232 J	<0.00012	0.887	<0.00003	0.000869 J	<0.00086	<0.00025	0.68 ± 0.35 J	2.53 ± 0.73	3.21 ± 1.08 J
			8/21/2019	N	6.07	2.78	510	979	<0.5	2640	5930	<0.0008	0.00325 J	0.0122	<0.0003	<0.0003 JH	<0.002	<0.003 JH	<0.0003 JH	0.957	<0.00008	<0.002	<0.002	<0.0005	0.465 ± 0.336	2.9 ± 0.485 J	3.36 ± 0.821
			1/21/2020	N	--	2.84	472	997	<0.2	2840	6060	<0.0008	0.00421 J	0.0248	<0.0003	<0.0003	0.0036 J	<0.003	0.00261	0.741	<0.00008	<0.002	0.0032 J	<0.0005	0.64 ± 0.339	3.33 ± 0.513	3.96 ± 0.852
			2/26/2020	N	5.95	3.2	462	1090	<0.5	2780	5860	<0.0008	0.00397 J	0.0233	0.000446 J	<0.0003	0.00327 J	<0.003	0.00243	0.912	<0.00008	<0.002	<0.002	<0.0005	0.345 ± 0.277 JH	3.28 ± 0.548 JH	3.62 ± 0.825 JH
			8/5/2020	N	6.05	3.38	522	1020	<0.5	2810	5770	<0.0008	0.00246 J	0.0122	<0.0003	<0.0003	<0.002	<0.003	<0.0003	0.93	<0.00008	<0.002	<0.002	<0.0005	0.551 ± 0.317	3.82 ± 0.631	4.37 ± 0.948
East Equalization Pond	PZ-07	Observation	2/20/2019	N	5.54	2.26	525	945	1.46	2730	5470	<0.0053	0.00278 J	0.0157 J	0.0234 J	<0.00077	0.0277 J	0.0515	<0.0012	0.771	<0.00003	<0.0049	<0.0086	<0.00125	<0.35 ± 0.27	2.01 ± 0.65	2.01 ± 0.92
			8/21/2019	N	4.26	1.99	520	996	2.05	2620	6190	<0.0008	0.00312 J	0.0161	0.0224	0.000374 JH	<0.002	0.0437 JH	<0.0003 JH	0.689	<0.00008	<0.002	0.0329	<0.0005	0.427 ± 0.282	3.19 ± 0.475 J	3.62 ± 0.757
			2/27/2020	N	4.13	2.01	479	1130	0.885 J	2840	5800	<0.0008	0.00478 J	0.0173	0.0253	0.000333 J	<0.002	0.0431	<0.0003 JH	0.685	<0.00008	<0.002	0.0431	<0.0005	0.406 ± 0.241	5.14 ± 0.528 JH	5.54 ± 0.769 JH
			8/12/2020	N	3.78	2.33	534	1090	<0.5	2810	5800	<0.0008	0.00505	0.0193	0.0258	0.000431 J	<0.002	0.0435	<0.0003	0.691	<0.00008	<0.002	0.047	<0.0005	0.392 ± 0.383	3.93 ± 0.597 JH	4.32 ± 0.98 JH

Notes:
1. This table includes cumulative groundwater monitoring results (Appendix III and IV) from all CCR groundwater monitoring network wells.
2. The East Equalization Pond was in the process of closure in 2021.
3. Fluoride is included in both Appendix III and Appendix IV analyte lists.
4. TDS = Total Dissolved Solids; mg/L = milligrams per liter; SU = standard units; SDL = sample detection limit; RL = reporting limit.
4. N = normal sample; Dup = field duplicate; "U or <" = not detected at the SDL; J = analyte detected between the SDL and RL.
6. Bias codes: B = analyte detetced in method blank; JH or J+ = estimated result is biased high; JL or J- = estimated result is biased low; UJ = analyte was analyzed for but was not detected above the reported SDL, the associated value is an estimate and may be inaccurate or imprecise; Dash ("-") = not available or not applicable.

Job No. 5076
Issued: 31 January 2022

2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

San Miguel Electric Cooperative, Inc.
Christine, Atascosa County, Texas

Appendix B. Data Usability Summaries and Laboratory Analytical Reports

Appendix B.1 Data Usability Summaries – February 2021

Appendix B.2 Data Usability Summaries – August 2021

Appendix B.3 Laboratory NELAP Accreditation

Job No. 5076
Issued: 31 January 2022

2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

San Miguel Electric Cooperative, Inc.
Christine, Atascosa County, Texas

Appendix B.1 Data Usability Summaries – February 2021

GSI ENVIRONMENTAL

DATA USABILITY SUMMARY

February 2021 Sampling Event (SDG: 2102164)

OVERVIEW

GSI Environmental Inc. (GSI) reviewed one data package from DHL Analytical (DHL) for the analysis of **seven groundwater samples collected at the Ash Pile on 24 - 25 February 2021** at the San Miguel Electric Cooperative, Inc., Christine, Atascosa County, Texas site. Data were reviewed for i) conformance to the requirements of the guidance document *Review and Reporting of COC Concentration Data* (RG-366/TRRP-13) and ii) adherence to project objectives (e.g., GSI 2019). GSI certifies that at the time the laboratory data were generated for the project, DHL was NELAC-accredited under the Texas Laboratory Accreditation Program (Certification Number: T104704211-21-26) for the matrices, analytes, and methods of analysis requested on the chain-of-custody documentation. A copy of DHL's National Environmental Laboratory Accreditation Program (NELAP) certificate applicable to the period during which the laboratory generated the data in this report is included in a separate appendix. No radiochemistry analyses were performed because the Ash Pile is in detection monitoring.

Intended Use of Data

Samples were collected to provide current data on groundwater conditions at the test location. Analyses requested included:

- Method SW6020B - Metals Analysis
- Method E300 - Anions Analysis
- Method M2320 B - Alkalinity Analysis
- Method M2540C - Total Dissolved Solids Analysis

Data were reviewed and validated, as described in *Review and Reporting of COC Concentration Data* (RG-366/TRRP-13), and the results are discussed in this Data Usability Summary (DUS). The following laboratory submittals and field data were examined:

- the reportable data (i.e., results provided in the laboratory data package),
- the laboratory review checklists and associated exception reports, and
- the field notes with respect to field instrument calibrations, filtering procedures (if applicable), and sampling procedures.

The results of supporting quality control (QC) analyses were summarized on the Laboratory Review Checklist (LRC), Exception Reports (ERs), and in the case narratives, all of which were included in this review. The LRCs, associated ERs, and reportable data included in this review are attached to this DUS as Attachment A.

INTRODUCTION

Seven (7) water samples were submitted to the laboratory, and all requested analyses were completed. Table 1 lists the sample identifications cross-referenced to laboratory identifications.

PROJECT MEASUREMENT QUALITY OBJECTIVES

The following criteria were used in this review (RG-366/TRRP-13):

Analytes	MS/MSD % R	MS/MSD RPD	LCS/LCSD % R	LCS/LCSD RPD	Lab Dup RPD	Field Precision RPD
Metals	75 – 125	15	80 – 120	15	-	≤ 30%
Inorganic Anions	90 – 110	20	90 – 110	20	10	
Alkalinity	-		74 – 129	20	20	
Total Dissolved Solids (TDS)	-		90 – 113	-	5	

DATA REVIEW / VALIDATION RESULTS

Analytical Results

Results from these samples may be considered usable with the limitations and exceptions described in this section. Sample data qualified as a result of this DUS, if any, are listed in Table 2. Non-detected results are reported as less than the value of the sample detection limit (SDL). Results between the SDL and sample quantitation limit (SQL) are J-flagged.

Finding: All requested analyses were completed, and results were reported as requested.

Preservation and Holding Times

The samples were evaluated for agreement with the chain-of-custody (C-O-C). The samples were received by the laboratory in the appropriate containers and in good condition, with proper completion of the C-O-C documentation. Samples receipt temperature was within the acceptance criteria, and field preservation was done as specified in the Sampling and Analysis Plan [SAP] (GSI, 2019). Samples were prepared and analyzed within method-specified holding times.

Finding: No qualifiers were added per these criteria.

Calibrations

No calibration issues were identified in the laboratory report narrative or during review of the laboratory data package.

Finding: No qualifiers were added per this evaluation.

Blanks

Equipment blank

- Boron, calcium, and sodium were detected in the equipment blank at concentrations equal or above the method detection limit (MDL). However, no qualifier was assigned because their groundwater concentrations were greater than five times the blank concentrations in the associated samples.

Finding: No qualifiers were added per this evaluation.

Internal Standard and Surrogate Recoveries (VOCs and SVOCs Only)

Not applicable.

Laboratory Control Samples

The Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD) recoveries and Relative Percent Differences (RPDs) were within the project-defined QC acceptance criteria.

Finding: No qualifiers were added per this evaluation.

Matrix Spike/Matrix Spike Duplicates and Laboratory Duplicates

The LRC indicated the following issues with matrix spike (MS)/matrix spike duplicate (MSD) data:

- %R for, boron, calcium, chloride, and sodium were outside the project-defined QC acceptance criteria. However, no qualifier was assigned because the spiking amount was less than four times the result in the unspiked parent sample.

All laboratory duplicates were within the project-defined QC acceptance criteria.

Findings: No qualifiers were added per this evaluation.

Field Duplicates (Field Precision)

A field duplicate identified as DUP-3 was collected for sample SP-01 during the field event. Field precision was calculated and the RPD was within the project-defined QC acceptance criteria. A comparison of the field sample and the duplicate sample is shown in Table 2.

Finding: No qualifiers were added per these criteria.

Field Procedures

Sample collection and documentation was done in accordance with the Groundwater Sampling and Analysis Plan (SAP; GSI, 2019).

Finding: Field activities were consistent with the SAP.

SUMMARY

The analytical data are usable for the purpose of characterizing groundwater conditions. No data were rejected based on this review and validation. No qualifiers were added to samples.

REFERENCES

GSI Environmental, Inc., 2019, Groundwater Sampling and Analysis Plan, San Miguel Electric Cooperative, Inc., December 26.

TCEQ 2010. Review and Reporting of COC Concentration Data under TRRP, RG-366/TRRP-13 https://www.tceq.texas.gov/assets/public/comm_exec/pubs/rg/rg-366-trrp-13.pdf

TABLES

TABLE 1
Cross-Reference Field Sample and Laboratory Identifications

Sample Date	Lab	Lab Sample ID	Field Sample ID	Matrix
2/24/2021	DHL	2102164-01	SP-34	Groundwater
2/25/2021	DHL	2102164-02	SP-01	Groundwater
2/25/2021	DHL	2102164-03	Dup-3	Groundwater
2/25/2021	DHL	2102164-04	SP-02	Groundwater
2/25/2021	DHL	2102164-05	SP-03	Groundwater
2/25/2021	DHL	2102164-06	SP-32	Groundwater
2/25/2021	DHL	2102164-07	FB-3-2-25-21	Field Blank

TABLE 2
Field Precision Evaluation

Sample ID	Duplicate Sample ID	Sample Date	Matrix	Analyte	Sample Result (pCi/l)	Duplicate Result (pCi/l)	RPD (%)	RPD Result
SP-01	Dup-3	2/25/2021	Groundwater	Chloride	3290	3280	0.30	A
SP-01	Dup-3	2/25/2021	Groundwater	Fluoride	5.91	6	1.51	A
SP-01	Dup-3	2/25/2021	Groundwater	Sulfate	6950	7120	2.42	A
SP-01	Dup-3	2/25/2021	Groundwater	Alkalinity, Bicarbonate (As CaCO3)	<10.0	<10.0	0.00	A
SP-01	Dup-3	2/25/2021	Groundwater	Alkalinity, Carbonate (As CaCO3)	<10.0	<10.0	0.00	A
SP-01	Dup-3	2/25/2021	Groundwater	Alkalinity, Hydroxide (As CaCO3)	<10.0	<10.0	0.00	A
SP-01	Dup-3	2/25/2021	Groundwater	Alkalinity, Total (As CaCO3)	<20.0	<20.0	0.00	A
SP-01	Dup-3	2/25/2021	Groundwater	Total Dissolved Solids (Residue, Filterable)	15200	15500	1.95	A
SP-01	Dup-3	2/25/2021	Groundwater	Boron	7.8	8.08	3.53	A
SP-01	Dup-3	2/25/2021	Groundwater	Calcium	547	551	0.73	A
SP-01	Dup-3	2/25/2021	Groundwater	Magnesium	253	258	1.96	A
SP-01	Dup-3	2/25/2021	Groundwater	Potassium	16.6	17.1	2.97	A
SP-01	Dup-3	2/25/2021	Groundwater	Sodium	2930	2960	1.02	A

Notes:
1. The detection limit was used to calculate Relative Percent Difference (RPD) for non-detect samples.
2. RPD = ((SR - DR) * 200)/(SR + DR).
3. A = Acceptable RPD.
4. U or “<” = Analyte was not detected at the SDL.

Attachment A

DHL Analytical

Analytical Report

SDG. 2102164

March 09, 2021

Mike Schofield
GSI Environmental, Inc
9600 Great Hills Trail, Suite 350E
Austin, Texas 78759
TEL: (512) 346-4474
FAX

Order No.: 2102164

RE: SMEC Christine, Texas

Dear Mike Schofield:

DHL Analytical, Inc. received 7 sample(s) on 2/26/2021 for the analyses presented in the following report.

There were no problems with the analyses and all data met requirements of NELAP except where noted in the Case Narrative. All non-NELAP methods will be identified accordingly in the case narrative and all estimated uncertainties of test results are within method or EPA specifications.

If you have any questions regarding these tests results, please feel free to call. Thank you for using DHL Analytical.

Sincerely,

John DuPont
General Manager

This report was performed under the accreditation of the State of Texas Laboratory Certification Number: T104704211-21-26

Table of Contents

Ash Pile

№ 67395

CHAIN-OF-CUSTODY

DHL ANALYTICAL
2300 Double Creek Dr. ■ Round Rock, TX 78664
Phone (512) 388-8222 ■ FAX (512) 388-8229
Web: www.dhlanalytical.com
E-Mail: login@dhlanalytical.com

CLIENT: GSI ENVIRONMENTAL INC
ADDRESS: 9600 GREAT HILLS TRAIL, #350E, AUSTIN, TX 78759
PHONE: 512-346-4474 FAX/E-MAIL:
DATA REPORTED TO: mhschoffield@gsi-net.com
ADDITIONAL REPORT COPIES TO: BNzeribe@gsi-net.com

DATE: 02/25/21 PAGE 1 OF 1
PO #: DHL WORK ORDER #: 2102164
PROJECT LOCATION OR NAME: SMEC CHRISTINE, TEXAS
CLENT PROJECT #: 5076-109 COLLECTOR: RTC, BNN, ECK, COR

Authorize 5% surcharge for TRRP Report? ☑ Yes ☐ No

S=SOIL W=WATER A=AIR L=LIQUID SE=SEDIMENT P=PAINT SL=SLUDGE O=OTHER SO=SOLID

PRESERVATION: HCl | HNO_3 | H_2SO_4 ☐ NaOH ☐ | ICE | UNPRESERVED

ANALYSES: BTEX ☐ MTBE ☐ [METHOD 8021] | TPH 1005 ☐ TPH 1006 ☐ HOLD 1006 ☐ | GRO [METHOD 8015] ☐ DRO [METHOD 8105] ☐ | VOC 8260 ☐ VOC 624 ☐ VOC 8260/5035 ☐ | SVOC 8270 ☐ PAH 8270 ☐ HOLD PAH ☐ SVOC 625 ☐ | 8270 PEST ☐ 625 PEST/PCB ☐ 608 PCB ☐ | 8270 O-P PEST ☐ 8082 PCB ☐ 8270 PCB ☐ | 8321 HERB ☐ T PHOS, AMMONIA ☐ | METALS 6020 ☑ METALS 200.8 ☐ DISS. METALS ☐ | RCRA ☐ TX11 ☐ PH ☐ HEX CHROM ☐ ALKALINITY ☑ COD ☐ | CHLORIDE ☐ ANIONS 6300 ☐ | TCLP-SVOC ☐ VOC ☐ PEST ☐ HERB ☐ | TCLP-METALS ☐ RCRA 8 ☐ TX-11 ☐ Pb ☐ | RCI ☐ FLASHPOINT ☐ DGAS ☐ | TDS ☑ TSS ☐ % MOISTURE ☐ CYANIDE ☐

Field Sample I.D.	DHL Lab #	Date	Time	Matrix	Container Type	# of Containers	HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESERVED	ANALYSES	FIELD NOTES
SP-34	01	2/24/21	0908	W	1 500mL & 250mL	2		X		X		X X X X	
SP-34-MS	↓	2/24/21	0908	↓	↓	↓		↓		↓		↓	
SP-34-MSD	↓	2/24/21	0908	↓	↓	↓		↓		↓		↓	
SP-01	02	2/25/21	1349	↓	↓	↓		↓		↓		↓	
DUP-3	03	2/25/21		↓	↓	↓		↓		↓		↓	
SP-02	04	2/25/21	1456	↓	↓	↓		↓		↓		↓	
SP-03	05	2/25/21	1555	↓	↓	↓		↓		↓		↓	
SP-32	06	2/25/21	1442	↓	↓	↓		↓		↓		↓	
FB-~~3~~-2-25-21 @2/26/21 per Mike S.	07	2/25/21	1601	X	X	X		X		X		X X X X	

RELINQUISHED BY: (Signature) DATE/TIME 2/26/21 9:47 RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)

☐ DHL DISPOSAL @ $5.00 each ☐ Return

TURN AROUND TIME
RUSH ☐ CALL FIRST
1 DAY ☐ CALL FIRST
2 DAY ☐
NORMAL ☒
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 1.2/1.0/2.8/1.6 0.3/1.9/1.4/1.1 THERM #: 78
CUSTODY SEALS: ☐ BROKEN ☐ INTACT ☒ NOT USED
CARRIER: ☐ LONE STAR ☐ FEDEX ☐ UPS ☐ OTHER
☐ COURIER DELIVERY
☒ HAND DELIVERED

DHL COC Rev 1 | FEB 2010

DHL Analytical, Inc.

Sample Receipt Checklist

Client Name **GSI Environmental, Inc** Date Received: **2/26/2021**

Work Order Number **2102164** Received by: **EL**

Checklist completed by: _____ 2/26/2021 Reviewed by (DL) 2/26/2021
Signature | Date | Initials | Date

Carrier name: Hand Delivered

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	**1.2** °C 1.0/2.8/1.6/0.3/1.9/1.4/1.1
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH<2 acceptable upon receipt?	Yes ☑	No ☐	NA ☐ LOT # 13171
	Adjusted? no		Checked by EL
Water - ph>9 (S) or ph>10 (CN) acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted? _____		Checked by _____

Any No response must be detailed in the comments section below.

Client contacted: _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action: _____

Laboratory Name: DHL Analytical, Inc.

Laboratory Review Checklist: Reportable Data

Project Name: SMEC Christine, Texas	**LRC Date:** 3/9/21
Reviewer Name: Carlos Castro	**Laboratory Work Order:** 2102164
Prep Batch Number(s): See Prep Dates Report	**Run Batch:** See Analytical Dates Report

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-Custody (C-O-C)					
R1	OI	**1)** Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				**R1-01**
		2) Were all departures from standard conditions described in an exception report?			X		
R2	OI	**Sample and Quality Control (QC) Identification**					
		1) Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		2) Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test Reports**					
		1) Were all samples prepared and analyzed within holding times?	X				
		2) Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		3) Were calculations checked by a peer or supervisor?	X				
		4) Were all analyte identifications checked by a peer or supervisor?	X				
		5) Were sample detection limits reported for all analytes not detected?	X				
		6) Were all results for soil and sediment samples reported on a dry weight basis?			X		
		7) Were % moisture (or solids) reported for all soil and sediment samples?			X		
		8) Were bulk soils/solids samples for volatile analysis extracted with methanol per EPA Method 5035?			X		
		9) If required for the project, TICs reported?			X		
R4	O	**Surrogate Recovery Data**					
		1) Were surrogates added prior to extraction?			X		
		2) Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R5	OI	**Test Reports/Summary Forms for Blank Samples**					
		1) Were appropriate type(s) of blanks analyzed?	X				
		2) Were blanks analyzed at the appropriate frequency?	X				
		3) Where method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		4) Were blank concentrations < MDL?	X				
		5) For analyte(s) detected in a blank sample, was the concentration, unadjusted for sample specific factors, in all associated field samples, **greater** than 10 times the concentration in the blank sample?			X		
R6	OI	**Laboratory Control Samples (LCS):**					
		1) Were all COCs included in the LCS?	X				
		2) Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		3) Were LCSs analyzed at the required frequency?	X				
		4) Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		5) Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		6) Was the LCSD RPD within QC limits (if applicable)?	X				
R7	OI	**Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Data**					
		1) Were the project/method specified analytes included in the MS and MSD?	X				
		2) Were MS/MSD analyzed at the appropriate frequency?	X				
		3) Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			**R7-03**
		4) Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	**Analytical Duplicate Data**					
		1) Were appropriate analytical duplicates analyzed for each matrix?	X				
		2) Were analytical duplicates analyzed at the appropriate frequency?	X				
		3) Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	**Method Quantitation Limits (MQLs):**					
		1) Are the MQLs for each method analyte included in the laboratory data package?	X				
		2) Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		3) Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other Problems/Anomalies**					
		1) Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				**R10-01**
		2) Was applicable and available technology used to lower the SDL to minimize the matrix interference affects on the sample results?	X				
		3) Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

Laboratory Name: DHL Analytical, Inc.

Laboratory Review Checklist (continued): Supporting Data

Project Name: SMEC Christine, Texas	**LRC Date:** 3/9/21
Reviewer Name: Carlos Castro	**Laboratory Work Order:** 2102164
Prep Batch Number(s): See Prep Dates Report	**Run Batch:** See Analytical Dates Report

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial Calibration (ICAL)**					
		1) Were response factors and/or relative response factors for each analyte within QC limits?	X				
		2) Were percent RSDs or correlation coefficient criteria met?	X				
		3) Was the number of standards recommended in the method used for all analytes?	X				
		4) Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		5) Are ICAL data available for all instruments used?	X				
		6) Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and Continuing calibration Verification (ICCV and CCV) and Continuing Calibration blank (CCB):**					
		1) Was the CCV analyzed at the method-required frequency?	X				
		2) Were percent differences for each analyte within the method-required QC limits?	X				
		3) Was the ICAL curve verified for each analyte?	X				
		4) Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	**Mass Spectral Tuning:**					
		1) Was the appropriate compound for the method used for tuning?	X				
		2) Were ion abundance data within the method-required QC limits?	X				
S4	O	**Internal Standards (IS):**					
		1) Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	**Raw Data (NELAC Section 5.5.10)**					
		1) Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		2) Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual Column Confirmation**					
		1) Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively Identified Compounds (TICs):**					
		1) If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) Results:**					
		1) Were percent recoveries within method QC limits?	X				
S9	I	**Serial Dilutions, Post Digestion Spikes, and Method of Standard Additions**					
		1) Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	**Method Detection Limit (MDL) Studies**					
		1) Was a MDL study performed for each reported analyte?	X				
		2) Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency Test Reports:**					
		1) Was the lab's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards Documentation**					
		1) Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/Analyte Identification Procedures**					
		1) Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of Analyst Competency (DOC)**					
		1) Was DOC conducted consistent with NELAC Chapter 5 – Appendix C?	X				
		2) Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/Validation Documentation for Methods** (NELAC Chapter 5)					
		1) Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory Standard Operating Procedures (SOPs):**					
		1) Are laboratory SOPs current and on file for each method performed?	X				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
3 NA = Not applicable.
4 NR = Not Reviewed.
5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Data Package Signature Page – RG-366/TRRP-13

This data package consists of:

This signature page, the laboratory review checklist, and the following reportable data:

R1 Field chain-of-custody documentation;
R2 Sample identification cross-reference;
R3 Test reports (analytical data sheets) for each environmental sample that includes:
  a) Items consistent with NELAC Chapter 5,
  b) dilution factors,
  c) preparation methods,
  d) cleanup methods, and
  e) if required for the project, tentatively identified compounds (TICs).
R4 Surrogate recovery data including:
  a) Calculated recovery (%R), and
  b) The laboratory's surrogate QC limits.
R5 Test reports/summary forms for blank samples;
R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  a) LCS spiking amounts,
  b) Calculated %R for each analyte, and
  c) The laboratory's LCS QC limits.
R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a) Samples associated with the MS/MSD clearly identified,
  b) MS/MSD spiking amounts,
  c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d) Calculated %Rs and relative percent differences (RPDs), and
  e) The laboratory's MS/MSD QC limits
R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  a) The amount of analyte measured in the duplicate,
  b) The calculated RPD, and
  c) The laboratory's QC limits for analytical duplicates.
R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;
R10 Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in the Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory is not accredited under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge that all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information or data affecting the quality of the data has been knowingly withheld.

This laboratory was last inspected by TCEQ on February 25-28 2019. Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Name: John DuPont
Official Title: General Manager

Signature

03/09/21

Date

Name: Dr. Derhsing Luu
Official Title: Technical Director

DHL Analytical, Inc. **Date:** *09-Mar-21*

CLIENT: GSI Environmental, Inc
Project: SMEC Christine, Texas
Lab Order: 2102164

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Method SW6020B - Metals Analysis
Method E300 - Anions Analysis
Method M2320 B - Alkalinity Analysis
Method M2540C - Total Dissolved Solids Analysis

Exception Report R1-01

The samples were received and log-in performed on 2/26/21. A total of 7 samples were received. The samples arrived in good condition and were properly packaged.

Exception Report R7-03

For Metals analysis performed on 3/3/21 the matrix spike and matrix spike duplicate recoveries were out of control limits for four analytes. These are flagged accordingly in the QC summary report. The sample selected for the matrix spike and matrix spike duplicate was from this work order. The LCS was within control limits for these analytes. No further corrective actions were taken.

For Anions analysis performed on 3/5/21 the matrix spikes and matrix spike duplicate recoveries (2102164-01 MS/MSD & 2102162-09 MS/MSD) were below control limits for Chloride. This was due to the concentration of target analytes. These are flagged accordingly. The sample selected for the matrix spike and matrix spike duplicate (2102164-01 MS/MSD) was from this work order. The sample selected for the matrix spike and matrix spike duplicate (2102162-09 MS/MSD) was not from this work order. The LCS was within control limits for these analytes. No further corrective actions were taken.

Exception Report R10-01

Per project specification, MS/MSDs are from workorder or project samples only.

For Anions analysis samples SP-02 and SP-03 were diluted prior to analysis due to the nature of the samples (concentration of Chloride and Sulfate).

DHL Analytical, Inc.

Date: *09-Mar-21*

CLIENT: GSI Environmental, Inc
Project: SMEC Christine, Texas
Lab Order: 2102164

Work Order Sample Summary

Lab Smp ID	Client Sample ID	Tag Number	Date Collected	Date Recved
2102164-01	SP-34		02/24/21 09:08 AM	2/26/2021
2102164-02	SP-01		02/25/21 01:49 PM	2/26/2021
2102164-03	Dup-3		02/25/21	2/26/2021
2102164-04	SP-02		02/25/21 02:56 PM	2/26/2021
2102164-05	SP-03		02/25/21 03:55 PM	2/26/2021
2102164-06	SP-32		02/25/21 02:42 PM	2/26/2021
2102164-07	FB-3-2-25-21		02/25/21 04:01 PM	2/26/2021

Lab Order: 2102164
Client: GSI Environmental, Inc
Project: SMEC Christine, Texas

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
2102164-01A	SP-34	02/24/21 09:08 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	SP-34	02/24/21 09:08 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	SP-34	02/24/21 09:08 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
2102164-01B	SP-34	02/24/21 09:08 AM	Aqueous	M2320 B	Alkalinity Preparation	03/05/21 10:00 AM	99716
	SP-34	02/24/21 09:08 AM	Aqueous	E300	Anion Preparation	03/05/21 10:21 AM	99713
	SP-34	02/24/21 09:08 AM	Aqueous	E300	Anion Preparation	03/05/21 10:21 AM	99713
	SP-34	02/24/21 09:08 AM	Aqueous	M2540C	TDS Preparation	03/02/21 02:44 PM	99665
2102164-02A	SP-01	02/25/21 01:49 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	SP-01	02/25/21 01:49 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	SP-01	02/25/21 01:49 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
2102164-02B	SP-01	02/25/21 01:49 PM	Aqueous	M2320 B	Alkalinity Preparation	03/05/21 10:00 AM	99716
	SP-01	02/25/21 01:49 PM	Aqueous	E300	Anion Preparation	03/05/21 10:21 AM	99713
	SP-01	02/25/21 01:49 PM	Aqueous	E300	Anion Preparation	03/05/21 10:21 AM	99713
	SP-01	02/25/21 01:49 PM	Aqueous	M2540C	TDS Preparation	03/02/21 02:44 PM	99665
2102164-03A	Dup-3	02/25/21	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	Dup-3	02/25/21	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	Dup-3	02/25/21	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
2102164-03B	Dup-3	02/25/21	Aqueous	M2320 B	Alkalinity Preparation	03/05/21 10:00 AM	99716
	Dup-3	02/25/21	Aqueous	E300	Anion Preparation	03/05/21 10:21 AM	99713
	Dup-3	02/25/21	Aqueous	E300	Anion Preparation	03/05/21 10:21 AM	99713
	Dup-3	02/25/21	Aqueous	M2540C	TDS Preparation	03/02/21 02:44 PM	99665
2102164-04A	SP-02	02/25/21 02:56 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	SP-02	02/25/21 02:56 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	SP-02	02/25/21 02:56 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
2102164-04B	SP-02	02/25/21 02:56 PM	Aqueous	M2320 B	Alkalinity Preparation	03/05/21 10:00 AM	99716
	SP-02	02/25/21 02:56 PM	Aqueous	E300	Anion Preparation	03/05/21 10:21 AM	99713
	SP-02	02/25/21 02:56 PM	Aqueous	E300	Anion Preparation	03/05/21 10:21 AM	99713
	SP-02	02/25/21 02:56 PM	Aqueous	M2540C	TDS Preparation	03/02/21 02:44 PM	99665

Lab Order: 2102164
Client: GSI Environmental, Inc
Project: SMEC Christine, Texas

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
2102164-05A	SP-03	02/25/21 03:55 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	SP-03	02/25/21 03:55 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	SP-03	02/25/21 03:55 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
2102164-05B	SP-03	02/25/21 03:55 PM	Aqueous	M2320 B	Alkalinity Preparation	03/05/21 10:00 AM	99716
	SP-03	02/25/21 03:55 PM	Aqueous	E300	Anion Preparation	03/05/21 10:21 AM	99713
	SP-03	02/25/21 03:55 PM	Aqueous	E300	Anion Preparation	03/05/21 10:21 AM	99713
	SP-03	02/25/21 03:55 PM	Aqueous	M2540C	TDS Preparation	03/02/21 02:44 PM	99665
2102164-06A	SP-32	02/25/21 02:42 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	SP-32	02/25/21 02:42 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	SP-32	02/25/21 02:42 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
2102164-06B	SP-32	02/25/21 02:42 PM	Aqueous	M2320 B	Alkalinity Preparation	03/05/21 10:00 AM	99716
	SP-32	02/25/21 02:42 PM	Aqueous	E300	Anion Preparation	03/05/21 10:21 AM	99713
	SP-32	02/25/21 02:42 PM	Aqueous	E300	Anion Preparation	03/05/21 10:21 AM	99713
	SP-32	02/25/21 02:42 PM	Aqueous	M2540C	TDS Preparation	03/02/21 02:44 PM	99665
2102164-07A	FB-3-2-25-21	02/25/21 04:01 PM	Field Blank	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	FB-3-2-25-21	02/25/21 04:01 PM	Field Blank	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
2102164-07B	FB-3-2-25-21	02/25/21 04:01 PM	Field Blank	M2320 B	Alkalinity Preparation	03/05/21 10:00 AM	99716
	FB-3-2-25-21	02/25/21 04:01 PM	Field Blank	E300	Anion Preparation	03/05/21 10:21 AM	99713
	FB-3-2-25-21	02/25/21 04:01 PM	Field Blank	M2540C	TDS Preparation	03/02/21 02:44 PM	99665

Lab Order: 2102164
Client: GSI Environmental, Inc
Project: SMEC Christine, Texas

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
2102164-01A	SP-34	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	100	03/03/21 02:28 PM	ICP-MS5_210303A
	SP-34	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	20	03/04/21 12:09 PM	ICP-MS5_210304A
	SP-34	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	1	03/02/21 03:13 PM	ICP-MS4_210302C
2102164-01B	SP-34	Aqueous	M2320 B	Alkalinity	99716	1	03/05/21 11:23 AM	TITRATOR_210305A
	SP-34	Aqueous	E300	Anions by IC method - Water	99713	100	03/05/21 07:30 PM	IC2_210305B
	SP-34	Aqueous	E300	Anions by IC method - Water	99713	5	03/06/21 12:34 AM	IC2_210305B
	SP-34	Aqueous	M2540C	Total Dissolved Solids	99665	1	03/02/21 04:50 PM	WC_210302B
2102164-02A	SP-01	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	1	03/02/21 03:23 PM	ICP-MS4_210302C
	SP-01	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	200	03/03/21 02:44 PM	ICP-MS5_210303A
	SP-01	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	20	03/03/21 05:07 PM	ICP-MS5_210303A
2102164-02B	SP-01	Aqueous	M2320 B	Alkalinity	99716	1	03/05/21 11:25 AM	TITRATOR_210305A
	SP-01	Aqueous	E300	Anions by IC method - Water	99713	100	03/05/21 08:18 PM	IC2_210305B
	SP-01	Aqueous	E300	Anions by IC method - Water	99713	5	03/06/21 12:50 AM	IC2_210305B
	SP-01	Aqueous	M2540C	Total Dissolved Solids	99665	1	03/02/21 04:50 PM	WC_210302B
2102164-03A	Dup-3	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	1	03/02/21 03:24 PM	ICP-MS4_210302C
	Dup-3	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	200	03/03/21 02:46 PM	ICP-MS5_210303A
	Dup-3	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	20	03/03/21 05:10 PM	ICP-MS5_210303A
2102164-03B	Dup-3	Aqueous	M2320 B	Alkalinity	99716	1	03/05/21 11:26 AM	TITRATOR_210305A
	Dup-3	Aqueous	E300	Anions by IC method - Water	99713	100	03/05/21 08:34 PM	IC2_210305B
	Dup-3	Aqueous	E300	Anions by IC method - Water	99713	5	03/06/21 01:06 AM	IC2_210305B
	Dup-3	Aqueous	M2540C	Total Dissolved Solids	99665	1	03/02/21 04:50 PM	WC_210302B
2102164-04A	SP-02	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	20	03/03/21 05:12 PM	ICP-MS5_210303A
	SP-02	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	1	03/02/21 03:26 PM	ICP-MS4_210302C
	SP-02	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	100	03/03/21 02:48 PM	ICP-MS5_210303A
2102164-04B	SP-02	Aqueous	M2320 B	Alkalinity	99716	1	03/05/21 11:32 AM	TITRATOR_210305A
	SP-02	Aqueous	E300	Anions by IC method - Water	99713	100	03/05/21 08:50 PM	IC2_210305B
	SP-02	Aqueous	E300	Anions by IC method - Water	99713	5	03/06/21 01:22 AM	IC2_210305B
	SP-02	Aqueous	M2540C	Total Dissolved Solids	99665	1	03/02/21 04:50 PM	WC_210302B

Lab Order: 2102164
Client: GSI Environmental, Inc
Project: SMEC Christine, Texas

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
2102164-05A	SP-03	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	1	03/02/21 03:28 PM	ICP-MS4_210302C
	SP-03	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	200	03/03/21 02:51 PM	ICP-MS5_210303A
	SP-03	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	20	03/03/21 05:14 PM	ICP-MS5_210303A
2102164-05B	SP-03	Aqueous	M2320 B	Alkalinity	99716	1	03/05/21 11:33 AM	TITRATOR_210305A
	SP-03	Aqueous	E300	Anions by IC method - Water	99713	100	03/05/21 09:06 PM	IC2_210305B
	SP-03	Aqueous	E300	Anions by IC method - Water	99713	5	03/06/21 01:38 AM	IC2_210305B
	SP-03	Aqueous	M2540C	Total Dissolved Solids	99665	1	03/02/21 04:50 PM	WC_210302B
2102164-06A	SP-32	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	20	03/03/21 05:16 PM	ICP-MS5_210303A
	SP-32	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	1	03/02/21 03:30 PM	ICP-MS4_210302C
	SP-32	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	200	03/03/21 02:53 PM	ICP-MS5_210303A
2102164-06B	SP-32	Aqueous	M2320 B	Alkalinity	99716	1	03/05/21 11:34 AM	TITRATOR_210305A
	SP-32	Aqueous	E300	Anions by IC method - Water	99713	100	03/05/21 09:22 PM	IC2_210305B
	SP-32	Aqueous	E300	Anions by IC method - Water	99713	5	03/06/21 01:54 AM	IC2_210305B
	SP-32	Aqueous	M2540C	Total Dissolved Solids	99665	1	03/02/21 04:50 PM	WC_210302B
2102164-07A	FB-3-2-25-21	Field Blank	SW6020B	Trace Metals: ICP-MS - Water	99628	1	03/02/21 03:32 PM	ICP-MS4_210302C
	FB-3-2-25-21	Field Blank	SW6020B	Trace Metals: ICP-MS - Water	99628	1	03/03/21 02:55 PM	ICP-MS5_210303A
2102164-07B	FB-3-2-25-21	Field Blank	M2320 B	Alkalinity	99716	1	03/05/21 11:36 AM	TITRATOR_210305A
	FB-3-2-25-21	Field Blank	E300	Anions by IC method - Water	99713	1	03/05/21 03:30 PM	IC2_210305B
	FB-3-2-25-21	Field Blank	M2540C	Total Dissolved Solids	99665	1	03/02/21 04:50 PM	WC_210302B

DHL Analytical, Inc.

Date: *09-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	SP-34
Project:	SMEC Christine, Texas	**Lab ID:**	2102164-01
Project No:	5076-109	**Collection Date:**	02/24/21 09:08 AM
Lab Order:	2102164	**Matrix:**	AQUEOUS

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Boron	11.2	1.00	3.00		mg/L	100	03/03/21 02:28 PM
Calcium	751	10.0	30.0		mg/L	100	03/03/21 02:28 PM
Magnesium	84.6	10.0	30.0		mg/L	100	03/03/21 02:28 PM
Potassium	27.6	2.00	6.00		mg/L	20	03/04/21 12:09 PM
Sodium	1590	10.0	30.0		mg/L	100	03/03/21 02:28 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	2730	30.0	100		mg/L	100	03/05/21 07:30 PM
Fluoride	3.99	0.500	2.00		mg/L	5	03/06/21 12:34 AM
Sulfate	2610	100	300		mg/L	100	03/05/21 07:30 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.34	1	03/05/21 11:23 AM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.34	1	03/05/21 11:23 AM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.34	1	03/05/21 11:23 AM
Alkalinity, Total (As CaCO3)	<20.0	20.0	20.0		mg/L @ pH 3.34	1	03/05/21 11:23 AM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	8300	200	200		mg/L	1	03/02/21 04:50 PM

Qualifiers:

ND - Not Detected at the SDL
J - Analyte detected between SDL and RL
B - Analyte detected in the associated Method Blank
DF- Dilution Factor
N - Parameter not NELAP certified
See Final Page of Report for MQLs and MDLs
S - Spike Recovery outside control limits
C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

DHL Analytical, Inc.

Date: *09-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	SP-01
Project:	SMEC Christine, Texas	**Lab ID:**	2102164-02
Project No:	5076-109	**Collection Date:**	02/25/21 01:49 PM
Lab Order:	2102164	**Matrix:**	AQUEOUS

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Boron	7.80	0.200	0.600		mg/L	20	03/03/21 05:07 PM
Calcium	547	20.0	60.0		mg/L	200	03/03/21 02:44 PM
Magnesium	253	2.00	6.00		mg/L	20	03/03/21 05:07 PM
Potassium	16.6	0.100	0.300		mg/L	1	03/02/21 03:23 PM
Sodium	2930	20.0	60.0		mg/L	200	03/03/21 02:44 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	3290	30.0	100		mg/L	100	03/05/21 08:18 PM
Fluoride	5.91	0.500	2.00		mg/L	5	03/06/21 12:50 AM
Sulfate	6950	100	300		mg/L	100	03/05/21 08:18 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.36	1	03/05/21 11:25 AM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.36	1	03/05/21 11:25 AM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.36	1	03/05/21 11:25 AM
Alkalinity, Total (As CaCO3)	<20.0	20.0	20.0		mg/L @ pH 3.36	1	03/05/21 11:25 AM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	15200	200	200		mg/L	1	03/02/21 04:50 PM

Qualifiers:

ND - Not Detected at the SDL
J - Analyte detected between SDL and RL
B - Analyte detected in the associated Method Blank
DF- Dilution Factor
N - Parameter not NELAP certified
See Final Page of Report for MQLs and MDLs
S - Spike Recovery outside control limits
C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

DHL Analytical, Inc.

Date: *09-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	Dup-3
Project:	SMEC Christine, Texas	**Lab ID:**	2102164-03
Project No:	5076-109	**Collection Date:**	02/25/21
Lab Order:	2102164	**Matrix:**	AQUEOUS

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Boron	8.08	0.200	0.600		mg/L	20	03/03/21 05:10 PM
Calcium	551	20.0	60.0		mg/L	200	03/03/21 02:46 PM
Magnesium	258	2.00	6.00		mg/L	20	03/03/21 05:10 PM
Potassium	17.1	0.100	0.300		mg/L	1	03/02/21 03:24 PM
Sodium	2960	20.0	60.0		mg/L	200	03/03/21 02:46 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	3280	30.0	100		mg/L	100	03/05/21 08:34 PM
Fluoride	6.00	0.500	2.00		mg/L	5	03/06/21 01:06 AM
Sulfate	7120	100	300		mg/L	100	03/05/21 08:34 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.32	1	03/05/21 11:26 AM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.32	1	03/05/21 11:26 AM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.32	1	03/05/21 11:26 AM
Alkalinity, Total (As CaCO3)	<20.0	20.0	20.0		mg/L @ pH 3.32	1	03/05/21 11:26 AM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	15500	200	200		mg/L	1	03/02/21 04:50 PM

Qualifiers:

ND - Not Detected at the SDL
J - Analyte detected between SDL and RL
B - Analyte detected in the associated Method Blank
DF- Dilution Factor
N - Parameter not NELAP certified
See Final Page of Report for MQLs and MDLs
S - Spike Recovery outside control limits
C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

DHL Analytical, Inc.

Date: *09-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	SP-02
Project:	SMEC Christine, Texas	**Lab ID:**	2102164-04
Project No:	5076-109	**Collection Date:**	02/25/21 02:56 PM
Lab Order:	2102164	**Matrix:**	AQUEOUS

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Boron	10.5	0.200	0.600		mg/L	20	03/03/21 05:12 PM
Calcium	1060	10.0	30.0		mg/L	100	03/03/21 02:48 PM
Magnesium	44.7	2.00	6.00		mg/L	20	03/03/21 05:12 PM
Potassium	48.2	2.00	6.00		mg/L	20	03/03/21 05:12 PM
Sodium	2100	10.0	30.0		mg/L	100	03/03/21 02:48 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	3830	30.0	100		mg/L	100	03/05/21 08:50 PM
Fluoride	<0.500	0.500	2.00		mg/L	5	03/06/21 01:22 AM
Sulfate	1810	100	300		mg/L	100	03/05/21 08:50 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	41.1	10.0	20.0		mg/L @ pH 4.52	1	03/05/21 11:32 AM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.52	1	03/05/21 11:32 AM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.52	1	03/05/21 11:32 AM
Alkalinity, Total (As CaCO3)	41.1	20.0	20.0		mg/L @ pH 4.52	1	03/05/21 11:32 AM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	9040	200	200		mg/L	1	03/02/21 04:50 PM

Qualifiers:

ND - Not Detected at the SDL
J - Analyte detected between SDL and RL
B - Analyte detected in the associated Method Blank
DF- Dilution Factor
N - Parameter not NELAP certified
See Final Page of Report for MQLs and MDLs
S - Spike Recovery outside control limits
C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

DHL Analytical, Inc.

Date: *09-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	SP-03
Project:	SMEC Christine, Texas	**Lab ID:**	2102164-05
Project No:	5076-109	**Collection Date:**	02/25/21 03:55 PM
Lab Order:	2102164	**Matrix:**	AQUEOUS

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Boron	7.32	0.200	0.600		mg/L	20	03/03/21 05:14 PM
Calcium	838	20.0	60.0		mg/L	200	03/03/21 02:51 PM
Magnesium	95.7	2.00	6.00		mg/L	20	03/03/21 05:14 PM
Potassium	59.2	2.00	6.00		mg/L	20	03/03/21 05:14 PM
Sodium	2930	20.0	60.0		mg/L	200	03/03/21 02:51 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	4620	30.0	100		mg/L	100	03/05/21 09:06 PM
Fluoride	<0.500	0.500	2.00		mg/L	5	03/06/21 01:38 AM
Sulfate	2560	100	300		mg/L	100	03/05/21 09:06 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.84	1	03/05/21 11:33 AM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.84	1	03/05/21 11:33 AM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.84	1	03/05/21 11:33 AM
Alkalinity, Total (As CaCO3)	<20.0	20.0	20.0		mg/L @ pH 3.84	1	03/05/21 11:33 AM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	11700	200	200		mg/L	1	03/02/21 04:50 PM

Qualifiers:

ND - Not Detected at the SDL
J - Analyte detected between SDL and RL
B - Analyte detected in the associated Method Blank
DF- Dilution Factor
N - Parameter not NELAP certified
See Final Page of Report for MQLs and MDLs
S - Spike Recovery outside control limits
C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

DHL Analytical, Inc.

Date: *09-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	SP-32
Project:	SMEC Christine, Texas	**Lab ID:**	2102164-06
Project No:	5076-109	**Collection Date:**	02/25/21 02:42 PM
Lab Order:	2102164	**Matrix:**	AQUEOUS

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Boron	8.72	0.200	0.600		mg/L	20	03/03/21 05:16 PM
Calcium	474	20.0	60.0		mg/L	200	03/03/21 02:53 PM
Magnesium	250	2.00	6.00		mg/L	20	03/03/21 05:16 PM
Potassium	17.3	0.100	0.300		mg/L	1	03/02/21 03:30 PM
Sodium	3020	20.0	60.0		mg/L	200	03/03/21 02:53 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	1930	30.0	100		mg/L	100	03/05/21 09:22 PM
Fluoride	4.22	0.500	2.00		mg/L	5	03/06/21 01:54 AM
Sulfate	9220	100	300		mg/L	100	03/05/21 09:22 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.48	1	03/05/21 11:34 AM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.48	1	03/05/21 11:34 AM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.48	1	03/05/21 11:34 AM
Alkalinity, Total (As CaCO3)	<20.0	20.0	20.0		mg/L @ pH 3.48	1	03/05/21 11:34 AM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	16000	200	200		mg/L	1	03/02/21 04:50 PM

Qualifiers:

ND - Not Detected at the SDL
J - Analyte detected between SDL and RL
B - Analyte detected in the associated Method Blank
DF- Dilution Factor
N - Parameter not NELAP certified
See Final Page of Report for MQLs and MDLs
S - Spike Recovery outside control limits
C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

DHL Analytical, Inc.

Date: *09-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	FB-3-2-25-21
Project:	SMEC Christine, Texas	**Lab ID:**	2102164-07
Project No:	5076-109	**Collection Date:**	02/25/21 04:01 PM
Lab Order:	2102164	**Matrix:**	FIELD BLANK

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Boron	0.0777	0.0100	0.0300		mg/L	1	03/03/21 02:55 PM
Calcium	3.10	0.100	0.300		mg/L	1	03/03/21 02:55 PM
Magnesium	0.274	0.100	0.300	J	mg/L	1	03/03/21 02:55 PM
Potassium	0.707	0.100	0.300		mg/L	1	03/03/21 02:55 PM
Sodium	1.47	0.100	0.300		mg/L	1	03/03/21 02:55 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	0.306	0.300	1.00	J	mg/L	1	03/05/21 03:30 PM
Fluoride	<0.100	0.100	0.400		mg/L	1	03/05/21 03:30 PM
Sulfate	1.05	1.00	3.00	J	mg/L	1	03/05/21 03:30 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.51	1	03/05/21 11:36 AM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.51	1	03/05/21 11:36 AM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.51	1	03/05/21 11:36 AM
Alkalinity, Total (As CaCO3)	<20.0	20.0	20.0		mg/L @ pH 4.51	1	03/05/21 11:36 AM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	24.0	10.0	10.0		mg/L	1	03/02/21 04:50 PM

Qualifiers:

ND - Not Detected at the SDL
J - Analyte detected between SDL and RL
B - Analyte detected in the associated Method Blank
DF- Dilution Factor
N - Parameter not NELAP certified
See Final Page of Report for MQLs and MDLs
S - Spike Recovery outside control limits
C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

CLIENT: GSI Environmental, Inc
Work Order: 2102164
Project: SMEC Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_210126C

Sample ID: **DCS2-99275** Batch ID: **99275** TestNo: **SW6020B** Units: **mg/L**
SampType: **DCS2** Run ID: **ICP-MS4_210126C** Analysis Date: **1/26/2021 12:05:00 PM** Prep Date: **1/25/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	0.352	0.300	0.300	0	117	70	130	0	0	
Magnesium	0.311	0.300	0.300	0	104	70	130	0	0	
Potassium	0.307	0.300	0.300	0	102	70	130	0	0	
Sodium	0.311	0.300	0.300	0	104	70	130	0	0	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102164
Project: SMEC Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_210302C

The QC data in batch 99628 applies to the following samples: 2102164-01A, 2102164-02A, 2102164-03A, 2102164-04A, 2102164-05A, 2102164-06A, 2102164-07A

Sample ID: **MB-99628** Batch ID: **99628** TestNo: **SW6020B** Units: **mg/L**
SampType: **MBLK** Run ID: **ICP-MS4_210302C** Analysis Date: **3/2/2021 1:31:00 PM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	<0.100	0.300								
Magnesium	<0.100	0.300								
Potassium	<0.100	0.300								
Sodium	<0.100	0.300								

Sample ID: **LCS-99628** Batch ID: **99628** TestNo: **SW6020B** Units: **mg/L**
SampType: **LCS** Run ID: **ICP-MS4_210302C** Analysis Date: **3/2/2021 1:33:00 PM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	4.94	0.300	5.00	0	98.7	80	120			
Magnesium	4.86	0.300	5.00	0	97.3	80	120			
Potassium	4.97	0.300	5.00	0	99.4	80	120			
Sodium	4.82	0.300	5.00	0	96.3	80	120			

Sample ID: **LCSD-99628** Batch ID: **99628** TestNo: **SW6020B** Units: **mg/L**
SampType: **LCSD** Run ID: **ICP-MS4_210302C** Analysis Date: **3/2/2021 1:35:00 PM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	4.98	0.300	5.00	0	99.5	80	120	0.799	15	
Magnesium	4.91	0.300	5.00	0	98.2	80	120	0.901	15	
Potassium	4.98	0.300	5.00	0	99.6	80	120	0.192	15	
Sodium	4.83	0.300	5.00	0	96.5	80	120	0.244	15	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102164
Project: SMEC Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_210302C

Sample ID: **ICV-210302**	Batch ID: **R114295**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **ICV**	Run ID: **ICP-MS4_210302C**	Analysis Date: **3/2/2021 10:00:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	2.45	0.300	2.50	0	98.0	90	110			
Magnesium	2.40	0.300	2.50	0	96.1	90	110			
Potassium	2.47	0.300	2.50	0	98.7	90	110			
Sodium	2.44	0.300	2.50	0	97.7	90	110			

Sample ID: **LCVL-210302**	Batch ID: **R114295**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **LCVL**	Run ID: **ICP-MS4_210302C**	Analysis Date: **3/2/2021 10:07:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	0.117	0.300	0.100	0	117	80	120			
Magnesium	0.107	0.300	0.100	0	107	80	120			
Potassium	0.109	0.300	0.100	0	109	80	120			
Sodium	0.107	0.300	0.100	0	107	80	120			

Sample ID: **CCV5-200302**	Batch ID: **R114295**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS4_210302C**	Analysis Date: **3/2/2021 1:24:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	5.00	0.300	5.00	0	99.9	90	110			
Magnesium	4.90	0.300	5.00	0	97.9	90	110			
Potassium	4.96	0.300	5.00	0	99.2	90	110			
Sodium	4.84	0.300	5.00	0	96.7	90	110			

Sample ID: **CCV6-200302**	Batch ID: **R114295**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS4_210302C**	Analysis Date: **3/2/2021 3:06:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	4.98	0.300	5.00	0	99.6	90	110			
Magnesium	4.83	0.300	5.00	0	96.6	90	110			
Potassium	4.98	0.300	5.00	0	99.5	90	110			
Sodium	4.78	0.300	5.00	0	95.6	90	110			

Sample ID: **CCV7-200302**	Batch ID: **R114295**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS4_210302C**	Analysis Date: **3/2/2021 4:00:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	4.98	0.300	5.00	0	99.7	90	110			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102164
Project: SMEC Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_210127B

Sample ID: **DCS2-99275**	Batch ID: **99275**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **DCS2**	Run ID: **ICP-MS5_210127B**	Analysis Date: **1/27/2021 11:15:00 AM**	Prep Date: **1/25/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	0.303	0.300	0.300	0	101	70	130	0	0	
Magnesium	0.299	0.300	0.300	0	99.8	70	130	0	0	
Potassium	0.292	0.300	0.300	0	97.4	70	130	0	0	
Sodium	0.300	0.300	0.300	0	99.9	70	130	0	0	

Sample ID: **DCS4-99275**	Batch ID: **99275**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **DCS4**	Run ID: **ICP-MS5_210127B**	Analysis Date: **1/27/2021 11:19:00 AM**	Prep Date: **1/25/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	0.0311	0.0300	0.0300	0	104	70	130	0	0	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102164
Project: SMEC Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_210303A

The QC data in batch 99628 applies to the following samples: 2102164-01A, 2102164-02A, 2102164-03A, 2102164-04A, 2102164-05A, 2102164-06A, 2102164-07A

Sample ID: **MB-99628** Batch ID: **99628** TestNo: **SW6020B** Units: **mg/L**
SampType: **MBLK** Run ID: **ICP-MS5_210303A** Analysis Date: **3/3/2021 1:29:00 PM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	<0.0100	0.0300								

Sample ID: **LCS-99628** Batch ID: **99628** TestNo: **SW6020B** Units: **mg/L**
SampType: **LCS** Run ID: **ICP-MS5_210303A** Analysis Date: **3/3/2021 1:32:00 PM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	0.197	0.0300	0.200	0	98.3	80	120			

Sample ID: **LCSD-99628** Batch ID: **99628** TestNo: **SW6020B** Units: **mg/L**
SampType: **LCSD** Run ID: **ICP-MS5_210303A** Analysis Date: **3/3/2021 1:34:00 PM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	0.208	0.0300	0.200	0	104	80	120	5.60	15	

Sample ID: **2102164-01A SD** Batch ID: **99628** TestNo: **SW6020B** Units: **mg/L**
SampType: **SD** Run ID: **ICP-MS5_210303A** Analysis Date: **3/3/2021 2:35:00 PM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	11.5	15.0	0	11.2				2.99	20	
Calcium	753	150	0	751				0.324	20	
Magnesium	85.9	150	0	84.6				1.47	20	
Sodium	1580	150	0	1590				0.656	20	

Sample ID: **2102164-01A PDS** Batch ID: **99628** TestNo: **SW6020B** Units: **mg/L**
SampType: **PDS** Run ID: **ICP-MS5_210303A** Analysis Date: **3/3/2021 3:02:00 PM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	30.1	3.00	20.0	11.2	95.0	75	125			
Calcium	1250	30.0	500	751	100	75	125			
Magnesium	580	30.0	500	84.6	99.2	75	125			
Sodium	2080	30.0	500	1590	99.8	75	125			

Sample ID: **2102164-01A MS** Batch ID: **99628** TestNo: **SW6020B** Units: **mg/L**
SampType: **MS** Run ID: **ICP-MS5_210303A** Analysis Date: **3/3/2021 3:04:00 PM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	12.6	3.00	0.200	11.2	726	75	125			S
Calcium	752	30.0	5.00	751	29.9	75	125			S
Magnesium	88.7	30.0	5.00	84.6	82.4	75	125			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102164
Project: SMEC Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_210303A

Sample ID: **2102164-01A MS**	Batch ID: **99628**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **MS**	Run ID: **ICP-MS5_210303A**	Analysis Date: **3/3/2021 3:04:00 PM**	Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	32.2	30.0	5.00	28.6	71.1	75	125			S
Sodium	1570	30.0	5.00	1590	-401	75	125			S

Sample ID: **2102164-01A MSD**	Batch ID: **99628**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **MSD**	Run ID: **ICP-MS5_210303A**	Analysis Date: **3/3/2021 3:06:00 PM**	Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	12.3	3.00	0.200	11.2	598	75	125	2.04	15	S
Calcium	753	30.0	5.00	751	47.0	75	125	0.114	15	S
Magnesium	88.6	30.0	5.00	84.6	79.8	75	125	0.147	15	
Potassium	32.0	30.0	5.00	28.6	68.1	75	125	0.458	15	S
Sodium	1570	30.0	5.00	1590	-370	75	125	0.101	15	S

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102164
Project: SMEC Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_210303A

Sample ID: **ICV-210303**	Batch ID: **R114326**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **ICV**	Run ID: **ICP-MS5_210303A**	Analysis Date: **3/3/2021 11:25:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	0.100	0.0300	0.100	0	100	90	110			
Calcium	2.53	0.300	2.50	0	101	90	110			
Magnesium	2.44	0.300	2.50	0	97.4	90	110			
Potassium	2.49	0.300	2.50	0	99.7	90	110			
Sodium	2.55	0.300	2.50	0	102	90	110			

Sample ID: **LCVL-210303**	Batch ID: **R114326**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **LCVL**	Run ID: **ICP-MS5_210303A**	Analysis Date: **3/3/2021 11:34:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	0.0219	0.0300	0.0200	0	110	80	120			
Calcium	0.113	0.300	0.100	0	113	80	120			
Magnesium	0.104	0.300	0.100	0	104	80	120			
Potassium	0.104	0.300	0.100	0	104	80	120			
Sodium	0.109	0.300	0.100	0	109	80	120			

Sample ID: **CCV2-210303**	Batch ID: **R114326**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS5_210303A**	Analysis Date: **3/3/2021 1:23:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	0.197	0.0300	0.200	0	98.6	90	110			

Sample ID: **CCV3-210303**	Batch ID: **R114326**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS5_210303A**	Analysis Date: **3/3/2021 2:19:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	0.194	0.0300	0.200	0	97.2	90	110			
Calcium	4.99	0.300	5.00	0	99.8	90	110			
Magnesium	5.04	0.300	5.00	0	101	90	110			
Potassium	5.03	0.300	5.00	0	101	90	110			
Sodium	5.03	0.300	5.00	0	101	90	110			

Sample ID: **CCV4-210303**	Batch ID: **R114326**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS5_210303A**	Analysis Date: **3/3/2021 3:13:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	0.194	0.0300	0.200	0	97.0	90	110			
Calcium	5.04	0.300	5.00	0	101	90	110			
Magnesium	5.05	0.300	5.00	0	101	90	110			
Potassium	5.05	0.300	5.00	0	101	90	110			
Sodium	5.05	0.300	5.00	0	101	90	110			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102164
Project: SMEC Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_210303A

Sample ID: **CCV5-210303**	Batch ID: **R114326**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS5_210303A**	Analysis Date: **3/3/2021 4:46:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	0.191	0.0300	0.200	0	95.3	90	110			
Magnesium	5.09	0.300	5.00	0	102	90	110			
Potassium	5.08	0.300	5.00	0	102	90	110			

Sample ID: **CCV6-210303**	Batch ID: **R114326**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS5_210303A**	Analysis Date: **3/3/2021 5:46:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	0.188	0.0300	0.200	0	94.1	90	110			
Magnesium	5.09	0.300	5.00	0	102	90	110			
Potassium	5.09	0.300	5.00	0	102	90	110			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102164
Project: SMEC Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_210304A

The QC data in batch 99628 applies to the following samples: 2102164-01A, 2102164-02A, 2102164-03A, 2102164-04A, 2102164-05A, 2102164-06A, 2102164-07A

Sample ID: **2102164-01A SD** Batch ID: **99628** TestNo: **SW6020B** Units: **mg/L**
SampType: **SD** Run ID: **ICP-MS5_210304A** Analysis Date: **3/4/2021 12:11:00 PM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	27.7	30.0	0	27.6				0.398	20	

Sample ID: **2102164-01A PDS** Batch ID: **99628** TestNo: **SW6020B** Units: **mg/L**
SampType: **PDS** Run ID: **ICP-MS5_210304A** Analysis Date: **3/4/2021 12:13:00 PM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	129	6.00	100	27.6	101	75	125			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102164
Project: SMEC Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_210304A

Sample ID: **ICV-210304**	Batch ID: **R114344**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **ICV**	Run ID: **ICP-MS5_210304A**	Analysis Date: **3/4/2021 10:46:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	2.50	0.300	2.50	0	99.9	90	110			

Sample ID: **LCVL-210304**	Batch ID: **R114344**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **LCVL**	Run ID: **ICP-MS5_210304A**	Analysis Date: **3/4/2021 11:18:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	0.112	0.300	0.100	0	112	80	120			

Sample ID: **CCV1-210304**	Batch ID: **R114344**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS5_210304A**	Analysis Date: **3/4/2021 12:04:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	5.01	0.300	5.00	0	100	90	110			

Sample ID: **CCV2-210304**	Batch ID: **R114344**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS5_210304A**	Analysis Date: **3/4/2021 12:26:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	5.06	0.300	5.00	0	101	90	110			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102164
Project: SMEC Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_210302A

Sample ID: **DCS3-99634** Batch ID: **99634** TestNo: **E300** Units: **mg/L**
SampType: **DCS3** Run ID: **IC2_210302A** Analysis Date: **3/2/2021 11:49:16 AM** Prep Date: **3/2/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	1.21	1.00	1.000	0	121	70	130	0	0	
Fluoride	0.331	0.400	0.4000	0	82.8	70	130	0	0	
Sulfate	2.86	3.00	3.000	0	95.4	70	130	0	0	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102164
Project: SMEC Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_210305B

The QC data in batch 99713 applies to the following samples: 2102164-01B, 2102164-02B, 2102164-03B, 2102164-04B, 2102164-05B, 2102164-06B, 2102164-07B

Sample ID: **MB-99713** Batch ID: **99713** TestNo: **E300** Units: **mg/L**
SampType: **MBLK** Run ID: **IC2_210305B** Analysis Date: **3/5/2021 11:34:40 AM** Prep Date: **3/5/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	<0.300	1.00								
Fluoride	<0.100	0.400								
Sulfate	<1.00	3.00								

Sample ID: **LCS-99713** Batch ID: **99713** TestNo: **E300** Units: **mg/L**
SampType: **LCS** Run ID: **IC2_210305B** Analysis Date: **3/5/2021 11:50:40 AM** Prep Date: **3/5/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.3	1.00	10.00	0	103	90	110			
Fluoride	3.74	0.400	4.000	0	93.6	90	110			
Sulfate	28.9	3.00	30.00	0	96.2	90	110			

Sample ID: **LCSD-99713** Batch ID: **99713** TestNo: **E300** Units: **mg/L**
SampType: **LCSD** Run ID: **IC2_210305B** Analysis Date: **3/5/2021 12:06:40 PM** Prep Date: **3/5/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.3	1.00	10.00	0	103	90	110	0.104	20	
Fluoride	3.74	0.400	4.000	0	93.4	90	110	0.188	20	
Sulfate	28.9	3.00	30.00	0	96.5	90	110	0.300	20	

Sample ID: **2102162-09BMS** Batch ID: **99713** TestNo: **E300** Units: **mg/L**
SampType: **MS** Run ID: **IC2_210305B** Analysis Date: **3/5/2021 4:18:10 PM** Prep Date: **3/5/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	5360	100	2000	3899	73.2	90	110			S
Fluoride	1880	40.0	2000	0	94.0	90	110			
Sulfate	4520	300	2000	2623	95.0	90	110			

Sample ID: **2102162-09BMSD** Batch ID: **99713** TestNo: **E300** Units: **mg/L**
SampType: **MSD** Run ID: **IC2_210305B** Analysis Date: **3/5/2021 4:34:10 PM** Prep Date: **3/5/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	5360	100	2000	3899	72.9	90	110	0.101	20	S
Fluoride	1890	40.0	2000	0	94.7	90	110	0.724	20	
Sulfate	4510	300	2000	2623	94.3	90	110	0.328	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102164
Project: SMEC Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_210305B

Sample ID: **2102164-01BMS**	Batch ID: **99713**	TestNo: **E300**	Units: **mg/L**
SampType: **MS**	Run ID: **IC2_210305B**	Analysis Date: **3/5/2021 7:46:10 PM**	Prep Date: **3/5/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4500	100	2000	2734	88.3	90	110			S
Fluoride	1910	40.0	2000	0	95.7	90	110			
Sulfate	4640	300	2000	2610	101	90	110			

Sample ID: **2102164-01BMSD**	Batch ID: **99713**	TestNo: **E300**	Units: **mg/L**
SampType: **MSD**	Run ID: **IC2_210305B**	Analysis Date: **3/5/2021 8:02:10 PM**	Prep Date: **3/5/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4490	100	2000	2734	87.6	90	110	0.312	20	S
Fluoride	1910	40.0	2000	0	95.6	90	110	0.082	20	
Sulfate	4630	300	2000	2610	101	90	110	0.187	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102164
Project: SMEC Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_210305B

Sample ID: **ICV-210305**	Batch ID: **R114374**	TestNo: **E300**	Units: **mg/L**
SampType: **ICV**	Run ID: **IC2_210305B**	Analysis Date: **3/5/2021 11:02:40 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	26.6	1.00	25.00	0	106	90	110			
Fluoride	9.81	0.400	10.00	0	98.1	90	110			
Sulfate	75.7	3.00	75.00	0	101	90	110			

Sample ID: **CCV1-210305**	Batch ID: **R114374**	TestNo: **E300**	Units: **mg/L**
SampType: **CCV**	Run ID: **IC2_210305B**	Analysis Date: **3/5/2021 6:58:10 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.3	1.00	10.00	0	103	90	110			
Fluoride	3.82	0.400	4.000	0	95.4	90	110			
Sulfate	29.0	3.00	30.00	0	96.8	90	110			

Sample ID: **CCV2-210305**	Batch ID: **R114374**	TestNo: **E300**	Units: **mg/L**
SampType: **CCV**	Run ID: **IC2_210305B**	Analysis Date: **3/5/2021 11:30:10 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.3	1.00	10.00	0	103	90	110			
Fluoride	3.76	0.400	4.000	0	94.1	90	110			
Sulfate	29.1	3.00	30.00	0	97.1	90	110			

Sample ID: **CCV3-210305**	Batch ID: **R114374**	TestNo: **E300**	Units: **mg/L**
SampType: **CCV**	Run ID: **IC2_210305B**	Analysis Date: **3/6/2021 2:58:10 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	3.77	0.400	4.000	0	94.2	90	110			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102164
Project: SMEC Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: TITRATOR_210305A

The QC data in batch 99716 applies to the following samples: 2102164-01B, 2102164-02B, 2102164-03B, 2102164-04B, 2102164-05B, 2102164-06B, 2102164-07B

Sample ID: **MB-99716** Batch ID: **99716** TestNo: **M2320 B** Units: **mg/L @ pH 4.45**
SampType: **MBLK** Run ID: **TITRATOR_210305A** Analysis Date: **3/5/2021 10:56:00 AM** Prep Date: **3/5/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	<10.0	20.0	0							
Alkalinity, Carbonate (As CaCO3)	<10.0	20.0	0							
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0	0							
Alkalinity, Total (As CaCO3)	<20.0	20.0	0							

Sample ID: **LCS-99716** Batch ID: **99716** TestNo: **M2320 B** Units: **mg/L @ pH 4.4**
SampType: **LCS** Run ID: **TITRATOR_210305A** Analysis Date: **3/5/2021 11:00:00 AM** Prep Date: **3/5/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	52.3	20.0	50.00	0	105	74	129			

Sample ID: **2102164-01B-DUP** Batch ID: **99716** TestNo: **M2320 B** Units: **mg/L @ pH 3.3**
SampType: **DUP** Run ID: **TITRATOR_210305A** Analysis Date: **3/5/2021 11:24:00 AM** Prep Date: **3/5/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	<10.0	20.0	0	0				0	20	
Alkalinity, Carbonate (As CaCO3)	<10.0	20.0	0	0				0	20	
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0	0	0				0	20	
Alkalinity, Total (As CaCO3)	<20.0	20.0	0	0				0	20	

Sample ID: **2103031-01B-DUP** Batch ID: **99716** TestNo: **M2320 B** Units: **mg/L @ pH 4.53**
SampType: **DUP** Run ID: **TITRATOR_210305A** Analysis Date: **3/5/2021 11:44:00 AM** Prep Date: **3/5/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	<10.0	20.0	0	0				0	20	
Alkalinity, Carbonate (As CaCO3)	<10.0	20.0	0	0				0	20	
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0	0	0				0	20	
Alkalinity, Total (As CaCO3)	<20.0	20.0	0	0				0	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102164
Project: SMEC Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: TITRATOR_210305A

Sample ID: **ICV-210305**	Batch ID: **R114362**	TestNo: **M2320 B**	Units: **mg/L @ pH 4.43**
SampType: **ICV**	Run ID: **TITRATOR_210305A**	Analysis Date: **3/5/2021 10:44:00 AM**	Prep Date: **3/5/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	17.3	20.0	0							
Alkalinity, Carbonate (As CaCO3)	83.0	20.0	0							
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0	0							
Alkalinity, Total (As CaCO3)	100	20.0	100.0	0	100	98	102			

Sample ID: **CCV1-210305**	Batch ID: **R114362**	TestNo: **M2320 B**	Units: **mg/L @ pH 4.42**
SampType: **CCV**	Run ID: **TITRATOR_210305A**	Analysis Date: **3/5/2021 11:50:00 AM**	Prep Date: **3/5/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	24.6	20.0	0							
Alkalinity, Carbonate (As CaCO3)	75.0	20.0	0							
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0	0							
Alkalinity, Total (As CaCO3)	99.7	20.0	100.0	0	99.7	90	110			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102164
Project: SMEC Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: WC_210302B

The QC data in batch 99665 applies to the following samples: 2102164-01B, 2102164-02B, 2102164-03B, 2102164-04B, 2102164-05B, 2102164-06B, 2102164-07B

Sample ID: **MB-99665**	Batch ID: **99665**	TestNo: **M2540C**	Units: **mg/L**
SampType: **MBLK**	Run ID: **WC_210302B**	Analysis Date: **3/2/2021 4:50:00 PM**	Prep Date: **3/2/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	<10.0	10.0								

Sample ID: **LCS-99665**	Batch ID: **99665**	TestNo: **M2540C**	Units: **mg/L**
SampType: **LCS**	Run ID: **WC_210302B**	Analysis Date: **3/2/2021 4:50:00 PM**	Prep Date: **3/2/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	768	10.0	745.6	0	103	90	113			

Sample ID: **2102162-09B-DUP**	Batch ID: **99665**	TestNo: **M2540C**	Units: **mg/L**
SampType: **DUP**	Run ID: **WC_210302B**	Analysis Date: **3/2/2021 4:50:00 PM**	Prep Date: **3/2/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	10400	200	0	10480				1.15	5	

Sample ID: **2102162-10B-DUP**	Batch ID: **99665**	TestNo: **M2540C**	Units: **mg/L**
SampType: **DUP**	Run ID: **WC_210302B**	Analysis Date: **3/2/2021 4:50:00 PM**	Prep Date: **3/2/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	8620	200	0	8980				4.09	5	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102164
Project: SMEC Christine, Texas

MQL SUMMARY REPORT

TestNo: E300	**MDL**	**MQL**
Analyte	**mg/L**	**mg/L**
Chloride	0.300	1.00
Fluoride	0.100	0.400
Sulfate	1.00	3.00

TestNo: SW6020B	**MDL**	**MQL**
Analyte	**mg/L**	**mg/L**
Boron	0.0100	0.0300
Calcium	0.100	0.300
Magnesium	0.100	0.300
Potassium	0.100	0.300
Sodium	0.100	0.300

TestNo: M2320 B	**MDL**	**MQL**
Analyte	**ıg/L @ pH 4.4**	**g/L @ pH 4.4**
Alkalinity, Bicarbonate (As CaCO3)	10.0	20.0
Alkalinity, Carbonate (As CaCO3)	10.0	20.0
Alkalinity, Hydroxide (As CaCO3)	10.0	20.0
Alkalinity, Total (As CaCO3)	20.0	20.0

TestNo: M2540C	**MDL**	**MQL**
Analyte	**mg/L**	**mg/L**
Total Dissolved Solids (Residue, Filt	10.0	10.0

Qualifiers: MQL -Method Quantitation Limit as defined by TRRP
MDL -Method Detection Limit as defined by TRRP

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109
Location: SMEC Christine, Texas
DHL Project Number: 2102164

Sample ID: **SP-34**
Lab ID Number: **2102164-01**

PARAMETER	RESULT	UNITS	METHOD
Calcium	751	mg/L	SW6020B
Magnesium	84.6	mg/L	SW6020B
Sodium	1590	mg/L	SW6020B
Potassium	27.6	mg/L	SW6020B
Carbonate	0	mg/L @ pH 3.34	M2320 B
Bicarbonate	0	mg/L @ pH 3.34	M2320 B
Sulfate	2610	mg/L	E300
Fluoride	3.99	mg/L	E300
T-Alkalinity	0	mg/L @ pH 3.34	M2320 B
Hardness	2224	mg/L	SM 2340B
Chloride	2730	mg/L	E300
TDS	8300	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	0.00
Calcium	37.48
Chloride	77.01
Fluoride	0.21
Magnesium	6.96
Potassium	0.71
Sodium	69.16
Sulfate	54.34
TOTAL ANIONS	132
TOTAL CATIONS	114
CATION/ANION (% DIFF)	-7.02
Calculated TDS	7797
TDS Ratio (Meas/Calc) (0.85 - 1.15)	1.06
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments: _____

Lab Rep Name/Signature: _____

Date: 03/09/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109
Location: SMEC Christine, Texas
DHL Project Number: 2102164

Sample ID: **SP-01**
Lab ID Number: **2102164-02**

PARAMETER	RESULT	UNITS	METHOD
Calcium	547	mg/L	SW6020B
Magnesium	253	mg/L	SW6020B
Sodium	2930	mg/L	SW6020B
Potassium	16.6	mg/L	SW6020B
Carbonate	0	mg/L @ pH 3.36	M2320 B
Bicarbonate	0	mg/L @ pH 3.36	M2320 B
Sulfate	6950	mg/L	E300
Fluoride	5.91	mg/L	E300
T-Alkalinity	0	mg/L @ pH 3.36	M2320 B
Hardness	2408	mg/L	SM 2340B
Chloride	3290	mg/L	E300
TDS	15200	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	0.00
Calcium	27.30
Chloride	92.81
Fluoride	0.31
Magnesium	20.81
Potassium	0.43
Sodium	127.45
Sulfate	144.70
TOTAL ANIONS	238
TOTAL CATIONS	176
CATION/ANION (% DIFF)	-14.95
Calculated TDS	13993
TDS Ratio (Meas/Calc) (0.85 - 1.15)	1.09
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments: _____

Lab Rep Name/Signature: _____

Date: 03/09/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109
Location: SMEC Christine, Texas
DHL Project Number: 2102164

Sample ID: **Dup-3**
Lab ID Number: **2102164-03**

PARAMETER	RESULT	UNITS	METHOD
Calcium	551	mg/L	SW6020B
Magnesium	258	mg/L	SW6020B
Sodium	2960	mg/L	SW6020B
Potassium	17.1	mg/L	SW6020B
Carbonate	0	mg/L @ pH 3.32	M2320 B
Bicarbonate	0	mg/L @ pH 3.32	M2320 B
Sulfate	7120	mg/L	E300
Fluoride	6.00	mg/L	E300
T-Alkalinity	0	mg/L @ pH 3.32	M2320 B
Hardness	2438	mg/L	SM 2340B
Chloride	3280	mg/L	E300
TDS	15500	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	0.00
Calcium	27.50
Chloride	92.52
Fluoride	0.32
Magnesium	21.22
Potassium	0.44
Sodium	128.75
Sulfate	148.24
TOTAL ANIONS	241
TOTAL CATIONS	178
CATION/ANION (% DIFF)	-15.08
Calculated TDS	14192
TDS Ratio (Meas/Calc) (0.85 - 1.15)	1.09
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments: _____

Lab Rep Name/Signature: _____

Date: 03/09/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109
Location: SMEC Christine, Texas
DHL Project Number: 2102164

Sample ID: **SP-02**
Lab ID Number: **2102164-04**

PARAMETER	RESULT	UNITS	METHOD
Calcium	1060	mg/L	SW6020B
Magnesium	44.7	mg/L	SW6020B
Sodium	2100	mg/L	SW6020B
Potassium	48.2	mg/L	SW6020B
Carbonate	0	mg/L @ pH 4.52	M2320 B
Bicarbonate	41.1	mg/L @ pH 4.52	M2320 B
Sulfate	1810	mg/L	E300
Fluoride	0	mg/L	E300
T-Alkalinity	41.1	mg/L @ pH 4.52	M2320 B
Hardness	2831	mg/L	SM 2340B
Chloride	3830	mg/L	E300
TDS	9040	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	0.82
Calcium	52.89
Chloride	108.04
Fluoride	0.00
Magnesium	3.68
Potassium	1.24
Sodium	91.34
Sulfate	37.68
TOTAL ANIONS	147
TOTAL CATIONS	149
CATION/ANION (% DIFF)	0.88
Calculated TDS	8914
TDS Ratio (Meas/Calc) (0.85 - 1.15)	1.01
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments: _____

Lab Rep Name/Signature: _____

Date: 03/09/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109
Location: SMEC Christine, Texas
DHL Project Number: 2102164

Sample ID: **SP-03**
Lab ID Number: **2102164-05**

PARAMETER	RESULT	UNITS	METHOD
Calcium	838	mg/L	SW6020B
Magnesium	95.7	mg/L	SW6020B
Sodium	2930	mg/L	SW6020B
Potassium	59.2	mg/L	SW6020B
Carbonate	0	mg/L @ pH 3.84	M2320 B
Bicarbonate	0	mg/L @ pH 3.84	M2320 B
Sulfate	2560	mg/L	E300
Fluoride	0	mg/L	E300
T-Alkalinity	0	mg/L @ pH 3.84	M2320 B
Hardness	2487	mg/L	SM 2340B
Chloride	4620	mg/L	E300
TDS	11700	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	0.00
Calcium	41.82
Chloride	130.32
Fluoride	0.00
Magnesium	7.87
Potassium	1.52
Sodium	127.45
Sulfate	53.30
TOTAL ANIONS	184
TOTAL CATIONS	179
CATION/ANION (% DIFF)	-1.37
Calculated TDS	11103
TDS Ratio (Meas/Calc) (0.85 - 1.15)	1.05
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments: _____

Lab Rep Name/Signature: _____

Date: 03/09/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109
Location: SMEC Christine, Texas
DHL Project Number: 2102164

Sample ID: **SP-32**
Lab ID Number: **2102164-06**

PARAMETER	RESULT	UNITS	METHOD
Calcium	474	mg/L	SW6020B
Magnesium	250	mg/L	SW6020B
Sodium	3020	mg/L	SW6020B
Potassium	17.3	mg/L	SW6020B
Carbonate	0	mg/L @ pH 3.48	M2320 B
Bicarbonate	0	mg/L @ pH 3.48	M2320 B
Sulfate	9220	mg/L	E300
Fluoride	4.22	mg/L	E300
T-Alkalinity	0	mg/L @ pH 3.48	M2320 B
Hardness	2213	mg/L	SM 2340B
Chloride	1930	mg/L	E300
TDS	16000	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	0.00
Calcium	23.65
Chloride	54.44
Fluoride	0.22
Magnesium	20.56
Potassium	0.44
Sodium	131.36
Sulfate	191.96
TOTAL ANIONS	247
TOTAL CATIONS	176
CATION/ANION (% DIFF)	-16.71
Calculated TDS	14916
TDS Ratio (Meas/Calc) (0.85 - 1.15)	1.07
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments: _____

Lab Rep Name/Signature: _____

Date: 03/09/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109
Location: SMEC Christine, Texas
DHL Project Number: 2102164

Sample ID: **FB-3-2-25-21**
Lab ID Number: **2102164-07**

PARAMETER	RESULT	UNITS	METHOD
Calcium	3.10	mg/L	SW6020B
Magnesium	0.274	mg/L	SW6020B
Sodium	1.47	mg/L	SW6020B
Potassium	0.707	mg/L	SW6020B
Carbonate	0	mg/L @ pH 4.51	M2320 B
Bicarbonate	0	mg/L @ pH 4.51	M2320 B
Sulfate	1.05	mg/L	E300
Fluoride	0	mg/L	E300
T-Alkalinity	0	mg/L @ pH 4.51	M2320 B
Hardness	9	mg/L	SM 2340B
Chloride	0.306	mg/L	E300
TDS	24.0	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	0.00
Calcium	0.15
Chloride	0.01
Fluoride	0.00
Magnesium	0.02
Potassium	0.02
Sodium	0.06
Sulfate	0.02
TOTAL ANIONS	0.0305
TOTAL CATIONS	0.259
CATION/ANION (% DIFF)	78.94
Calculated TDS	7
TDS Ratio (Meas/Calc) (0.85 - 1.15)	3.43
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments:

Lab Rep Name/Signature:

Date: 03/09/21

Cation/Anion % Difference calculated per SM1030E.

GSI ENVIRONMENTAL

DATA USABILITY SUMMARY

February 2021 Sampling Event (SDG: 2102162)

OVERVIEW

GSI Environmental Inc. (GSI) reviewed one data package from DHL Analytical (DHL) for the analysis of **fifteen groundwater samples collected at the Ash Ponds on 24 - 25 February 2021** at the San Miguel Electric Cooperative, Inc., Christine, Atascosa County, Texas site. Data were reviewed for i) conformance to the requirements of the guidance document *Review and Reporting of COC Concentration Data* (RG-366/TRRP-13) and ii) adherence to project objectives (e.g., GSI 2019). GSI certifies that at the time the laboratory data were generated for the project, DHL was NELAC-accredited under the Texas Laboratory Accreditation Program (Certification Number: T104704211-21-26) for the matrices, analytes, and methods of analysis requested on the chain-of-custody documentation. A copy of DHL's National Environmental Laboratory Accreditation Program (NELAP) certificate applicable to the period during which the laboratory generated the data in this report is included in a separate appendix.

DHL completed all requested analyses except for radiochemistry, which was subcontracted to Pace Analytical. Refer to the DHL/Pace data package **SDG: L1321693 (2102163) for the radiochemistry results.**

Intended Use of Data

Samples were collected to provide current data on groundwater conditions at the test location. Analyses requested included:

- Method SW6020B - Metals Analysis
- Method SW7470A – Mercury Analysis
- Method E300 - Anions Analysis
- Method M2320 B - Alkalinity Analysis
- Method M2540C - Total Dissolved Solids Analysis

Data were reviewed and validated, as described in *Review and Reporting of COC Concentration Data* (RG-366/TRRP-13), and the results are discussed in this Data Usability Summary (DUS). The following laboratory submittals and field data were examined:

- the reportable data (i.e., results provided in the laboratory data package),
- the laboratory review checklists and associated exception reports, and
- the field notes with respect to field instrument calibrations, filtering procedures (if applicable), and sampling procedures.

The results of supporting quality control (QC) analyses were summarized on the Laboratory Review Checklists (LRCs), Exception Reports (ERs), and in the case narratives, all of which were included in this review. The LRCs, associated ERs, and reportable data included in this review are attached to this DUS as Attachment A.

INTRODUCTION

Fifteen (15) groundwater samples were submitted to the laboratory, and all requested analyses were completed. Table 1 lists the sample identifications cross-referenced to laboratory identifications.

PROJECT MEASUREMENT QUALITY OBJECTIVES

The following criteria were used in this review (RG-366/TRRP-13):

	MS/MSD		LCS/LCSD		Lab Dup	Field Precision
Analytes	% R	RPD	% R	RPD	RPD	RPD
Metals	75 – 125	15	80 – 120	15	-	≤ 30%
Mercury	80 – 120	15	85 – 115	15	-	
Inorganic Anions	90 – 110	20	90 – 110	20	10	
Alkalinity	-		74 – 129	20	20	
Total Dissolved Solids (TDS)	-		90 – 113	-	5	

DATA REVIEW / VALIDATION RESULTS

Analytical Results

Results from these samples may be considered usable with the limitations and exceptions described in this section. Non-detected results are reported as less than the value of the sample detection limit (SDL). Results between the SDL and sample quantitation limit (SQL) are J-flagged.

Finding: All requested analyses were completed, and results were reported as requested.

Preservation and Holding Times

The samples were evaluated for agreement with the chain-of-custody (C-O-C). The samples were received by the laboratory in the appropriate containers and in good condition, with proper completion of the C-O-C documentation. Samples receipt temperature was within the acceptance criteria, and field preservation was done as specified in the Sampling and Analysis Plan [SAP] (GSI, 2019). Samples were prepared and analyzed within method-specified holding times.

Finding: No qualifiers were added per these criteria.

Calibrations

No calibration issues were identified in the laboratory report narrative or during review of the laboratory data package.

Finding: No qualifiers were added per this evaluation.

Blanks

Field blank

- Boron, calcium, and potassium were detected in the field blank sample (FB-2-2-24-21) at concentrations equal or above the method detection limit (MDL). However, no qualifier was assigned because their groundwater concentrations were greater than five times the blank concentrations in the associated samples.

Equipment blank

- Boron, calcium, and sodium were detected in the equipment blank samples (EB-1-2-24-21 and EB3-2-25-21) at concentrations equal or above the method detection limit (MDL). However, no qualifier was assigned because their groundwater concentrations were greater than five times the blank concentrations in the associated samples.

Finding: No qualifiers were added per this evaluation.

Internal Standard and Surrogate Recoveries (VOCs and SVOCs Only)

Not applicable.

Laboratory Control Samples

The Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD) recoveries and Relative Percent Differences (RPDs) were within the project-defined QC acceptance criteria.

Finding: No qualifiers were added per this evaluation.

Matrix Spike/Matrix Spike Duplicates and Laboratory Duplicates

The LRC indicated the following issues with matrix spike (MS)/matrix spike duplicate (MSD) data:

- For anions %R for, chloride was outside the project-defined QC acceptance criteria. However, no qualifier was assigned because the spiking amount was less than four times the result in the unspiked parent sample.
- For metals %R for, beryllium, boron, calcium, cobalt, lithium, magnesium and sodium for were outside the project-defined QC acceptance criteria. However, no qualifier was assigned because the spiking amount was less than four times the result in the unspiked parent sample.

All laboratory duplicates were within the project-defined QC acceptance criteria.

Findings: No qualifiers were added per this evaluation.

Field Duplicates (Field Precision)

A field duplicate identified as DUP-2 was collected for sample AP-35 during the field event. Field precision was calculated and the RPD was within the project-defined QC acceptance criteria for all analytes except for mercury. A comparison of the field sample and the duplicate sample is shown in Table 2.

Finding: No qualifiers were added per these criteria.

Field Procedures

Sample collection and documentation was done in accordance with the Groundwater Sampling and Analysis Plan (SAP; GSI, 2019).

Finding: Field activities were consistent with the SAP.

SUMMARY

The analytical data are usable for the purpose of characterizing groundwater conditions. No data were rejected based on this review and validation. No qualifiers were added to samples.

REFERENCES

GSI Environmental, Inc., 2019, Groundwater Sampling and Analysis Plan, San Miguel Electric Cooperative, Inc., December 26.

TCEQ 2010. Review and Reporting of COC Concentration Data under TRRP, RG-366/TRRP-13 https://www.tceq.texas.gov/assets/public/comm_exec/pubs/rg/rg-366-trrp-13.pdf

TABLES

TABLE 1
Cross-Reference Field Sample and Laboratory Identifications

Sample Date	Lab	Lab Sample ID	Field Sample ID	Matrix
2/24/2021	DHL	2102162-01	PZ-03	Groundwater
2/24/2021	DHL	2102162-02	AP-31	Groundwater
2/24/2021	DHL	2102162-03	MW-03	Groundwater
2/24/2021	DHL	2102162-04	AP-32	Groundwater
2/24/2021	DHL	2102162-05	AP-33	Groundwater
2/24/2021	DHL	2102162-06	PZ-05	Groundwater
2/24/2021	DHL	2102162-07	FB-2-2-24-21	Water (Field Blank)
2/24/2021	DHL	2102162-08	EB-1-2-24-21	Water (Equipment Blank)
2/24/2021	DHL	2102162-09	PZ-02	Groundwater
2/25/2021	DHL	2102162-10	AP-34	Groundwater
2/25/2021	DHL	2102162-11	AP-35	Groundwater
2/25/2021	DHL	2102162-12	Dup-2	Groundwater
2/25/2021	DHL	2102162-13	AP-36	Groundwater
2/25/2021	DHL	2102162-14	PZ-06	Groundwater
2/25/2021	DHL	2102162-15	EB3-2-25-21	Water (Equipment Blank)

TABLE 2
Field Precision Evaluation

Sample ID	Duplicate Sample ID	Sample Date	Matrix	Analyte	Sample Result (mg/L)	Duplicate Result (mg/L)	RPD (%)	RPD Result
AP-35	DUP-2	2/25/2021	Groundwater	Chloride	2200	2220	0.90	A
AP-35	DUP-2	2/25/2021	Groundwater	Fluoride	3.82	4.33	12.52	A
AP-35	DUP-2	2/25/2021	Groundwater	Sulfate	2900	2900	0.00	A
AP-35	DUP-2	2/25/2021	Groundwater	Alkalinity, Bicarbonate (As CaCO3)	<10.0	<10.0	0.00	A
AP-35	DUP-2	2/25/2021	Groundwater	Alkalinity, Carbonate (As CaCO3)	<10.0	<10.0	0.00	A
AP-35	DUP-2	2/25/2021	Groundwater	Alkalinity, Hydroxide (As CaCO3)	<10.0	<10.0	0.00	A
AP-35	DUP-2	2/25/2021	Groundwater	Alkalinity, Total (As CaCO3)	<20.0	<20.0	0.00	A
AP-35	DUP-2	2/25/2021	Groundwater	Total Dissolved Solids (Residue, Filterable)	8300	8300	0.00	A
AP-35	DUP-2	2/25/2021	Groundwater	Antimony	<0.000800	<0.000800	0.00	A
AP-35	DUP-2	2/25/2021	Groundwater	Arsenic	0.0177	0.017	4.03	A
AP-35	DUP-2	2/25/2021	Groundwater	Barium	0.0218	0.0206	5.66	A
AP-35	DUP-2	2/25/2021	Groundwater	Beryllium	0.147	0.134	9.25	A
AP-35	DUP-2	2/25/2021	Groundwater	Boron	26.1	28.8	9.84	A
AP-35	DUP-2	2/25/2021	Groundwater	Cadmium	0.00906	0.00938	3.47	A
AP-35	DUP-2	2/25/2021	Groundwater	Calcium	629	632	0.48	A
AP-35	DUP-2	2/25/2021	Groundwater	Chromium	<0.00200	<0.00200	0.00	A
AP-35	DUP-2	2/25/2021	Groundwater	Cobalt	0.13	0.133	2.28	A
AP-35	DUP-2	2/25/2021	Groundwater	Lead	0.00517	0.00486	6.18	A
AP-35	DUP-2	2/25/2021	Groundwater	Lithium	0.989	0.996	0.71	A
AP-35	DUP-2	2/25/2021	Groundwater	Magnesium	127	125	1.59	A
AP-35	DUP-2	2/25/2021	Groundwater	Molybdenum	<0.00200	<0.00200	0.00	A
AP-35	DUP-2	2/25/2021	Groundwater	Potassium	48.8	48.9	0.20	A
AP-35	DUP-2	2/25/2021	Groundwater	Selenium	0.183	0.189	3.23	A
AP-35	DUP-2	2/25/2021	Groundwater	Sodium	1700	1680	1.18	A
AP-35	DUP-2	2/25/2021	Groundwater	Thallium	0.00666	0.00675	1.34	A
AP-35	DUP-2	2/25/2021	Groundwater	Mercury	0.00149	0.000935	45.77	--

Notes:
1. The detection limit was used to calculate Relative Percent Difference (RPD) for non-detect samples.
2. RPD = ((SR - DR) * 200)/(SR + DR).
3. A = Acceptable RPD.
4. U or "<" = Analyte was not detected at the SDL. J = Analyte detected between SDL and RL.

Attachment A

DHL Analytical

Analytical Report

SDG. 2102162

March 09, 2021

Mike Schofield
GSI Environmental, Inc
9600 Great Hills Trail, Suite 350E
Austin, Texas 78759
TEL: (512) 346-4474
FAX:

Order No.: 2102162

RE: SMEC, Christine, Texas

Dear Mike Schofield:

DHL Analytical, Inc. received 15 sample(s) on 2/26/2021 for the analyses presented in the following report.

There were no problems with the analyses and all data met requirements of NELAP except where noted in the Case Narrative. All non-NELAP methods will be identified accordingly in the case narrative and all estimated uncertainties of test results are within method or EPA specifications.

If you have any questions regarding these tests results, please feel free to call. Thank you for using DHL Analytical.

Sincerely,

John DuPont
General Manager

This report was performed under the accreditation of the State of Texas Laboratory Certification Number: T104704211-21-26

Table of Contents

DHL ANALYTICAL
2300 Double Creek Dr. ■ Round Rock, TX 78664
Phone (512) 388-8222 ■ FAX (512) 388-8229
Web: www.dhlanalytical.com
E-Mail: login@dhlanalytical.com

ITSM Funds

№ 67398

CHAIN-OF-CUSTODY

CLIENT: GSI ENVIRONMENTAL INC
ADDRESS: 9600 GREAT HILLS TRL, #350E, AUSTIN, TX 78759
PHONE: 512-346-4474 FAX/E-MAIL:
DATA REPORTED TO: MLSchofield@gsi-net.com
ADDITIONAL REPORT COPIES TO: BNzeribe@gsi-net.com

DATE: 02/25/21 PAGE 1 OF 2
PO #: DHL WORK ORDER #: 2102162
PROJECT LOCATION OR NAME: SMEC, CHRISTINE, TEXAS
CLENT PROJECT #: 5076-109 COLLECTOR: RIC, BN, ELR, CVR

Authorize 5% surcharge for TRRP Report? ☒ Yes ☐ No

S=SOIL W=WATER A=AIR L=LIQUID SE=SEDIMENT P=PAINT SL=SLUDGE O=OTHER SO=SOLID

PRESERVATION: HCl, HNO_3, H_2SO_4 ☐ NaOH ☐, ICE, UNPRESERVED

ANALYSES: BTEX ☐ MTBE ☐ [METHOD 8021] / TPH 1005 ☐ TPH 1006 ☐ HOLD 1006 ☐ / GRO [METHOD 8015] ☐ DRO [METHOD 8105] ☐ / VOC 8260 ☐ VOC 624 ☐ VOC 8260/5035 ☐ / SVOC 8270 ☐ PAH 8270 ☐ HOLD PAH ☐ SVOC 625 ☐ / 8270 PEST ☐ 625 PEST/PCB ☐ 608 PCB ☐ / 8270 O-P PEST ☐ 8082 PCB ☐ 8270 PCB ☐ / 8321 HERB ☐ TPHOS, AMMONIA ☐ / METALS 6020 ☒ METALS 200.8 ☐ DISS. METALS ☐ / RCRA ☐ TX11 ☐ / PH ☐ HEX CHROM ☐ ALKALINITY ☒ COD ☐ / CHLORIDE ☐ ANIONS E300 / TCLP-SVOC ☐ VOC ☐ PEST ☐ HERB ☐ / TCLP-METALS ☐ RCRA 8 ☐ TX-11 ☐ Pb ☐ / RCI ☐ FLASHPOINT ☐ DGAS ☐ / TDS ☒ TSS ☐ % MOISTURE ☐ CYANIDE ☐ / Radium 226/228

Field Sample I.D.	DHL Lab #	Date	Time	Matrix	Container Type	# of Containers	HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESERVED	ANALYSES	FIELD NOTES
PZ-03	01	2/24/21	1127	W	1 x 500mL, 1 x 250mL, 2 x 1L			X		X		E300, Radium 226/228	
PZ-03-MS		2/24/21	1127										
PZ-03-MSD		2/24/21	1127										
AP-31	02	2/24/21	1332										
MW-03	03	2/24/21	1418										
AP-32	04	2/24/21	1624										
AP-33	05	2/24/21	1632										
PZ-05	06	2/24/21	1730										
EB-2-2-24-21	07	2/24/21	1817										
EB-1-2-24-21	08	2/24/21	1845										
PZ-02	09	2/24/21	1115										
AP-34	10	2/25/21	0926										
AP-35	11	2/25/21	1015										
DUP-2	12	2/25/21											
AP-36	13	2/25/21	1125	↓	↓			↓		↓		↓	

RELINQUISHED BY: (Signature) DATE/TIME 2/26/21 9:47 RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)

☒ DHL DISPOSAL @ $5.00 each ☐ Return

TURN AROUND TIME
RUSH ☐ CALL FIRST
1 DAY ☐ CALL FIRST
2 DAY ☐
NORMAL ☒
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 1.2/1.0/2.8/1.6 0.3/1.9/1.4 THERM #: 78
CUSTODY SEALS: ☐ BROKEN ☐ INTACT ☒ NOT USED
CARRIER: ☐ LONE STAR ☐ FEDEX ☐ UPS ☐ OTHER
☐ COURIER DELIVERY
☒ HAND DELIVERED

DHL COC Rev 1 | FEB 2010

Ash Ponds

№ 67397

CHAIN-OF-CUSTODY

DHL ANALYTICAL
2300 Double Creek Dr. ■ Round Rock, TX 78664
Phone (512) 388-8222 ■ FAX (512) 388-8229
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DATA REPORTED TO: MLSchofield@gsi-net.com
ADDITIONAL REPORT COPIES TO: BNzeribe@gsi-net.com

DATE: 02/25/21 PAGE 2 OF 2
PO #: DHL WORK ORDER #: 2102162
PROJECT LOCATION OR NAME: SMEC, CHRISTINE, TX
CLENT PROJECT #: 5076-09 COLLECTOR: RTC, BNW, FKR, WR

Authorize 5% surcharge for TRRP Report? ☑ Yes ☐ No

S=SOIL W=WATER A=AIR L=LIQUID SE=SEDIMENT P=PAINT SL=SLUDGE O=OTHER SO=SOLID

PRESERVATION: HCl | HNO_3 | H_2SO_4 ☐ NaOH ☐ | ICE | UNPRESERVED

ANALYSES: BTEX ☐ MTBE ☐ [METHOD 8021] | TPH 1005 ☐ TPH 1006 ☐ HOLD 1006 ☐ | GRO [METHOD 8015] ☐ DRO [METHOD 8105] ☐ | VOC 8260 ☐ VOC 624 ☐ VOC 8260/5035 ☐ | SVOC 8270 ☐ PAH 8270 ☐ HOLD PAH ☐ SVOC 625 ☐ | 8270 PEST ☐ 625 PEST/PCB ☐ 608 PCB ☐ | 8270 O-P PEST ☐ 8082 PCB ☐ 608 PCB ☐ 8270 PCB ☐ | 8321 HERB ☐ TPHOS, AMMONIA ☐ | METALS 6020 ☐ METALS 200.8 ☐ DISS. METALS ☐ | RCRA ☐ TX11 ☐ | PH ☐ HEX CHROM ☐ ALKALINITY ☐ COD ☐ | CHLORIDE ☐ ANIONS ☐ 8260 | TCLP-SVOC ☐ VOC ☐ PEST ☐ HERB ☐ | TCLP-METALS ☐ RCRA 8 ☐ TX-11 ☐ Pb ☐ | RCI ☐ FLASHPOINT ☐ DGAS ☐ | TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐ | Radium 226/228

Field Sample I.D.	DHL Lab #	Date	Time	Matrix	Container Type	# of Containers	HCl	HNO_3	H_2SO_4 NaOH	ICE	UNPRESERVED	FIELD NOTES
PZ-06	14	2/25/21	1215	W	1 250mL 1 to 250mL			X		X		
EB3-2-25-21	15	2/25/21	1527	W	2x 1L			X		X		

RELINQUISHED BY: (Signature) DATE/TIME 2/26/21 9:47 RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)

☑ DHL DISPOSAL @ $5.00 each ☐ Return

TURN AROUND TIME
RUSH ☐ CALL FIRST
1 DAY ☐ CALL FIRST
2 DAY ☐
NORMAL ☒
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 1.2/1.5/2.8/1.6 8.3/1.4/1.4/THERM #: 78
CUSTODY SEALS: ☐ BROKEN ☐ INTACT ☑ NOT USED
CARRIER: ☐ LONE STAR ☐ FEDEX ☐ UPS ☐ OTHER
☐ COURIER DELIVERY
☒ HAND DELIVERED

DHL COC Rev 1 | FEB 2010

DHL Analytical, Inc.

Sample Receipt Checklist

Client Name **GSI Environmental, Inc** Date Received: **2/26/2021**

Work Order Number **2102162** Received by: **EL**

Checklist completed by: EL 2/26/2021 Reviewed by (DL) 2/26/2021
Signature | Date | Initials | Date

Carrier name: Hand Delivered

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	1.2 °C/1.0/2.8/1.6/0.3/1.9/1.4/1.1
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH<2 acceptable upon receipt?	Yes ☑	No ☐	NA ☐ LOT # 13171
	Adjusted? NO		Checked by EL
Water - ph>9 (S) or ph>10 (CN) acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted?		Checked by

Any No response must be detailed in the comments section below.

Client contacted: _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action: _____

Laboratory Name: DHL Analytical, Inc.

Laboratory Review Checklist: Reportable Data

Project Name: SMEC, Christine, Texas	**LRC Date:** 3/9/2021
Reviewer Name: Angie O'Donnell	**Laboratory Work Order: 2102162**
Prep Batch Number(s): See Prep Dates Report	**Run Batch:** See Analytical Dates Report

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-Custody (C-O-C)					
R1	OI	**1)** Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	**X**				**R1-01**
		2) Were all departures from standard conditions described in an exception report?			**X**		
R2	OI	**Sample and Quality Control (QC) Identification**					
		1) Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	**X**				
		2) Are all laboratory ID numbers cross-referenced to the corresponding QC data?	**X**				
R3	OI	**Test Reports**					
		1) Were all samples prepared and analyzed within holding times?	**X**				
		2) Other than those results < MQL, were all other raw values bracketed by calibration standards?	**X**				
		3) Were calculations checked by a peer or supervisor?	**X**				
		4) Were all analyte identifications checked by a peer or supervisor?	**X**				
		5) Were sample detection limits reported for all analytes not detected?	**X**				
		6) Were all results for soil and sediment samples reported on a dry weight basis?			**X**		
		7) Were % moisture (or solids) reported for all soil and sediment samples?			**X**		
		8) Were bulk soils/solids samples for volatile analysis extracted with methanol per EPA Method 5035?			**X**		
		9) If required for the project, TICs reported?			**X**		
R4	O	**Surrogate Recovery Data**					
		1) Were surrogates added prior to extraction?			**X**		
		2) Were surrogate percent recoveries in all samples within the laboratory QC limits?			**X**		
R5	OI	**Test Reports/Summary Forms for Blank Samples**					
		1) Were appropriate type(s) of blanks analyzed?	**X**				
		2) Were blanks analyzed at the appropriate frequency?	**X**				
		3) Where method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	**X**				
		4) Were blank concentrations < MDL?	**X**				
		5) For analyte(s) detected in a blank sample, was the concentration, unadjusted for sample specific factors, in all associated field samples, **greater** than 10 times the concentration in the blank sample?	**X**				
R6	OI	**Laboratory Control Samples (LCS):**					
		1) Were all COCs included in the LCS?	**X**				
		2) Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	**X**				
		3) Were LCSs analyzed at the required frequency?	**X**				
		4) Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	**X**				
		5) Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	**X**				
		6) Was the LCSD RPD within QC limits (if applicable)?	**X**				
R7	OI	**Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Data**					
		1) Were the project/method specified analytes included in the MS and MSD?	**X**				
		2) Were MS/MSD analyzed at the appropriate frequency?	**X**				
		3) Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		**X**			**R7-03**
		4) Were MS/MSD RPDs within laboratory QC limits?	**X**				
R8	OI	**Analytical Duplicate Data**					
		1) Were appropriate analytical duplicates analyzed for each matrix?	**X**				
		2) Were analytical duplicates analyzed at the appropriate frequency?	**X**				
		3) Were RPDs or relative standard deviations within the laboratory QC limits?	**X**				
R9	OI	**Method Quantitation Limits (MQLs):**					
		1) Are the MQLs for each method analyte included in the laboratory data package?	**X**				
		2) Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	**X**				
		3) Are unadjusted MQLs and DCSs included in the laboratory data package?	**X**				
R10	OI	**Other Problems/Anomalies**					
		1) Are all known problems/anomalies/special conditions noted in this LRC and ER?	**X**				**R10-01**
		2) Was applicable and available technology used to lower the SDL to minimize the matrix interference affects on the sample results?	**X**				
		3) Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	**X**				

Laboratory Name: DHL Analytical, Inc.

Laboratory Review Checklist (continued): Supporting Data

Project Name: SMEC, Christine, Texas	**LRC Date:** 3/9/2021
Reviewer Name: Angie O'Donnell	**Laboratory Work Order: 2102162**
Prep Batch Number(s): See Prep Dates Report	**Run Batch:** See Analytical Dates Report

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial Calibration (ICAL)**					
		1) Were response factors and/or relative response factors for each analyte within QC limits?	X				
		2) Were percent RSDs or correlation coefficient criteria met?	X				
		3) Was the number of standards recommended in the method used for all analytes?	X				
		4) Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		5) Are ICAL data available for all instruments used?	X				
		6) Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and Continuing calibration Verification (ICCV and CCV) and Continuing Calibration blank (CCB):**					
		1) Was the CCV analyzed at the method-required frequency?	X				
		2) Were percent differences for each analyte within the method-required QC limits?	X				
		3) Was the ICAL curve verified for each analyte?	X				
		4) Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	**Mass Spectral Tuning:**					
		1) Was the appropriate compound for the method used for tuning?	X				
		2) Were ion abundance data within the method-required QC limits?	X				
S4	O	**Internal Standards (IS):**					
		1) Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	**Raw Data (NELAC Section 5.5.10)**					
		1) Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		2) Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual Column Confirmation**					
		1) Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively Identified Compounds (TICs):**					
		1) If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) Results:**					
		1) Were percent recoveries within method QC limits?	X				
S9	I	**Serial Dilutions, Post Digestion Spikes, and Method of Standard Additions**					
		1) Were percent differences, recoveries, and the linearity within the QC limits specified in the method?		X			**S9-01**
S10	OI	**Method Detection Limit (MDL) Studies**					
		1) Was a MDL study performed for each reported analyte?	X				
		2) Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency Test Reports:**					
		1) Was the lab's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards Documentation**					
		1) Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/Analyte Identification Procedures**					
		1) Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of Analyst Competency (DOC)**					
		1) Was DOC conducted consistent with NELAC Chapter 5 – Appendix C?	X				
		2) Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/Validation Documentation for Methods** (NELAC Chapter 5)					
		1) Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory Standard Operating Procedures (SOPs):**					
		1) Are laboratory SOPs current and on file for each method performed?	X				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
3 NA = Not applicable.
4 NR = Not Reviewed.
5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Data Package Signature Page – RG-366/TRRP-13

This data package consists of:

This signature page, the laboratory review checklist, and the following reportable data:

R1 Field chain-of-custody documentation;
R2 Sample identification cross-reference;
R3 Test reports (analytical data sheets) for each environmental sample that includes:
  a) Items consistent with NELAC Chapter 5,
  b) dilution factors,
  c) preparation methods,
  d) cleanup methods, and
  e) if required for the project, tentatively identified compounds (TICs).
R4 Surrogate recovery data including:
  a) Calculated recovery (%R), and
  b) The laboratory's surrogate QC limits.
R5 Test reports/summary forms for blank samples;
R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  a) LCS spiking amounts,
  b) Calculated %R for each analyte, and
  c) The laboratory's LCS QC limits.
R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a) Samples associated with the MS/MSD clearly identified,
  b) MS/MSD spiking amounts,
  c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d) Calculated %Rs and relative percent differences (RPDs), and
  e) The laboratory's MS/MSD QC limits
R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  a) The amount of analyte measured in the duplicate,
  b) The calculated RPD, and
  c) The laboratory's QC limits for analytical duplicates.
R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;
R10 Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in the Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory is not accredited under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge that all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information or data affecting the quality of the data has been knowingly withheld.

This laboratory was last inspected by TCEQ on February 25-28, 2019. Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Name: John DuPont
Official Title: General Manager

Signature

03/09/21

Date

Name: Dr. Derhsing Luu
Official Title: Technical Director

CLIENT: GSI Environmental, Inc
Project: SMEC, Christine, Texas
Lab Order: 2102162

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Method SW6020B - Metals Analysis
Method SW7470A - Mercury Analysis
Method E300 - Anions Analysis
Method M2320 B - Alkalinity Analysis
Method M2540C - Total Dissolved Solids Analysis

Exception Report R1-01

The samples were received and log-in performed on 2/26/2021. A total of 15 samples were received and analyzed. The samples arrived in good condition and were properly packaged.

Exception Report R7-03

For Anions Analysis, for Batches 99686 and 99713, the recovery of Chloride for the Matrix Spike and Matrix Spike Duplicate(s) (2102162-01, -09 and 2102164-01 MS/MSD) was below the method control limits. These are flagged accordingly in the QC Summary Report. This anion was within method control limits in the associated LCS(s). The reference sample(s) selected for the Batch QC were from this workorder/project. No further corrective action was taken.

For Metals Analysis, for Batch 99629, the recoveries of seven analytes for the Matrix Spike and Matrix Spike Duplicate (2102162-01 MS/MSD) were outside of the method control limits. These are flagged accordingly in the QC Summary Report. These analytes were within method control limits in the associated LCS. The reference sample selected for the Batch QC was from this workorder. No further corrective action was taken.

Exception Report R10-01

Per project specification, MS/MSDs are from workorder or project samples only.

Exception Report S9-01

For Metals Analysis, the recoveries of three analytes for the Post Digestion Spike (2102162-01 PDS) were outside of method control limits. These are flagged accordingly in the QC Summary Report. These analytes were within method control limits in the associated Serial Dilution. No further corrective action was taken.

For Metals Analysis, the RPDs of two analytes for the Serial Dilution (2102162-01 SD) were above the

method control limit. These are flagged accordingly in the QC Summary Report. These analytes were within method control limits in the associated Post Digestion Spike. No further corrective action was taken.

DHL Analytical, Inc.

Date: *09-Mar-21*

CLIENT: GSI Environmental, Inc
Project: SMEC, Christine, Texas
Lab Order: 2102162

Work Order Sample Summary

Lab Smp ID	Client Sample ID	Tag Number	Date Collected	Date Recved
2102162-01	PZ-03		02/24/21 11:27 AM	2/26/2021
2102162-02	AP-31		02/24/21 01:32 PM	2/26/2021
2102162-03	MW-03		02/24/21 02:18 PM	2/26/2021
2102162-04	AP-32		02/24/21 04:24 PM	2/26/2021
2102162-05	AP-33		02/24/21 04:32 PM	2/26/2021
2102162-06	PZ-05		02/24/21 05:30 PM	2/26/2021
2102162-07	FB-2-2-24-21		02/24/21 06:17 PM	2/26/2021
2102162-08	EB-1-2-24-21		02/24/21 06:45 PM	2/26/2021
2102162-09	PZ-02		02/24/21 11:15 AM	2/26/2021
2102162-10	AP-34		02/25/21 09:26 AM	2/26/2021
2102162-11	AP-35		02/25/21 10:15 AM	2/26/2021
2102162-12	Dup-2		02/25/21	2/26/2021
2102162-13	AP-36		02/25/21 11:25 AM	2/26/2021
2102162-14	PZ-06		02/25/21 12:15 PM	2/26/2021
2102162-15	EB3-2-25-21		02/25/21 03:27 PM	2/26/2021

Lab Order: 2102162
Client: GSI Environmental, Inc
Project: SMEC, Christine, Texas

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
2102162-01A	PZ-03	02/24/21 11:27 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	PZ-03	02/24/21 11:27 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	PZ-03	02/24/21 11:27 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	PZ-03	02/24/21 11:27 AM	Aqueous	SW7470A	Mercury Aq Prep	02/26/21 02:20 PM	99620
2102162-01B	PZ-03	02/24/21 11:27 AM	Aqueous	M2320 B	Alkalinity Preparation	03/04/21 09:20 AM	99688
	PZ-03	02/24/21 11:27 AM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	PZ-03	02/24/21 11:27 AM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	PZ-03	02/24/21 11:27 AM	Aqueous	E300	Anion Preparation	03/05/21 10:21 AM	99713
	PZ-03	02/24/21 11:27 AM	Aqueous	M2540C	TDS Preparation	03/01/21 10:24 AM	99633
2102162-02A	AP-31	02/24/21 01:32 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	AP-31	02/24/21 01:32 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	AP-31	02/24/21 01:32 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	AP-31	02/24/21 01:32 PM	Aqueous	SW7470A	Mercury Aq Prep	02/26/21 02:20 PM	99620
2102162-02B	AP-31	02/24/21 01:32 PM	Aqueous	M2320 B	Alkalinity Preparation	03/04/21 09:20 AM	99688
	AP-31	02/24/21 01:32 PM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	AP-31	02/24/21 01:32 PM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	AP-31	02/24/21 01:32 PM	Aqueous	M2540C	TDS Preparation	03/01/21 10:24 AM	99633
2102162-03A	MW-03	02/24/21 02:18 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	MW-03	02/24/21 02:18 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	MW-03	02/24/21 02:18 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	MW-03	02/24/21 02:18 PM	Aqueous	SW7470A	Mercury Aq Prep	02/26/21 02:20 PM	99620
2102162-03B	MW-03	02/24/21 02:18 PM	Aqueous	M2320 B	Alkalinity Preparation	03/04/21 09:20 AM	99688
	MW-03	02/24/21 02:18 PM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	MW-03	02/24/21 02:18 PM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	MW-03	02/24/21 02:18 PM	Aqueous	M2540C	TDS Preparation	03/01/21 10:24 AM	99633
2102162-04A	AP-32	02/24/21 04:24 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	AP-32	02/24/21 04:24 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	AP-32	02/24/21 04:24 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629

Lab Order: 2102162
Client: GSI Environmental, Inc
Project: SMEC, Christine, Texas

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
2102162-04A	AP-32	02/24/21 04:24 PM	Aqueous	SW7470A	Mercury Aq Prep	02/26/21 02:20 PM	99620
2102162-04B	AP-32	02/24/21 04:24 PM	Aqueous	M2320 B	Alkalinity Preparation	03/04/21 09:20 AM	99688
	AP-32	02/24/21 04:24 PM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	AP-32	02/24/21 04:24 PM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	AP-32	02/24/21 04:24 PM	Aqueous	M2540C	TDS Preparation	03/01/21 10:24 AM	99633
2102162-05A	AP-33	02/24/21 04:32 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	AP-33	02/24/21 04:32 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	AP-33	02/24/21 04:32 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	AP-33	02/24/21 04:32 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	AP-33	02/24/21 04:32 PM	Aqueous	SW7470A	Mercury Aq Prep	02/26/21 02:20 PM	99620
2102162-05B	AP-33	02/24/21 04:32 PM	Aqueous	M2320 B	Alkalinity Preparation	03/04/21 09:20 AM	99688
	AP-33	02/24/21 04:32 PM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	AP-33	02/24/21 04:32 PM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	AP-33	02/24/21 04:32 PM	Aqueous	M2540C	TDS Preparation	03/01/21 10:24 AM	99633
2102162-06A	PZ-05	02/24/21 05:30 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	PZ-05	02/24/21 05:30 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	PZ-05	02/24/21 05:30 PM	Aqueous	SW7470A	Mercury Aq Prep	02/26/21 02:20 PM	99620
2102162-06B	PZ-05	02/24/21 05:30 PM	Aqueous	M2320 B	Alkalinity Preparation	03/04/21 09:20 AM	99688
	PZ-05	02/24/21 05:30 PM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	PZ-05	02/24/21 05:30 PM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	PZ-05	02/24/21 05:30 PM	Aqueous	M2540C	TDS Preparation	03/02/21 02:44 PM	99665
2102162-07A	FB-2-2-24-21	02/24/21 06:17 PM	Field Blank	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	FB-2-2-24-21	02/24/21 06:17 PM	Field Blank	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	FB-2-2-24-21	02/24/21 06:17 PM	Field Blank	SW7470A	Mercury Aq Prep	02/26/21 02:20 PM	99620
2102162-07B	FB-2-2-24-21	02/24/21 06:17 PM	Field Blank	M2320 B	Alkalinity Preparation	03/04/21 09:20 AM	99688
	FB-2-2-24-21	02/24/21 06:17 PM	Field Blank	E300	Anion Preparation	03/04/21 09:11 AM	99686
	FB-2-2-24-21	02/24/21 06:17 PM	Field Blank	M2540C	TDS Preparation	03/02/21 02:44 PM	99665
2102162-08A	EB-1-2-24-21	02/24/21 06:45 PM	Equip Blank	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629

Lab Order: 2102162
Client: GSI Environmental, Inc
Project: SMEC, Christine, Texas

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
2102162-08A	EB-1-2-24-21	02/24/21 06:45 PM	Equip Blank	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	EB-1-2-24-21	02/24/21 06:45 PM	Equip Blank	SW7470A	Mercury Aq Prep	02/26/21 02:20 PM	99620
2102162-08B	EB-1-2-24-21	02/24/21 06:45 PM	Equip Blank	M2320 B	Alkalinity Preparation	03/04/21 09:20 AM	99688
	EB-1-2-24-21	02/24/21 06:45 PM	Equip Blank	E300	Anion Preparation	03/05/21 10:21 AM	99713
	EB-1-2-24-21	02/24/21 06:45 PM	Equip Blank	M2540C	TDS Preparation	03/02/21 02:44 PM	99665
2102162-09A	PZ-02	02/24/21 11:15 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	PZ-02	02/24/21 11:15 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	PZ-02	02/24/21 11:15 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	PZ-02	02/24/21 11:15 AM	Aqueous	SW7470A	Mercury Aq Prep	02/26/21 02:20 PM	99620
2102162-09B	PZ-02	02/24/21 11:15 AM	Aqueous	M2320 B	Alkalinity Preparation	03/04/21 09:20 AM	99688
	PZ-02	02/24/21 11:15 AM	Aqueous	E300	Anion Preparation	03/05/21 10:21 AM	99713
	PZ-02	02/24/21 11:15 AM	Aqueous	E300	Anion Preparation	03/05/21 10:21 AM	99713
	PZ-02	02/24/21 11:15 AM	Aqueous	M2540C	TDS Preparation	03/02/21 02:44 PM	99665
2102162-10A	AP-34	02/25/21 09:26 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	AP-34	02/25/21 09:26 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	AP-34	02/25/21 09:26 AM	Aqueous	SW7470A	Mercury Aq Prep	02/26/21 02:20 PM	99620
2102162-10B	AP-34	02/25/21 09:26 AM	Aqueous	M2320 B	Alkalinity Preparation	03/04/21 09:20 AM	99688
	AP-34	02/25/21 09:26 AM	Aqueous	E300	Anion Preparation	03/05/21 10:21 AM	99713
	AP-34	02/25/21 09:26 AM	Aqueous	E300	Anion Preparation	03/05/21 10:21 AM	99713
	AP-34	02/25/21 09:26 AM	Aqueous	M2540C	TDS Preparation	03/02/21 02:44 PM	99665
2102162-11A	AP-35	02/25/21 10:15 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	AP-35	02/25/21 10:15 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	AP-35	02/25/21 10:15 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	AP-35	02/25/21 10:15 AM	Aqueous	SW7470A	Mercury Aq Prep	02/26/21 02:20 PM	99620
2102162-11B	AP-35	02/25/21 10:15 AM	Aqueous	M2320 B	Alkalinity Preparation	03/04/21 09:20 AM	99688
	AP-35	02/25/21 10:15 AM	Aqueous	E300	Anion Preparation	03/05/21 10:21 AM	99713
	AP-35	02/25/21 10:15 AM	Aqueous	E300	Anion Preparation	03/05/21 10:21 AM	99713
	AP-35	02/25/21 10:15 AM	Aqueous	M2540C	TDS Preparation	03/02/21 02:44 PM	99665

Lab Order: 2102162
Client: GSI Environmental, Inc
Project: SMEC, Christine, Texas

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
2102162-12A	Dup-2	02/25/21	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	Dup-2	02/25/21	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	Dup-2	02/25/21	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	Dup-2	02/25/21	Aqueous	SW7470A	Mercury Aq Prep	02/26/21 02:20 PM	99620
2102162-12B	Dup-2	02/25/21	Aqueous	M2320 B	Alkalinity Preparation	03/04/21 09:20 AM	99688
	Dup-2	02/25/21	Aqueous	E300	Anion Preparation	03/05/21 10:21 AM	99713
	Dup-2	02/25/21	Aqueous	E300	Anion Preparation	03/05/21 10:21 AM	99713
	Dup-2	02/25/21	Aqueous	M2540C	TDS Preparation	03/02/21 02:44 PM	99665
2102162-13A	AP-36	02/25/21 11:25 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	AP-36	02/25/21 11:25 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	AP-36	02/25/21 11:25 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	AP-36	02/25/21 11:25 AM	Aqueous	SW7470A	Mercury Aq Prep	02/26/21 02:20 PM	99620
2102162-13B	AP-36	02/25/21 11:25 AM	Aqueous	M2320 B	Alkalinity Preparation	03/04/21 09:20 AM	99688
	AP-36	02/25/21 11:25 AM	Aqueous	E300	Anion Preparation	03/05/21 10:21 AM	99713
	AP-36	02/25/21 11:25 AM	Aqueous	E300	Anion Preparation	03/05/21 10:21 AM	99713
	AP-36	02/25/21 11:25 AM	Aqueous	M2540C	TDS Preparation	03/02/21 02:44 PM	99665
2102162-14A	PZ-06	02/25/21 12:15 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	PZ-06	02/25/21 12:15 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	PZ-06	02/25/21 12:15 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	PZ-06	02/25/21 12:15 PM	Aqueous	SW7470A	Mercury Aq Prep	02/26/21 02:20 PM	99620
2102162-14B	PZ-06	02/25/21 12:15 PM	Aqueous	M2320 B	Alkalinity Preparation	03/04/21 09:20 AM	99688
	PZ-06	02/25/21 12:15 PM	Aqueous	E300	Anion Preparation	03/05/21 10:21 AM	99713
	PZ-06	02/25/21 12:15 PM	Aqueous	E300	Anion Preparation	03/05/21 10:21 AM	99713
	PZ-06	02/25/21 12:15 PM	Aqueous	M2540C	TDS Preparation	03/02/21 02:44 PM	99665
2102162-15A	EB3-2-25-21	02/25/21 03:27 PM	Equip Blank	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	EB3-2-25-21	02/25/21 03:27 PM	Equip Blank	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:28 AM	99629
	EB3-2-25-21	02/25/21 03:27 PM	Equip Blank	SW7470A	Mercury Aq Prep	02/26/21 02:20 PM	99620
2102162-15B	EB3-2-25-21	02/25/21 03:27 PM	Equip Blank	M2320 B	Alkalinity Preparation	03/04/21 09:20 AM	99688

Lab Order: 2102162
Client: GSI Environmental, Inc
Project: SMEC, Christine, Texas

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
2102162-15B	EB3-2-25-21	02/25/21 03:27 PM	Equip Blank	E300	Anion Preparation	03/05/21 10:21 AM	99713
	EB3-2-25-21	02/25/21 03:27 PM	Equip Blank	M2540C	TDS Preparation	03/02/21 02:44 PM	99665

Lab Order: 2102162
Client: GSI Environmental, Inc
Project: SMEC, Christine, Texas

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
2102162-01A	PZ-03	Aqueous	SW7470A	Mercury Total: Aqueous	99620	1	03/03/21 04:37 PM	CETAC2_HG_210303 A
	PZ-03	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	1	03/02/21 11:23 AM	ICP-MS4_210302C
	PZ-03	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	500	03/03/21 12:09 PM	ICP-MS5_210303A
	PZ-03	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	20	03/03/21 03:19 PM	ICP-MS5_210303A
2102162-01B	PZ-03	Aqueous	M2320 B	Alkalinity	99688	1	03/04/21 11:22 AM	TITRATOR_210304A
	PZ-03	Aqueous	E300	Anions by IC method - Water	99686	100	03/04/21 10:13 PM	IC2_210305A
	PZ-03	Aqueous	E300	Anions by IC method - Water	99686	5	03/05/21 05:41 AM	IC2_210305A
	PZ-03	Aqueous	E300	Anions by IC method - Water	99713	1000	03/05/21 03:46 PM	IC2_210305B
	PZ-03	Aqueous	M2540C	Total Dissolved Solids	99633	1	03/01/21 04:00 PM	WC_210301B
2102162-02A	AP-31	Aqueous	SW7470A	Mercury Total: Aqueous	99620	1	03/03/21 04:48 PM	CETAC2_HG_210303 A
	AP-31	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	1	03/02/21 11:27 AM	ICP-MS4_210302C
	AP-31	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	100	03/03/21 12:18 PM	ICP-MS5_210303A
	AP-31	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	5	03/03/21 03:28 PM	ICP-MS5_210303A
2102162-02B	AP-31	Aqueous	M2320 B	Alkalinity	99688	1	03/04/21 11:24 AM	TITRATOR_210304A
	AP-31	Aqueous	E300	Anions by IC method - Water	99686	100	03/04/21 11:01 PM	IC2_210305A
	AP-31	Aqueous	E300	Anions by IC method - Water	99686	5	03/05/21 05:57 AM	IC2_210305A
	AP-31	Aqueous	M2540C	Total Dissolved Solids	99633	1	03/01/21 04:00 PM	WC_210301B
2102162-03A	MW-03	Aqueous	SW7470A	Mercury Total: Aqueous	99620	1	03/03/21 04:50 PM	CETAC2_HG_210303 A
	MW-03	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	1	03/02/21 11:29 AM	ICP-MS4_210302C
	MW-03	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	200	03/03/21 12:20 PM	ICP-MS5_210303A
	MW-03	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	50	03/03/21 04:00 PM	ICP-MS5_210303A
2102162-03B	MW-03	Aqueous	M2320 B	Alkalinity	99688	1	03/04/21 11:25 AM	TITRATOR_210304A
	MW-03	Aqueous	E300	Anions by IC method - Water	99686	100	03/04/21 11:17 PM	IC2_210305A
	MW-03	Aqueous	E300	Anions by IC method - Water	99686	5	03/05/21 06:13 AM	IC2_210305A
	MW-03	Aqueous	M2540C	Total Dissolved Solids	99633	1	03/01/21 04:00 PM	WC_210301B
2102162-04A	AP-32	Aqueous	SW7470A	Mercury Total: Aqueous	99620	1	03/03/21 04:53 PM	CETAC2_HG_210303 A

Lab Order: 2102162
Client: GSI Environmental, Inc
Project: SMEC, Christine, Texas

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
2102162-04A	AP-32	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	50	03/03/21 04:02 PM	ICP-MS5_210303A
	AP-32	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	200	03/03/21 12:22 PM	ICP-MS5_210303A
	AP-32	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	1	03/02/21 11:31 AM	ICP-MS4_210302C
2102162-04B	AP-32	Aqueous	M2320 B	Alkalinity	99688	1	03/04/21 11:28 AM	TITRATOR_210304A
	AP-32	Aqueous	E300	Anions by IC method - Water	99686	100	03/04/21 11:33 PM	IC2_210305A
	AP-32	Aqueous	E300	Anions by IC method - Water	99686	5	03/05/21 06:29 AM	IC2_210305A
	AP-32	Aqueous	M2540C	Total Dissolved Solids	99633	1	03/01/21 04:00 PM	WC_210301B
2102162-05A	AP-33	Aqueous	SW7470A	Mercury Total: Aqueous	99620	1	03/03/21 04:55 PM	CETAC2_HG_210303A
	AP-33	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	1	03/02/21 11:33 AM	ICP-MS4_210302C
	AP-33	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	500	03/03/21 12:25 PM	ICP-MS5_210303A
	AP-33	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	100	03/03/21 04:05 PM	ICP-MS5_210303A
	AP-33	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	5	03/04/21 12:15 PM	ICP-MS5_210304A
2102162-05B	AP-33	Aqueous	M2320 B	Alkalinity	99688	1	03/04/21 11:29 AM	TITRATOR_210304A
	AP-33	Aqueous	E300	Anions by IC method - Water	99686	100	03/04/21 11:49 PM	IC2_210305A
	AP-33	Aqueous	E300	Anions by IC method - Water	99686	5	03/05/21 06:45 AM	IC2_210305A
	AP-33	Aqueous	M2540C	Total Dissolved Solids	99633	1	03/01/21 04:00 PM	WC_210301B
2102162-06A	PZ-05	Aqueous	SW7470A	Mercury Total: Aqueous	99620	1	03/03/21 04:57 PM	CETAC2_HG_210303A
	PZ-05	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	100	03/03/21 01:16 PM	ICP-MS5_210303A
	PZ-05	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	1	03/02/21 11:35 AM	ICP-MS4_210302C
2102162-06B	PZ-05	Aqueous	M2320 B	Alkalinity	99688	1	03/04/21 11:30 AM	TITRATOR_210304A
	PZ-05	Aqueous	E300	Anions by IC method - Water	99686	100	03/05/21 12:05 AM	IC2_210305A
	PZ-05	Aqueous	E300	Anions by IC method - Water	99686	5	03/05/21 07:01 AM	IC2_210305A
	PZ-05	Aqueous	M2540C	Total Dissolved Solids	99665	1	03/02/21 04:50 PM	WC_210302B
2102162-07A	FB-2-2-24-21	Field Blank	SW7470A	Mercury Total: Aqueous	99620	1	03/03/21 05:00 PM	CETAC2_HG_210303A
	FB-2-2-24-21	Field Blank	SW6020B	Trace Metals: ICP-MS - Water	99629	1	03/02/21 11:37 AM	ICP-MS4_210302C
	FB-2-2-24-21	Field Blank	SW6020B	Trace Metals: ICP-MS - Water	99629	1	03/03/21 12:29 PM	ICP-MS5_210303A

Lab Order: 2102162
Client: GSI Environmental, Inc
Project: SMEC, Christine, Texas

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
2102162-07B	FB-2-2-24-21	Field Blank	M2320 B	Alkalinity	99688	1	03/04/21 11:32 AM	TITRATOR_210304A
	FB-2-2-24-21	Field Blank	E300	Anions by IC method - Water	99686	1	03/04/21 05:25 PM	IC2_210305A
	FB-2-2-24-21	Field Blank	M2540C	Total Dissolved Solids	99665	1	03/02/21 04:50 PM	WC_210302B
2102162-08A	EB-1-2-24-21	Equip Blank	SW7470A	Mercury Total: Aqueous	99620	1	03/03/21 05:02 PM	CETAC2_HG_210303A
	EB-1-2-24-21	Equip Blank	SW6020B	Trace Metals: ICP-MS - Water	99629	1	03/03/21 12:31 PM	ICP-MS5_210303A
	EB-1-2-24-21	Equip Blank	SW6020B	Trace Metals: ICP-MS - Water	99629	1	03/02/21 11:39 AM	ICP-MS4_210302C
2102162-08B	EB-1-2-24-21	Equip Blank	M2320 B	Alkalinity	99688	1	03/04/21 11:34 AM	TITRATOR_210304A
	EB-1-2-24-21	Equip Blank	E300	Anions by IC method - Water	99713	1	03/05/21 02:58 PM	IC2_210305B
	EB-1-2-24-21	Equip Blank	M2540C	Total Dissolved Solids	99665	1	03/02/21 04:50 PM	WC_210302B
2102162-09A	PZ-02	Aqueous	SW7470A	Mercury Total: Aqueous	99620	1	03/03/21 05:04 PM	CETAC2_HG_210303A
	PZ-02	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	1	03/02/21 11:41 AM	ICP-MS4_210302C
	PZ-02	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	200	03/03/21 12:34 PM	ICP-MS5_210303A
	PZ-02	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	20	03/03/21 04:07 PM	ICP-MS5_210303A
2102162-09B	PZ-02	Aqueous	M2320 B	Alkalinity	99688	1	03/04/21 11:49 AM	TITRATOR_210304A
	PZ-02	Aqueous	E300	Anions by IC method - Water	99713	100	03/05/21 04:02 PM	IC2_210305B
	PZ-02	Aqueous	E300	Anions by IC method - Water	99713	5	03/05/21 09:38 PM	IC2_210305B
	PZ-02	Aqueous	M2540C	Total Dissolved Solids	99665	1	03/02/21 04:50 PM	WC_210302B
2102162-10A	AP-34	Aqueous	SW7470A	Mercury Total: Aqueous	99620	1	03/03/21 05:11 PM	CETAC2_HG_210303A
	AP-34	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	1	03/02/21 11:42 AM	ICP-MS4_210302C
	AP-34	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	100	03/03/21 12:36 PM	ICP-MS5_210303A
2102162-10B	AP-34	Aqueous	M2320 B	Alkalinity	99688	1	03/04/21 11:50 AM	TITRATOR_210304A
	AP-34	Aqueous	E300	Anions by IC method - Water	99713	100	03/05/21 04:50 PM	IC2_210305B
	AP-34	Aqueous	E300	Anions by IC method - Water	99713	5	03/05/21 09:54 PM	IC2_210305B
	AP-34	Aqueous	M2540C	Total Dissolved Solids	99665	1	03/02/21 04:50 PM	WC_210302B
2102162-11A	AP-35	Aqueous	SW7470A	Mercury Total: Aqueous	99620	1	03/03/21 05:13 PM	CETAC2_HG_210303A
	AP-35	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	1	03/02/21 12:15 PM	ICP-MS4_210302C

Lab Order: 2102162
Client: GSI Environmental, Inc
Project: SMEC, Christine, Texas

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
2102162-11A	AP-35	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	100	03/03/21 01:05 PM	ICP-MS5_210303A
	AP-35	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	10	03/04/21 12:18 PM	ICP-MS5_210304A
2102162-11B	AP-35	Aqueous	M2320 B	Alkalinity	99688	1	03/04/21 11:52 AM	TITRATOR_210304A
	AP-35	Aqueous	E300	Anions by IC method - Water	99713	100	03/05/21 05:06 PM	IC2_210305B
	AP-35	Aqueous	E300	Anions by IC method - Water	99713	5	03/05/21 10:10 PM	IC2_210305B
	AP-35	Aqueous	M2540C	Total Dissolved Solids	99665	1	03/02/21 04:50 PM	WC_210302B
2102162-12A	Dup-2	Aqueous	SW7470A	Mercury Total: Aqueous	99620	1	03/03/21 05:15 PM	CETAC2_HG_210303A
	Dup-2	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	10	03/04/21 12:20 PM	ICP-MS5_210304A
	Dup-2	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	100	03/03/21 01:07 PM	ICP-MS5_210303A
	Dup-2	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	1	03/02/21 12:17 PM	ICP-MS4_210302C
2102162-12B	Dup-2	Aqueous	M2320 B	Alkalinity	99688	1	03/04/21 11:53 AM	TITRATOR_210304A
	Dup-2	Aqueous	E300	Anions by IC method - Water	99713	100	03/05/21 05:22 PM	IC2_210305B
	Dup-2	Aqueous	E300	Anions by IC method - Water	99713	5	03/05/21 10:26 PM	IC2_210305B
	Dup-2	Aqueous	M2540C	Total Dissolved Solids	99665	1	03/02/21 04:50 PM	WC_210302B
2102162-13A	AP-36	Aqueous	SW7470A	Mercury Total: Aqueous	99620	1	03/03/21 05:18 PM	CETAC2_HG_210303A
	AP-36	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	1	03/02/21 12:19 PM	ICP-MS4_210302C
	AP-36	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	100	03/03/21 01:09 PM	ICP-MS5_210303A
	AP-36	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	10	03/03/21 04:11 PM	ICP-MS5_210303A
2102162-13B	AP-36	Aqueous	M2320 B	Alkalinity	99688	1	03/04/21 11:55 AM	TITRATOR_210304A
	AP-36	Aqueous	E300	Anions by IC method - Water	99713	100	03/05/21 05:38 PM	IC2_210305B
	AP-36	Aqueous	E300	Anions by IC method - Water	99713	5	03/06/21 12:02 AM	IC2_210305B
	AP-36	Aqueous	M2540C	Total Dissolved Solids	99665	1	03/02/21 04:50 PM	WC_210302B
2102162-14A	PZ-06	Aqueous	SW7470A	Mercury Total: Aqueous	99620	1	03/03/21 05:20 PM	CETAC2_HG_210303A
	PZ-06	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	100	03/03/21 01:11 PM	ICP-MS5_210303A
	PZ-06	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	10	03/03/21 04:18 PM	ICP-MS5_210303A
	PZ-06	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99629	1	03/02/21 12:20 PM	ICP-MS4_210302C

Lab Order: 2102162
Client: GSI Environmental, Inc
Project: SMEC, Christine, Texas

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
2102162-14B	PZ-06	Aqueous	M2320 B	Alkalinity	99688	1	03/04/21 12:03 PM	TITRATOR_210304A
	PZ-06	Aqueous	E300	Anions by IC method - Water	99713	100	03/05/21 05:54 PM	IC2_210305B
	PZ-06	Aqueous	E300	Anions by IC method - Water	99713	5	03/06/21 12:18 AM	IC2_210305B
	PZ-06	Aqueous	M2540C	Total Dissolved Solids	99665	1	03/02/21 04:50 PM	WC_210302B
2102162-15A	EB3-2-25-21	Equip Blank	SW7470A	Mercury Total: Aqueous	99620	1	03/03/21 05:22 PM	CETAC2_HG_210303A
	EB3-2-25-21	Equip Blank	SW6020B	Trace Metals: ICP-MS - Water	99629	1	03/02/21 12:22 PM	ICP-MS4_210302C
	EB3-2-25-21	Equip Blank	SW6020B	Trace Metals: ICP-MS - Water	99629	1	03/03/21 01:14 PM	ICP-MS5_210303A
2102162-15B	EB3-2-25-21	Equip Blank	M2320 B	Alkalinity	99688	1	03/04/21 12:05 PM	TITRATOR_210304A
	EB3-2-25-21	Equip Blank	E300	Anions by IC method - Water	99713	1	03/05/21 03:14 PM	IC2_210305B
	EB3-2-25-21	Equip Blank	M2540C	Total Dissolved Solids	99665	1	03/02/21 04:50 PM	WC_210302B

DHL Analytical, Inc.

Date: *09-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	PZ-03
Project:	SMEC, Christine, Texas	**Lab ID:**	2102162-01
Project No:	5076-109	**Collection Date:**	02/24/21 11:27 AM
Lab Order:	2102162	**Matrix:**	AQUEOUS

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Antimony	<0.000800	0.000800	0.00250		mg/L	1	03/02/21 11:23 AM
Arsenic	0.0678	0.00200	0.00500		mg/L	1	03/02/21 11:23 AM
Barium	0.0243	0.00300	0.0100		mg/L	1	03/02/21 11:23 AM
Beryllium	0.189	0.000300	0.00100		mg/L	1	03/02/21 11:23 AM
Boron	9.49	0.200	0.600		mg/L	20	03/03/21 03:19 PM
Cadmium	0.477	0.000300	0.00100		mg/L	1	03/02/21 11:23 AM
Calcium	798	50.0	150		mg/L	500	03/03/21 12:09 PM
Chromium	0.00424	0.00200	0.00500	J	mg/L	1	03/02/21 11:23 AM
Cobalt	1.48	0.0600	0.100		mg/L	20	03/03/21 03:19 PM
Lead	0.00320	0.000300	0.00100		mg/L	1	03/02/21 11:23 AM
Lithium	1.84	0.00500	0.0100		mg/L	1	03/02/21 11:23 AM
Magnesium	266	2.00	6.00		mg/L	20	03/03/21 03:19 PM
Molybdenum	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 11:23 AM
Potassium	26.6	2.00	6.00		mg/L	20	03/03/21 03:19 PM
Selenium	0.711	0.00200	0.00500		mg/L	1	03/02/21 11:23 AM
Sodium	3320	50.0	150		mg/L	500	03/03/21 12:09 PM
Thallium	0.00627	0.000500	0.00150		mg/L	1	03/02/21 11:23 AM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	03/03/21 04:37 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	5310	300	1000		mg/L	1000	03/05/21 03:46 PM
Fluoride	3.77	0.500	2.00		mg/L	5	03/05/21 05:41 AM
Sulfate	4010	100	300		mg/L	100	03/04/21 10:13 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.44	1	03/04/21 11:22 AM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.44	1	03/04/21 11:22 AM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.44	1	03/04/21 11:22 AM
Alkalinity, Total (As CaCO3)	<20.0	20.0	20.0		mg/L @ pH 3.44	1	03/04/21 11:22 AM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	14200	200	200		mg/L	1	03/01/21 04:00 PM

Qualifiers:

ND - Not Detected at the SDL
J - Analyte detected between SDL and RL
B - Analyte detected in the associated Method Blank
DF- Dilution Factor
N - Parameter not NELAP certified
See Final Page of Report for MQLs and MDLs
S - Spike Recovery outside control limits
C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

DHL Analytical, Inc.

Date: *09-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	AP-31
Project:	SMEC, Christine, Texas	**Lab ID:**	2102162-02
Project No:	5076-109	**Collection Date:**	02/24/21 01:32 PM
Lab Order:	2102162	**Matrix:**	AQUEOUS

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Antimony	<0.000800	0.000800	0.00250		mg/L	1	03/02/21 11:27 AM
Arsenic	0.0133	0.00200	0.00500		mg/L	1	03/02/21 11:27 AM
Barium	0.0135	0.00300	0.0100		mg/L	1	03/02/21 11:27 AM
Beryllium	0.00975	0.000300	0.00100		mg/L	1	03/02/21 11:27 AM
Boron	47.6	1.00	3.00		mg/L	100	03/03/21 12:18 PM
Cadmium	0.00487	0.000300	0.00100		mg/L	1	03/02/21 11:27 AM
Calcium	586	10.0	30.0		mg/L	100	03/03/21 12:18 PM
Chromium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 11:27 AM
Cobalt	0.232	0.00300	0.00500		mg/L	1	03/02/21 11:27 AM
Lead	0.000361	0.000300	0.00100	J	mg/L	1	03/02/21 11:27 AM
Lithium	0.679	0.00500	0.0100		mg/L	1	03/02/21 11:27 AM
Magnesium	62.3	0.500	1.50		mg/L	5	03/03/21 03:28 PM
Molybdenum	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 11:27 AM
Potassium	9.98	0.100	0.300		mg/L	1	03/02/21 11:27 AM
Selenium	0.129	0.00200	0.00500		mg/L	1	03/02/21 11:27 AM
Sodium	1870	10.0	30.0		mg/L	100	03/03/21 12:18 PM
Thallium	0.00236	0.000500	0.00150		mg/L	1	03/02/21 11:27 AM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	0.000479	0.0000800	0.000200		mg/L	1	03/03/21 04:48 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	1950	30.0	100		mg/L	100	03/04/21 11:01 PM
Fluoride	<0.500	0.500	2.00		mg/L	5	03/05/21 05:57 AM
Sulfate	3050	100	300		mg/L	100	03/04/21 11:01 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.9	1	03/04/21 11:24 AM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.9	1	03/04/21 11:24 AM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.9	1	03/04/21 11:24 AM
Alkalinity, Total (As CaCO3)	<20.0	20.0	20.0		mg/L @ pH 3.9	1	03/04/21 11:24 AM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	8000	200	200		mg/L	1	03/01/21 04:00 PM

Qualifiers:

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DF- Dilution Factor
N - Parameter not NELAP certified
See Final Page of Report for MQLs and MDLs
S - Spike Recovery outside control limits
C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

DHL Analytical, Inc.

Date: *09-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	MW-03
Project:	SMEC, Christine, Texas	**Lab ID:**	2102162-03
Project No:	5076-109	**Collection Date:**	02/24/21 02:18 PM
Lab Order:	2102162	**Matrix:**	AQUEOUS

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Antimony	<0.000800	0.000800	0.00250		mg/L	1	03/02/21 11:29 AM
Arsenic	0.0246	0.00200	0.00500		mg/L	1	03/02/21 11:29 AM
Barium	0.0120	0.00300	0.0100		mg/L	1	03/02/21 11:29 AM
Beryllium	0.0189	0.000300	0.00100		mg/L	1	03/02/21 11:29 AM
Boron	12.8	0.500	1.50		mg/L	50	03/03/21 04:00 PM
Cadmium	0.0480	0.000300	0.00100		mg/L	1	03/02/21 11:29 AM
Calcium	555	20.0	60.0		mg/L	200	03/03/21 12:20 PM
Chromium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 11:29 AM
Cobalt	0.294	0.00300	0.00500		mg/L	1	03/02/21 11:29 AM
Lead	0.000398	0.000300	0.00100	J	mg/L	1	03/02/21 11:29 AM
Lithium	1.41	0.00500	0.0100		mg/L	1	03/02/21 11:29 AM
Magnesium	101	5.00	15.0		mg/L	50	03/03/21 04:00 PM
Molybdenum	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 11:29 AM
Potassium	36.7	5.00	15.0		mg/L	50	03/03/21 04:00 PM
Selenium	0.230	0.00200	0.00500		mg/L	1	03/02/21 11:29 AM
Sodium	2320	20.0	60.0		mg/L	200	03/03/21 12:20 PM
Thallium	0.00211	0.000500	0.00150		mg/L	1	03/02/21 11:29 AM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	03/03/21 04:50 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	1990	30.0	100		mg/L	100	03/04/21 11:17 PM
Fluoride	1.39	0.500	2.00	J	mg/L	5	03/05/21 06:13 AM
Sulfate	4170	100	300		mg/L	100	03/04/21 11:17 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.64	1	03/04/21 11:25 AM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.64	1	03/04/21 11:25 AM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.64	1	03/04/21 11:25 AM
Alkalinity, Total (As CaCO3)	<20.0	20.0	20.0		mg/L @ pH 3.64	1	03/04/21 11:25 AM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	9280	200	200		mg/L	1	03/01/21 04:00 PM

Qualifiers:

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- J - Analyte detected between SDL and RL
- B - Analyte detected in the associated Method Blank
- DF- Dilution Factor
- N - Parameter not NELAP certified
- See Final Page of Report for MQLs and MDLs
- S - Spike Recovery outside control limits
- C - Sample Result or QC discussed in Case Narrative
- RL - Reporting Limit (MQL adjusted for moisture and sample size)
- SDL - Sample Detection Limit
- E - TPH pattern not Gas or Diesel Range Pattern

DHL Analytical, Inc.

Date: *09-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	AP-32
Project:	SMEC, Christine, Texas	**Lab ID:**	2102162-04
Project No:	5076-109	**Collection Date:**	02/24/21 04:24 PM
Lab Order:	2102162	**Matrix:**	AQUEOUS

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Antimony	<0.000800	0.000800	0.00250		mg/L	1	03/02/21 11:31 AM
Arsenic	0.0484	0.00200	0.00500		mg/L	1	03/02/21 11:31 AM
Barium	0.0183	0.00300	0.0100		mg/L	1	03/02/21 11:31 AM
Beryllium	0.0457	0.000300	0.00100		mg/L	1	03/02/21 11:31 AM
Boron	19.7	0.500	1.50		mg/L	50	03/03/21 04:02 PM
Cadmium	0.0729	0.000300	0.00100		mg/L	1	03/02/21 11:31 AM
Calcium	677	20.0	60.0		mg/L	200	03/03/21 12:22 PM
Chromium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 11:31 AM
Cobalt	0.471	0.00300	0.00500		mg/L	1	03/02/21 11:31 AM
Lead	0.000520	0.000300	0.00100	J	mg/L	1	03/02/21 11:31 AM
Lithium	1.21	0.00500	0.0100		mg/L	1	03/02/21 11:31 AM
Magnesium	89.3	5.00	15.0		mg/L	50	03/03/21 04:02 PM
Molybdenum	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 11:31 AM
Potassium	39.5	5.00	15.0		mg/L	50	03/03/21 04:02 PM
Selenium	0.487	0.00200	0.00500		mg/L	1	03/02/21 11:31 AM
Sodium	2340	20.0	60.0		mg/L	200	03/03/21 12:22 PM
Thallium	0.00448	0.000500	0.00150		mg/L	1	03/02/21 11:31 AM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	0.00164	0.0000800	0.000200		mg/L	1	03/03/21 04:53 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	2930	30.0	100		mg/L	100	03/04/21 11:33 PM
Fluoride	1.37	0.500	2.00	J	mg/L	5	03/05/21 06:29 AM
Sulfate	3290	100	300		mg/L	100	03/04/21 11:33 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.55	1	03/04/21 11:28 AM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.55	1	03/04/21 11:28 AM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.55	1	03/04/21 11:28 AM
Alkalinity, Total (As CaCO3)	<20.0	20.0	20.0		mg/L @ pH 3.55	1	03/04/21 11:28 AM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	9740	200	200		mg/L	1	03/01/21 04:00 PM

Qualifiers:

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- S - Spike Recovery outside control limits
- C - Sample Result or QC discussed in Case Narrative
- RL - Reporting Limit (MQL adjusted for moisture and sample size)
- SDL - Sample Detection Limit
- E - TPH pattern not Gas or Diesel Range Pattern

See Final Page of Report for MQLs and MDLs

DHL Analytical, Inc.

Date: *09-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	AP-33
Project:	SMEC, Christine, Texas	**Lab ID:**	2102162-05
Project No:	5076-109	**Collection Date:**	02/24/21 04:32 PM
Lab Order:	2102162	**Matrix:**	AQUEOUS

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Antimony	<0.000800	0.000800	0.00250		mg/L	1	03/02/21 11:33 AM
Arsenic	0.0751	0.00200	0.00500		mg/L	1	03/02/21 11:33 AM
Barium	0.0186	0.00300	0.0100		mg/L	1	03/02/21 11:33 AM
Beryllium	0.214	0.000300	0.00100		mg/L	1	03/02/21 11:33 AM
Boron	61.2	1.00	3.00		mg/L	100	03/03/21 04:05 PM
Cadmium	0.114	0.000300	0.00100		mg/L	1	03/02/21 11:33 AM
Calcium	782	10.0	30.0		mg/L	100	03/03/21 04:05 PM
Chromium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 11:33 AM
Cobalt	1.05	0.00300	0.00500		mg/L	1	03/02/21 11:33 AM
Lead	0.000578	0.000300	0.00100	J	mg/L	1	03/02/21 11:33 AM
Lithium	0.873	0.00500	0.0100		mg/L	1	03/02/21 11:33 AM
Magnesium	199	10.0	30.0		mg/L	100	03/03/21 04:05 PM
Molybdenum	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 11:33 AM
Potassium	27.5	0.500	1.50		mg/L	5	03/04/21 12:15 PM
Selenium	0.772	0.00200	0.00500		mg/L	1	03/02/21 11:33 AM
Sodium	2720	50.0	150		mg/L	500	03/03/21 12:25 PM
Thallium	0.00569	0.000500	0.00150		mg/L	1	03/02/21 11:33 AM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	0.00466	0.0000800	0.000200		mg/L	1	03/03/21 04:55 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	4500	30.0	100		mg/L	100	03/04/21 11:49 PM
Fluoride	3.88	0.500	2.00		mg/L	5	03/05/21 06:45 AM
Sulfate	3300	100	300		mg/L	100	03/04/21 11:49 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.41	1	03/04/21 11:29 AM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.41	1	03/04/21 11:29 AM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.41	1	03/04/21 11:29 AM
Alkalinity, Total (As CaCO3)	<20.0	20.0	20.0		mg/L @ pH 3.41	1	03/04/21 11:29 AM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	12200	200	200		mg/L	1	03/01/21 04:00 PM

Qualifiers:

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See Final Page of Report for MQLs and MDLs
S - Spike Recovery outside control limits
C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

DHL Analytical, Inc.

Date: *09-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	PZ-05
Project:	SMEC, Christine, Texas	**Lab ID:**	2102162-06
Project No:	5076-109	**Collection Date:**	02/24/21 05:30 PM
Lab Order:	2102162	**Matrix:**	AQUEOUS

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Antimony	<0.000800	0.000800	0.00250		mg/L	1	03/02/21 11:35 AM
Arsenic	0.0438	0.00200	0.00500		mg/L	1	03/02/21 11:35 AM
Barium	0.0173	0.00300	0.0100		mg/L	1	03/02/21 11:35 AM
Beryllium	0.159	0.000300	0.00100		mg/L	1	03/02/21 11:35 AM
Boron	26.4	1.00	3.00		mg/L	100	03/03/21 01:16 PM
Cadmium	0.0659	0.000300	0.00100		mg/L	1	03/02/21 11:35 AM
Calcium	651	10.0	30.0		mg/L	100	03/03/21 01:16 PM
Chromium	0.00302	0.00200	0.00500	J	mg/L	1	03/02/21 11:35 AM
Cobalt	0.782	0.00300	0.00500		mg/L	1	03/02/21 11:35 AM
Lead	0.000747	0.000300	0.00100	J	mg/L	1	03/02/21 11:35 AM
Lithium	0.756	0.00500	0.0100		mg/L	1	03/02/21 11:35 AM
Magnesium	117	10.0	30.0		mg/L	100	03/03/21 01:16 PM
Molybdenum	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 11:35 AM
Potassium	20.9	0.100	0.300		mg/L	1	03/02/21 11:35 AM
Selenium	0.519	0.00200	0.00500		mg/L	1	03/02/21 11:35 AM
Sodium	1780	10.0	30.0		mg/L	100	03/03/21 01:16 PM
Thallium	0.00270	0.000500	0.00150		mg/L	1	03/02/21 11:35 AM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	0.000745	0.0000800	0.000200		mg/L	1	03/03/21 04:57 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	2480	30.0	100		mg/L	100	03/05/21 12:05 AM
Fluoride	1.09	0.500	2.00	J	mg/L	5	03/05/21 07:01 AM
Sulfate	2930	100	300		mg/L	100	03/05/21 12:05 AM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.55	1	03/04/21 11:30 AM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.55	1	03/04/21 11:30 AM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.55	1	03/04/21 11:30 AM
Alkalinity, Total (As CaCO3)	<20.0	20.0	20.0		mg/L @ pH 3.55	1	03/04/21 11:30 AM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	8360	200	200		mg/L	1	03/02/21 04:50 PM

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S - Spike Recovery outside control limits
C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

DHL Analytical, Inc.

Date: *09-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	FB-2-2-24-21
Project:	SMEC, Christine, Texas	**Lab ID:**	2102162-07
Project No:	5076-109	**Collection Date:**	02/24/21 06:17 PM
Lab Order:	2102162	**Matrix:**	FIELD BLANK

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Antimony	<0.000800	0.000800	0.00250		mg/L	1	03/02/21 11:37 AM
Arsenic	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 11:37 AM
Barium	<0.00300	0.00300	0.0100		mg/L	1	03/02/21 11:37 AM
Beryllium	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 11:37 AM
Boron	0.0383	0.0100	0.0300		mg/L	1	03/03/21 12:29 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 11:37 AM
Calcium	0.461	0.100	0.300		mg/L	1	03/03/21 12:29 PM
Chromium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 11:37 AM
Cobalt	<0.00300	0.00300	0.00500		mg/L	1	03/02/21 11:37 AM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 11:37 AM
Lithium	<0.00500	0.00500	0.0100		mg/L	1	03/02/21 11:37 AM
Magnesium	<0.100	0.100	0.300		mg/L	1	03/02/21 11:37 AM
Molybdenum	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 11:37 AM
Potassium	0.197	0.100	0.300	J	mg/L	1	03/03/21 12:29 PM
Selenium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 11:37 AM
Sodium	<0.100	0.100	0.300		mg/L	1	03/03/21 12:29 PM
Thallium	<0.000500	0.000500	0.00150		mg/L	1	03/02/21 11:37 AM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	03/03/21 05:00 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	<0.300	0.300	1.00		mg/L	1	03/04/21 05:25 PM
Fluoride	<0.100	0.100	0.400		mg/L	1	03/04/21 05:25 PM
Sulfate	<1.00	1.00	3.00		mg/L	1	03/04/21 05:25 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.51	1	03/04/21 11:32 AM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.51	1	03/04/21 11:32 AM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.51	1	03/04/21 11:32 AM
Alkalinity, Total (As CaCO3)	<20.0	20.0	20.0		mg/L @ pH 4.51	1	03/04/21 11:32 AM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	<10.0	10.0	10.0		mg/L	1	03/02/21 04:50 PM

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C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

DHL Analytical, Inc.

Date: *09-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	EB-1-2-24-21
Project:	SMEC, Christine, Texas	**Lab ID:**	2102162-08
Project No:	5076-109	**Collection Date:**	02/24/21 06:45 PM
Lab Order:	2102162	**Matrix:**	EQUIP BLANK

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Antimony	<0.000800	0.000800	0.00250		mg/L	1	03/02/21 11:39 AM
Arsenic	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 11:39 AM
Barium	<0.00300	0.00300	0.0100		mg/L	1	03/02/21 11:39 AM
Beryllium	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 11:39 AM
Boron	0.0374	0.0100	0.0300		mg/L	1	03/03/21 12:31 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 11:39 AM
Calcium	0.480	0.100	0.300		mg/L	1	03/03/21 12:31 PM
Chromium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 11:39 AM
Cobalt	<0.00300	0.00300	0.00500		mg/L	1	03/02/21 11:39 AM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 11:39 AM
Lithium	<0.00500	0.00500	0.0100		mg/L	1	03/02/21 11:39 AM
Magnesium	<0.100	0.100	0.300		mg/L	1	03/02/21 11:39 AM
Molybdenum	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 11:39 AM
Potassium	<0.100	0.100	0.300		mg/L	1	03/02/21 11:39 AM
Selenium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 11:39 AM
Sodium	0.308	0.100	0.300		mg/L	1	03/03/21 12:31 PM
Thallium	<0.000500	0.000500	0.00150		mg/L	1	03/02/21 11:39 AM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	03/03/21 05:02 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	<0.300	0.300	1.00		mg/L	1	03/05/21 02:58 PM
Fluoride	<0.100	0.100	0.400		mg/L	1	03/05/21 02:58 PM
Sulfate	<1.00	1.00	3.00		mg/L	1	03/05/21 02:58 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.46	1	03/04/21 11:34 AM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.46	1	03/04/21 11:34 AM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.46	1	03/04/21 11:34 AM
Alkalinity, Total (As CaCO3)	<20.0	20.0	20.0		mg/L @ pH 4.46	1	03/04/21 11:34 AM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	<10.0	10.0	10.0		mg/L	1	03/02/21 04:50 PM

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DHL Analytical, Inc.

Date: *09-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	PZ-02
Project:	SMEC, Christine, Texas	**Lab ID:**	2102162-09
Project No:	5076-109	**Collection Date:**	02/24/21 11:15 AM
Lab Order:	2102162	**Matrix:**	AQUEOUS

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Antimony	<0.000800	0.000800	0.00250		mg/L	1	03/02/21 11:41 AM
Arsenic	0.00513	0.00200	0.00500		mg/L	1	03/02/21 11:41 AM
Barium	0.0702	0.00300	0.0100		mg/L	1	03/02/21 11:41 AM
Beryllium	0.00285	0.000300	0.00100		mg/L	1	03/02/21 11:41 AM
Boron	7.15	0.200	0.600		mg/L	20	03/03/21 04:07 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 11:41 AM
Calcium	799	20.0	60.0		mg/L	200	03/03/21 12:34 PM
Chromium	0.0137	0.00200	0.00500		mg/L	1	03/02/21 11:41 AM
Cobalt	0.0132	0.00300	0.00500		mg/L	1	03/02/21 11:41 AM
Lead	0.00743	0.000300	0.00100		mg/L	1	03/02/21 11:41 AM
Lithium	1.40	0.00500	0.0100		mg/L	1	03/02/21 11:41 AM
Magnesium	128	2.00	6.00		mg/L	20	03/03/21 04:07 PM
Molybdenum	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 11:41 AM
Potassium	54.6	2.00	6.00		mg/L	20	03/03/21 04:07 PM
Selenium	0.00566	0.00200	0.00500		mg/L	1	03/02/21 11:41 AM
Sodium	2510	20.0	60.0		mg/L	200	03/03/21 12:34 PM
Thallium	0.00170	0.000500	0.00150		mg/L	1	03/02/21 11:41 AM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	03/03/21 05:04 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	3900	30.0	100		mg/L	100	03/05/21 04:02 PM
Fluoride	<0.500	0.500	2.00		mg/L	5	03/05/21 09:38 PM
Sulfate	2620	100	300		mg/L	100	03/05/21 04:02 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	92.3	10.0	20.0		mg/L @ pH 4.52	1	03/04/21 11:49 AM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.52	1	03/04/21 11:49 AM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.52	1	03/04/21 11:49 AM
Alkalinity, Total (As CaCO3)	92.3	20.0	20.0		mg/L @ pH 4.52	1	03/04/21 11:49 AM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	10500	200	200		mg/L	1	03/02/21 04:50 PM

Qualifiers:

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J - Analyte detected between SDL and RL
B - Analyte detected in the associated Method Blank
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S - Spike Recovery outside control limits
C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
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DHL Analytical, Inc.

Date: *09-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	AP-34
Project:	SMEC, Christine, Texas	**Lab ID:**	2102162-10
Project No:	5076-109	**Collection Date:**	02/25/21 09:26 AM
Lab Order:	2102162	**Matrix:**	AQUEOUS

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Antimony	<0.000800	0.000800	0.00250		mg/L	1	03/02/21 11:42 AM
Arsenic	0.0544	0.00200	0.00500		mg/L	1	03/02/21 11:42 AM
Barium	0.0139	0.00300	0.0100		mg/L	1	03/02/21 11:42 AM
Beryllium	0.218	0.000300	0.00100		mg/L	1	03/02/21 11:42 AM
Boron	24.1	1.00	3.00		mg/L	100	03/03/21 12:36 PM
Cadmium	0.0242	0.000300	0.00100		mg/L	1	03/02/21 11:42 AM
Calcium	693	10.0	30.0		mg/L	100	03/03/21 12:36 PM
Chromium	0.00418	0.00200	0.00500	J	mg/L	1	03/02/21 11:42 AM
Cobalt	0.963	0.00300	0.00500		mg/L	1	03/02/21 11:42 AM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 11:42 AM
Lithium	0.988	0.00500	0.0100		mg/L	1	03/02/21 11:42 AM
Magnesium	148	10.0	30.0		mg/L	100	03/03/21 12:36 PM
Molybdenum	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 11:42 AM
Potassium	14.2	0.100	0.300		mg/L	1	03/02/21 11:42 AM
Selenium	0.583	0.00200	0.00500		mg/L	1	03/02/21 11:42 AM
Sodium	1830	10.0	30.0		mg/L	100	03/03/21 12:36 PM
Thallium	0.00203	0.000500	0.00150		mg/L	1	03/02/21 11:42 AM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	0.00265	0.0000800	0.000200		mg/L	1	03/03/21 05:11 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	2950	30.0	100		mg/L	100	03/05/21 04:50 PM
Fluoride	4.58	0.500	2.00		mg/L	5	03/05/21 09:54 PM
Sulfate	3350	100	300		mg/L	100	03/05/21 04:50 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.5	1	03/04/21 11:50 AM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.5	1	03/04/21 11:50 AM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.5	1	03/04/21 11:50 AM
Alkalinity, Total (As CaCO3)	<20.0	20.0	20.0		mg/L @ pH 3.5	1	03/04/21 11:50 AM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	8980	200	200		mg/L	1	03/02/21 04:50 PM

Qualifiers:

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DF- Dilution Factor
N - Parameter not NELAP certified
See Final Page of Report for MQLs and MDLs
S - Spike Recovery outside control limits
C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

DHL Analytical, Inc.

Date: *09-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	AP-35
Project:	SMEC, Christine, Texas	**Lab ID:**	2102162-11
Project No:	5076-109	**Collection Date:**	02/25/21 10:15 AM
Lab Order:	2102162	**Matrix:**	AQUEOUS

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Antimony	<0.000800	0.000800	0.00250		mg/L	1	03/02/21 12:15 PM
Arsenic	0.0177	0.00200	0.00500		mg/L	1	03/02/21 12:15 PM
Barium	0.0218	0.00300	0.0100		mg/L	1	03/02/21 12:15 PM
Beryllium	0.147	0.000300	0.00100		mg/L	1	03/02/21 12:15 PM
Boron	26.1	1.00	3.00		mg/L	100	03/03/21 01:05 PM
Cadmium	0.00906	0.000300	0.00100		mg/L	1	03/02/21 12:15 PM
Calcium	629	10.0	30.0		mg/L	100	03/03/21 01:05 PM
Chromium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 12:15 PM
Cobalt	0.130	0.00300	0.00500		mg/L	1	03/02/21 12:15 PM
Lead	0.00517	0.000300	0.00100		mg/L	1	03/02/21 12:15 PM
Lithium	0.989	0.00500	0.0100		mg/L	1	03/02/21 12:15 PM
Magnesium	127	10.0	30.0		mg/L	100	03/03/21 01:05 PM
Molybdenum	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 12:15 PM
Potassium	48.8	1.00	3.00		mg/L	10	03/04/21 12:18 PM
Selenium	0.183	0.00200	0.00500		mg/L	1	03/02/21 12:15 PM
Sodium	1700	10.0	30.0		mg/L	100	03/03/21 01:05 PM
Thallium	0.00666	0.000500	0.00150		mg/L	1	03/02/21 12:15 PM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	0.00149	0.0000800	0.000200		mg/L	1	03/03/21 05:13 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	2200	30.0	100		mg/L	100	03/05/21 05:06 PM
Fluoride	3.82	0.500	2.00		mg/L	5	03/05/21 10:10 PM
Sulfate	2900	100	300		mg/L	100	03/05/21 05:06 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.69	1	03/04/21 11:52 AM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.69	1	03/04/21 11:52 AM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.69	1	03/04/21 11:52 AM
Alkalinity, Total (As CaCO3)	<20.0	20.0	20.0		mg/L @ pH 3.69	1	03/04/21 11:52 AM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	8300	200	200		mg/L	1	03/02/21 04:50 PM

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C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

DHL Analytical, Inc.

Date: *09-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	Dup-2
Project:	SMEC, Christine, Texas	**Lab ID:**	2102162-12
Project No:	5076-109	**Collection Date:**	02/25/21
Lab Order:	2102162	**Matrix:**	AQUEOUS

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Antimony	<0.000800	0.000800	0.00250		mg/L	1	03/02/21 12:17 PM
Arsenic	0.0170	0.00200	0.00500		mg/L	1	03/02/21 12:17 PM
Barium	0.0206	0.00300	0.0100		mg/L	1	03/02/21 12:17 PM
Beryllium	0.134	0.000300	0.00100		mg/L	1	03/02/21 12:17 PM
Boron	28.8	1.00	3.00		mg/L	100	03/03/21 01:07 PM
Cadmium	0.00938	0.000300	0.00100		mg/L	1	03/02/21 12:17 PM
Calcium	632	10.0	30.0		mg/L	100	03/03/21 01:07 PM
Chromium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 12:17 PM
Cobalt	0.133	0.00300	0.00500		mg/L	1	03/02/21 12:17 PM
Lead	0.00486	0.000300	0.00100		mg/L	1	03/02/21 12:17 PM
Lithium	0.996	0.00500	0.0100		mg/L	1	03/02/21 12:17 PM
Magnesium	125	10.0	30.0		mg/L	100	03/03/21 01:07 PM
Molybdenum	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 12:17 PM
Potassium	48.9	1.00	3.00		mg/L	10	03/04/21 12:20 PM
Selenium	0.189	0.00200	0.00500		mg/L	1	03/02/21 12:17 PM
Sodium	1680	10.0	30.0		mg/L	100	03/03/21 01:07 PM
Thallium	0.00675	0.000500	0.00150		mg/L	1	03/02/21 12:17 PM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	0.000935	0.0000800	0.000200		mg/L	1	03/03/21 05:15 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	2220	30.0	100		mg/L	100	03/05/21 05:22 PM
Fluoride	4.33	0.500	2.00		mg/L	5	03/05/21 10:26 PM
Sulfate	2900	100	300		mg/L	100	03/05/21 05:22 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.68	1	03/04/21 11:53 AM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.68	1	03/04/21 11:53 AM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.68	1	03/04/21 11:53 AM
Alkalinity, Total (As CaCO3)	<20.0	20.0	20.0		mg/L @ pH 3.68	1	03/04/21 11:53 AM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	8300	200	200		mg/L	1	03/02/21 04:50 PM

Qualifiers:

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- DF- Dilution Factor
- N - Parameter not NELAP certified
- S - Spike Recovery outside control limits
- C - Sample Result or QC discussed in Case Narrative
- RL - Reporting Limit (MQL adjusted for moisture and sample size)
- SDL - Sample Detection Limit
- E - TPH pattern not Gas or Diesel Range Pattern

See Final Page of Report for MQLs and MDLs

DHL Analytical, Inc.

Date: *09-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	AP-36
Project:	SMEC, Christine, Texas	**Lab ID:**	2102162-13
Project No:	5076-109	**Collection Date:**	02/25/21 11:25 AM
Lab Order:	2102162	**Matrix:**	AQUEOUS

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Antimony	<0.000800	0.000800	0.00250		mg/L	1	03/02/21 12:19 PM
Arsenic	0.00690	0.00200	0.00500		mg/L	1	03/02/21 12:19 PM
Barium	0.0185	0.00300	0.0100		mg/L	1	03/02/21 12:19 PM
Beryllium	0.00818	0.000300	0.00100		mg/L	1	03/02/21 12:19 PM
Boron	2.38	0.100	0.300		mg/L	10	03/03/21 04:11 PM
Cadmium	0.000383	0.000300	0.00100	J	mg/L	1	03/02/21 12:19 PM
Calcium	629	10.0	30.0		mg/L	100	03/03/21 01:09 PM
Chromium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 12:19 PM
Cobalt	0.0592	0.00300	0.00500		mg/L	1	03/02/21 12:19 PM
Lead	0.000386	0.000300	0.00100	J	mg/L	1	03/02/21 12:19 PM
Lithium	0.744	0.00500	0.0100		mg/L	1	03/02/21 12:19 PM
Magnesium	97.3	1.00	3.00		mg/L	10	03/03/21 04:11 PM
Molybdenum	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 12:19 PM
Potassium	37.3	1.00	3.00		mg/L	10	03/03/21 04:11 PM
Selenium	0.0444	0.00200	0.00500		mg/L	1	03/02/21 12:19 PM
Sodium	1390	10.0	30.0		mg/L	100	03/03/21 01:09 PM
Thallium	0.000937	0.000500	0.00150	J	mg/L	1	03/02/21 12:19 PM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	03/03/21 05:18 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	1780	30.0	100		mg/L	100	03/05/21 05:38 PM
Fluoride	1.06	0.500	2.00	J	mg/L	5	03/06/21 12:02 AM
Sulfate	2640	100	300		mg/L	100	03/05/21 05:38 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.26	1	03/04/21 11:55 AM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.26	1	03/04/21 11:55 AM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.26	1	03/04/21 11:55 AM
Alkalinity, Total (As CaCO3)	<20.0	20.0	20.0		mg/L @ pH 4.26	1	03/04/21 11:55 AM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	6760	50.0	50.0		mg/L	1	03/02/21 04:50 PM

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C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

DHL Analytical, Inc.

Date: *09-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	PZ-06
Project:	SMEC, Christine, Texas	**Lab ID:**	2102162-14
Project No:	5076-109	**Collection Date:**	02/25/21 12:15 PM
Lab Order:	2102162	**Matrix:**	AQUEOUS

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Antimony	<0.000800	0.000800	0.00250		mg/L	1	03/02/21 12:20 PM
Arsenic	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 12:20 PM
Barium	0.0208	0.00300	0.0100		mg/L	1	03/02/21 12:20 PM
Beryllium	0.00181	0.000300	0.00100		mg/L	1	03/02/21 12:20 PM
Boron	2.79	0.100	0.300		mg/L	10	03/03/21 04:18 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 12:20 PM
Calcium	648	10.0	30.0		mg/L	100	03/03/21 01:11 PM
Chromium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 12:20 PM
Cobalt	<0.00300	0.00300	0.00500		mg/L	1	03/02/21 12:20 PM
Lead	0.000303	0.000300	0.00100	J	mg/L	1	03/02/21 12:20 PM
Lithium	0.771	0.00500	0.0100		mg/L	1	03/02/21 12:20 PM
Magnesium	96.4	1.00	3.00		mg/L	10	03/03/21 04:18 PM
Molybdenum	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 12:20 PM
Potassium	42.2	1.00	3.00		mg/L	10	03/03/21 04:18 PM
Selenium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 12:20 PM
Sodium	1530	10.0	30.0		mg/L	100	03/03/21 01:11 PM
Thallium	<0.000500	0.000500	0.00150		mg/L	1	03/02/21 12:20 PM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	03/03/21 05:20 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	1720	30.0	100		mg/L	100	03/05/21 05:54 PM
Fluoride	1.07	0.500	2.00	J	mg/L	5	03/06/21 12:18 AM
Sulfate	2840	100	300		mg/L	100	03/05/21 05:54 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	77.2	10.0	20.0		mg/L @ pH 4.52	1	03/04/21 12:03 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.52	1	03/04/21 12:03 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.52	1	03/04/21 12:03 PM
Alkalinity, Total (As CaCO3)	77.2	20.0	20.0		mg/L @ pH 4.52	1	03/04/21 12:03 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	7090	50.0	50.0		mg/L	1	03/02/21 04:50 PM

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C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
SDL - Sample Detection Limit
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DHL Analytical, Inc.

Date: *09-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	EB3-2-25-21
Project:	SMEC, Christine, Texas	**Lab ID:**	2102162-15
Project No:	5076-109	**Collection Date:**	02/25/21 03:27 PM
Lab Order:	2102162	**Matrix:**	EQUIP BLANK

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Antimony	<0.000800	0.000800	0.00250		mg/L	1	03/02/21 12:22 PM
Arsenic	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 12:22 PM
Barium	<0.00300	0.00300	0.0100		mg/L	1	03/02/21 12:22 PM
Beryllium	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 12:22 PM
Boron	0.0364	0.0100	0.0300		mg/L	1	03/03/21 01:14 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 12:22 PM
Calcium	0.232	0.100	0.300	J	mg/L	1	03/03/21 01:14 PM
Chromium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 12:22 PM
Cobalt	<0.00300	0.00300	0.00500		mg/L	1	03/02/21 12:22 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 12:22 PM
Lithium	<0.00500	0.00500	0.0100		mg/L	1	03/02/21 12:22 PM
Magnesium	<0.100	0.100	0.300		mg/L	1	03/02/21 12:22 PM
Molybdenum	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 12:22 PM
Potassium	<0.100	0.100	0.300		mg/L	1	03/02/21 12:22 PM
Selenium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 12:22 PM
Sodium	0.179	0.100	0.300	J	mg/L	1	03/03/21 01:14 PM
Thallium	<0.000500	0.000500	0.00150		mg/L	1	03/02/21 12:22 PM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	03/03/21 05:22 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	<0.300	0.300	1.00		mg/L	1	03/05/21 03:14 PM
Fluoride	<0.100	0.100	0.400		mg/L	1	03/05/21 03:14 PM
Sulfate	<1.00	1.00	3.00		mg/L	1	03/05/21 03:14 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.5	1	03/04/21 12:05 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.5	1	03/04/21 12:05 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.5	1	03/04/21 12:05 PM
Alkalinity, Total (As CaCO3)	<20.0	20.0	20.0		mg/L @ pH 4.5	1	03/04/21 12:05 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	<10.0	10.0	10.0		mg/L	1	03/02/21 04:50 PM

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B - Analyte detected in the associated Method Blank
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RL - Reporting Limit (MQL adjusted for moisture and sample size)
SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

CLIENT: GSI Environmental, Inc
Work Order: 2102162
Project: SMEC, Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC2_HG_210212B

Sample ID: **DCS-99502**	Batch ID: **99502**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **DCS**	Run ID: **CETAC2_HG_210212B**	Analysis Date: **2/12/2021 1:28:16 PM**	Prep Date: **2/11/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.000178	0.000200	0.000200	0	89.0	82	119	0	0	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102162
Project: SMEC, Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC2_HG_210303A

The QC data in batch 99620 applies to the following samples: 2102162-01A, 2102162-02A, 2102162-03A, 2102162-04A, 2102162-05A, 2102162-06A, 2102162-07A, 2102162-08A, 2102162-09A, 2102162-10A, 2102162-11A, 2102162-12A, 2102162-13A, 2102162-14A, 2102162-15A

Sample ID: **MB-99620** Batch ID: **99620** TestNo: **SW7470A** Units: **mg/L**
SampType: **MBLK** Run ID: **CETAC2_HG_210303A** Analysis Date: **3/3/2021 4:28:18 PM** Prep Date: **2/26/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	<0.0000800	0.000200								

Sample ID: **LCS-99620** Batch ID: **99620** TestNo: **SW7470A** Units: **mg/L**
SampType: **LCS** Run ID: **CETAC2_HG_210303A** Analysis Date: **3/3/2021 4:30:34 PM** Prep Date: **2/26/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00184	0.000200	0.00200	0	92.0	85	115			

Sample ID: **LCSD-99620** Batch ID: **99620** TestNo: **SW7470A** Units: **mg/L**
SampType: **LCSD** Run ID: **CETAC2_HG_210303A** Analysis Date: **3/3/2021 4:32:50 PM** Prep Date: **2/26/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00188	0.000200	0.00200	0	94.0	85	115	2.15	15	

Sample ID: **2102162-01A MS** Batch ID: **99620** TestNo: **SW7470A** Units: **mg/L**
SampType: **MS** Run ID: **CETAC2_HG_210303A** Analysis Date: **3/3/2021 4:39:38 PM** Prep Date: **2/26/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00184	0.000200	0.00200	0	92.0	80	120			

Sample ID: **2102162-01A MSD** Batch ID: **99620** TestNo: **SW7470A** Units: **mg/L**
SampType: **MSD** Run ID: **CETAC2_HG_210303A** Analysis Date: **3/3/2021 4:41:53 PM** Prep Date: **2/26/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00182	0.000200	0.00200	0	91.0	80	120	1.09	15	

Sample ID: **2102162-01A SD** Batch ID: **99620** TestNo: **SW7470A** Units: **mg/L**
SampType: **SD** Run ID: **CETAC2_HG_210303A** Analysis Date: **3/3/2021 4:44:09 PM** Prep Date: **2/26/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	<0.000400	0.00100	0	0				0	10	

Sample ID: **2102162-01A PDS** Batch ID: **99620** TestNo: **SW7470A** Units: **mg/L**
SampType: **PDS** Run ID: **CETAC2_HG_210303A** Analysis Date: **3/3/2021 4:46:25 PM** Prep Date: **2/26/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00241	0.000200	0.00250	0	96.4	85	115			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102162
Project: SMEC, Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC2_HG_210303A

Sample ID: **ICV-210222**	Batch ID: **R114323**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **ICV**	Run ID: **CETAC2_HG_210303A**	Analysis Date: **3/3/2021 4:23:44 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00408	0.000200	0.00400	0	102	90	110			

Sample ID: **CCV1-210303**	Batch ID: **R114323**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **CCV**	Run ID: **CETAC2_HG_210303A**	Analysis Date: **3/3/2021 5:06:51 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00197	0.000200	0.00200	0	98.5	90	110			

Sample ID: **CCV2-210303**	Batch ID: **R114323**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **CCV**	Run ID: **CETAC2_HG_210303A**	Analysis Date: **3/3/2021 5:52:24 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00204	0.000200	0.00200	0	102	90	110			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102162
Project: SMEC, Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_210126C

Sample ID: **DCS1-99275**	Batch ID: **99275**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **DCS**	Run ID: **ICP-MS4_210126C**	Analysis Date: **1/26/2021 12:03:00 PM**	Prep Date: **1/25/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.00102	0.00250	0.00100	0	102	70	130	0	0	
Beryllium	0.000591	0.00100	0.000500	0	118	70	130	0	0	
Cadmium	0.000458	0.00100	0.000500	0	91.6	70	130	0	0	
Lead	0.000565	0.00100	0.000500	0	113	70	130	0	0	
Thallium	0.000517	0.00150	0.000500	0	103	70	130	0	0	

Sample ID: **DCS2-99275**	Batch ID: **99275**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **DCS2**	Run ID: **ICP-MS4_210126C**	Analysis Date: **1/26/2021 12:05:00 PM**	Prep Date: **1/25/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	0.352	0.300	0.300	0	117	70	130	0	0	
Magnesium	0.311	0.300	0.300	0	104	70	130	0	0	
Potassium	0.307	0.300	0.300	0	102	70	130	0	0	
Sodium	0.311	0.300	0.300	0	104	70	130	0	0	

Sample ID: **DCS3-99275**	Batch ID: **99275**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **DCS3**	Run ID: **ICP-MS4_210126C**	Analysis Date: **1/26/2021 12:07:00 PM**	Prep Date: **1/25/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.00513	0.00500	0.00500	0	103	70	130	0	0	
Barium	0.00490	0.0100	0.00500	0	97.9	70	130	0	0	
Chromium	0.00525	0.00500	0.00500	0	105	70	130	0	0	
Cobalt	0.00522	0.00500	0.00500	0	104	70	130	0	0	
Lithium	0.00570	0.0100	0.00500	0	114	70	130	0	0	
Molybdenum	0.00507	0.00500	0.00500	0	101	70	130	0	0	
Selenium	0.00515	0.00500	0.00500	0	103	70	130	0	0	

Sample ID: **DCS4-99275**	Batch ID: **99275**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **DCS4**	Run ID: **ICP-MS4_210126C**	Analysis Date: **1/26/2021 12:09:00 PM**	Prep Date: **1/25/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	0.0299	0.0300	0.0300	0	99.8	70	130	0	0	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102162
Project: SMEC, Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_210302C

The QC data in batch 99629 applies to the following samples: 2102162-01A, 2102162-02A, 2102162-03A, 2102162-04A, 2102162-05A, 2102162-06A, 2102162-07A, 2102162-08A, 2102162-09A, 2102162-10A, 2102162-11A, 2102162-12A, 2102162-13A, 2102162-14A, 2102162-15A

Sample ID: **MB-99629** Batch ID: **99629** TestNo: **SW6020B** Units: **mg/L**
SampType: **MBLK** Run ID: **ICP-MS4_210302C** Analysis Date: **3/2/2021 11:15:00 AM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	<0.000800	0.00250								
Arsenic	<0.00200	0.00500								
Barium	<0.00300	0.0100								
Beryllium	<0.000300	0.00100								
Cadmium	<0.000300	0.00100								
Calcium	<0.100	0.300								
Chromium	<0.00200	0.00500								
Cobalt	<0.00300	0.00500								
Lead	<0.000300	0.00100								
Lithium	<0.00500	0.0100								
Magnesium	<0.100	0.300								
Molybdenum	<0.00200	0.00500								
Potassium	<0.100	0.300								
Selenium	<0.00200	0.00500								
Sodium	<0.100	0.300								
Thallium	<0.000500	0.00150								

Sample ID: **LCS-99629** Batch ID: **99629** TestNo: **SW6020B** Units: **mg/L**
SampType: **LCS** Run ID: **ICP-MS4_210302C** Analysis Date: **3/2/2021 11:17:00 AM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.193	0.00250	0.200	0	96.7	80	120			
Arsenic	0.198	0.00500	0.200	0	98.9	80	120			
Barium	0.195	0.0100	0.200	0	97.7	80	120			
Beryllium	0.199	0.00100	0.200	0	99.6	80	120			
Cadmium	0.197	0.00100	0.200	0	98.4	80	120			
Calcium	4.96	0.300	5.00	0	99.3	80	120			
Chromium	0.199	0.00500	0.200	0	99.6	80	120			
Cobalt	0.197	0.00500	0.200	0	98.6	80	120			
Lead	0.190	0.00100	0.200	0	94.9	80	120			
Lithium	0.192	0.0100	0.200	0	95.8	80	120			
Magnesium	4.98	0.300	5.00	0	99.7	80	120			
Molybdenum	0.189	0.00500	0.200	0	94.7	80	120			
Potassium	5.04	0.300	5.00	0	101	80	120			
Selenium	0.199	0.00500	0.200	0	99.7	80	120			
Sodium	4.92	0.300	5.00	0	98.4	80	120			
Thallium	0.195	0.00150	0.200	0	97.5	80	120			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102162
Project: SMEC, Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_210302C

Sample ID: **LCSD-99629**	Batch ID: **99629**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **LCSD**	Run ID: **ICP-MS4_210302C**	Analysis Date: **3/2/2021 11:19:00 AM**	Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.195	0.00250	0.200	0	97.4	80	120	0.779	15	
Arsenic	0.197	0.00500	0.200	0	98.4	80	120	0.579	15	
Barium	0.197	0.0100	0.200	0	98.6	80	120	0.884	15	
Beryllium	0.193	0.00100	0.200	0	96.6	80	120	3.01	15	
Cadmium	0.196	0.00100	0.200	0	97.9	80	120	0.483	15	
Calcium	4.98	0.300	5.00	0	99.7	80	120	0.401	15	
Chromium	0.197	0.00500	0.200	0	98.3	80	120	1.27	15	
Cobalt	0.198	0.00500	0.200	0	98.9	80	120	0.305	15	
Lead	0.193	0.00100	0.200	0	96.5	80	120	1.75	15	
Lithium	0.191	0.0100	0.200	0	95.6	80	120	0.224	15	
Magnesium	4.98	0.300	5.00	0	99.6	80	120	0.065	15	
Molybdenum	0.190	0.00500	0.200	0	95.1	80	120	0.393	15	
Potassium	4.96	0.300	5.00	0	99.2	80	120	1.56	15	
Selenium	0.197	0.00500	0.200	0	98.4	80	120	1.32	15	
Sodium	4.89	0.300	5.00	0	97.7	80	120	0.735	15	
Thallium	0.198	0.00150	0.200	0	98.9	80	120	1.45	15	

Sample ID: **2102162-01A SD**	Batch ID: **99629**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **SD**	Run ID: **ICP-MS4_210302C**	Analysis Date: **3/2/2021 11:25:00 AM**	Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	<0.00400	0.0125	0	0				0	20	
Arsenic	0.0883	0.0250	0	0.0678				26.2	20	R
Barium	0.0252	0.0500	0	0.0242				3.91	20	
Beryllium	0.225	0.00500	0	0.189				17.7	20	
Cadmium	0.508	0.00500	0	0.477				6.28	20	
Chromium	<0.0100	0.0250	0	0.00424				0	20	
Lead	0.00352	0.00500	0	0.00320				9.38	20	
Lithium	2.17	0.0500	0	1.84				16.4	20	
Molybdenum	<0.0100	0.0250	0	0				0	20	
Selenium	0.904	0.0250	0	0.711				24.0	20	R
Thallium	0.00604	0.00750	0	0.00627				3.62	20	

Sample ID: **2102162-01A PDS**	Batch ID: **99629**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **PDS**	Run ID: **ICP-MS4_210302C**	Analysis Date: **3/2/2021 11:48:00 AM**	Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.188	0.00250	0.200	0	93.9	75	125			
Arsenic	0.225	0.00500	0.200	0.0678	78.7	75	125			
Barium	0.224	0.0100	0.200	0.0243	99.7	75	125			
Beryllium	0.309	0.00100	0.200	0.189	60.1	75	125			S

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102162
Project: SMEC, Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_210302C

Sample ID: **2102162-01A PDS** Batch ID: **99629** TestNo: **SW6020B** Units: **mg/L**
SampType: **PDS** Run ID: **ICP-MS4_210302C** Analysis Date: **3/2/2021 11:48:00 AM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.617	0.00100	0.200	0.477	70.1	75	125			S
Chromium	0.181	0.00500	0.200	0.00424	88.6	75	125			
Lead	0.207	0.00100	0.200	0.00320	102	75	125			
Lithium	1.81	0.0100	0.200	1.84	-12.6	75	125			S
Molybdenum	0.184	0.00500	0.200	0	92.2	75	125			
Selenium	0.863	0.00500	0.200	0.711	76.3	75	125			
Thallium	0.217	0.00150	0.200	0.00627	105	75	125			

Sample ID: **2102162-01A MS** Batch ID: **99629** TestNo: **SW6020B** Units: **mg/L**
SampType: **MS** Run ID: **ICP-MS4_210302C** Analysis Date: **3/2/2021 11:50:00 AM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.181	0.00250	0.200	0	90.6	75	125			
Arsenic	0.232	0.00500	0.200	0.0678	82.0	75	125			
Barium	0.217	0.0100	0.200	0.0243	96.5	75	125			
Beryllium	0.311	0.00100	0.200	0.189	61.2	75	125			S
Cadmium	0.636	0.00100	0.200	0.477	79.3	75	125			
Calcium	727	0.300	5.00	724	44.9	75	125			S
Chromium	0.173	0.00500	0.200	0.00424	84.2	75	125			
Cobalt	1.25	0.00500	0.200	1.13	60.2	75	125			S
Lead	0.202	0.00100	0.200	0.00320	99.5	75	125			
Lithium	1.84	0.0100	0.200	1.84	2.87	75	125			S
Magnesium	235	0.300	5.00	235	-4.67	75	125			S
Molybdenum	0.185	0.00500	0.200	0	92.3	75	125			
Potassium	31.0	0.300	5.00	26.1	98.6	75	125			
Selenium	0.915	0.00500	0.200	0.711	102	75	125			
Sodium	2830	0.300	5.00	2910	-1550	75	125			S
Thallium	0.213	0.00150	0.200	0.00627	103	75	125			

Sample ID: **2102162-01A MSD** Batch ID: **99629** TestNo: **SW6020B** Units: **mg/L**
SampType: **MSD** Run ID: **ICP-MS4_210302C** Analysis Date: **3/2/2021 11:52:00 AM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.185	0.00250	0.200	0	92.3	75	125	1.84	15	
Arsenic	0.231	0.00500	0.200	0.0678	81.5	75	125	0.390	15	
Barium	0.220	0.0100	0.200	0.0243	98.1	75	125	1.41	15	
Beryllium	0.310	0.00100	0.200	0.189	60.6	75	125	0.381	15	S
Cadmium	0.629	0.00100	0.200	0.477	76.1	75	125	1.02	15	
Calcium	728	0.300	5.00	724	66.1	75	125	0.146	15	S
Chromium	0.172	0.00500	0.200	0.00424	84.0	75	125	0.227	15	
Cobalt	1.24	0.00500	0.200	1.13	55.9	75	125	0.699	15	S

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102162
Project: SMEC, Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_210302C

Sample ID: **2102162-01A MSD** Batch ID: **99629** TestNo: **SW6020B** Units: **mg/L**
SampType: **MSD** Run ID: **ICP-MS4_210302C** Analysis Date: **3/2/2021 11:52:00 AM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.203	0.00100	0.200	0.00320	99.7	75	125	0.255	15	
Lithium	1.84	0.0100	0.200	1.84	2.05	75	125	0.089	15	S
Magnesium	236	0.300	5.00	235	7.45	75	125	0.258	15	S
Molybdenum	0.187	0.00500	0.200	0	93.5	75	125	1.34	15	
Potassium	31.2	0.300	5.00	26.1	101	75	125	0.446	15	
Selenium	0.905	0.00500	0.200	0.711	96.9	75	125	1.19	15	
Sodium	2810	0.300	5.00	2910	-1940	75	125	0.698	15	S
Thallium	0.213	0.00150	0.200	0.00627	103	75	125	0.062	15	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102162
Project: SMEC, Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_210302C

Sample ID: **ICV-210302**	Batch ID: **R114295**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **ICV**	Run ID: **ICP-MS4_210302C**	Analysis Date: **3/2/2021 10:00:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.0966	0.00250	0.100	0	96.6	90	110			
Arsenic	0.0979	0.00500	0.100	0	97.9	90	110			
Barium	0.100	0.0100	0.100	0	100	90	110			
Beryllium	0.0976	0.00100	0.100	0	97.6	90	110			
Cadmium	0.0995	0.00100	0.100	0	99.5	90	110			
Calcium	2.45	0.300	2.50	0	98.0	90	110			
Chromium	0.104	0.00500	0.100	0	104	90	110			
Cobalt	0.101	0.00500	0.100	0	101	90	110			
Lead	0.0988	0.00100	0.100	0	98.8	90	110			
Lithium	0.0963	0.0100	0.100	0	96.3	90	110			
Magnesium	2.40	0.300	2.50	0	96.1	90	110			
Molybdenum	0.0943	0.00500	0.100	0	94.3	90	110			
Potassium	2.47	0.300	2.50	0	98.7	90	110			
Selenium	0.0996	0.00500	0.100	0	99.6	90	110			
Sodium	2.44	0.300	2.50	0	97.7	90	110			
Thallium	0.0996	0.00150	0.100	0	99.6	90	110			

Sample ID: **LCVL-210302**	Batch ID: **R114295**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **LCVL**	Run ID: **ICP-MS4_210302C**	Analysis Date: **3/2/2021 10:07:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.00201	0.00250	0.00200	0	101	80	120			
Arsenic	0.00514	0.00500	0.00500	0	103	80	120			
Barium	0.00540	0.0100	0.00500	0	108	80	120			
Beryllium	0.000990	0.00100	0.00100	0	99.0	80	120			
Cadmium	0.00114	0.00100	0.00100	0	114	80	120			
Calcium	0.117	0.300	0.100	0	117	80	120			
Chromium	0.00545	0.00500	0.00500	0	109	80	120			
Cobalt	0.00537	0.00500	0.00500	0	107	80	120			
Lead	0.00105	0.00100	0.00100	0	105	80	120			
Lithium	0.0100	0.0100	0.0100	0	100	80	120			
Magnesium	0.107	0.300	0.100	0	107	80	120			
Molybdenum	0.00542	0.00500	0.00500	0	108	80	120			
Potassium	0.109	0.300	0.100	0	109	80	120			
Selenium	0.00539	0.00500	0.00500	0	108	80	120			
Sodium	0.107	0.300	0.100	0	107	80	120			
Thallium	0.00106	0.00150	0.00100	0	106	80	120			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102162
Project: SMEC, Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_210302C

Sample ID: **CCV2-200302**	Batch ID: **R114295**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS4_210302C**	Analysis Date: **3/2/2021 11:03:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.197	0.00250	0.200	0	98.4	90	110			
Arsenic	0.197	0.00500	0.200	0	98.3	90	110			
Barium	0.195	0.0100	0.200	0	97.6	90	110			
Beryllium	0.197	0.00100	0.200	0	98.7	90	110			
Cadmium	0.195	0.00100	0.200	0	97.5	90	110			
Calcium	4.97	0.300	5.00	0	99.4	90	110			
Chromium	0.198	0.00500	0.200	0	99.1	90	110			
Cobalt	0.197	0.00500	0.200	0	98.5	90	110			
Lead	0.192	0.00100	0.200	0	95.8	90	110			
Lithium	0.199	0.0100	0.200	0	99.3	90	110			
Magnesium	4.99	0.300	5.00	0	99.8	90	110			
Molybdenum	0.193	0.00500	0.200	0	96.4	90	110			
Potassium	4.99	0.300	5.00	0	99.8	90	110			
Selenium	0.197	0.00500	0.200	0	98.3	90	110			
Sodium	4.95	0.300	5.00	0	99.0	90	110			
Thallium	0.197	0.00150	0.200	0	98.5	90	110			

Sample ID: **CCV3-200302**	Batch ID: **R114295**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS4_210302C**	Analysis Date: **3/2/2021 12:02:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.196	0.00250	0.200	0	97.9	90	110			
Arsenic	0.193	0.00500	0.200	0	96.3	90	110			
Barium	0.198	0.0100	0.200	0	98.8	90	110			
Beryllium	0.181	0.00100	0.200	0	90.7	90	110			
Cadmium	0.195	0.00100	0.200	0	97.4	90	110			
Calcium	4.90	0.300	5.00	0	97.9	90	110			
Chromium	0.194	0.00500	0.200	0	96.8	90	110			
Cobalt	0.192	0.00500	0.200	0	96.1	90	110			
Lead	0.191	0.00100	0.200	0	95.3	90	110			
Lithium	0.184	0.0100	0.200	0	91.8	90	110			
Magnesium	4.92	0.300	5.00	0	98.5	90	110			
Molybdenum	0.186	0.00500	0.200	0	92.8	90	110			
Potassium	5.01	0.300	5.00	0	100	90	110			
Selenium	0.206	0.00500	0.200	0	103	90	110			
Sodium	5.05	0.300	5.00	0	101	90	110			
Thallium	0.195	0.00150	0.200	0	97.6	90	110			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102162
Project: SMEC, Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_210302C

Sample ID: **CCV4-200302** Batch ID: **R114295** TestNo: **SW6020B** Units: **mg/L**
SampType: **CCV** Run ID: **ICP-MS4_210302C** Analysis Date: **3/2/2021 12:43:00 PM** Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.195	0.00250	0.200	0	97.7	90	110			
Arsenic	0.192	0.00500	0.200	0	95.9	90	110			
Barium	0.197	0.0100	0.200	0	98.7	90	110			
Beryllium	0.184	0.00100	0.200	0	92.1	90	110			
Cadmium	0.192	0.00100	0.200	0	96.0	90	110			
Chromium	0.195	0.00500	0.200	0	97.4	90	110			
Cobalt	0.191	0.00500	0.200	0	95.7	90	110			
Lead	0.188	0.00100	0.200	0	94.2	90	110			
Lithium	0.183	0.0100	0.200	0	91.3	90	110			
Magnesium	4.89	0.300	5.00	0	97.7	90	110			
Molybdenum	0.186	0.00500	0.200	0	92.8	90	110			
Potassium	5.01	0.300	5.00	0	100	90	110			
Selenium	0.209	0.00500	0.200	0	105	90	110			
Thallium	0.193	0.00150	0.200	0	96.3	90	110			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102162
Project: SMEC, Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_210127B

Sample ID: **DCS1-99275**	Batch ID: **99275**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **DCS**	Run ID: **ICP-MS5_210127B**	Analysis Date: **1/27/2021 11:12:00 AM**	Prep Date: **1/25/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.00103	0.00250	0.00100	0	103	70	130	0	0	
Beryllium	0.000524	0.00100	0.000500	0	105	70	130	0	0	
Cadmium	0.000545	0.00100	0.000500	0	109	70	130	0	0	
Lead	0.000550	0.00100	0.000500	0	110	70	130	0	0	
Thallium	0.000480	0.00150	0.000500	0	96.0	70	130	0	0	

Sample ID: **DCS2-99275**	Batch ID: **99275**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **DCS2**	Run ID: **ICP-MS5_210127B**	Analysis Date: **1/27/2021 11:15:00 AM**	Prep Date: **1/25/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	0.303	0.300	0.300	0	101	70	130	0	0	
Magnesium	0.299	0.300	0.300	0	99.8	70	130	0	0	
Potassium	0.292	0.300	0.300	0	97.4	70	130	0	0	
Sodium	0.300	0.300	0.300	0	99.9	70	130	0	0	

Sample ID: **DCS3-99275**	Batch ID: **99275**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **DCS3**	Run ID: **ICP-MS5_210127B**	Analysis Date: **1/27/2021 11:17:00 AM**	Prep Date: **1/25/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.00492	0.00500	0.00500	0	98.3	70	130	0	0	
Barium	0.00490	0.0100	0.00500	0	98.1	70	130	0	0	
Chromium	0.00513	0.00500	0.00500	0	103	70	130	0	0	
Cobalt	0.00493	0.00500	0.00500	0	98.6	70	130	0	0	
Lithium	0.00508	0.0100	0.00500	0	102	70	130	0	0	
Molybdenum	0.00488	0.00500	0.00500	0	97.5	70	130	0	0	
Selenium	0.00603	0.00500	0.00500	0	120	70	130	0	0	

Sample ID: **DCS4-99275**	Batch ID: **99275**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **DCS4**	Run ID: **ICP-MS5_210127B**	Analysis Date: **1/27/2021 11:19:00 AM**	Prep Date: **1/25/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	0.0311	0.0300	0.0300	0	104	70	130	0	0	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102162
Project: SMEC, Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_210303A

The QC data in batch 99629 applies to the following samples: 2102162-01A, 2102162-02A, 2102162-03A, 2102162-04A, 2102162-05A, 2102162-06A, 2102162-07A, 2102162-08A, 2102162-09A, 2102162-10A, 2102162-11A, 2102162-12A, 2102162-13A, 2102162-14A, 2102162-15A

Sample ID: **MB-99629** Batch ID: **99629** TestNo: **SW6020B** Units: **mg/L**
SampType: **MBLK** Run ID: **ICP-MS5_210303A** Analysis Date: **3/3/2021 12:00:00 PM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	<0.0100	0.0300								

Sample ID: **LCS-99629** Batch ID: **99629** TestNo: **SW6020B** Units: **mg/L**
SampType: **LCS** Run ID: **ICP-MS5_210303A** Analysis Date: **3/3/2021 12:02:00 PM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	0.192	0.0300	0.200	0	96.1	80	120			

Sample ID: **LCSD-99629** Batch ID: **99629** TestNo: **SW6020B** Units: **mg/L**
SampType: **LCSD** Run ID: **ICP-MS5_210303A** Analysis Date: **3/3/2021 12:04:00 PM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	0.204	0.0300	0.200	0	102	80	120	6.16	15	

Sample ID: **2102162-01A SD** Batch ID: **99629** TestNo: **SW6020B** Units: **mg/L**
SampType: **SD** Run ID: **ICP-MS5_210303A** Analysis Date: **3/3/2021 12:16:00 PM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	760	750	0	798				4.89	20	
Sodium	3230	750	0	3320				2.73	20	

Sample ID: **2102162-01A PDS** Batch ID: **99629** TestNo: **SW6020B** Units: **mg/L**
SampType: **PDS** Run ID: **ICP-MS5_210303A** Analysis Date: **3/3/2021 12:43:00 PM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	3310	150	2500	798	100	75	125			
Sodium	5940	150	2500	3320	105	75	125			

Sample ID: **2102162-01A SD** Batch ID: **99629** TestNo: **SW6020B** Units: **mg/L**
SampType: **SD** Run ID: **ICP-MS5_210303A** Analysis Date: **3/3/2021 3:26:00 PM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	10.2	3.00	0	9.49				7.00	20	
Cobalt	1.51	0.500	0	1.48				2.65	20	
Magnesium	268	30.0	0	266				0.701	20	
Potassium	26.9	30.0	0	26.6				1.07	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102162
Project: SMEC, Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_210303A

Sample ID: **2102162-01A PDS**	Batch ID: **99629**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **PDS**	Run ID: **ICP-MS5_210303A**	Analysis Date: **3/3/2021 4:25:00 PM**	Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	13.2	0.600	4.00	9.49	93.1	75	125			
Cobalt	5.25	0.100	4.00	1.48	94.3	75	125			
Magnesium	368	6.00	100	266	102	75	125			
Potassium	130	6.00	100	26.6	103	75	125			

Sample ID: **2102162-01A MS**	Batch ID: **99629**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **MS**	Run ID: **ICP-MS5_210303A**	Analysis Date: **3/3/2021 4:27:00 PM**	Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	9.79	0.600	0.200	9.49	150	75	125			S

Sample ID: **2102162-01A MSD**	Batch ID: **99629**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **MSD**	Run ID: **ICP-MS5_210303A**	Analysis Date: **3/3/2021 4:29:00 PM**	Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	9.94	0.600	0.200	9.49	227	75	125	1.57	15	S

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102162
Project: SMEC, Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_210303A

Sample ID: **ICV-210303**	Batch ID: **R114326**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **ICV**	Run ID: **ICP-MS5_210303A**	Analysis Date: **3/3/2021 11:25:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	0.0995	0.00100	0.100	0	99.5	90	110			
Boron	0.100	0.0300	0.100	0	100	90	110			
Calcium	2.53	0.300	2.50	0	101	90	110			
Cobalt	0.105	0.00500	0.100	0	105	90	110			
Lithium	0.0977	0.0100	0.100	0	97.7	90	110			
Magnesium	2.44	0.300	2.50	0	97.4	90	110			
Molybdenum	0.0961	0.00500	0.100	0	96.1	90	110			
Potassium	2.49	0.300	2.50	0	99.7	90	110			
Sodium	2.55	0.300	2.50	0	102	90	110			

Sample ID: **LCVL-210303**	Batch ID: **R114326**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **LCVL**	Run ID: **ICP-MS5_210303A**	Analysis Date: **3/3/2021 11:34:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	0.00108	0.00100	0.00100	0	108	80	120			
Boron	0.0219	0.0300	0.0200	0	110	80	120			
Calcium	0.113	0.300	0.100	0	113	80	120			
Cobalt	0.00531	0.00500	0.00500	0	106	80	120			
Lithium	0.0101	0.0100	0.0100	0	101	80	120			
Magnesium	0.104	0.300	0.100	0	104	80	120			
Molybdenum	0.00514	0.00500	0.00500	0	103	80	120			
Potassium	0.104	0.300	0.100	0	104	80	120			
Sodium	0.109	0.300	0.100	0	109	80	120			

Sample ID: **CCV1-210303**	Batch ID: **R114326**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS5_210303A**	Analysis Date: **3/3/2021 12:49:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	0.191	0.0300	0.200	0	95.3	90	110			
Calcium	4.98	0.300	5.00	0	99.7	90	110			
Magnesium	5.01	0.300	5.00	0	100	90	110			
Potassium	5.03	0.300	5.00	0	101	90	110			
Sodium	5.03	0.300	5.00	0	101	90	110			

Sample ID: **CCV2-210303**	Batch ID: **R114326**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS5_210303A**	Analysis Date: **3/3/2021 1:23:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	0.201	0.00100	0.200	0	100	90	110			
Boron	0.197	0.0300	0.200	0	98.6	90	110			
Calcium	4.97	0.300	5.00	0	99.5	90	110			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102162
Project: SMEC, Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_210303A

Sample ID: **CCV2-210303**	Batch ID: **R114326**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS5_210303A**	Analysis Date: **3/3/2021 1:23:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lithium	0.201	0.0100	0.200	0	100	90	110			
Magnesium	5.04	0.300	5.00	0	101	90	110			
Potassium	5.03	0.300	5.00	0	101	90	110			
Sodium	5.05	0.300	5.00	0	101	90	110			

Sample ID: **CCV4-210303**	Batch ID: **R114326**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS5_210303A**	Analysis Date: **3/3/2021 3:13:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	0.198	0.00100	0.200	0	98.8	90	110			
Boron	0.194	0.0300	0.200	0	97.0	90	110			
Calcium	5.04	0.300	5.00	0	101	90	110			
Cobalt	0.203	0.00500	0.200	0	102	90	110			
Lithium	0.197	0.0100	0.200	0	98.3	90	110			
Magnesium	5.05	0.300	5.00	0	101	90	110			
Molybdenum	0.196	0.00500	0.200	0	98.1	90	110			
Potassium	5.05	0.300	5.00	0	101	90	110			
Sodium	5.05	0.300	5.00	0	101	90	110			

Sample ID: **CCV5-210303**	Batch ID: **R114326**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS5_210303A**	Analysis Date: **3/3/2021 4:46:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	0.199	0.00100	0.200	0	99.3	90	110			
Boron	0.191	0.0300	0.200	0	95.3	90	110			
Calcium	5.06	0.300	5.00	0	101	90	110			
Cobalt	0.201	0.00500	0.200	0	101	90	110			
Lithium	0.198	0.0100	0.200	0	99.2	90	110			
Magnesium	5.09	0.300	5.00	0	102	90	110			
Potassium	5.08	0.300	5.00	0	102	90	110			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102162
Project: SMEC, Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_210304A

Sample ID: **ICV-210304**	Batch ID: **R114344**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **ICV**	Run ID: **ICP-MS5_210304A**	Analysis Date: **3/4/2021 10:46:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	2.50	0.300	2.50	0	99.9	90	110			

Sample ID: **LCVL-210304**	Batch ID: **R114344**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **LCVL**	Run ID: **ICP-MS5_210304A**	Analysis Date: **3/4/2021 11:18:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	0.112	0.300	0.100	0	112	80	120			

Sample ID: **CCV1-210304**	Batch ID: **R114344**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS5_210304A**	Analysis Date: **3/4/2021 12:04:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	5.01	0.300	5.00	0	100	90	110			

Sample ID: **CCV2-210304**	Batch ID: **R114344**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS5_210304A**	Analysis Date: **3/4/2021 12:26:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	5.06	0.300	5.00	0	101	90	110			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102162
Project: SMEC, Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_210302A

Sample ID: **DCS3-99634** Batch ID: **99634** TestNo: **E300** Units: **mg/L**
SampType: **DCS3** Run ID: **IC2_210302A** Analysis Date: **3/2/2021 11:49:16 AM** Prep Date: **3/2/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	1.21	1.00	1.000	0	121	70	130	0	0	
Fluoride	0.331	0.400	0.4000	0	82.8	70	130	0	0	
Sulfate	2.86	3.00	3.000	0	95.4	70	130	0	0	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102162
Project: SMEC, Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_210305A

The QC data in batch 99686 applies to the following samples: 2102162-01B, 2102162-02B, 2102162-03B, 2102162-04B, 2102162-05B, 2102162-06B, 2102162-07B

Sample ID: **MB-99686** Batch ID: **99686** TestNo: **E300** Units: **mg/L**
SampType: **MBLK** Run ID: **IC2_210305A** Analysis Date: **3/4/2021 10:37:41 AM** Prep Date: **3/4/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	<0.300	1.00								
Fluoride	<0.100	0.400								
Sulfate	<1.00	3.00								

Sample ID: **LCS-99686** Batch ID: **99686** TestNo: **E300** Units: **mg/L**
SampType: **LCS** Run ID: **IC2_210305A** Analysis Date: **3/4/2021 10:53:41 AM** Prep Date: **3/4/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.4	1.00	10.00	0	104	90	110			
Fluoride	3.75	0.400	4.000	0	93.9	90	110			
Sulfate	29.2	3.00	30.00	0	97.5	90	110			

Sample ID: **LCSD-99686** Batch ID: **99686** TestNo: **E300** Units: **mg/L**
SampType: **LCSD** Run ID: **IC2_210305A** Analysis Date: **3/4/2021 11:09:41 AM** Prep Date: **3/4/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.5	1.00	10.00	0	105	90	110	1.10	20	
Fluoride	3.82	0.400	4.000	0	95.5	90	110	1.69	20	
Sulfate	29.0	3.00	30.00	0	96.7	90	110	0.819	20	

Sample ID: **2102162-01BMS** Batch ID: **99686** TestNo: **E300** Units: **mg/L**
SampType: **MS** Run ID: **IC2_210305A** Analysis Date: **3/4/2021 10:29:18 PM** Prep Date: **3/4/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	6160	100	2000	5104	52.8	90	110			S
Fluoride	2010	40.0	2000	0	101	90	110			
Sulfate	6150	300	2000	4011	107	90	110			

Sample ID: **2102162-01BMSD** Batch ID: **99686** TestNo: **E300** Units: **mg/L**
SampType: **MSD** Run ID: **IC2_210305A** Analysis Date: **3/4/2021 10:45:18 PM** Prep Date: **3/4/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	6160	100	2000	5104	52.6	90	110	0.054	20	S
Fluoride	2020	40.0	2000	0	101	90	110	0.473	20	
Sulfate	6120	300	2000	4011	106	90	110	0.430	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102162
Project: SMEC, Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_210305A

Sample ID: **ICV-210304**	Batch ID: **R114348**	TestNo: **E300**	Units: **mg/L**
SampType: **ICV**	Run ID: **IC2_210305A**	Analysis Date: **3/4/2021 10:05:41 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	26.3	1.00	25.00	0	105	90	110			
Fluoride	9.79	0.400	10.00	0	97.9	90	110			
Sulfate	75.2	3.00	75.00	0	100	90	110			

Sample ID: **CCV1-210304**	Batch ID: **R114348**	TestNo: **E300**	Units: **mg/L**
SampType: **CCV**	Run ID: **IC2_210305A**	Analysis Date: **3/4/2021 8:37:18 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.6	1.00	10.00	0	106	90	110			
Fluoride	3.87	0.400	4.000	0	96.8	90	110			
Sulfate	29.4	3.00	30.00	0	97.9	90	110			

Sample ID: **CCV2-210304**	Batch ID: **R114348**	TestNo: **E300**	Units: **mg/L**
SampType: **CCV**	Run ID: **IC2_210305A**	Analysis Date: **3/5/2021 1:09:18 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.5	1.00	10.00	0	105	90	110			
Fluoride	3.86	0.400	4.000	0	96.5	90	110			
Sulfate	29.2	3.00	30.00	0	97.4	90	110			

Sample ID: **CCV3-210304**	Batch ID: **R114348**	TestNo: **E300**	Units: **mg/L**
SampType: **CCV**	Run ID: **IC2_210305A**	Analysis Date: **3/5/2021 5:09:18 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.7	1.00	10.00	0	107	90	110			
Fluoride	3.95	0.400	4.000	0	98.7	90	110			
Sulfate	29.5	3.00	30.00	0	98.2	90	110			

Sample ID: **CCV4-210304**	Batch ID: **R114348**	TestNo: **E300**	Units: **mg/L**
SampType: **CCV**	Run ID: **IC2_210305A**	Analysis Date: **3/5/2021 8:05:18 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.6	1.00	10.00	0	106	90	110			
Fluoride	3.76	0.400	4.000	0	93.9	90	110			
Sulfate	29.5	3.00	30.00	0	98.2	90	110			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102162
Project: SMEC, Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_210305B

The QC data in batch 99713 applies to the following samples: 2102162-01B, 2102162-08B, 2102162-09B, 2102162-10B, 2102162-11B, 2102162-12B, 2102162-13B, 2102162-14B, 2102162-15B

Sample ID: **MB-99713** Batch ID: **99713** TestNo: **E300** Units: **mg/L**
SampType: **MBLK** Run ID: **IC2_210305B** Analysis Date: **3/5/2021 11:34:40 AM** Prep Date: **3/5/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	<0.300	1.00								
Fluoride	<0.100	0.400								
Sulfate	<1.00	3.00								

Sample ID: **LCS-99713** Batch ID: **99713** TestNo: **E300** Units: **mg/L**
SampType: **LCS** Run ID: **IC2_210305B** Analysis Date: **3/5/2021 11:50:40 AM** Prep Date: **3/5/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.3	1.00	10.00	0	103	90	110			
Fluoride	3.74	0.400	4.000	0	93.6	90	110			
Sulfate	28.9	3.00	30.00	0	96.2	90	110			

Sample ID: **LCSD-99713** Batch ID: **99713** TestNo: **E300** Units: **mg/L**
SampType: **LCSD** Run ID: **IC2_210305B** Analysis Date: **3/5/2021 12:06:40 PM** Prep Date: **3/5/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.3	1.00	10.00	0	103	90	110	0.104	20	
Fluoride	3.74	0.400	4.000	0	93.4	90	110	0.188	20	
Sulfate	28.9	3.00	30.00	0	96.5	90	110	0.300	20	

Sample ID: **2102162-09BMS** Batch ID: **99713** TestNo: **E300** Units: **mg/L**
SampType: **MS** Run ID: **IC2_210305B** Analysis Date: **3/5/2021 4:18:10 PM** Prep Date: **3/5/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	5360	100	2000	3899	73.2	90	110			S
Fluoride	1880	40.0	2000	0	94.0	90	110			
Sulfate	4520	300	2000	2623	95.0	90	110			

Sample ID: **2102162-09BMSD** Batch ID: **99713** TestNo: **E300** Units: **mg/L**
SampType: **MSD** Run ID: **IC2_210305B** Analysis Date: **3/5/2021 4:34:10 PM** Prep Date: **3/5/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	5360	100	2000	3899	72.9	90	110	0.101	20	S
Fluoride	1890	40.0	2000	0	94.7	90	110	0.724	20	
Sulfate	4510	300	2000	2623	94.3	90	110	0.328	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102162
Project: SMEC, Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_210305B

Sample ID: **2102164-01BMS**	Batch ID: **99713**	TestNo: **E300**	Units: **mg/L**
SampType: **MS**	Run ID: **IC2_210305B**	Analysis Date: **3/5/2021 7:46:10 PM**	Prep Date: **3/5/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4500	100	2000	2734	88.3	90	110			S
Fluoride	1910	40.0	2000	0	95.7	90	110			
Sulfate	4640	300	2000	2610	101	90	110			

Sample ID: **2102164-01BMSD**	Batch ID: **99713**	TestNo: **E300**	Units: **mg/L**
SampType: **MSD**	Run ID: **IC2_210305B**	Analysis Date: **3/5/2021 8:02:10 PM**	Prep Date: **3/5/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4490	100	2000	2734	87.6	90	110	0.312	20	S
Fluoride	1910	40.0	2000	0	95.6	90	110	0.082	20	
Sulfate	4630	300	2000	2610	101	90	110	0.187	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102162
Project: SMEC, Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_210305B

Sample ID: **ICV-210305**	Batch ID: **R114374**	TestNo: **E300**	Units: **mg/L**
SampType: **ICV**	Run ID: **IC2_210305B**	Analysis Date: **3/5/2021 11:02:40 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	26.6	1.00	25.00	0	106	90	110			
Fluoride	9.81	0.400	10.00	0	98.1	90	110			
Sulfate	75.7	3.00	75.00	0	101	90	110			

Sample ID: **CCV1-210305**	Batch ID: **R114374**	TestNo: **E300**	Units: **mg/L**
SampType: **CCV**	Run ID: **IC2_210305B**	Analysis Date: **3/5/2021 6:58:10 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.3	1.00	10.00	0	103	90	110			
Fluoride	3.82	0.400	4.000	0	95.4	90	110			
Sulfate	29.0	3.00	30.00	0	96.8	90	110			

Sample ID: **CCV2-210305**	Batch ID: **R114374**	TestNo: **E300**	Units: **mg/L**
SampType: **CCV**	Run ID: **IC2_210305B**	Analysis Date: **3/5/2021 11:30:10 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	3.76	0.400	4.000	0	94.1	90	110			

Sample ID: **CCV3-210305**	Batch ID: **R114374**	TestNo: **E300**	Units: **mg/L**
SampType: **CCV**	Run ID: **IC2_210305B**	Analysis Date: **3/6/2021 2:58:10 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	3.77	0.400	4.000	0	94.2	90	110			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102162
Project: SMEC, Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: TITRATOR_210304A

The QC data in batch 99688 applies to the following samples: 2102162-01B, 2102162-02B, 2102162-03B, 2102162-04B, 2102162-05B, 2102162-06B, 2102162-07B, 2102162-08B, 2102162-09B, 2102162-10B, 2102162-11B, 2102162-12B, 2102162-13B, 2102162-14B, 2102162-15B

Sample ID: **MB-99688** Batch ID: **99688** TestNo: **M2320 B** Units: **mg/L @ pH 4.49**
SampType: **MBLK** Run ID: **TITRATOR_210304A** Analysis Date: **3/4/2021 11:10:00 AM** Prep Date: **3/4/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	<10.0	20.0								
Alkalinity, Carbonate (As CaCO3)	<10.0	20.0								
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0								
Alkalinity, Total (As CaCO3)	<20.0	20.0								

Sample ID: **LCS-99688** Batch ID: **99688** TestNo: **M2320 B** Units: **mg/L @ pH 4.43**
SampType: **LCS** Run ID: **TITRATOR_210304A** Analysis Date: **3/4/2021 11:15:00 AM** Prep Date: **3/4/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	49.5	20.0	50.00	0	99.0	74	129			

Sample ID: **LCSD-99688** Batch ID: **99688** TestNo: **M2320 B** Units: **mg/L @ pH 4.39**
SampType: **LCSD** Run ID: **TITRATOR_210304A** Analysis Date: **3/4/2021 11:19:00 AM** Prep Date: **3/4/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	51.8	20.0	50.00	0	104	74	129	4.58	20	

Sample ID: **2102162-01B-DUP** Batch ID: **99688** TestNo: **M2320 B** Units: **mg/L @ pH 3.49**
SampType: **DUP** Run ID: **TITRATOR_210304A** Analysis Date: **3/4/2021 11:23:00 AM** Prep Date: **3/4/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	<10.0	20.0	0	0				0	20	
Alkalinity, Carbonate (As CaCO3)	<10.0	20.0	0	0				0	20	
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0	0	0				0	20	
Alkalinity, Total (As CaCO3)	<20.0	20.0	0	0				0	20	

Sample ID: **2102162-03B-DUP** Batch ID: **99688** TestNo: **M2320 B** Units: **mg/L @ pH 3.63**
SampType: **DUP** Run ID: **TITRATOR_210304A** Analysis Date: **3/4/2021 11:26:00 AM** Prep Date: **3/4/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	<10.0	20.0	0	0				0	20	
Alkalinity, Carbonate (As CaCO3)	<10.0	20.0	0	0				0	20	
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0	0	0				0	20	
Alkalinity, Total (As CaCO3)	<20.0	20.0	0	0				0	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102162
Project: SMEC, Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: TITRATOR_210304A

Sample ID: **ICV-210304**	Batch ID: **R114349**	TestNo: **M2320 B**	Units: **mg/L @ pH 4.4**
SampType: **ICV**	Run ID: **TITRATOR_210304A**	Analysis Date: **3/4/2021 10:58:00 AM**	Prep Date: **3/4/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	13.7	20.0	0							
Alkalinity, Carbonate (As CaCO3)	85.4	20.0	0							
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0	0							
Alkalinity, Total (As CaCO3)	99.1	20.0	100.0	0	99.1	98	102			

Sample ID: **CCV1-210304**	Batch ID: **R114349**	TestNo: **M2320 B**	Units: **mg/L @ pH 4.39**
SampType: **CCV**	Run ID: **TITRATOR_210304A**	Analysis Date: **3/4/2021 11:40:00 AM**	Prep Date: **3/4/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	26.1	20.0	0							
Alkalinity, Carbonate (As CaCO3)	74.1	20.0	0							
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0	0							
Alkalinity, Total (As CaCO3)	100	20.0	100.0	0	100	90	110			

Sample ID: **CCV2-210304**	Batch ID: **R114349**	TestNo: **M2320 B**	Units: **mg/L @ pH 4.5**
SampType: **CCV**	Run ID: **TITRATOR_210304A**	Analysis Date: **3/4/2021 12:25:00 PM**	Prep Date: **3/4/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	30.7	20.0	0							
Alkalinity, Carbonate (As CaCO3)	62.7	20.0	0							
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0	0							
Alkalinity, Total (As CaCO3)	93.4	20.0	100.0	0	93.4	90	110			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102162
Project: SMEC, Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: WC_210301B

The QC data in batch 99633 applies to the following samples: 2102162-01B, 2102162-02B, 2102162-03B, 2102162-04B, 2102162-05B

Sample ID: **MB-99633**	Batch ID: **99633**		TestNo: **M2540C**				Units: **mg/L**				
SampType: **MBLK**	Run ID: **WC_210301B**		Analysis Date: **3/1/2021 4:00:00 PM**				Prep Date: **3/1/2021**				
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Total Dissolved Solids (Residue, Filtera	<10.0	10.0									

Sample ID: **LCS-99633**	Batch ID: **99633**		TestNo: **M2540C**				Units: **mg/L**				
SampType: **LCS**	Run ID: **WC_210301B**		Analysis Date: **3/1/2021 4:00:00 PM**				Prep Date: **3/1/2021**				
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Total Dissolved Solids (Residue, Filtera	768	10.0	745.6	0	103	90	113				

Sample ID: **2102158-02B-DUP**	Batch ID: **99633**		TestNo: **M2540C**				Units: **mg/L**				
SampType: **DUP**	Run ID: **WC_210301B**		Analysis Date: **3/1/2021 4:00:00 PM**				Prep Date: **3/1/2021**				
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Total Dissolved Solids (Residue, Filtera	9620	200	0	9800				1.85	5		

Sample ID: **2102158-03B-DUP**	Batch ID: **99633**		TestNo: **M2540C**				Units: **mg/L**				
SampType: **DUP**	Run ID: **WC_210301B**		Analysis Date: **3/1/2021 4:00:00 PM**				Prep Date: **3/1/2021**				
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Total Dissolved Solids (Residue, Filtera	9460	200	0	9480				0.211	5		

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102162
Project: SMEC, Christine, Texas

ANALYTICAL QC SUMMARY REPORT

RunID: WC_210302B

The QC data in batch 99665 applies to the following samples: 2102162-06B, 2102162-07B, 2102162-08B, 2102162-09B, 2102162-10B, 2102162-11B, 2102162-12B, 2102162-13B, 2102162-14B, 2102162-15B

Sample ID: **MB-99665** Batch ID: **99665** TestNo: **M2540C** Units: **mg/L**
SampType: **MBLK** Run ID: **WC_210302B** Analysis Date: **3/2/2021 4:50:00 PM** Prep Date: **3/2/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	<10.0	10.0								

Sample ID: **LCS-99665** Batch ID: **99665** TestNo: **M2540C** Units: **mg/L**
SampType: **LCS** Run ID: **WC_210302B** Analysis Date: **3/2/2021 4:50:00 PM** Prep Date: **3/2/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	768	10.0	745.6	0	103	90	113			

Sample ID: **2102162-09B-DUP** Batch ID: **99665** TestNo: **M2540C** Units: **mg/L**
SampType: **DUP** Run ID: **WC_210302B** Analysis Date: **3/2/2021 4:50:00 PM** Prep Date: **3/2/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	10400	200	0	10480				1.15	5	

Sample ID: **2102162-10B-DUP** Batch ID: **99665** TestNo: **M2540C** Units: **mg/L**
SampType: **DUP** Run ID: **WC_210302B** Analysis Date: **3/2/2021 4:50:00 PM** Prep Date: **3/2/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	8620	200	0	8980				4.09	5	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102162
Project: SMEC, Christine, Texas

MQL SUMMARY REPORT

TestNo: E300	**MDL**	**MQL**
Analyte	**mg/L**	**mg/L**
Chloride	0.300	1.00
Fluoride	0.100	0.400
Sulfate	1.00	3.00

TestNo: SW6020B	**MDL**	**MQL**
Analyte	**mg/L**	**mg/L**
Antimony	0.000800	0.00250
Arsenic	0.00200	0.00500
Barium	0.00300	0.0100
Beryllium	0.000300	0.00100
Boron	0.0100	0.0300
Cadmium	0.000300	0.00100
Calcium	0.100	0.300
Chromium	0.00200	0.00500
Cobalt	0.00300	0.00500
Lead	0.000300	0.00100
Lithium	0.00500	0.0100
Magnesium	0.100	0.300
Molybdenum	0.00200	0.00500
Potassium	0.100	0.300
Selenium	0.00200	0.00500
Sodium	0.100	0.300
Thallium	0.000500	0.00150

TestNo: M2320 B	**MDL**	**MQL**
Analyte	**ıg/L @ pH 4.4**	**g/L @ pH 4.4**
Alkalinity, Bicarbonate (As CaCO3)	10.0	20.0
Alkalinity, Carbonate (As CaCO3)	10.0	20.0
Alkalinity, Hydroxide (As CaCO3)	10.0	20.0
Alkalinity, Total (As CaCO3)	20.0	20.0

TestNo: SW7470A	**MDL**	**MQL**
Analyte	**mg/L**	**mg/L**
Mercury	0.0000800	0.000200

TestNo: M2540C	**MDL**	**MQL**
Analyte	**mg/L**	**mg/L**
Total Dissolved Solids (Residue, Filt	10.0	10.0

Qualifiers: MQL -Method Quantitation Limit as defined by TRRP
MDL -Method Detection Limit as defined by TRRP

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109
Location: SMEC, Christine, Texas
DHL Project Number: 2102162

Sample ID: **PZ-03**
Lab ID Number: **2102162-01**

PARAMETER	RESULT	UNITS	METHOD
Calcium	798	mg/L	SW6020B
Magnesium	266	mg/L	SW6020B
Sodium	3320	mg/L	SW6020B
Potassium	26.6	mg/L	SW6020B
Carbonate	0	mg/L @ pH 3.44	M2320 B
Bicarbonate	0	mg/L @ pH 3.44	M2320 B
Sulfate	4010	mg/L	E300
Fluoride	3.77	mg/L	E300
T-Alkalinity	0	mg/L @ pH 3.44	M2320 B
Hardness	3088	mg/L	SM 2340B
Chloride	5310	mg/L	E300
TDS	14200	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	0.00
Calcium	39.82
Chloride	149.79
Fluoride	0.20
Magnesium	21.88
Potassium	0.68
Sodium	144.41
Sulfate	83.49
TOTAL ANIONS	233
TOTAL CATIONS	207
CATION/ANION (% DIFF)	-6.06
Calculated TDS	13734
TDS Ratio (Meas/Calc) (0.85 - 1.15)	1.03
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments: _____

Lab Rep Name/Signature: _____

Date: 03/09/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109
Location: SMEC, Christine, Texas
DHL Project Number: 2102162

Sample ID: AP-31
Lab ID Number: 2102162-02

PARAMETER	RESULT	UNITS	METHOD
Calcium	586	mg/L	SW6020B
Magnesium	62.3	mg/L	SW6020B
Sodium	1870	mg/L	SW6020B
Potassium	9.98	mg/L	SW6020B
Carbonate	0	mg/L @ pH 3.9	M2320 B
Bicarbonate	0	mg/L @ pH 3.9	M2320 B
Sulfate	3050	mg/L	E300
Fluoride	0	mg/L	E300
T-Alkalinity	0	mg/L @ pH 3.9	M2320 B
Hardness	1720	mg/L	SM 2340B
Chloride	1950	mg/L	E300
TDS	8000	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	0.00
Calcium	29.24
Chloride	55.01
Fluoride	0.00
Magnesium	5.12
Potassium	0.26
Sodium	81.34
Sulfate	63.50
TOTAL ANIONS	119
TOTAL CATIONS	116
CATION/ANION (% DIFF)	-1.09
Calculated TDS	7528
TDS Ratio (Meas/Calc) (0.85 - 1.15)	1.06
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments:

Lab Rep Name/Signature:

Date: 03/09/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109
Location: SMEC, Christine, Texas
DHL Project Number: 2102162

Sample ID: **MW-03**
Lab ID Number: **2102162-03**

PARAMETER	RESULT	UNITS	METHOD
Calcium	555	mg/L	SW6020B
Magnesium	101	mg/L	SW6020B
Sodium	2320	mg/L	SW6020B
Potassium	36.7	mg/L	SW6020B
Carbonate	0	mg/L @ pH 3.64	M2320 B
Bicarbonate	0	mg/L @ pH 3.64	M2320 B
Sulfate	4170	mg/L	E300
Fluoride	1.39	mg/L	E300
T-Alkalinity	0	mg/L @ pH 3.64	M2320 B
Hardness	1802	mg/L	SM 2340B
Chloride	1990	mg/L	E300
TDS	9280	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	0.00
Calcium	27.69
Chloride	56.14
Fluoride	0.07
Magnesium	8.31
Potassium	0.94
Sodium	100.91
Sulfate	86.82
TOTAL ANIONS	143
TOTAL CATIONS	138
CATION/ANION (% DIFF)	-1.84
Calculated TDS	9174
TDS Ratio (Meas/Calc) (0.85 - 1.15)	1.01
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments:

Lab Rep Name/Signature:

Date: 03/09/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109
Location: SMEC, Christine, Texas
DHL Project Number: 2102162

Sample ID: **AP-32**
Lab ID Number: **2102162-04**

PARAMETER	RESULT	UNITS	METHOD
Calcium	677	mg/L	SW6020B
Magnesium	89.3	mg/L	SW6020B
Sodium	2340	mg/L	SW6020B
Potassium	39.5	mg/L	SW6020B
Carbonate	0	mg/L @ pH 3.55	M2320 B
Bicarbonate	0	mg/L @ pH 3.55	M2320 B
Sulfate	3290	mg/L	E300
Fluoride	1.37	mg/L	E300
T-Alkalinity	0	mg/L @ pH 3.55	M2320 B
Hardness	2058	mg/L	SM 2340B
Chloride	2930	mg/L	E300
TDS	9740	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	0.00
Calcium	33.78
Chloride	82.65
Fluoride	0.07
Magnesium	7.34
Potassium	1.01
Sodium	101.78
Sulfate	68.50
TOTAL ANIONS	151
TOTAL CATIONS	144
CATION/ANION (% DIFF)	-2.47
Calculated TDS	9367
TDS Ratio (Meas/Calc) (0.85 - 1.15)	1.04
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments:

Lab Rep Name/Signature:

Date: 03/09/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109
Location: SMEC, Christine, Texas
DHL Project Number: 2102162

Sample ID: AP-33
Lab ID Number: 2102162-05

PARAMETER	RESULT	UNITS	METHOD
Calcium	782	mg/L	SW6020B
Magnesium	199	mg/L	SW6020B
Sodium	2720	mg/L	SW6020B
Potassium	27.5	mg/L	SW6020B
Carbonate	0	mg/L @ pH 3.41	M2320 B
Bicarbonate	0	mg/L @ pH 3.41	M2320 B
Sulfate	3300	mg/L	E300
Fluoride	3.88	mg/L	E300
T-Alkalinity	0	mg/L @ pH 3.41	M2320 B
Hardness	2772	mg/L	SM 2340B
Chloride	4500	mg/L	E300
TDS	12200	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	0.00
Calcium	39.02
Chloride	126.94
Fluoride	0.20
Magnesium	16.37
Potassium	0.70
Sodium	118.31
Sulfate	68.71
TOTAL ANIONS	196
TOTAL CATIONS	174
CATION/ANION (% DIFF)	-5.79
Calculated TDS	11532
TDS Ratio (Meas/Calc) (0.85 - 1.15)	1.06
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments:

Lab Rep Name/Signature:

Date: 03/09/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109
Location: SMEC, Christine, Texas
DHL Project Number: 2102162

Sample ID: PZ-05
Lab ID Number: 2102162-06

PARAMETER	RESULT	UNITS	METHOD
Calcium	651	mg/L	SW6020B
Magnesium	117	mg/L	SW6020B
Sodium	1780	mg/L	SW6020B
Potassium	20.9	mg/L	SW6020B
Carbonate	0	mg/L @ pH 3.55	M2320 B
Bicarbonate	0	mg/L @ pH 3.55	M2320 B
Sulfate	2930	mg/L	E300
Fluoride	1.09	mg/L	E300
T-Alkalinity	0	mg/L @ pH 3.55	M2320 B
Hardness	2107	mg/L	SM 2340B
Chloride	2480	mg/L	E300
TDS	8360	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	0.00
Calcium	32.49
Chloride	69.96
Fluoride	0.06
Magnesium	9.62
Potassium	0.54
Sodium	77.42
Sulfate	61.00
TOTAL ANIONS	131
TOTAL CATIONS	120
CATION/ANION (% DIFF)	-4.36
Calculated TDS	7980
TDS Ratio (Meas/Calc) (0.85 - 1.15)	1.05
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments: _____

Lab Rep Name/Signature: _____

Date: 03/09/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109
Location: SMEC, Christine, Texas
DHL Project Number: 2102162

Sample ID: **FB-2-2-24-21**
Lab ID Number: **2102162-07**

PARAMETER	RESULT	UNITS	METHOD
Calcium	0.461	mg/L	SW6020B
Magnesium	0	mg/L	SW6020B
Sodium	0	mg/L	SW6020B
Potassium	0.197	mg/L	SW6020B
Carbonate	0	mg/L @ pH 4.51	M2320 B
Bicarbonate	0	mg/L @ pH 4.51	M2320 B
Sulfate	0	mg/L	E300
Fluoride	0	mg/L	E300
T-Alkalinity	0	mg/L @ pH 4.51	M2320 B
Hardness	1	mg/L	SM 2340B
Chloride	0	mg/L	E300
TDS	0	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	0.00
Calcium	0.02
Chloride	0.00
Fluoride	0.00
Magnesium	0.00
Potassium	0.01
Sodium	0.00
Sulfate	0.00
TOTAL ANIONS	0
TOTAL CATIONS	0.0280
CATION/ANION (% DIFF)	100.00
Calculated TDS	1
TDS Ratio (Meas/Calc) (0.85 - 1.15)	0.00
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments:

Lab Rep Name/Signature:

Date: 03/09/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109
Location: SMEC, Christine, Texas
DHL Project Number: 2102162

Sample ID: **EB-1-2-24-21**
Lab ID Number: **2102162-08**

PARAMETER	RESULT	UNITS	METHOD
Calcium	0.480	mg/L	SW6020B
Magnesium	0	mg/L	SW6020B
Sodium	0.308	mg/L	SW6020B
Potassium	0	mg/L	SW6020B
Carbonate	0	mg/L @ pH 4.46	M2320 B
Bicarbonate	0	mg/L @ pH 4.46	M2320 B
Sulfate	0	mg/L	E300
Fluoride	0	mg/L	E300
T-Alkalinity	0	mg/L @ pH 4.46	M2320 B
Hardness	1	mg/L	SM 2340B
Chloride	0	mg/L	E300
TDS	0	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	0.00
Calcium	0.02
Chloride	0.00
Fluoride	0.00
Magnesium	0.00
Potassium	0.00
Sodium	0.01
Sulfate	0.00
TOTAL ANIONS	0
TOTAL CATIONS	0.0374
CATION/ANION (% DIFF)	100.00
Calculated TDS	1
TDS Ratio (Meas/Calc) (0.85 - 1.15)	0.00
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments: _____

Lab Rep Name/Signature: _____

Date: 03/09/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109
Location: SMEC, Christine, Texas
DHL Project Number: 2102162

Sample ID: **PZ-02**
Lab ID Number: **2102162-09**

PARAMETER	RESULT	UNITS	METHOD
Calcium	799	mg/L	SW6020B
Magnesium	128	mg/L	SW6020B
Sodium	2510	mg/L	SW6020B
Potassium	54.6	mg/L	SW6020B
Carbonate	0	mg/L @ pH 4.52	M2320 B
Bicarbonate	92.3	mg/L @ pH 4.52	M2320 B
Sulfate	2620	mg/L	E300
Fluoride	0	mg/L	E300
T-Alkalinity	92.3	mg/L @ pH 4.52	M2320 B
Hardness	2522	mg/L	SM 2340B
Chloride	3900	mg/L	E300
TDS	10500	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	1.84
Calcium	39.87
Chloride	110.01
Fluoride	0.00
Magnesium	10.53
Potassium	1.40
Sodium	109.18
Sulfate	54.55
TOTAL ANIONS	166
TOTAL CATIONS	161
CATION/ANION (% DIFF)	-1.66
Calculated TDS	10058
TDS Ratio (Meas/Calc) (0.85 - 1.15)	1.04
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments: _____

Lab Rep Name/Signature: _____

Date: 03/09/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109
Location: SMEC, Christine, Texas
DHL Project Number: 2102162

Sample ID: AP-34
Lab ID Number: 2102162-10

PARAMETER	RESULT	UNITS	METHOD
Calcium	693	mg/L	SW6020B
Magnesium	148	mg/L	SW6020B
Sodium	1830	mg/L	SW6020B
Potassium	14.2	mg/L	SW6020B
Carbonate	0	mg/L @ pH 3.5	M2320 B
Bicarbonate	0	mg/L @ pH 3.5	M2320 B
Sulfate	3350	mg/L	E300
Fluoride	4.58	mg/L	E300
T-Alkalinity	0	mg/L @ pH 3.5	M2320 B
Hardness	2340	mg/L	SM 2340B
Chloride	2950	mg/L	E300
TDS	8980	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	0.00
Calcium	34.58
Chloride	83.22
Fluoride	0.24
Magnesium	12.17
Potassium	0.36
Sodium	79.60
Sulfate	69.75
TOTAL ANIONS	153
TOTAL CATIONS	127
CATION/ANION (% DIFF)	-9.46
Calculated TDS	8990
TDS Ratio (Meas/Calc) (0.85 - 1.15)	1.00
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments:

Lab Rep Name/Signature:

Date: 03/09/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109
Location: SMEC, Christine, Texas
DHL Project Number: 2102162

Sample ID: AP-35
Lab ID Number: 2102162-11

PARAMETER	RESULT	UNITS	METHOD
Calcium	629	mg/L	SW6020B
Magnesium	127	mg/L	SW6020B
Sodium	1700	mg/L	SW6020B
Potassium	48.8	mg/L	SW6020B
Carbonate	0	mg/L @ pH 3.69	M2320 B
Bicarbonate	0	mg/L @ pH 3.69	M2320 B
Sulfate	2900	mg/L	E300
Fluoride	3.82	mg/L	E300
T-Alkalinity	0	mg/L @ pH 3.69	M2320 B
Hardness	2094	mg/L	SM 2340B
Chloride	2200	mg/L	E300
TDS	8300	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	0.00
Calcium	31.39
Chloride	62.06
Fluoride	0.20
Magnesium	10.44
Potassium	1.25
Sodium	73.95
Sulfate	60.38
TOTAL ANIONS	123
TOTAL CATIONS	117
CATION/ANION (% DIFF)	-2.34
Calculated TDS	7609
TDS Ratio (Meas/Calc) (0.85 - 1.15)	1.09
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments:

Lab Rep Name/Signature:

Date: 03/09/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109
Location: SMEC, Christine, Texas
DHL Project Number: 2102162

Sample ID: **Dup-2**
Lab ID Number: **2102162-12**

PARAMETER	RESULT	UNITS	METHOD
Calcium	632	mg/L	SW6020B
Magnesium	125	mg/L	SW6020B
Sodium	1680	mg/L	SW6020B
Potassium	48.9	mg/L	SW6020B
Carbonate	0	mg/L @ pH 3.68	M2320 B
Bicarbonate	0	mg/L @ pH 3.68	M2320 B
Sulfate	2900	mg/L	E300
Fluoride	4.33	mg/L	E300
T-Alkalinity	0	mg/L @ pH 3.68	M2320 B
Hardness	2093	mg/L	SM 2340B
Chloride	2220	mg/L	E300
TDS	8300	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	0.00
Calcium	31.54
Chloride	62.62
Fluoride	0.23
Magnesium	10.28
Potassium	1.25
Sodium	73.08
Sulfate	60.38
TOTAL ANIONS	123
TOTAL CATIONS	116
CATION/ANION (% DIFF)	-2.96
Calculated TDS	7610
TDS Ratio (Meas/Calc) (0.85 - 1.15)	1.09
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments: _____

Lab Rep Name/Signature: _____

Date: 03/09/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109
Location: SMEC, Christine, Texas
DHL Project Number: 2102162

Sample ID: AP-36
Lab ID Number: 2102162-13

PARAMETER	RESULT	UNITS	METHOD
Calcium	629	mg/L	SW6020B
Magnesium	97.3	mg/L	SW6020B
Sodium	1390	mg/L	SW6020B
Potassium	37.3	mg/L	SW6020B
Carbonate	0	mg/L @ pH 4.26	M2320 B
Bicarbonate	0	mg/L @ pH 4.26	M2320 B
Sulfate	2640	mg/L	E300
Fluoride	1.06	mg/L	E300
T-Alkalinity	0	mg/L @ pH 4.26	M2320 B
Hardness	1971	mg/L	SM 2340B
Chloride	1780	mg/L	E300
TDS	6760	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	0.00
Calcium	31.39
Chloride	50.21
Fluoride	0.06
Magnesium	8.00
Potassium	0.96
Sodium	60.46
Sulfate	54.97
TOTAL ANIONS	105
TOTAL CATIONS	101
CATION/ANION (% DIFF)	-2.15
Calculated TDS	6575
TDS Ratio (Meas/Calc) (0.85 - 1.15)	1.03
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments:

Lab Rep Name/Signature:

Date: 03/09/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109
Location: SMEC, Christine, Texas
DHL Project Number: 2102162

Sample ID: PZ-06
Lab ID Number: 2102162-14

PARAMETER	RESULT	UNITS	METHOD
Calcium	648	mg/L	SW6020B
Magnesium	96.4	mg/L	SW6020B
Sodium	1530	mg/L	SW6020B
Potassium	42.2	mg/L	SW6020B
Carbonate	0	mg/L @ pH 4.52	M2320 B
Bicarbonate	77.2	mg/L @ pH 4.52	M2320 B
Sulfate	2840	mg/L	E300
Fluoride	1.07	mg/L	E300
T-Alkalinity	77.2	mg/L @ pH 4.52	M2320 B
Hardness	2015	mg/L	SM 2340B
Chloride	1720	mg/L	E300
TDS	7090	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	1.54
Calcium	32.34
Chloride	48.52
Fluoride	0.06
Magnesium	7.93
Potassium	1.08
Sodium	66.55
Sulfate	59.13
TOTAL ANIONS	109
TOTAL CATIONS	108
CATION/ANION (% DIFF)	-0.62
Calculated TDS	6916
TDS Ratio (Meas/Calc) (0.85 - 1.15)	1.03
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments:

Lab Rep Name/Signature:

Date: 03/09/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109
Location: SMEC, Christine, Texas
DHL Project Number: 2102162

Sample ID: **EB3-2-25-21**
Lab ID Number: **2102162-15**

PARAMETER	RESULT	UNITS	METHOD
Calcium	0.232	mg/L	SW6020B
Magnesium	0	mg/L	SW6020B
Sodium	0.179	mg/L	SW6020B
Potassium	0	mg/L	SW6020B
Carbonate	0	mg/L @ pH 4.5	M2320 B
Bicarbonate	0	mg/L @ pH 4.5	M2320 B
Sulfate	0	mg/L	E300
Fluoride	0	mg/L	E300
T-Alkalinity	0	mg/L @ pH 4.5	M2320 B
Hardness	1	mg/L	SM 2340B
Chloride	0	mg/L	E300
TDS	0	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	0.00
Calcium	0.01
Chloride	0.00
Fluoride	0.00
Magnesium	0.00
Potassium	0.00
Sodium	0.01
Sulfate	0.00
TOTAL ANIONS	0
TOTAL CATIONS	0.0194
CATION/ANION (% DIFF)	100.00
Calculated TDS	0
TDS Ratio (Meas/Calc) (0.85 - 1.15)	0.00
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments: _____

Lab Rep Name/Signature: _____

Date: 03/09/21

Cation/Anion % Difference calculated per SM1030E.

GSI ENVIRONMENTAL

DATA USABILITY SUMMARY

February 2021 Sampling Event (SDG: 2102163/L1321693)

OVERVIEW

GSI Environmental Inc. (GSI) reviewed one data package from DHL Analytical (DHL) for radiochemistry analysis of **fifteen groundwater samples collected at the Ash Ponds on 24 - 25 February 2021** at the San Miguel Electric Cooperative, Inc., Christine, Atascosa County, Texas site. DHL subcontracted the job to Pace Analytical (Pace). The DHL data package is **SDG: 2102163**. Note that other samples from this sampling event were analyzed by DHL for other constituents **(SDG: 2102163)**.

Data were reviewed for i) conformance to the requirements of the guidance document *Review and Reporting of COC Concentration Data* (RG-366/TRRP-13) and ii) adherence to project objectives (e.g., GSI 2019). GSI certifies that at the time the laboratory data were generated for the project, Pace was NELAC-accredited under the Texas Laboratory Accreditation Program (Certification Number: T104704245-20-18) for the matrices, analytes, and methods of analysis requested on the chain-of-custody documentation. A copy of Pace Analytical National Environmental Laboratory Accreditation Program (NELAP) certificate applicable to the period during which the laboratory generated the data in this report is included in a separate appendix.

Intended Use of Data

Samples were collected to provide current data on groundwater conditions at the test location. Analyses requested included:

- Method 904 – Radium-226 Analysis
- Method SM7500Ra B M – Radium-228 Analysis
- Method Calculation – Combined Radium (Radium 226 & Radium-228) Analysis

Data were reviewed and validated, as described in *Review and Reporting of COC Concentration Data* (RG-366/TRRP-13), and the results are discussed in this Data Usability Summary (DUS). The following laboratory submittals and field data were examined:

- the reportable data (i.e., results provided in the laboratory data package),
- the laboratory review checklists and associated exception reports, and
- the field notes with respect to field instrument calibrations, filtering procedures (if applicable), sampling procedures, and preservation procedures prior to shipping the samples to the laboratory.

The results of supporting quality control (QC) analyses were summarized on the Laboratory Review Checklist (LRC), Exception Reports (ERs), and in the case narratives, all of which were included in this review. The LRC, associated ERs, and reportable data included in this review are provided are attached to this DUS as Attachment A.

INTRODUCTION

Fifteen (15) groundwater samples were submitted to the laboratory, and all requested analyses were completed. Table 1 lists the sample identifications cross-referenced to laboratory identifications.

PROJECT MEASUREMENT QUALITY OBJECTIVES

The following criteria were used in this review (GSI 2019):

	MS/MSD		LCS/LCSD		Lab Dup		Field Precision
	% R	RPD	% R	RPD	RPD	RER	RPD
Analytes							
All Analytes	70 – 130	20	80 – 120	20	20	3	≤30

DATA REVIEW / VALIDATION RESULTS

Analytical Results

Results from these samples may be considered usable with the limitations and exceptions described in this section. Qualified sample data are listed in Table 2. Non-detected results are reported as less than the value of the sample detection limit (SDL).

Finding: All requested analyses were completed, and results were reported as requested.

Preservation and Holding Times

Samples were evaluated for agreement with the chain-of-custody (C-O-C). The samples were received by the laboratory in the appropriate containers and in good condition, with proper completion of the C-O-C documentation. Samples receipt temperature was within the acceptance criteria, and field preservation was done as specified in the Sampling and Analysis Plan [SAP] (GSI 2019). Samples were prepared and analyzed within method-specified holding times.

Finding: No qualifiers were added per these criteria.

Calibrations

No calibration issues were identified in the laboratory report narrative.

Finding: No qualifiers were added per this evaluation.

Blanks

Method Blank

- Radium-228 and Radium-226 were detected in the method blank above the reported sample detection limit and were qualified as analyte detected in the method blank (B) in the associated field samples.

Field Blank

Radium-228 and Radium-226 were detected in the field blank and were qualified as estimated with high bias (JH) in the associated field samples.

Equipment Blank

- Radium-228 and Radium-226 were detected in the equipment blank and were qualified as estimated with high bias (JH) in the associated field samples.

Finding: B and JH qualifiers were added per these criteria.

Internal Standard and Surrogate Recoveries (Volatile Organic Compounds (VOCs) and Semivolatile Organic Compounds (SVOCs) Only)

Not applicable.

Laboratory Control Samples

Laboratory control sample (LCS) recoveries met the project-defined QC acceptance criteria. No Laboratory Control Sample Duplicate (LCSD) was performed.

Finding: No qualifiers were added per these criteria.

Matrix Spike/Matrix Spike Duplicates (MS/MSD) and Laboratory Duplicates

MS/MSD precision and accuracy were within the project-defined QC acceptance criteria.

All laboratory duplicates were within the project-defined QC acceptance criteria.

Finding: No qualifiers were added per these criteria.

Field Duplicates (Field Precision)

Field precision A field duplicate identified as DUP-2 was collected for sample AP-35 during the field event. Field precision was calculated, and the RPD was within the project-defined QC acceptance criteria for all analytes except for Radium-226. A comparison of the field sample and the duplicate sample is shown in Table 3.

Finding: No qualifiers were added per these criteria.

Field Procedures

Sample collection and documentation were done according to the Groundwater Sampling and Analysis Plan (GSI, 2019).

Finding: Field activities were consistent with the SAP.

SUMMARY

The analytical data are usable for the purpose of characterizing groundwater conditions. No data were rejected based on this review and validation. However, a limited number of qualifiers were added (see Table 2).

REFERENCES

GSI Environmental, Inc., 2019, Groundwater Sampling and Analysis Plan, San Miguel Electric Cooperative, Inc., December 26.

TCEQ 2010. Review and Reporting of COC Concentration Data under TRRP, RG-366/TRRP-13 https://www.tceq.texas.gov/assets/public/comm_exec/pubs/rg/rg-366-trrp-13.pdf

TABLES

TABLE 1
Cross-Reference Field Sample and Laboratory Identifications

Sample Date	Lab	Lab Sample ID	Field Sample ID	Matrix
2/24/2021	Pace	L1321693-01	PZ-03	Groundwater
2/24/2021	Pace	L1321693-02	AP-31	Groundwater
2/24/2021	Pace	L1321693-03	MW-03	Groundwater
2/24/2021	Pace	L1321693-04	AP-32	Groundwater
2/24/2021	Pace	L1321693-05	AP-33	Groundwater
2/24/2021	Pace	L1321693-06	PZ-05	Groundwater
2/24/2021	Pace	L1321693-07	FB-2-2-24-21	Water (Field Blank)
2/24/2021	Pace	L1321693-08	EB-1-2-24-21	Water (Equipment Blank)
2/24/2021	Pace	L1321693-09	PZ-02	Groundwater
2/25/2021	Pace	L1321693-10	AP-34	Groundwater
2/25/2021	Pace	L1321693-11	AP-35	Groundwater
2/25/2021	Pace	L1321693-12	Dup-2	Groundwater
2/25/2021	Pace	L1321693-13	AP-36	Groundwater
2/25/2021	Pace	L1321693-14	PZ-06	Groundwater
2/25/2021	Pace	L1321693-15	EB3-2-25-21	Water (Equipment Blank)

TABLE 2
Qualifiers Added During Data Usability Review

Sample ID	Analyte	Lab Result	Unit	DUS Qualifier or Bias Code	Reason for Qualification	Batch Number	Report Number
PZ-03	Combined Radium		pCi/L	JH	Radium-226 and Radium-228 detected in field and equipment blank, respectively.		L1321693
PZ-03	Radium-228		pCi/L	JH	Radium-228 detected in equipment blank.		L1321693
PZ-03	Radium-226		pCi/L	JH	Radium-226 detected in field blank		L1321693
AP-31	Combined Radium		pCi/L	JH	Radium-226 and Radium-228 detected in field and equipment blank, respectively.		L1321693
AP-31	Radium-228		pCi/L	JH	Radium-228 detected in equipment blank.		L1321693
AP-31	Radium-226		pCi/L	JH	Radium-226 detected in field blank		L1321693
MW-03	Combined Radium		pCi/L	JH	Radium-226 and Radium-228 detected in field and equipment blank, respectively.		L1321693
MW-03	Radium-228		pCi/L	JH	Radium-228 detected in equipment blank.		L1321693
MW-03	Radium-226		pCi/L	JH	Radium-226 detected in field blank		L1321693

Sample ID	Analyte	Lab Result	Unit	DUS Qualifier or Bias Code	Reason for Qualification	Batch Number	Report Number
AP-32	Combined Radium		pCi/L	JH	Radium-226 detected in field blank.		L1321693
AP-32	Radium-226		pCi/L	JH	Radium-226 detected in field blank		L1321693
AP-33	Combined Radium		pCi/L	JH	Radium-226 and Radium-228 detected in field and equipment blank, respectively.		L1321693
AP-33	Radium-228		pCi/L	JH	Radium-228 detected in equipment blank.		L1321693
AP-33	Radium-226		pCi/L	JH	Radium-226 detected in field blank		L1321693
PZ-05	Combined Radium		pCi/L	JH	Radium-226 and Radium-228 detected in field and equipment blank, respectively.		L1321693
PZ-05	Radium-228		pCi/L	JH	Radium-228 detected in equipment blank.		L1321693
PZ-05	Radium-226		pCi/L	JH	Radium-226 detected in field blank		L1321693
FB-2-2-24-21	Radium-226		pCi/L	JH	Radium-226 detected in field blank		L1321693
EB-1-2-24-21	Combined Radium		pCi/L	B	Radium-226 detected in method blank.		L1321693
EB-1-2-24-21	Radium-226		pCi/L	B	Radium-226 detected in method blank		L1321693

Sample ID	Analyte	Lab Result	Unit	DUS Qualifier or Bias Code	Reason for Qualification	Batch Number	Report Number
PZ-02	Combined Radium		pCi/L	JH	Radium-226 detected in field blank.		L1321693
PZ-02	Radium-226		pCi/L	JH	Radium-226 detected in field blank		L1321693
AP-34	Combined Radium		pCi/L	JH	Radium-226 detected in field blank.		L1321693
AP-34	Radium-226		pCi/L	JH	Radium-226 detected in field blank		L1321693
AP-36	Combined Radium		pCi/L	JH	Radium-226 detected in field blank.		L1321693
AP-36	Radium-226		pCi/L	JH	Radium-226 detected in field blank		L1321693
PZ-06	Combined Radium		pCi/L	JH	Radium-226 detected in field blank.		L1321693
PZ-06	Radium-226		pCi/L	JH	Radium-226 detected in field blank		L1321693
EB3-2-25-21	Combined Radium		pCi/L	B	Radium-226 detected in method blank.		L1321693
EB3-2-25-21	Radium-226		pCi/L	B	Radium-226 detected in method blank		L1321693

Notes:

1. pCi/L = pico Curies per liter
2. U or "<" = Analyte was not detected at the SDL. J = Analyte detected between SDL and RL.
3. B = Analyte detected in method blank.
4. JH = Percent recovery greater than validation specifications, estimated results bias high.

TABLE 3
Field Precision Evaluation

Sample ID	Duplicate Sample ID	Sample Date	Matrix	Analyte	Sample Result (pCi/l)	Duplicate Result (pCi/l)	RPD (%)	RPD Result
AP-35	DUP-2	2/24/2021	Groundwater	Combined Radium	29.6 ± 1.67	26.3 ± 1.34	11.8	A
AP-35	DUP-2	2/24/2021	Groundwater	Radium-228	6.4 ± 0.641	23.3 ± 0.647	0.4	A
AP-35	DUP-2	2/24/2021	Groundwater	Radium-226	26.3 ± 1.03	3.05 ± 0.694	158.4	--

Notes:
1. The detection limit was used to calculate Relative Percent Difference (RPD) for non-detect samples.
2. RPD = ((SR - DR) * 200)/(SR + DR).
3. A = Acceptable RPD.

Attachment A

DHL Analytical

Analytical Report

SDG. 2102163

April 01, 2021

Mike Schofield
GSI Environmental, Inc
9600 Great Hills Trail, Suite 350E
Austin, Texas 78759
TEL: (512) 346-4474
FAX

Order No.: 2102163

RE: SMEC, Christine, Texas

Dear Mike Schofield:

DHL Analytical, Inc. received 15 sample(s) on 2/26/2021 for the analyses presented in the following report.

There were no problems with the analyses and all data met requirements of NELAP except where noted in the Case Narrative. All non-NELAP methods will be identified accordingly in the case narrative and all estimated uncertainties of test results are within method or EPA specifications.

If you have any questions regarding these tests results, please feel free to call. Thank you for using DHL Analytical.

Sincerely,

John DuPont
General Manager

This report was performed under the accreditation of the State of Texas Laboratory Certification Number: T104704211-21-26

Table of Contents

TTSU Funds

№ 67398

DHL ANALYTICAL

2300 Double Creek Dr. ■ Round Rock, TX 78664
Phone (512) 388-8222 ■ FAX (512) 388-8229
Web: *www.dhlanalytical.com*
E-Mail: *login@dhlanalytical.com*

CHAIN-OF-CUSTODY

CLIENT: GSI ENVIRONMENTAL INC
ADDRESS: 9600 GREAT HILLS TRL, #350E, AUSTIN, TX 78759
PHONE: 512-346-4474 FAX/E-MAIL:
DATA REPORTED TO: MLSchofield@gsi-net.com
ADDITIONAL REPORT COPIES TO: BNzeribe@gsi-net.com

DATE: 02/25/21 PAGE 1 OF 2
PO #: DHL WORK ORDER #: 2102163
PROJECT LOCATION OR NAME: SMEC; CHRISTINE, TEXAS
CLENT PROJECT #: 5046-109 COLLECTOR: RTC, BNW, ELR, CWR

Authorize 5% surcharge for TRRP Report? ☒ Yes ☐ No

S=SOIL W=WATER A=AIR L=LIQUID SE=SEDIMENT P=PAINT SL=SLUDGE O=OTHER SO=SOLID

PRESERVATION: HCl | HNO_3 | H_2SO_4 ☐ NaOH ☐ | ICE | UNPRESERVED

ANALYSES: BTEX ☐ MTBE ☐ [METHOD 8021] | TPH 1005 ☐ TPH 1006 ☐ HOLD 1006 ☐ | GRO [METHOD 8015] ☐ DRO [METHOD 8105] ☐ | VOC 8260 ☐ VOC 624 ☐ VOC 8260/5035 ☐ | SVOC 8270 ☐ PAH 8270 ☐ HOLD PAH ☐ SVOC 625 ☐ | 8270 PEST ☐ 625 PEST/PCB ☐ 608 PCB ☐ 8270 PCB ☐ | 8270 O-P PEST ☐ 8082 PCB ☐ 8270 PCB ☐ | 8321 HERB ☐ T PHOS, AMMONIA ☐ | METALS 6020 ☐ METALS 200.8 ☐ DISS. METALS ☐ | RCRA ☐ TX11 ☐ | PH ☐ HEX CHROM ☐ ALKALINITY ☐ COD ☐ | CHLORIDE ☐ ANIONS ☐ E300 | TCLP-SVOC ☐ VOC ☐ PEST ☐ HERB ☐ | TCLP-METALS ☐ RCRA 8 ☐ TX-11 ☐ Pb ☐ | RCI ☐ FLASHPOINT ☐ DGAS ☐ | TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐ | Radium 226/228

Field Sample I.D.	DHL Lab #	Date	Time	Matrix	Container Type	# of Containers	HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESERVED	ANALYSES	FIELD NOTES
PZ-03	01	2/24/21	1127	W	1×500mL 1×250mL 2×1L			X		X		X' X X	T X
PZ-03-MS	↓	2/24/21	1127	↓	↓			↓		↓		↓ ↓ ↓	↓ ↓
PZ-03-MSD	↓	2/24/21	1127	↓	↓			↓		↓		↓ ↓ ↓	↓ ↓
AP-31	02	2/24/21	1332	↓	↓			↓		↓		↓ ↓ ↓	↓ ↓
MW-03	03	2/24/21	1418	↓	↓			↓		↓		↓ ↓ ↓	↓ ↓
AP-32	04	2/24/21	1624	↓	↓			↓		↓		↓ ↓ ↓	↓ ↓
AP-33	05	2/24/21	1632	↓	↓			↓		↓		↓ ↓ ↓	↓ ↓
PZ-05	06	2/24/21	1730	↓	↓			↓		↓		↓ ↓ ↓	↓ ↓
FB-2-2-24-21	07	2/24/21	1817	↓	↓			↓		↓		↓ ↓ ↓	↓ ↓
EB-1-2-24-21	08	2/24/21	1845	↓	↓			↓		↓		↓ ↓ ↓	↓ ↓
PZ-02	09	2/24/21	1115	↓	↓			↓		↓		↓ ↓ ↓	↓ ↓
AP-34	10	2/25/21	0926	↓	↓			↓		↓		↓ ↓ ↓	↓ ↓
AP-35	11	2/25/21	1015	↓	↓			↓		↓		↓ ↓ ↓	↓ ↓
DUP-2	12	2/25/21		↓	↓			↓		↓		↓ ↓ ↓	↓ ↓
AP-36	13	2/25/21	1125	↓	↓			↓		↓		↓ ↓ ↓	↓ ↓

RELINQUISHED BY: (Signature) DATE/TIME 2/26/21 9:47 RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)

☒ DHL DISPOSAL @ $5.00 each ☐ Return

TURN AROUND TIME
RUSH ☐ CALL FIRST
1 DAY ☐ CALL FIRST
2 DAY ☐
NORMAL ☒
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 1.2/1.0/2.8/1.6 0.3/1.9/1.4 THERM #: 78
CUSTODY SEALS: ☐ BROKEN ☐ INTACT ☒ NOT USED
CARRIER: ☐ LONE STAR ☐ FEDEX ☐ UPS ☐ OTHER
☐ COURIER DELIVERY
☒ HAND DELIVERED

DHL COC Rev 1 | FEB 2010

DHL ANALYTICAL
2300 Double Creek Dr. ■ Round Rock, TX 78664
Phone (512) 388-8222 ■ FAX (512) 388-8229
Web: www.dhlanalytical.com
E-Mail: login@dhlanalytical.com

Ash Ponds

№ 67397

CHAIN-OF-CUSTODY

CLIENT: GSI ENVIRONMENTAL INC
ADDRESS: 9600 GREAT HILLS TRL #350 E, AUSTIN, TX 78759
PHONE: 512-346-4474 FAX/E-MAIL:
DATA REPORTED TO: MLSchofield@GSI-net.com
ADDITIONAL REPORT COPIES TO: BNzeribe@gsi-net.com

DATE: 02/25/21 PAGE 2 OF 2
PO #: DHL WORK ORDER #: 2102163
PROJECT LOCATION OR NAME: SMEC, CHRISTINE, TX
CLENT PROJECT #: 5076-09 COLLECTOR: RTC BNW, FKR, WR

Authorize 5% surcharge for TRRP Report? ☑ Yes ☐ No

S=SOIL W=WATER A=AIR L=LIQUID SE=SEDIMENT P=PAINT SL=SLUDGE O=OTHER SO=SOLID

PRESERVATION: HCl | HNO_3 | H_2SO_4 ☐ NaOH ☐ | ICE | UNPRESERVED

ANALYSES: BTEX ☐ MTBE ☐ (METHOD 8021) | TPH 1005 ☐ TPH 1006 ☐ HOLD 1006 ☐ | GRO (METHOD 8015) ☐ DRO (METHOD 8105) ☐ | VOC 8260 ☐ VOC 624 ☐ VOC 8260/5035 ☐ | SVOC 8270 ☐ PAH 8270 ☐ HOLD PAH ☐ SVOC 625 ☐ | 8270 PEST ☐ 625 PEST/PCB ☐ 608 PCB ☐ 8082 PCB ☐ 8270 PCB ☐ | 8270 O-P PEST ☐ 8321 HERB ☐ T PHOS, AMMONIA ☐ | METALS 6020 ☐ METALS 200.8 ☐ DISS. METALS ☐ | RCRA ☐ TX11 ☐ | PH ☐ HEX CHROM ☐ ALKALINITY ☐ COD ☐ | CHLORIDE ☐ ANIONS E350 ☐ | TCLP-SVOC ☐ VOC ☐ PEST ☐ HERB ☐ | TCLP-METALS ☐ RCRA 8 ☐ TX-11 ☐ Pb ☐ | RCI ☐ FLASHPOINT ☐ DGAS ☐ | TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐ | Radium 226/228

Field Sample I.D.	DHL Lab #	Date	Time	Matrix	Container Type	# of Containers	HCl	HNO_3	H_2SO_4 NaOH	ICE	UNPRESERVED	ANALYSES	FIELD NOTES
PZ-06	14	2/25/21	1215	W	1x500mL 1x250mL			X		X		6 X X X X	
EB3-2-25-21	15	2/25/21	1527	W	2x 1L			X		X		X X X X X	

RELINQUISHED BY: (Signature) DATE/TIME 2/26/21 9:47 RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)

☑ DHL DISPOSAL @ $5.00 each ☐ Return

TURN AROUND TIME
RUSH ☐ CALL FIRST
1 DAY ☐ CALL FIRST
2 DAY ☐
NORMAL ☒
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 1.2/1.8/2.8/1.6 8.3/1.4/1.4/1.1 THERM #: 78
CUSTODY SEALS: ☐ BROKEN ☐ INTACT ☑ NOT USED
CARRIER: ☐ LONE STAR ☐ FEDEX ☐ UPS ☐ OTHER
☐ COURIER DELIVERY
☒ HAND DELIVERED

DHL COC Rev 1 | FEB 2010

DHL Analytical, Inc.

Sample Receipt Checklist

Client Name **GSI Environmental, Inc** Date Received: **2/26/2021**

Work Order Number **2102163** Received by: **EL**

Checklist completed by: _____ 2/26/2021 Reviewed by _____ 2/26/2021
Signature | Date | Initials | Date

Carrier name: Hand Delivered

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	1.2 °C/1.0/2.8/1.6/0.3/1.9/1.4/1.1
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH<2 acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted? _____		Checked by _____
Water - ph>9 (S) or ph>10 (CN) acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted? _____		Checked by _____

Any No response must be detailed in the comments section below.

Client contacted: _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action: _____

Laboratory Name: DHL Analytical, Inc.

Laboratory Review Checklist: Reportable Data

Project Name: SMEC, Christine, Texas	**LRC Date:** 4/1/21
Reviewer Name: Carlos Castro	**Laboratory Work Order:** 2102163
Prep Batch Number(s): See Prep Dates Report	**Run Batch:** See Analytical Dates Report

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-Custody (C-O-C)					
R1	OI	**1)** Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	**X**				**R1-01**
		2) Were all departures from standard conditions described in an exception report?			**X**		
R2	OI	**Sample and Quality Control (QC) Identification**					
		1) Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	**X**				
		2) Are all laboratory ID numbers cross-referenced to the corresponding QC data?	**X**				
R3	OI	**Test Reports**					
		1) Were all samples prepared and analyzed within holding times?			**X**		
		2) Other than those results < MQL, were all other raw values bracketed by calibration standards?			**X**		
		3) Were calculations checked by a peer or supervisor?			**X**		
		4) Were all analyte identifications checked by a peer or supervisor?			**X**		
		5) Were sample detection limits reported for all analytes not detected?			**X**		
		6) Were all results for soil and sediment samples reported on a dry weight basis?			**X**		
		7) Were % moisture (or solids) reported for all soil and sediment samples?			**X**		
		8) Were bulk soils/solids samples for volatile analysis extracted with methanol per EPA Method 5035?			**X**		
		9) If required for the project, TICs reported?			**X**		
R4	O	**Surrogate Recovery Data**					
		1) Were surrogates added prior to extraction?			**X**		
		2) Were surrogate percent recoveries in all samples within the laboratory QC limits?			**X**		
R5	OI	**Test Reports/Summary Forms for Blank Samples**					
		1) Were appropriate type(s) of blanks analyzed?			**X**		
		2) Were blanks analyzed at the appropriate frequency?			**X**		
		3) Where method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?			**X**		
		4) Were blank concentrations < MDL?			**X**		
		5) For analyte(s) detected in a blank sample, was the concentration, unadjusted for sample specific factors, in all associated field samples, **greater** than 10 times the concentration in the blank sample?			**X**		
R6	OI	**Laboratory Control Samples (LCS):**					
		1) Were all COCs included in the LCS?			**X**		
		2) Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?			**X**		
		3) Were LCSs analyzed at the required frequency?			**X**		
		4) Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?			**X**		
		5) Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?			**X**		
		6) Was the LCSD RPD within QC limits (if applicable)?			**X**		
R7	OI	**Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Data**					
		1) Were the project/method specified analytes included in the MS and MSD?			**X**		
		2) Were MS/MSD analyzed at the appropriate frequency?			**X**		
		3) Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			**X**		
		4) Were MS/MSD RPDs within laboratory QC limits?			**X**		
R8	OI	**Analytical Duplicate Data**					
		1) Were appropriate analytical duplicates analyzed for each matrix?			**X**		
		2) Were analytical duplicates analyzed at the appropriate frequency?			**X**		
		3) Were RPDs or relative standard deviations within the laboratory QC limits?			**X**		
R9	OI	**Method Quantitation Limits (MQLs):**					
		1) Are the MQLs for each method analyte included in the laboratory data package?			**X**		
		2) Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?			**X**		
		3) Are unadjusted MQLs and DCSs included in the laboratory data package?			**X**		
R10	OI	**Other Problems/Anomalies**					
		1) Are all known problems/anomalies/special conditions noted in this LRC and ER?			**X**		
		2) Was applicable and available technology used to lower the SDL to minimize the matrix interference affects on the sample results?			**X**		
		3) Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?			**X**		

Laboratory Name: DHL Analytical, Inc.

Laboratory Review Checklist (continued): Supporting Data

Project Name: SMEC, Christine, Texas	**LRC Date:** 4/1/21
Reviewer Name: Carlos Castro	**Laboratory Work Order:** 2102163
Prep Batch Number(s): See Prep Dates Report	**Run Batch:** See Analytical Dates Report

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial Calibration (ICAL)**					
		1) Were response factors and/or relative response factors for each analyte within QC limits?			X		
		2) Were percent RSDs or correlation coefficient criteria met?			X		
		3) Was the number of standards recommended in the method used for all analytes?			X		
		4) Were all points generated between the lowest and highest standard used to calculate the curve?			X		
		5) Are ICAL data available for all instruments used?			X		
		6) Has the initial calibration curve been verified using an appropriate second source standard?			X		
S2	OI	**Initial and Continuing calibration Verification (ICCV and CCV) and Continuing Calibration blank (CCB):**					
		1) Was the CCV analyzed at the method-required frequency?			X		
		2) Were percent differences for each analyte within the method-required QC limits?			X		
		3) Was the ICAL curve verified for each analyte?			X		
		4) Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	**Mass Spectral Tuning:**					
		1) Was the appropriate compound for the method used for tuning?			X		
		2) Were ion abundance data within the method-required QC limits?			X		
S4	O	**Internal Standards (IS):**					
		1) Were IS area counts and retention times within the method-required QC limits?			X		
S5	OI	**Raw Data (NELAC Section 5.5.10)**					
		1) Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?			X		
		2) Were data associated with manual integrations flagged on the raw data?			X		
S6	O	**Dual Column Confirmation**					
		1) Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively Identified Compounds (TICs):**					
		1) If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) Results:**					
		1) Were percent recoveries within method QC limits?			X		
S9	I	**Serial Dilutions, Post Digestion Spikes, and Method of Standard Additions**					
		1) Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	**Method Detection Limit (MDL) Studies**					
		1) Was a MDL study performed for each reported analyte?			X		
		2) Is the MDL either adjusted or supported by the analysis of DCSs?			X		
S11	OI	**Proficiency Test Reports:**					
		1) Was the lab's performance acceptable on the applicable proficiency tests or evaluation studies?			X		
S12	OI	**Standards Documentation**					
		1) Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?			X		
S13	OI	**Compound/Analyte Identification Procedures**					
		1) Are the procedures for compound/analyte identification documented?			X		
S14	OI	**Demonstration of Analyst Competency (DOC)**					
		1) Was DOC conducted consistent with NELAC Chapter 5 – Appendix C?			X		
		2) Is documentation of the analyst's competency up-to-date and on file?			X		
S15	OI	**Verification/Validation Documentation for Methods** (NELAC Chapter 5)					
		1) Are all the methods used to generate the data documented, verified, and validated, where applicable?			X		
S16	OI	**Laboratory Standard Operating Procedures (SOPs):**					
		1) Are laboratory SOPs current and on file for each method performed?			X		

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
3 NA = Not applicable.
4 NR = Not Reviewed.
5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Data Package Signature Page – RG-366/TRRP-13

This data package consists of:

This signature page, the laboratory review checklist, and the following reportable data:

R1 Field chain-of-custody documentation;
R2 Sample identification cross-reference;
R3 Test reports (analytical data sheets) for each environmental sample that includes:
  a) Items consistent with NELAC Chapter 5,
  b) dilution factors,
  c) preparation methods,
  d) cleanup methods, and
  e) if required for the project, tentatively identified compounds (TICs).
R4 Surrogate recovery data including:
  a) Calculated recovery (%R), and
  b) The laboratory's surrogate QC limits.
R5 Test reports/summary forms for blank samples;
R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  a) LCS spiking amounts,
  b) Calculated %R for each analyte, and
  c) The laboratory's LCS QC limits.
R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a) Samples associated with the MS/MSD clearly identified,
  b) MS/MSD spiking amounts,
  c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d) Calculated %Rs and relative percent differences (RPDs), and
  e) The laboratory's MS/MSD QC limits
R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  a) The amount of analyte measured in the duplicate,
  b) The calculated RPD, and
  c) The laboratory's QC limits for analytical duplicates.
R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;
R10 Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in the Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory is not accredited under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge that all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information or data affecting the quality of the data has been knowingly withheld.

This laboratory was last inspected by TCEQ on February 25-28 2019. Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Name: John DuPont
Official Title: General Manager

Signature

04/01/21

Date

Name: Dr. Derhsing Luu
Official Title: Technical Director

DHL Analytical, Inc. **Date:** *01-Apr-21*

CLIENT: GSI Environmental, Inc
Project: SMEC, Christine, Texas
Lab Order: 2102163

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Sub-contract - Radiochemistry by method 904, SM7500Ra B M. Analyzed at Pace Analytical.

Exception Report R1-01

The samples were received and log-in performed on 2/26/21. A total of 15 samples were received. The samples arrived in good condition and were properly packaged.

DHL Analytical, Inc.

Date: *01-Apr-21*

CLIENT: GSI Environmental, Inc
Project: SMEC, Christine, Texas
Lab Order: 2102163

Work Order Sample Summary

Lab Smp ID	Client Sample ID	Tag Number	Date Collected	Date Recved
2102163-01	PZ-03		02/24/21 11:27 AM	2/26/2021
2102163-02	AP-31		02/24/21 01:32 PM	2/26/2021
2102163-03	MW-03		02/24/21 02:18 PM	2/26/2021
2102163-04	AP-32		02/24/21 04:24 PM	2/26/2021
2102163-05	AP-33		02/24/21 04:32 PM	2/26/2021
2102163-06	PZ-05		02/24/21 05:30 PM	2/26/2021
2102163-07	FB-2-2-24-21		02/24/21 06:17 PM	2/26/2021
2102163-08	EB-1-2-24-21		02/24/21 06:45 PM	2/26/2021
2102163-09	PZ-02		02/24/21 11:15 AM	2/26/2021
2102163-10	AP-34		02/25/21 09:26 AM	2/26/2021
2102163-11	AP-35		02/25/21 10:15 AM	2/26/2021
2102163-12	Dup-2		02/25/21	2/26/2021
2102163-13	AP-36		02/25/21 11:25 AM	2/26/2021
2102163-14	PZ-06		02/25/21 12:15 PM	2/26/2021
2102163-15	EB3-2-25-21		02/25/21 03:27 PM	2/26/2021

ANALYTICAL REPORT

April 01, 2021

DHL Analytical, Inc.

Sample Delivery Group:	L1321693
Samples Received:	03/02/2021
Project Number:	2102163
Description:	

Report To: John DuPont
2300 Double Creek Drive
Round Rock, TX 78664

Entire Report Reviewed By:

Donna Eidson
Project Manager

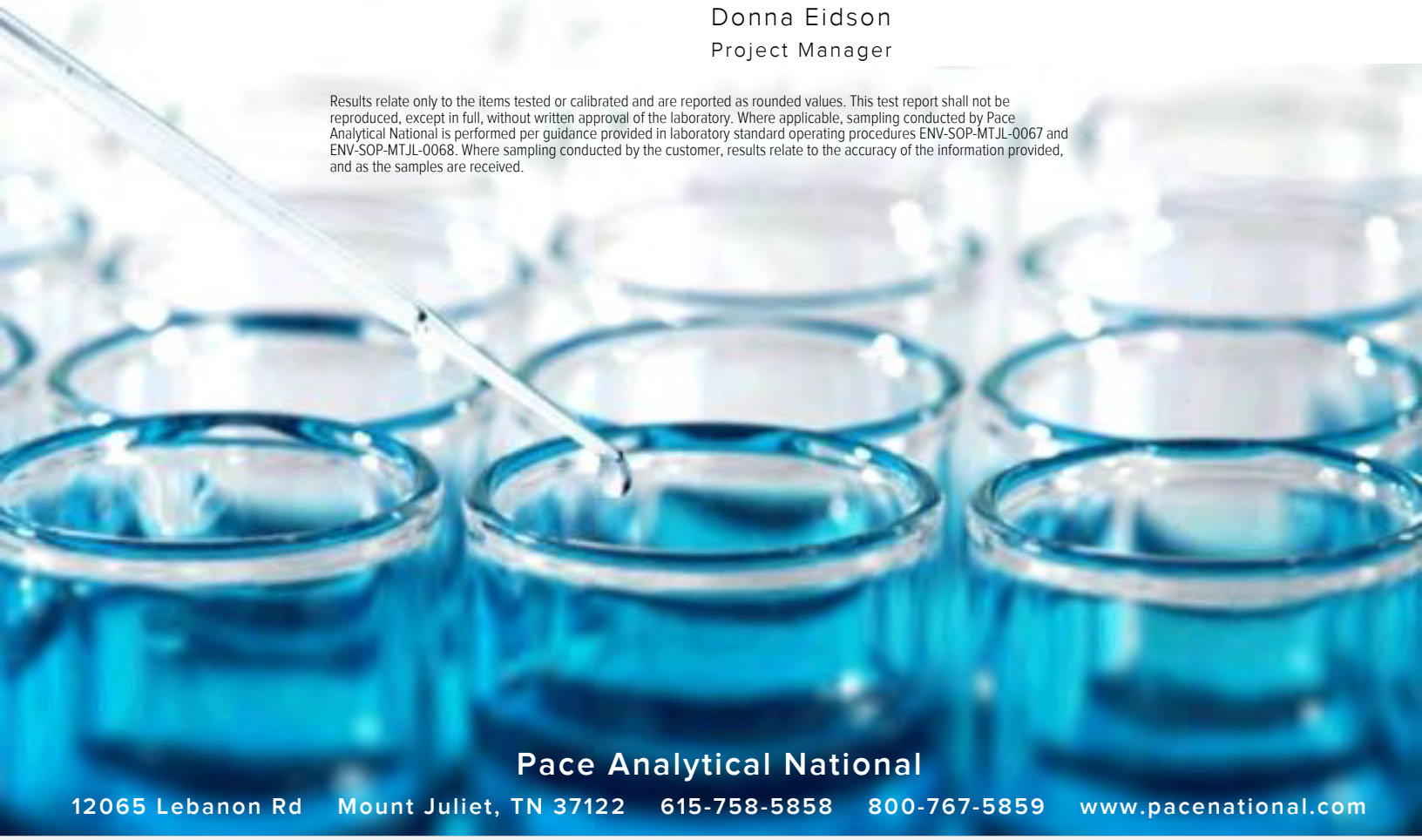

TABLE OF CONTENTS

PZ-03 L1321693-01 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/24/21 11:27	03/02/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904	WG1638495	1	03/24/21 12:21	03/29/21 14:20	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1637265	1	03/22/21 14:07	03/29/21 14:20	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1637265	1	03/22/21 14:07	03/23/21 15:46	RGT	Mt. Juliet, TN

AP-31 L1321693-02 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/24/21 13:32	03/02/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904	WG1638495	1	03/24/21 12:21	03/29/21 14:20	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1637265	1	03/22/21 14:07	03/29/21 14:20	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1637265	1	03/22/21 14:07	03/23/21 15:46	RGT	Mt. Juliet, TN

MW-03 L1321693-03 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/24/21 14:18	03/02/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904	WG1638495	1	03/24/21 12:21	03/29/21 14:20	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1637265	1	03/22/21 14:07	03/29/21 14:20	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1637265	1	03/22/21 14:07	03/23/21 15:46	RGT	Mt. Juliet, TN

AP-32 L1321693-04 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/24/21 16:24	03/02/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904	WG1638495	1	03/24/21 12:21	03/29/21 14:20	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1637265	1	03/22/21 14:07	03/29/21 14:20	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1637265	1	03/22/21 14:07	03/23/21 15:46	RGT	Mt. Juliet, TN

AP-33 L1321693-05 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/24/21 16:32	03/02/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904	WG1638495	1	03/24/21 12:21	03/29/21 14:20	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1637265	1	03/22/21 14:07	03/29/21 14:20	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1637265	1	03/22/21 14:07	03/23/21 15:46	RGT	Mt. Juliet, TN

PZ-05 L1321693-06 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/24/21 17:30	03/02/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904	WG1638495	1	03/24/21 12:21	03/29/21 14:20	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1637265	1	03/22/21 14:07	03/29/21 14:20	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1637265	1	03/22/21 14:07	03/23/21 15:46	RGT	Mt. Juliet, TN

FB-2-2-24-21 L1321693-07 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/24/21 18:17	03/02/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904	WG1638495	1	03/24/21 12:21	03/30/21 09:05	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1637265	1	03/22/21 14:07	03/30/21 09:05	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1637265	1	03/22/21 14:07	03/23/21 15:46	RGT	Mt. Juliet, TN

EB-1-2-24-21 L1321693-08 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/24/21 18:45	03/02/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904	WG1638495	1	03/24/21 12:21	03/30/21 09:05	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1637265	1	03/22/21 14:07	03/30/21 09:05	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1637265	1	03/22/21 14:07	03/23/21 15:46	RGT	Mt. Juliet, TN

PZ-02 L1321693-09 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/24/21 11:15	03/02/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904	WG1638495	1	03/24/21 12:21	03/30/21 09:05	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1637265	1	03/22/21 14:07	03/30/21 09:05	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1637265	1	03/22/21 14:07	03/23/21 15:46	RGT	Mt. Juliet, TN

AP-34 L1321693-10 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/25/21 09:26	03/02/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904	WG1638495	1	03/24/21 12:21	03/30/21 09:05	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1637265	1	03/22/21 14:07	03/30/21 09:05	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1637265	1	03/22/21 14:07	03/23/21 15:46	RGT	Mt. Juliet, TN

AP-35 L1321693-11 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/25/21 10:15	03/02/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904	WG1638495	1	03/24/21 12:21	03/30/21 09:05	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1637265	1	03/22/21 14:07	03/30/21 09:05	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1637265	1	03/22/21 14:07	03/23/21 15:46	RGT	Mt. Juliet, TN

DUP-2 L1321693-12 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/25/21 00:00	03/02/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904	WG1638495	1	03/24/21 12:21	03/30/21 09:05	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1637265	1	03/22/21 14:07	03/30/21 09:05	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1637265	1	03/22/21 14:07	03/23/21 15:46	RGT	Mt. Juliet, TN

AP-36 L1321693-13 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/25/21 11:25	03/02/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904	WG1638495	1	03/24/21 12:21	03/30/21 09:05	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1637265	1	03/22/21 14:07	03/30/21 09:05	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1637265	1	03/22/21 14:07	03/23/21 15:46	RGT	Mt. Juliet, TN

PZ-06 L1321693-14 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/25/21 12:15	03/02/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904	WG1638495	1	03/24/21 12:21	03/30/21 09:05	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1637265	1	03/22/21 14:07	03/30/21 09:05	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1637265	1	03/22/21 14:07	03/23/21 15:46	RGT	Mt. Juliet, TN

EB3-2-25-21 L1321693-15 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/25/21 15:27	03/02/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904	WG1638495	1	03/24/21 12:21	03/30/21 09:05	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1637265	1	03/22/21 14:07	03/30/21 09:05	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1637265	1	03/22/21 14:07	03/23/21 15:46	RGT	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Donna Eidson
Project Manager

Radiochemistry by Method 904

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	4.22		0.390	0.606	03/29/2021 14:20	WG1638495
(T) Barium	*96.8*			*62.0-143*	*03/29/2021 14:20*	WG1638495
(T) Yttrium	*98.2*			*79.0-136*	*03/29/2021 14:20*	WG1638495

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	5.16		0.770	0.788	03/29/2021 14:20	WG1637265

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.939		0.380	0.182	03/23/2021 15:46	WG1637265
(T) Barium-133	*93.4*			*30.0-143*	*03/23/2021 15:46*	WG1637265

Radiochemistry by Method 904

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.852		0.349	0.621	03/29/2021 14:20	WG1638495
(T) Barium	*100*			*62.0-143*	*03/29/2021 14:20*	WG1638495
(T) Yttrium	*93.4*			*79.0-136*	*03/29/2021 14:20*	WG1638495

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.94		0.739	0.846	03/29/2021 14:20	WG1637265

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	1.09		0.390	0.225	03/23/2021 15:46	WG1637265
(T) Barium-133	*97.0*			*30.0-143*	*03/23/2021 15:46*	WG1637265

Radiochemistry by Method 904

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	3.89		0.389	0.62	03/29/2021 14:20	WG1638495
(T) Barium	*107*			*62.0-143*	*03/29/2021 14:20*	WG1638495
(T) Yttrium	*103*			*79.0-136*	*03/29/2021 14:20*	WG1638495

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	4.70		0.745	0.827	03/29/2021 14:20	WG1637265

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.809		0.356	0.207	03/23/2021 15:46	WG1637265
(T) Barium-133	*94.1*			*30.0-143*	*03/23/2021 15:46*	WG1637265

Radiochemistry by Method 904

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	8.46		0.446	0.608	03/29/2021 14:20	WG1638495
(T) Barium	*94.3*			*62.0-143*	*03/29/2021 14:20*	WG1638495
(T) Yttrium	*99.4*			*79.0-136*	*03/29/2021 14:20*	WG1638495

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	9.59		0.822	0.802	03/29/2021 14:20	WG1637265

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	1.13		0.376	0.194	03/23/2021 15:46	WG1637265
(T) Barium-133	*97.1*			*30.0-143*	*03/23/2021 15:46*	WG1637265

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Radiochemistry by Method 904

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	5.86		0.447	0.671	03/29/2021 14:20	WG1638495
(T) Barium	*94.2*			*62.0-143*	*03/29/2021 14:20*	WG1638495
(T) Yttrium	*92.0*			*79.0-136*	*03/29/2021 14:20*	WG1638495

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	6.70		0.808	1.01	03/29/2021 14:20	WG1637265

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.843		0.361	0.337	03/23/2021 15:46	WG1637265
(T) Barium-133	*99.8*			*30.0-143*	*03/23/2021 15:46*	WG1637265

Radiochemistry by Method 904

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	2.94		0.385	0.628	03/29/2021 14:20	WG1638495
(T) Barium	*95.9*			*62.0-143*	*03/29/2021 14:20*	WG1638495
(T) Yttrium	*93.8*			*79.0-136*	*03/29/2021 14:20*	WG1638495

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	3.48		0.674	0.826	03/29/2021 14:20	WG1637265

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.548		0.289	0.198	03/23/2021 15:46	WG1637265
(T) Barium-133	*97.0*			*30.0-143*	*03/23/2021 15:46*	WG1637265

Radiochemistry by Method 904

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	-1.12	U	0.351	0.604	03/30/2021 09:05	WG1638495
(T) Barium	*103*			*62.0-143*	*03/30/2021 09:05*	WG1638495
(T) Yttrium	*104*			*79.0-136*	*03/30/2021 09:05*	WG1638495

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.330	J	0.620	0.932	03/30/2021 09:05	WG1637265

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.330		0.269	0.328	03/23/2021 15:46	WG1637265
(T) Barium-133	*85.7*			*30.0-143*	*03/23/2021 15:46*	WG1637265

Radiochemistry by Method 904

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	1.33		0.343	0.526	03/30/2021 09:05	WG1638495
(T) Barium	*107*			*62.0-143*	*03/30/2021 09:05*	WG1638495
(T) Yttrium	*103*			*79.0-136*	*03/30/2021 09:05*	WG1638495

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.37		0.459	0.775	03/30/2021 09:05	WG1637265

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.0432	U	0.116	0.249	03/23/2021 15:46	WG1637265
(T) Barium-133	*64.7*			*30.0-143*	*03/23/2021 15:46*	WG1637265

Radiochemistry by Method 904

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-1.14	U	0.377	0.647	03/30/2021 09:05	WG1638495
(T) Barium	*94.8*			*62.0-143*	*03/30/2021 09:05*	WG1638495
(T) Yttrium	*101*			*79.0-136*	*03/30/2021 09:05*	WG1638495

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.596	J	0.667	0.845	03/30/2021 09:05	WG1637265

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.596		0.290	0.198	03/23/2021 15:46	WG1637265
(T) Barium-133	*96.1*			*30.0-143*	*03/23/2021 15:46*	WG1637265

Radiochemistry by Method 904

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	3.86		0.430	0.609	03/30/2021 09:05	WG1638495
(T) Barium	*96.0*			*62.0-143*	*03/30/2021 09:05*	WG1638495
(T) Yttrium	*104*			*79.0-136*	*03/30/2021 09:05*	WG1638495

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	4.12		0.660	0.882	03/30/2021 09:05	WG1637265

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.267	J	0.230	0.273	03/23/2021 15:46	WG1637265
(T) Barium-133	*97.8*			*30.0-143*	*03/23/2021 15:46*	WG1637265

Radiochemistry by Method 904

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	23.2		0.641	0.617	03/30/2021 09:05	WG1638495
(T) Barium	*99.9*			*62.0-143*	*03/30/2021 09:05*	WG1638495
(T) Yttrium	*99.4*			*79.0-136*	*03/30/2021 09:05*	WG1638495

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	29.6		1.67	1.06	03/30/2021 09:05	WG1637265

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	6.40		1.03	0.441	03/23/2021 15:46	WG1637265
(T) Barium-133	*97.7*			*30.0-143*	*03/23/2021 15:46*	WG1637265

Radiochemistry by Method 904

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	23.3		0.647	0.62	03/30/2021 09:05	WG1638495
(T) Barium	*101*			*62.0-143*	*03/30/2021 09:05*	WG1638495
(T) Yttrium	*98.2*			*79.0-136*	*03/30/2021 09:05*	WG1638495

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	26.3		1.34	0.885	03/30/2021 09:05	WG1637265

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	3.05		0.694	0.265	03/23/2021 15:46	WG1637265
(T) Barium-133	*98.3*			*30.0-143*	*03/23/2021 15:46*	WG1637265

Radiochemistry by Method 904

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	2.66		0.443	0.755	03/30/2021 09:05	WG1638495
(T) Barium	*99.9*			*62.0-143*	*03/30/2021 09:05*	WG1638495
(T) Yttrium	*105*			*79.0-136*	*03/30/2021 09:05*	WG1638495

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	3.53		0.814	0.966	03/30/2021 09:05	WG1637265

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.863		0.371	0.211	03/23/2021 15:46	WG1637265
(T) Barium-133	*98.9*			*30.0-143*	*03/23/2021 15:46*	WG1637265

Radiochemistry by Method 904

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	2.22		0.384	0.658	03/30/2021 09:05	WG1638495
(T) Barium	*101*			*62.0-143*	*03/30/2021 09:05*	WG1638495
(T) Yttrium	*108*			*79.0-136*	*03/30/2021 09:05*	WG1638495

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	2.55		0.634	0.937	03/30/2021 09:05	WG1637265

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.328		0.250	0.279	03/23/2021 15:46	WG1637265
(T) Barium-133	*102*			*30.0-143*	*03/23/2021 15:46*	WG1637265

Radiochemistry by Method 904

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.117	U	0.420	0.794	03/30/2021 09:05	WG1638495
(T) Barium	*104*			*62.0-143*	*03/30/2021 09:05*	WG1638495
(T) Yttrium	*103*			*79.0-136*	*03/30/2021 09:05*	WG1638495

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.0505	U	0.641	1.2	03/30/2021 09:05	WG1637265

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.0505	U	0.221	0.409	03/23/2021 15:46	WG1637265
(T) Barium-133	*82.7*			*30.0-143*	*03/23/2021 15:46*	WG1637265

Method Blank (MB)

(MB) R3636686-1 03/29/21 14:20

Analyte	MB Result pCi/l	MB Qualifier	MB MDA pCi/l
Radium-228	0.110	U	0.503
(T) Barium	*89.8*		
(T) Yttrium	*93.1*		

L1324019-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1324019-01 03/30/21 09:05 • (DUP) R3636686-5 03/29/21 14:20

Analyte	Original Result pCi/l	DUP Result pCi/l	Dilution	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.173	-0.571	1	200	1.24	U	20	3
(T) Barium	*99.3*	*95.5*						
(T) Yttrium	*101*	*92.0*						

Laboratory Control Sample (LCS)

(LCS) R3636686-2 03/29/21 14:20

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.82	116	80.0-120	
(T) Barium			*96.5*		
(T) Yttrium			*105*		

L1321693-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1321693-01 03/29/21 14:20 • (MS) R3636686-3 03/29/21 14:20 • (MSD) R3636686-4 03/29/21 14:20

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	10.0	4.22	13.5	14.5	92.7	103	1	70.0-130			7.22		20
(T) Barium		*96.8*			*102*	*92.6*							
(T) Yttrium		*98.2*			*95.8*	*93.4*							

Method Blank (MB)

(MB) R3634819-1 03/23/21 15:46

Analyte	MB Result pCi/l	MB Qualifier	MB MDA pCi/l
Radium-226	0.0299	J	0.0807
(T) Barium-133	*81.1*		

L1321693-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1321693-02 03/23/21 15:46 • (DUP) R3634819-5 03/23/21 15:46

Analyte	Original Result pCi/l	DUP Result pCi/l	Dilution	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	1.09	0.497	1	74.7	1.19		20	3
(T) Barium-133	*97.0*	*95.2*						

Laboratory Control Sample (LCS)

(LCS) R3634819-2 03/23/21 15:46

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.02	5.79	115	80.0-120	
(T) Barium-133			*84.1*		

L1321693-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1321693-01 03/23/21 15:46 • (MS) R3634819-3 03/23/21 15:46 • (MSD) R3634819-4 03/23/21 15:46

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.1	0.939	21.1	23.4	100	111	1	75.0-125			10.0		20
(T) Barium-133		*93.4*			*93.2*	*90.2*							

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDA	Minimum Detectable Activity.
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(T)	Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
U	Below Detectable Limits: Indicates that the analyte was not detected.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

DHL Analytical, Inc.
2300 Double Creek Drive
Round Rock, TX 78664
TEL: *(512) 388-8222* FAX: *(512) 388-8229*

CHAIN-OF-CUSTODY RECORD

G111

Work Order: 2102163

1321693

Subcontractor:

Pace Analytical
12065 Lebanon Rd
Mt. Juliet, TN 37122

TEL: (615) 773-5923
FAX:
Acct #: DHLRRTX

26-Feb-21

Sample ID	Matrix	DHL#	Date Collected	Bottle Type	Requested Tests					
					Ra-228	Ra-226				
					E904.0	M7500 Ra B M				
PZ-03	Aqueous	01A	02/24/21 11:27 AM	1LHDPEHNO3	3					-01
****MS/MSD Requested****										
PZ-03	Aqueous	01B	02/24/21 11:27 AM	1LHDPEHNO3		3				01
****MS/MSD Requested****										
AP-31	Aqueous	02A	02/24/21 01:32 PM	1LHDPEHNO3	1					02
AP-31	Aqueous	02B	02/24/21 01:32 PM	1LHDPEHNO3		1				1
MW-03	Aqueous	03A	02/24/21 02:18 PM	1LHDPEHNO3	1					03
MW-03	Aqueous	03B	02/24/21 02:18 PM	1LHDPEHNO3		1				1
AP-32	Aqueous	04A	02/24/21 04:24 PM	1LHDPEHNO3	1					04
AP-32	Aqueous	04B	02/24/21 04:24 PM	1LHDPEHNO3		1				1
AP-33	Aqueous	05A	02/24/21 04:32 PM	1LHDPEHNO3	1					05
AP-33	Aqueous	05B	02/24/21 04:32 PM	1LHDPEHNO3		1				1
PZ-05	Aqueous	06A	02/24/21 05:30 PM	1LHDPEHNO3	1					06
PZ-05	Aqueous	06B	02/24/21 05:30 PM	1LHDPEHNO3		1				1
FB-2-2-24-21	Field Blank	07A	02/24/21 06:17 PM	1LHDPEHNO3	1					07
FB-2-2-24-21	Field Blank	07B	02/24/21 06:17 PM	1LHDPEHNO3		1				1
EB-1-2-24-21	Equip Blank	08A	02/24/21 06:45 PM	1LHDPEHNO3	1					08

General Comments:

Please analyze these samples with Normal Turnaround Time.
Report RA-226, Ra-228 & Combined per Specs.
Quality Control Package Needed: Standard - NELAC Rad Test compliant
Email to cac@dhlanalytical.com & dupont@dhlanalytical.com

	Date/Time		Date/Time
Relinquished by:		**Received by:**	Kaley Miller 3/2/21 @ 1030
Relinquished by:		**Received by:**	

DHL Analytical, Inc.
2300 Double Creek Drive
Round Rock, TX 78664
TEL: *(512) 388-8222* FAX: *(512) 388-8229*

CHAIN-OF-CUSTODY RECORD

Work Order: 2102163

Subcontractor:

Pace Analytical
12065 Lebanon Rd
Mt. Juliet, TN 37122

TEL: (615) 773-5923
FAX:
Acct #: DHLRRTX

26-Feb-21

Sample ID	Matrix	DHL#	Date Collected	Bottle Type	Requested Tests: Ra-228 E904.0	Ra-226 M7500 Ra B M				
EB-1-2-24-21	Equip Blank	08B	02/24/21 06:45 PM	1LHDPEHNO3		1				08
PZ-02	Aqueous	09A	02/24/21 11:15 AM	1LHDPEHNO3	1					09
PZ-02	Aqueous	09B	02/24/21 11:15 AM	1LHDPEHNO3		1				"
AP-34	Aqueous	10A	02/25/21 09:26 AM	1LHDPEHNO3	1					10
AP-34	Aqueous	10B	02/25/21 09:26 AM	1LHDPEHNO3		1				"
AP-35	Aqueous	11A	02/25/21 10:15 AM	1LHDPEHNO3	1					11
AP-35	Aqueous	11B	02/25/21 10:15 AM	1LHDPEHNO3		1				"
Dup-2	Aqueous	12A	02/25/21	1LHDPEHNO3	1					12
Dup-2	Aqueous	12B	02/25/21	1LHDPEHNO3		1				"
AP-36	Aqueous	13A	02/25/21 11:25 AM	1LHDPEHNO3	1					13
AP-36	Aqueous	13B	02/25/21 11:25 AM	1LHDPEHNO3		1				"
PZ-06	Aqueous	14A	02/25/21 12:15 PM	1LHDPEHNO3	1					14
PZ-06	Aqueous	14B	02/25/21 12:15 PM	1LHDPEHNO3		1				"
EB3-2-25-21	Equip Blank	15A	02/25/21 03:27 PM	1LHDPEHNO3	1					15
EB3-2-25-21	Equip Blank	15B	02/25/21 03:27 PM	1LHDPEHNO3		1				"

General Comments:

Please analyze these samples with Normal Turnaround Time.
Report RA-226, Ra-228 & Combined per Specs.
Quality Control Package Needed: Standard - NELAC Rad Test compliant
Email to cac@dhlanalytical.com & dupont@dhlanalytical.com

Sample Receipt Checklist

COC Seal Present/Intact:	Y N	If Applicable	
COC Signed/Accurate:	Y N	VOA Zero Headspace:	Y N
Bottles arrive intact:	Y N	Pres.Correct/Check:	Y N
Correct bottles used:	Y N		
Sufficient volume sent:	Y N		
RAD Screen <0.5 mR/hr:	Y N		

		Date/Time			Date/Time
Relinquished by:				Received by:	Kailey Miller 3/2/21 @1030
Relinquished by:				Received by:	

GSI ENVIRONMENTAL

DATA USABILITY SUMMARY

February 2021 Sampling Event (SDG: 2102158)

OVERVIEW

GSI Environmental Inc. (GSI) reviewed one data package from DHL Analytical (DHL) for the analysis of **thirteen groundwater samples collected at the Equalization Pond on 24 - 25 February 2021** at the San Miguel Electric Cooperative, Inc., Christine, Atascosa County, Texas site. Data were reviewed for i) conformance to the requirements of the guidance document *Review and Reporting of COC Concentration Data* (RG-366/TRRP-13) and ii) adherence to project objectives (e.g., GSI 2019). GSI certifies that at the time the laboratory data were generated for the project, DHL was NELAC-accredited under the Texas Laboratory Accreditation Program (Certification Number: T104704211-21-26) for the matrices, analytes, and methods of analysis requested on the chain-of-custody documentation. A copy of DHL's National Environmental Laboratory Accreditation Program (NELAP) certificate applicable to the period during which the laboratory generated the data in this report is included in a separate appendix.

DHL completed all requested analyses except for radiochemistry, which was subcontracted to Pace Analytical. Refer to the DHL/Pace data package **SDG: L1321687 (2102159) for the radiochemistry results.**

Intended Use of Data

Samples were collected to provide current data on groundwater conditions at the test location. Analyses requested included:

- Method SW6020B – Metals Analysis
- Method SW7470A – Mercury Analysis
- Method E300 – Anions Analysis
- Method M2320 B – Alkalinity Analysis
- Method M2540C – Total Dissolved Solids Analysis

Data were reviewed and validated, as described in *Review and Reporting of COC Concentration Data* (RG-366/TRRP-13), and the results are discussed in this Data Usability Summary (DUS). The following laboratory submittals and field data were examined:

- the reportable data (i.e., results provided in the laboratory data package),
- the laboratory review checklists and associated exception reports, and
- the field notes with respect to field instrument calibrations, filtering procedures (if applicable), and sampling procedures.

The results of supporting quality control (QC) analyses were summarized on the Laboratory Review Checklists (LRC), Exception Reports (ERs), and in the case narrative, all of which were included in this review. The LRCs, associated ERs, and reportable data included in this review are attached to this DUS as Attachment A.

INTRODUCTION

Thirteen (13) groundwater samples were submitted to the laboratory, and all requested analyses were completed. Table 1 lists the sample identifications cross-referenced to laboratory identifications.

PROJECT MEASUREMENT QUALITY OBJECTIVES

The following criteria were used in this review (RG-366/TRRP-13):

	MS/MSD		LCS/LCSD		Lab Dup	Field Precision
Analytes	% R	RPD	% R	RPD	RPD	RPD
Metals	75 – 125	15	80 – 120	15	-	≤ 30%
Mercury	80 – 120	15	85 – 115	15	-	
Inorganic Anions	90 – 110	20	90 – 110	20	10	
Alkalinity	-		74 – 129	20	20	
Total Dissolved Solids (TDS)	-		90 – 113	-	5	

DATA REVIEW / VALIDATION RESULTS

Analytical Results

Results from these samples may be considered usable with the limitations and exceptions described in this section. Non-detected results are reported as less than the value of the sample detection limit (SDL).

Finding: All requested analyses were completed, and results were reported as requested.

Preservation and Holding Times

The samples were evaluated for agreement with the chain-of-custody (C-O-C). The samples were received by the laboratory in the appropriate containers and in good condition, with proper completion of the C-O-C documentation. Samples receipt temperature was within the acceptance criteria, and field preservation was done as specified in the Sampling and Analysis Plan [SAP] (GSI, 2019). Samples were prepared and analyzed within method-specified holding times.

Finding: No qualifiers were added per these criteria.

Calibrations

For metals analysis, sodium was detected below the reporting limits for the Continuing Calibration Blank (CCB6-200302).

Finding: No qualifiers were added per this evaluation.

Blanks

Field blank

- Boron, calcium, sodium, and TDS were detected in the field blank sample (FB-1-2242021) at concentrations equal or above the method detection limit (MDL). However, no qualifier was assigned because their groundwater concentrations were greater than five times the blank concentrations in the associated samples.

Equipment blank

- Boron, and calcium were detected in the equipment blank samples (EB-2-2242021and EB4-2-25-21) at concentrations equal or above the method detection limit (MDL). However, no qualifier was assigned because their groundwater concentrations were greater than five times the blank concentrations in the associated samples.

Finding: No qualifiers were added per this evaluation.

Internal Standard and Surrogate Recoveries (VOCs and SVOCs Only)

Not applicable.

Laboratory Control Samples

The Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD) recoveries and Relative Percent Differences (RPDs) were within the project-defined QC acceptance criteria.

Finding: No qualifiers were added per this evaluation.

Matrix Spike/Matrix Spike Duplicates and Laboratory Duplicates

The LRC indicated the following issues with matrix spike (MS)/matrix spike duplicate (MSD) data:

- For metals %R for, boron, magnesium and sodium were outside the project-defined QC acceptance criteria. However, no qualifier was assigned because the spiking amount was less than four times the result in the unspiked parent sample.

All laboratory duplicates were within the project-defined QC acceptance criteria.

Findings: No qualifiers were added per this evaluation.

Field Duplicates (Field Precision)

A field duplicate identified as DUP-1 was collected for sample EP-32 during the field event. Field precision was calculated and the RPD was within the project-defined QC acceptance criteria for all analytes except for fluoride. A comparison of the field sample and the duplicate sample is shown in Table 2.

Finding: No qualifiers were added per these criteria.

Field Procedures

Sample collection and documentation was done in accordance with the Groundwater Sampling and Analysis Plan (SAP; GSI, 2019).

Finding: Field activities were consistent with the SAP.

SUMMARY

The analytical data are usable for the purpose of characterizing groundwater conditions. No data were rejected based on this review and validation. No qualifiers were added to samples.

REFERENCES

GSI Environmental, Inc., 2019, Groundwater Sampling and Analysis Plan, San Miguel Electric Cooperative, Inc., December 26.

TCEQ 2010. Review and Reporting of COC Concentration Data under TRRP, RG-366/TRRP-13 https://www.tceq.texas.gov/assets/public/comm_exec/pubs/rg/rg-366-trrp-13.pdf

TABLES

TABLE 1
Cross-Reference Field Sample and Laboratory Identifications

Sample Date	Lab	Lab Sample ID	Field Sample ID	Matrix
2/24/2021	DHL	2102158-01	EP-31	Groundwater
2/24/2021	DHL	2102158-02	EP-32	Groundwater
2/24/2021	DHL	2102158-03	DUP-1	Groundwater
2/24/2021	DHL	2102158-04	EP-33	Groundwater
2/24/2021	DHL	2102158-05	EP-35	Groundwater
2/24/2021	DHL	2102158-06	EP-34	Groundwater
2/24/2021	DHL	2102158-07	EP-36	Water (Field Blank)
2/24/2021	DHL	2102158-08	FB-1-2242021	Water (Field Blank)
2/24/2021	DHL	2102158-09	EB-2-2242021	Water (Equipment Blank)
2/25/2021	DHL	2102158-10	EP-37	Groundwater
2/25/2021	DHL	2102158-11	MW-04	Groundwater
2/25/2021	DHL	2102158-12	EP-38	Groundwater
2/25/2021	DHL	2102158-13	EB4-2-25-21	Water (Equipment Blank)

TABLE 2
Field Precision Evaluation

Sample ID	Duplicate Sample ID	Sample Date	Matrix	Analyte	Sample Result (mg/L)	Duplicate Result (mg/L)	RPD (%)	RPD Result
EP-32	DUP-1	2/25/2021	Groundwater	Chloride	1820	1900	4.30	A
EP-32	DUP-1	2/25/2021	Groundwater	Fluoride	<0.500	1.01	67.55	--
EP-32	DUP-1	2/25/2021	Groundwater	Sulfate	4300	4290	0.23	A
EP-32	DUP-1	2/25/2021	Groundwater	Alkalinity, Bicarbonate (As CaCO3)	227	224	1.33	A
EP-32	DUP-1	2/25/2021	Groundwater	Alkalinity, Carbonate (As CaCO3)	<10.0	<10.0	0.00	A
EP-32	DUP-1	2/25/2021	Groundwater	Alkalinity, Hydroxide (As CaCO3)	<10.0	<10.0	0.00	A
EP-32	DUP-1	2/25/2021	Groundwater	Alkalinity, Total (As CaCO3)	227	224	1.33	A
EP-32	DUP-1	2/25/2021	Groundwater	Total Dissolved Solids (Residue, Filterable)	9800	9480	3.32	A
EP-32	DUP-1	2/25/2021	Groundwater	Antimony	<0.000800	<0.000800	0.00	A
EP-32	DUP-1	2/25/2021	Groundwater	Arsenic	<0.00200	<0.00200	0.00	A
EP-32	DUP-1	2/25/2021	Groundwater	Barium	0.0147	0.0135	8.51	A
EP-32	DUP-1	2/25/2021	Groundwater	Beryllium	<0.00150	<0.00150	0.00	A
EP-32	DUP-1	2/25/2021	Groundwater	Boron	20.9	23.6	12.13	A
EP-32	DUP-1	2/25/2021	Groundwater	Cadmium	<0.000300	<0.000300	0.00	A
EP-32	DUP-1	2/25/2021	Groundwater	Calcium	406	428	5.28	A
EP-32	DUP-1	2/25/2021	Groundwater	Chromium	<0.00200	<0.00200	0.00	A
EP-32	DUP-1	2/25/2021	Groundwater	Cobalt	<0.00300	<0.00300	0.00	A
EP-32	DUP-1	2/25/2021	Groundwater	Lead	<0.000300	<0.000300	0.00	A
EP-32	DUP-1	2/25/2021	Groundwater	Lithium	1.09	1.05	3.74	A
EP-32	DUP-1	2/25/2021	Groundwater	Magnesium	49.5	44.1	11.54	A
EP-32	DUP-1	2/25/2021	Groundwater	Molybdenum	0.0112	0.0127	12.55	A
EP-32	DUP-1	2/25/2021	Groundwater	Potassium	42.3	40	5.59	A
EP-32	DUP-1	2/25/2021	Groundwater	Selenium	<0.00200	<0.00200	0.00	A
EP-32	DUP-1	2/25/2021	Groundwater	Sodium	2710	2650	2.24	A
EP-32	DUP-1	2/25/2021	Groundwater	Thallium	<0.000500	<0.000500	0.00	A
EP-32	DUP-1	2/25/2021	Groundwater	Mercury	<0.00008	<0.000080	0.00	A

Notes:
1. The detection limit was used to calculate Relative Percent Difference (RPD) for non-detect samples.
2. RPD = ((SR - DR) * 200)/(SR + DR).
3. A = Acceptable RPD.
4. U or "<" = Analyte was not detected at the SDL. J = Analyte detected between SDL and RL.

Attachment A

DHL Analytical

Analytical Report

SDG. 2102158

March 08, 2021

Mike Schofield
GSI Environmental, Inc
9600 Great Hills Trail, Suite 350E
Austin, Texas 78759
TEL: (512) 346-4474
FAX:

Order No.: 2102158

RE: SMEC Semiannual Groundwater Sampling

Dear Mike Schofield:

DHL Analytical, Inc. received 13 sample(s) on 2/26/2021 for the analyses presented in the following report.

There were no problems with the analyses and all data met requirements of NELAP except where noted in the Case Narrative. All non-NELAP methods will be identified accordingly in the case narrative and all estimated uncertainties of test results are within method or EPA specifications.

If you have any questions regarding these tests results, please feel free to call. Thank you for using DHL Analytical.

Sincerely,

John DuPont
General Manager

This report was performed under the accreditation of the State of Texas Laboratory Certification Number: T104704211-21-26

Table of Contents

Equalization Pond

DHL ANALYTICAL

2300 Double Creek Dr. ■ Round Rock, TX 78664
Phone (512) 388-8222 ■ FAX (512) 388-8229
Web: www.dhlanalytical.com
E-Mail: login@dhlanalytical.com

nelap

№ 67400

CHAIN-OF-CUSTODY

CLIENT: GSI ENVIRONMENTAL
ADDRESS: 9600 GREAT HILLS TRAIL, AUSTIN, TX 78759
PHONE: 512) 346-4474 FAX/E-MAIL:
DATA REPORTED TO: bnzeribe@gsi-net.com
ADDITIONAL REPORT COPIES TO: mlschofield@gsi-net.com

DATE: 2/25/21 PAGE 1 OF 1
PO #:
DHL WORK ORDER #: 2102158
PROJECT LOCATION OR NAME: SMEC Semiannual Groundwater Sampling
CLENT PROJECT #: 5076-109 COLLECTOR: CDR

Authorize 5% surcharge for TRRP Report? ☒ Yes ❑ No

S=SOIL P=PAINT
W=WATER SL=SLUDGE
A=AIR O=OTHER
L=LIQUID SO=SOLID
SE=SEDIMENT

Field Sample I.D.	DHL Lab #	Date	Time	Matrix	Container Type	# of Containers	HCl	HNO_3	H_2SO_4 ❑ NaOH ❑	ICE	UNPRESERVED	BTEX ❑ MTBE ❑ [METHOD 8021]	TPH 1005 ❑ TPH 1006 ❑ HOLD 1006 ❑	GRO [METHOD 8015] ❑ DRO [METHOD 8015] ❑	VOC 8260 ❑ VOC 624 ❑ VOC 8260/5035 ❑	SVOC 8270 ❑ PAH 8270 ❑ HOLD PAH ❑ SVOC 625 ❑	8270 PEST ❑ 625 PEST/PCB ❑ 608 PCB ❑	8270 O-P PEST ❑ 8082 PCB ❑ 8270 PCB ❑	8321 HERB ❑ T PHOS, AMMONIA ❑	METALS 6020 ☒ METALS 200.8 ❑ DISS. METALS ❑	RCRA ❑ TX11 ❑	PH ❑ HEX CHROM ❑ ALKALINITY ☒ COD ❑	CHLORIDE ❑ ANIONS E300 ❑	TCLP-SVOC ❑ VOC ❑ PEST ❑ HERB ❑	TCLP-METALS ❑ RCRA 8 ❑ TX-11 ❑ Pb ❑	RCI ❑ FLASHPOINT ❑ DGAS ❑	TDS ☒ TSS ❑ % MOISTURE ❑ CYANIDE ❑	RADIUM 226/228	FIELD NOTES
EP-31	01	2/24/21	0938	W		4		X		X	X									X		X	X				X	X	
EP-31-MS	↓	↓	0938			↓		↓		↓	↓									↓		↓	↓				↓	↓	
EP-31-MSD	↓		0938																										
EP-32	02	↓	1311																										
DUP-1	03	—	—																										
EP-33	04	2/24/21	1428																										
EP-35	05	↓	1047																										
EP-34	06		1545																										
EP-36	07		1819																										
FB-1-2242021	08		1707																										
EB-2-2242021	09	↓	1830																										
EP-37	10	2/25/21	1159																										
MW-04	11		1045																										
EP-38	12		0928			↓		↓		↓	↓									↓		↓	↓				↓	↓	
~~EB4-2-25-21~~	~~13~~	~~2/25/21~~	~~1620~~			~~x~~		~~x~~		~~x~~	~~x~~									~~x~~		~~x~~	~~x~~				~~x~~	~~x~~	Please Ignore The dash line

RELINQUISHED BY: (Signature) [signature] DATE/TIME 2/26/21 9:47 RECEIVED BY: (Signature) [signature]
RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)

☒ DHL DISPOSAL @ $5.00 each ❑ Return

TURN AROUND TIME
RUSH ❑ CALL FIRST
1 DAY ❑ CALL FIRST
2 DAY ❑
NORMAL ☒
OTHER ❑

LABORATORY USE ONLY:
RECEIVING TEMP: 1.2/1.0/2.8/1.6 0.3/1.9/1.4/1.1 THERM #: 78
CUSTODY SEALS: ❑ BROKEN ❑ INTACT ☒ NOT USED
CARRIER: ❑ LONE STAR ❑ FEDEX ❑ UPS ❑ OTHER
❑ COURIER DELIVERY
☒ HAND DELIVERED

DHL COC Rev 1 | FEB 2010

DHL Analytical, Inc.

Sample Receipt Checklist

Client Name **GSI Environmental, Inc** Date Received: **2/26/2021**

Work Order Number **2102158** Received by: **EL**

Checklist completed by: EL 2/26/2021 (Signature / Date) Reviewed by DL 2/26/2021 (Initials / Date)

Carrier name: Hand Delivered

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	1.2 °C/1.0/2.8/1.6/0.3/1.9/1.4/1.1
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH<2 acceptable upon receipt?	Yes ☑	No ☐	NA ☐ LOT # 13171
	Adjusted? no		Checked by EL
Water - ph>9 (S) or ph>10 (CN) acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted?		Checked by

Any No response must be detailed in the comments section below.

Client contacted: _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action: _____

Laboratory Name: DHL Analytical, Inc.

Laboratory Review Checklist: Reportable Data

Project Name: SMEC Semiannual Groundwater Sampling	**LRC Date:** 3/8/2021
Reviewer Name: Angie O'Donnell	**Laboratory Work Order: 2102158**
Prep Batch Number(s): See Prep Dates Report	**Run Batch:** See Analytical Dates Report

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-Custody (C-O-C)					
R1	OI	**1)** Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	**X**				**R1-01**
		2) Were all departures from standard conditions described in an exception report?			**X**		
R2	OI	**Sample and Quality Control (QC) Identification**					
		1) Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	**X**				
		2) Are all laboratory ID numbers cross-referenced to the corresponding QC data?	**X**				
R3	OI	**Test Reports**					
		1) Were all samples prepared and analyzed within holding times?	**X**				
		2) Other than those results < MQL, were all other raw values bracketed by calibration standards?	**X**				
		3) Were calculations checked by a peer or supervisor?	**X**				
		4) Were all analyte identifications checked by a peer or supervisor?	**X**				
		5) Were sample detection limits reported for all analytes not detected?	**X**				
		6) Were all results for soil and sediment samples reported on a dry weight basis?			**X**		
		7) Were % moisture (or solids) reported for all soil and sediment samples?			**X**		
		8) Were bulk soils/solids samples for volatile analysis extracted with methanol per EPA Method 5035?			**X**		
		9) If required for the project, TICs reported?			**X**		
R4	O	**Surrogate Recovery Data**					
		1) Were surrogates added prior to extraction?			**X**		
		2) Were surrogate percent recoveries in all samples within the laboratory QC limits?			**X**		
R5	OI	**Test Reports/Summary Forms for Blank Samples**					
		1) Were appropriate type(s) of blanks analyzed?	**X**				
		2) Were blanks analyzed at the appropriate frequency?	**X**				
		3) Where method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	**X**				
		4) Were blank concentrations < MDL?	**X**				
		5) For analyte(s) detected in a blank sample, was the concentration, unadjusted for sample specific factors, in all associated field samples, **greater** than 10 times the concentration in the blank sample?	**X**				
R6	OI	**Laboratory Control Samples (LCS):**					
		1) Were all COCs included in the LCS?	**X**				
		2) Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	**X**				
		3) Were LCSs analyzed at the required frequency?	**X**				
		4) Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	**X**				
		5) Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	**X**				
		6) Was the LCSD RPD within QC limits (if applicable)?	**X**				
R7	OI	**Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Data**					
		1) Were the project/method specified analytes included in the MS and MSD?	**X**				
		2) Were MS/MSD analyzed at the appropriate frequency?	**X**				
		3) Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		**X**			**R7-03**
		4) Were MS/MSD RPDs within laboratory QC limits?	**X**				
R8	OI	**Analytical Duplicate Data**					
		1) Were appropriate analytical duplicates analyzed for each matrix?	**X**				
		2) Were analytical duplicates analyzed at the appropriate frequency?	**X**				
		3) Were RPDs or relative standard deviations within the laboratory QC limits?	**X**				
R9	OI	**Method Quantitation Limits (MQLs):**					
		1) Are the MQLs for each method analyte included in the laboratory data package?	**X**				
		2) Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	**X**				
		3) Are unadjusted MQLs and DCSs included in the laboratory data package?	**X**				
R10	OI	**Other Problems/Anomalies**					
		1) Are all known problems/anomalies/special conditions noted in this LRC and ER?	**X**				**R10-01**
		2) Was applicable and available technology used to lower the SDL to minimize the matrix interference affects on the sample results?	**X**				
		3) Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	**X**				

Laboratory Name: DHL Analytical, Inc.

Laboratory Review Checklist (continued): Supporting Data

Project Name: SMEC Semiannual Groundwater Sampling	**LRC Date:** 3/8/2021
Reviewer Name: Angie O'Donnell	**Laboratory Work Order: 2102158**
Prep Batch Number(s): See Prep Dates Report	**Run Batch:** See Analytical Dates Report

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial Calibration (ICAL)**					
		1) Were response factors and/or relative response factors for each analyte within QC limits?	X				
		2) Were percent RSDs or correlation coefficient criteria met?	X				
		3) Was the number of standards recommended in the method used for all analytes?	X				
		4) Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		5) Are ICAL data available for all instruments used?	X				
		6) Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and Continuing calibration Verification (ICCV and CCV) and Continuing Calibration blank (CCB):**					
		1) Was the CCV analyzed at the method-required frequency?	X				
		2) Were percent differences for each analyte within the method-required QC limits?	X				
		3) Was the ICAL curve verified for each analyte?	X				
		4) Was the absolute value of the analyte concentration in the inorganic CCB < MDL?		X			**S2-04**
S3	O	**Mass Spectral Tuning:**					
		1) Was the appropriate compound for the method used for tuning?	X				
		2) Were ion abundance data within the method-required QC limits?	X				
S4	O	**Internal Standards (IS):**					
		1) Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	**Raw Data (NELAC Section 5.5.10)**					
		1) Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		2) Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual Column Confirmation**					
		1) Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively Identified Compounds (TICs):**					
		1) If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) Results:**					
		1) Were percent recoveries within method QC limits?	X				
S9	I	**Serial Dilutions, Post Digestion Spikes, and Method of Standard Additions**					
		1) Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	**Method Detection Limit (MDL) Studies**					
		1) Was a MDL study performed for each reported analyte?	X				
		2) Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency Test Reports:**					
		1) Was the lab's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards Documentation**					
		1) Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/Analyte Identification Procedures**					
		1) Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of Analyst Competency (DOC)**					
		1) Was DOC conducted consistent with NELAC Chapter 5 – Appendix C?	X				
		2) Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/Validation Documentation for Methods** (NELAC Chapter 5)					
		1) Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory Standard Operating Procedures (SOPs):**					
		1) Are laboratory SOPs current and on file for each method performed?	X				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
3 NA = Not applicable.
4 NR = Not Reviewed.
5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Data Package Signature Page – RG-366/TRRP-13

This data package consists of:

This signature page, the laboratory review checklist, and the following reportable data:

R1 Field chain-of-custody documentation;
R2 Sample identification cross-reference;
R3 Test reports (analytical data sheets) for each environmental sample that includes:
  a) Items consistent with NELAC Chapter 5,
  b) dilution factors,
  c) preparation methods,
  d) cleanup methods, and
  e) if required for the project, tentatively identified compounds (TICs).
R4 Surrogate recovery data including:
  a) Calculated recovery (%R), and
  b) The laboratory's surrogate QC limits.
R5 Test reports/summary forms for blank samples;
R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  a) LCS spiking amounts,
  b) Calculated %R for each analyte, and
  c) The laboratory's LCS QC limits.
R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a) Samples associated with the MS/MSD clearly identified,
  b) MS/MSD spiking amounts,
  c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d) Calculated %Rs and relative percent differences (RPDs), and
  e) The laboratory's MS/MSD QC limits
R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  a) The amount of analyte measured in the duplicate,
  b) The calculated RPD, and
  c) The laboratory's QC limits for analytical duplicates.
R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;
R10 Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in the Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory is not accredited under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge that all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information or data affecting the quality of the data has been knowingly withheld.

This laboratory was last inspected by TCEQ on February 25-28, 2019. Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Name: John DuPont
Official Title: General Manager

Signature

03/08/21

Date

Name: Dr. Derhsing Luu
Official Title: Technical Director

DHL Analytical, Inc. **Date:** *08-Mar-21*

CLIENT: GSI Environmental, Inc
Project: SMEC Semiannual Groundwater Sampling
Lab Order: 2102158

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Method SW6020B - Metals Analysis
Method SW7470A - Mercury Analysis
Method E300 - Anions Analysis
Method M2320 B - Alkalinity Analysis
Method M2540C - Total Dissolved Solids Analysis

Exception Report R1-01

The samples were received and log-in performed on 2/26/2021. A total of 13 samples were received and analyzed. The samples arrived in good condition and were properly packaged.

Exception Report R7-03

For Metals Analysis, the recoveries of up to three analytes for the Matrix Spike and Matrix Spike Duplicate (2102158-01 MS/MSD) were outside of the method control limits. These are flagged accordingly in the QC Summary Report. These analytes were within method control limits in the associated LCS. The reference sample selected for the Batch QC was from this workorder. No further corrective action was taken.

Exception Report R10-01

Per project specification, MS/MSDs are from workorder or project samples only.

Exception Report S2-04

For Metals Analysis, Sodium was detected below the reporting limits for the Continuing Calibration Blank (CCB6-200302). This analyte was reported in QC samples only. No further corrective action was taken.

DHL Analytical, Inc.

Date: *08-Mar-21*

CLIENT: GSI Environmental, Inc
Project: SMEC Semiannual Groundwater Sampling
Lab Order: 2102158

Work Order Sample Summary

Lab Smp ID	Client Sample ID	Tag Number	Date Collected	Date Recved
2102158-01	EP-31		02/24/21 09:38 AM	2/26/2021
2102158-02	EP-32		02/24/21 01:11 PM	2/26/2021
2102158-03	DUP-1		02/24/21	2/26/2021
2102158-04	EP-33		02/24/21 02:28 PM	2/26/2021
2102158-05	EP-35		02/24/21 04:47 PM	2/26/2021
2102158-06	EP-34		02/24/21 03:45 PM	2/26/2021
2102158-07	EP-36		02/24/21 06:19 PM	2/26/2021
2102158-08	FB-1-2242021		02/24/21 05:07 PM	2/26/2021
2102158-09	EB-2-2242021		02/24/21 06:30 PM	2/26/2021
2102158-10	EP-37		02/25/21 11:59 AM	2/26/2021
2102158-11	MW-04		02/25/21 10:45 AM	2/26/2021
2102158-12	EP-38		02/25/21 09:28 AM	2/26/2021
2102158-13	EB4-2-25-21		02/25/21 04:26 PM	2/26/2021

Lab Order: 2102158
Client: GSI Environmental, Inc
Project: SMEC Semiannual Groundwater S

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
2102158-01A	EP-31	02/24/21 09:38 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EP-31	02/24/21 09:38 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EP-31	02/24/21 09:38 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EP-31	02/24/21 09:38 AM	Aqueous	SW7470A	Mercury Aq Prep	03/01/21 09:36 AM	99632
2102158-01B	EP-31	02/24/21 09:38 AM	Aqueous	M2320 B	Alkalinity Preparation	03/02/21 01:55 PM	99663
	EP-31	02/24/21 09:38 AM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	EP-31	02/24/21 09:38 AM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	EP-31	02/24/21 09:38 AM	Aqueous	M2540C	TDS Preparation	03/01/21 10:24 AM	99633
2102158-02A	EP-32	02/24/21 01:11 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EP-32	02/24/21 01:11 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EP-32	02/24/21 01:11 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EP-32	02/24/21 01:11 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EP-32	02/24/21 01:11 PM	Aqueous	SW7470A	Mercury Aq Prep	03/01/21 09:36 AM	99632
2102158-02B	EP-32	02/24/21 01:11 PM	Aqueous	M2320 B	Alkalinity Preparation	03/02/21 01:55 PM	99663
	EP-32	02/24/21 01:11 PM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	EP-32	02/24/21 01:11 PM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	EP-32	02/24/21 01:11 PM	Aqueous	M2540C	TDS Preparation	03/01/21 10:24 AM	99633
2102158-03A	DUP-1	02/24/21	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	DUP-1	02/24/21	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	DUP-1	02/24/21	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	DUP-1	02/24/21	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	DUP-1	02/24/21	Aqueous	SW7470A	Mercury Aq Prep	03/01/21 09:36 AM	99632
2102158-03B	DUP-1	02/24/21	Aqueous	M2320 B	Alkalinity Preparation	03/02/21 01:55 PM	99663
	DUP-1	02/24/21	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	DUP-1	02/24/21	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	DUP-1	02/24/21	Aqueous	M2540C	TDS Preparation	03/01/21 10:24 AM	99633
2102158-04A	EP-33	02/24/21 02:28 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EP-33	02/24/21 02:28 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628

Lab Order: 2102158
Client: GSI Environmental, Inc
Project: SMEC Semiannual Groundwater S

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
2102158-04A	EP-33	02/24/21 02:28 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EP-33	02/24/21 02:28 PM	Aqueous	SW7470A	Mercury Aq Prep	03/01/21 09:36 AM	99632
2102158-04B	EP-33	02/24/21 02:28 PM	Aqueous	M2320 B	Alkalinity Preparation	03/02/21 01:55 PM	99663
	EP-33	02/24/21 02:28 PM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	EP-33	02/24/21 02:28 PM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	EP-33	02/24/21 02:28 PM	Aqueous	M2540C	TDS Preparation	03/01/21 10:24 AM	99633
2102158-05A	EP-35	02/24/21 04:47 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EP-35	02/24/21 04:47 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EP-35	02/24/21 04:47 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EP-35	02/24/21 04:47 PM	Aqueous	SW7470A	Mercury Aq Prep	03/01/21 09:36 AM	99632
2102158-05B	EP-35	02/24/21 04:47 PM	Aqueous	M2320 B	Alkalinity Preparation	03/02/21 01:55 PM	99663
	EP-35	02/24/21 04:47 PM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	EP-35	02/24/21 04:47 PM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	EP-35	02/24/21 04:47 PM	Aqueous	M2540C	TDS Preparation	03/01/21 10:24 AM	99633
2102158-06A	EP-34	02/24/21 03:45 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EP-34	02/24/21 03:45 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EP-34	02/24/21 03:45 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EP-34	02/24/21 03:45 PM	Aqueous	SW7470A	Mercury Aq Prep	03/01/21 09:36 AM	99632
2102158-06B	EP-34	02/24/21 03:45 PM	Aqueous	M2320 B	Alkalinity Preparation	03/02/21 01:55 PM	99663
	EP-34	02/24/21 03:45 PM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	EP-34	02/24/21 03:45 PM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	EP-34	02/24/21 03:45 PM	Aqueous	M2540C	TDS Preparation	03/01/21 10:24 AM	99633
2102158-07A	EP-36	02/24/21 06:19 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EP-36	02/24/21 06:19 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EP-36	02/24/21 06:19 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EP-36	02/24/21 06:19 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EP-36	02/24/21 06:19 PM	Aqueous	SW7470A	Mercury Aq Prep	03/01/21 09:36 AM	99632
2102158-07B	EP-36	02/24/21 06:19 PM	Aqueous	M2320 B	Alkalinity Preparation	03/02/21 01:55 PM	99663

Lab Order: 2102158
Client: GSI Environmental, Inc
Project: SMEC Semiannual Groundwater S

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
2102158-07B	EP-36	02/24/21 06:19 PM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	EP-36	02/24/21 06:19 PM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	EP-36	02/24/21 06:19 PM	Aqueous	M2540C	TDS Preparation	03/01/21 10:24 AM	99633
2102158-08A	FB-1-2242021	02/24/21 05:07 PM	Field Blank	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	FB-1-2242021	02/24/21 05:07 PM	Field Blank	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	FB-1-2242021	02/24/21 05:07 PM	Field Blank	SW7470A	Mercury Aq Prep	03/01/21 09:36 AM	99632
2102158-08B	FB-1-2242021	02/24/21 05:07 PM	Field Blank	M2320 B	Alkalinity Preparation	03/02/21 01:55 PM	99663
	FB-1-2242021	02/24/21 05:07 PM	Field Blank	E300	Anion Preparation	03/04/21 09:11 AM	99686
	FB-1-2242021	02/24/21 05:07 PM	Field Blank	M2540C	TDS Preparation	03/01/21 10:24 AM	99633
2102158-09A	EB-2-2242021	02/24/21 06:30 PM	Equip Blank	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EB-2-2242021	02/24/21 06:30 PM	Equip Blank	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EB-2-2242021	02/24/21 06:30 PM	Equip Blank	SW7470A	Mercury Aq Prep	03/01/21 09:36 AM	99632
2102158-09B	EB-2-2242021	02/24/21 06:30 PM	Equip Blank	M2320 B	Alkalinity Preparation	03/02/21 01:55 PM	99663
	EB-2-2242021	02/24/21 06:30 PM	Equip Blank	E300	Anion Preparation	03/04/21 09:11 AM	99686
	EB-2-2242021	02/24/21 06:30 PM	Equip Blank	M2540C	TDS Preparation	03/01/21 10:24 AM	99633
2102158-10A	EP-37	02/25/21 11:59 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EP-37	02/25/21 11:59 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EP-37	02/25/21 11:59 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EP-37	02/25/21 11:59 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EP-37	02/25/21 11:59 AM	Aqueous	SW7470A	Mercury Aq Prep	03/01/21 09:36 AM	99632
2102158-10B	EP-37	02/25/21 11:59 AM	Aqueous	M2320 B	Alkalinity Preparation	03/02/21 01:55 PM	99663
	EP-37	02/25/21 11:59 AM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	EP-37	02/25/21 11:59 AM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	EP-37	02/25/21 11:59 AM	Aqueous	M2540C	TDS Preparation	03/01/21 10:24 AM	99633
2102158-11A	MW-04	02/25/21 10:45 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	MW-04	02/25/21 10:45 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	MW-04	02/25/21 10:45 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	MW-04	02/25/21 10:45 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628

Lab Order: 2102158
Client: GSI Environmental, Inc
Project: SMEC Semiannual Groundwater S

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
2102158-11A	MW-04	02/25/21 10:45 AM	Aqueous	SW7470A	Mercury Aq Prep	03/01/21 09:36 AM	99632
2102158-11B	MW-04	02/25/21 10:45 AM	Aqueous	M2320 B	Alkalinity Preparation	03/02/21 01:55 PM	99663
	MW-04	02/25/21 10:45 AM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	MW-04	02/25/21 10:45 AM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	MW-04	02/25/21 10:45 AM	Aqueous	M2540C	TDS Preparation	03/01/21 10:24 AM	99633
2102158-12A	EP-38	02/25/21 09:28 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EP-38	02/25/21 09:28 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EP-38	02/25/21 09:28 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EP-38	02/25/21 09:28 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EP-38	02/25/21 09:28 AM	Aqueous	SW7470A	Mercury Aq Prep	03/01/21 09:36 AM	99632
2102158-12B	EP-38	02/25/21 09:28 AM	Aqueous	M2320 B	Alkalinity Preparation	03/02/21 01:55 PM	99663
	EP-38	02/25/21 09:28 AM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	EP-38	02/25/21 09:28 AM	Aqueous	E300	Anion Preparation	03/04/21 09:11 AM	99686
	EP-38	02/25/21 09:28 AM	Aqueous	M2540C	TDS Preparation	03/01/21 10:24 AM	99633
2102158-13A	EB4-2-25-21	02/25/21 04:26 PM	Equip Blank	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EB4-2-25-21	02/25/21 04:26 PM	Equip Blank	SW3005A	Aq Prep Metals : ICP-MS	03/01/21 09:27 AM	99628
	EB4-2-25-21	02/25/21 04:26 PM	Equip Blank	SW7470A	Mercury Aq Prep	03/01/21 09:36 AM	99632
2102158-13B	EB4-2-25-21	02/25/21 04:26 PM	Equip Blank	M2320 B	Alkalinity Preparation	03/02/21 01:55 PM	99663
	EB4-2-25-21	02/25/21 04:26 PM	Equip Blank	E300	Anion Preparation	03/04/21 09:11 AM	99686
	EB4-2-25-21	02/25/21 04:26 PM	Equip Blank	M2540C	TDS Preparation	03/01/21 10:24 AM	99633

Lab Order: 2102158
Client: GSI Environmental, Inc
Project: SMEC Semiannual Groundwater S

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
2102158-01A	EP-31	Aqueous	SW7470A	Mercury Total: Aqueous	99632	1	03/04/21 10:54 AM	CETAC2_HG_210304B
	EP-31	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	1	03/02/21 01:39 PM	ICP-MS4_210302C
	EP-31	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	50	03/03/21 01:38 PM	ICP-MS5_210303A
	EP-31	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	5	03/04/21 11:29 AM	ICP-MS5_210304A
2102158-01B	EP-31	Aqueous	M2320 B	Alkalinity	99663	1	03/02/21 02:10 PM	TITRATOR_210302B
	EP-31	Aqueous	E300	Anions by IC method - Water	99686	100	03/04/21 05:41 PM	IC2_210305A
	EP-31	Aqueous	E300	Anions by IC method - Water	99686	5	03/05/21 01:41 AM	IC2_210305A
	EP-31	Aqueous	M2540C	Total Dissolved Solids	99633	1	03/01/21 04:00 PM	WC_210301B
2102158-02A	EP-32	Aqueous	SW7470A	Mercury Total: Aqueous	99632	1	03/04/21 11:06 AM	CETAC2_HG_210304B
	EP-32	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	5	03/04/21 11:33 AM	ICP-MS5_210304A
	EP-32	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	1	03/02/21 01:43 PM	ICP-MS4_210302C
	EP-32	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	200	03/03/21 01:47 PM	ICP-MS5_210303A
	EP-32	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	100	03/03/21 04:54 PM	ICP-MS5_210303A
2102158-02B	EP-32	Aqueous	M2320 B	Alkalinity	99663	1	03/02/21 02:25 PM	TITRATOR_210302B
	EP-32	Aqueous	E300	Anions by IC method - Water	99686	5	03/05/21 01:57 AM	IC2_210305A
	EP-32	Aqueous	E300	Anions by IC method - Water	99686	100	03/04/21 06:29 PM	IC2_210305A
	EP-32	Aqueous	M2540C	Total Dissolved Solids	99633	1	03/01/21 04:00 PM	WC_210301B
2102158-03A	DUP-1	Aqueous	SW7470A	Mercury Total: Aqueous	99632	1	03/04/21 11:08 AM	CETAC2_HG_210304B
	DUP-1	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	1	03/02/21 01:45 PM	ICP-MS4_210302C
	DUP-1	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	200	03/03/21 01:49 PM	ICP-MS5_210303A
	DUP-1	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	100	03/03/21 04:56 PM	ICP-MS5_210303A
	DUP-1	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	5	03/04/21 11:35 AM	ICP-MS5_210304A
2102158-03B	DUP-1	Aqueous	M2320 B	Alkalinity	99663	1	03/02/21 02:52 PM	TITRATOR_210302B
	DUP-1	Aqueous	E300	Anions by IC method - Water	99686	100	03/04/21 06:45 PM	IC2_210305A
	DUP-1	Aqueous	E300	Anions by IC method - Water	99686	5	03/05/21 02:13 AM	IC2_210305A
	DUP-1	Aqueous	M2540C	Total Dissolved Solids	99633	1	03/01/21 04:00 PM	WC_210301B

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Project: SMEC Semiannual Groundwater S

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
2102158-04A	EP-33	Aqueous	SW7470A	Mercury Total: Aqueous	99632	1	03/04/21 11:10 AM	CETAC2_HG_210304B
	EP-33	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	1	03/02/21 01:47 PM	ICP-MS4_210302C
	EP-33	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	200	03/03/21 01:52 PM	ICP-MS5_210303A
	EP-33	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	5	03/04/21 11:37 AM	ICP-MS5_210304A
2102158-04B	EP-33	Aqueous	M2320 B	Alkalinity	99663	1	03/02/21 03:06 PM	TITRATOR_210302B
	EP-33	Aqueous	E300	Anions by IC method - Water	99686	100	03/04/21 07:01 PM	IC2_210305A
	EP-33	Aqueous	E300	Anions by IC method - Water	99686	5	03/05/21 02:29 AM	IC2_210305A
	EP-33	Aqueous	M2540C	Total Dissolved Solids	99633	1	03/01/21 04:00 PM	WC_210301B
2102158-05A	EP-35	Aqueous	SW7470A	Mercury Total: Aqueous	99632	1	03/04/21 11:13 AM	CETAC2_HG_210304B
	EP-35	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	1	03/02/21 01:49 PM	ICP-MS4_210302C
	EP-35	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	200	03/03/21 01:54 PM	ICP-MS5_210303A
	EP-35	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	5	03/04/21 11:40 AM	ICP-MS5_210304A
2102158-05B	EP-35	Aqueous	M2320 B	Alkalinity	99663	1	03/02/21 03:19 PM	TITRATOR_210302B
	EP-35	Aqueous	E300	Anions by IC method - Water	99686	100	03/04/21 07:17 PM	IC2_210305A
	EP-35	Aqueous	E300	Anions by IC method - Water	99686	5	03/05/21 02:45 AM	IC2_210305A
	EP-35	Aqueous	M2540C	Total Dissolved Solids	99633	1	03/01/21 04:00 PM	WC_210301B
2102158-06A	EP-34	Aqueous	SW7470A	Mercury Total: Aqueous	99632	1	03/04/21 11:15 AM	CETAC2_HG_210304B
	EP-34	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	1	03/02/21 01:51 PM	ICP-MS4_210302C
	EP-34	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	200	03/03/21 01:56 PM	ICP-MS5_210303A
	EP-34	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	5	03/04/21 11:42 AM	ICP-MS5_210304A
2102158-06B	EP-34	Aqueous	M2320 B	Alkalinity	99663	1	03/02/21 03:32 PM	TITRATOR_210302B
	EP-34	Aqueous	E300	Anions by IC method - Water	99686	100	03/04/21 07:33 PM	IC2_210305A
	EP-34	Aqueous	E300	Anions by IC method - Water	99686	5	03/05/21 03:01 AM	IC2_210305A
	EP-34	Aqueous	M2540C	Total Dissolved Solids	99633	1	03/01/21 04:00 PM	WC_210301B
2102158-07A	EP-36	Aqueous	SW7470A	Mercury Total: Aqueous	99632	1	03/04/21 11:17 AM	CETAC2_HG_210304B
	EP-36	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	200	03/03/21 01:58 PM	ICP-MS5_210303A

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ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
2102158-07A	EP-36	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	100	03/03/21 04:58 PM	ICP-MS5_210303A
	EP-36	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	5	03/04/21 11:44 AM	ICP-MS5_210304A
	EP-36	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	1	03/02/21 01:53 PM	ICP-MS4_210302C
2102158-07B	EP-36	Aqueous	M2320 B	Alkalinity	99663	1	03/02/21 03:46 PM	TITRATOR_210302B
	EP-36	Aqueous	E300	Anions by IC method - Water	99686	100	03/04/21 09:09 PM	IC2_210305A
	EP-36	Aqueous	E300	Anions by IC method - Water	99686	5	03/05/21 03:17 AM	IC2_210305A
	EP-36	Aqueous	M2540C	Total Dissolved Solids	99633	1	03/01/21 04:00 PM	WC_210301B
2102158-08A	FB-1-2242021	Field Blank	SW7470A	Mercury Total: Aqueous	99632	1	03/04/21 11:19 AM	CETAC2_HG_210304B
	FB-1-2242021	Field Blank	SW6020B	Trace Metals: ICP-MS - Water	99628	1	03/02/21 01:55 PM	ICP-MS4_210302C
	FB-1-2242021	Field Blank	SW6020B	Trace Metals: ICP-MS - Water	99628	1	03/03/21 02:01 PM	ICP-MS5_210303A
2102158-08B	FB-1-2242021	Field Blank	M2320 B	Alkalinity	99663	1	03/02/21 03:48 PM	TITRATOR_210302B
	FB-1-2242021	Field Blank	E300	Anions by IC method - Water	99686	1	03/04/21 04:37 PM	IC2_210305A
	FB-1-2242021	Field Blank	M2540C	Total Dissolved Solids	99633	1	03/01/21 04:00 PM	WC_210301B
2102158-09A	EB-2-2242021	Equip Blank	SW7470A	Mercury Total: Aqueous	99632	1	03/04/21 11:22 AM	CETAC2_HG_210304B
	EB-2-2242021	Equip Blank	SW6020B	Trace Metals: ICP-MS - Water	99628	1	03/03/21 02:03 PM	ICP-MS5_210303A
	EB-2-2242021	Equip Blank	SW6020B	Trace Metals: ICP-MS - Water	99628	1	03/02/21 01:57 PM	ICP-MS4_210302C
2102158-09B	EB-2-2242021	Equip Blank	M2320 B	Alkalinity	99663	1	03/02/21 03:50 PM	TITRATOR_210302B
	EB-2-2242021	Equip Blank	E300	Anions by IC method - Water	99686	1	03/04/21 04:53 PM	IC2_210305A
	EB-2-2242021	Equip Blank	M2540C	Total Dissolved Solids	99633	1	03/01/21 04:00 PM	WC_210301B
2102158-10A	EP-37	Aqueous	SW7470A	Mercury Total: Aqueous	99632	1	03/04/21 11:29 AM	CETAC2_HG_210304B
	EP-37	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	1	03/02/21 01:59 PM	ICP-MS4_210302C
	EP-37	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	200	03/03/21 02:05 PM	ICP-MS5_210303A
	EP-37	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	20	03/03/21 05:01 PM	ICP-MS5_210303A
	EP-37	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	5	03/04/21 11:46 AM	ICP-MS5_210304A
2102158-10B	EP-37	Aqueous	M2320 B	Alkalinity	99663	1	03/02/21 04:03 PM	TITRATOR_210302B
	EP-37	Aqueous	E300	Anions by IC method - Water	99686	100	03/04/21 09:25 PM	IC2_210305A

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ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
2102158-10B	EP-37	Aqueous	E300	Anions by IC method - Water	99686	5	03/05/21 03:33 AM	IC2_210305A
	EP-37	Aqueous	M2540C	Total Dissolved Solids	99633	1	03/01/21 04:00 PM	WC_210301B
2102158-11A	MW-04	Aqueous	SW7470A	Mercury Total: Aqueous	99632	1	03/04/21 11:31 AM	CETAC2_HG_210304B
	MW-04	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	1	03/02/21 03:17 PM	ICP-MS4_210302C
	MW-04	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	100	03/03/21 02:37 PM	ICP-MS5_210303A
	MW-04	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	20	03/03/21 05:03 PM	ICP-MS5_210303A
	MW-04	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	5	03/04/21 11:48 AM	ICP-MS5_210304A
2102158-11B	MW-04	Aqueous	M2320 B	Alkalinity	99663	1	03/02/21 04:18 PM	TITRATOR_210302B
	MW-04	Aqueous	E300	Anions by IC method - Water	99686	100	03/04/21 09:41 PM	IC2_210305A
	MW-04	Aqueous	E300	Anions by IC method - Water	99686	5	03/05/21 03:49 AM	IC2_210305A
	MW-04	Aqueous	M2540C	Total Dissolved Solids	99633	1	03/01/21 04:00 PM	WC_210301B
2102158-12A	EP-38	Aqueous	SW7470A	Mercury Total: Aqueous	99632	1	03/04/21 11:33 AM	CETAC2_HG_210304B
	EP-38	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	1	03/02/21 03:19 PM	ICP-MS4_210302C
	EP-38	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	5	03/04/21 11:51 AM	ICP-MS5_210304A
	EP-38	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	100	03/03/21 02:39 PM	ICP-MS5_210303A
	EP-38	Aqueous	SW6020B	Trace Metals: ICP-MS - Water	99628	10	03/03/21 05:05 PM	ICP-MS5_210303A
2102158-12B	EP-38	Aqueous	M2320 B	Alkalinity	99663	1	03/02/21 04:24 PM	TITRATOR_210302B
	EP-38	Aqueous	E300	Anions by IC method - Water	99686	100	03/04/21 09:57 PM	IC2_210305A
	EP-38	Aqueous	E300	Anions by IC method - Water	99686	5	03/05/21 04:05 AM	IC2_210305A
	EP-38	Aqueous	M2540C	Total Dissolved Solids	99633	1	03/01/21 04:00 PM	WC_210301B
2102158-13A	EB4-2-25-21	Equip Blank	SW7470A	Mercury Total: Aqueous	99632	1	03/04/21 11:35 AM	CETAC2_HG_210304B
	EB4-2-25-21	Equip Blank	SW6020B	Trace Metals: ICP-MS - Water	99628	1	03/02/21 03:21 PM	ICP-MS4_210302C
	EB4-2-25-21	Equip Blank	SW6020B	Trace Metals: ICP-MS - Water	99628	1	03/03/21 02:42 PM	ICP-MS5_210303A
2102158-13B	EB4-2-25-21	Equip Blank	M2320 B	Alkalinity	99663	1	03/02/21 04:26 PM	TITRATOR_210302B
	EB4-2-25-21	Equip Blank	E300	Anions by IC method - Water	99686	1	03/04/21 05:09 PM	IC2_210305A
	EB4-2-25-21	Equip Blank	M2540C	Total Dissolved Solids	99633	1	03/01/21 04:00 PM	WC_210301B

DHL Analytical, Inc.

Date: *08-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	EP-31
Project:	SMEC Semiannual Groundwater Sampling	**Lab ID:**	2102158-01
Project No:	5076-109	**Collection Date:**	02/24/21 09:38 AM
Lab Order:	2102158	**Matrix:**	AQUEOUS

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Antimony	<0.000800	0.000800	0.00250		mg/L	1	03/02/21 01:39 PM
Arsenic	0.0206	0.00200	0.00500		mg/L	1	03/02/21 01:39 PM
Barium	0.00606	0.00300	0.0100	J	mg/L	1	03/02/21 01:39 PM
Beryllium	0.0865	0.00150	0.00500		mg/L	5	03/04/21 11:29 AM
Boron	5.75	0.500	1.50		mg/L	50	03/03/21 01:38 PM
Cadmium	0.0255	0.000300	0.00100		mg/L	1	03/02/21 01:39 PM
Calcium	492	5.00	15.0		mg/L	50	03/03/21 01:38 PM
Chromium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:39 PM
Cobalt	0.125	0.00300	0.00500		mg/L	1	03/02/21 01:39 PM
Lead	0.00225	0.000300	0.00100		mg/L	1	03/02/21 01:39 PM
Lithium	0.904	0.0250	0.0500		mg/L	5	03/04/21 11:29 AM
Magnesium	54.7	5.00	15.0		mg/L	50	03/03/21 01:38 PM
Molybdenum	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:39 PM
Potassium	38.9	5.00	15.0		mg/L	50	03/03/21 01:38 PM
Selenium	0.147	0.00200	0.00500		mg/L	1	03/02/21 01:39 PM
Sodium	992	5.00	15.0		mg/L	50	03/03/21 01:38 PM
Thallium	0.00212	0.000500	0.00150		mg/L	1	03/02/21 01:39 PM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	03/04/21 10:54 AM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	191	1.50	5.00		mg/L	5	03/05/21 01:41 AM
Fluoride	1.42	0.500	2.00	J	mg/L	5	03/05/21 01:41 AM
Sulfate	3070	100	300		mg/L	100	03/04/21 05:41 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.81	1	03/02/21 02:10 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.81	1	03/02/21 02:10 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 3.81	1	03/02/21 02:10 PM
Alkalinity, Total (As CaCO3)	<20.0	20.0	20.0		mg/L @ pH 3.81	1	03/02/21 02:10 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	5340	50.0	50.0		mg/L	1	03/01/21 04:00 PM

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N - Parameter not NELAP certified
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S - Spike Recovery outside control limits
C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

DHL Analytical, Inc.

Date: *08-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	EP-32
Project:	SMEC Semiannual Groundwater Sampling	**Lab ID:**	2102158-02
Project No:	5076-109	**Collection Date:**	02/24/21 01:11 PM
Lab Order:	2102158	**Matrix:**	AQUEOUS

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Antimony	<0.000800	0.000800	0.00250		mg/L	1	03/02/21 01:43 PM
Arsenic	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:43 PM
Barium	0.0147	0.00300	0.0100		mg/L	1	03/02/21 01:43 PM
Beryllium	<0.00150	0.00150	0.00500		mg/L	5	03/04/21 11:33 AM
Boron	20.9	1.00	3.00		mg/L	100	03/03/21 04:54 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 01:43 PM
Calcium	406	20.0	60.0		mg/L	200	03/03/21 01:47 PM
Chromium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:43 PM
Cobalt	<0.00300	0.00300	0.00500		mg/L	1	03/02/21 01:43 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 01:43 PM
Lithium	1.09	0.0250	0.0500		mg/L	5	03/04/21 11:33 AM
Magnesium	49.5	0.500	1.50		mg/L	5	03/04/21 11:33 AM
Molybdenum	0.0112	0.00200	0.00500		mg/L	1	03/02/21 01:43 PM
Potassium	42.3	0.500	1.50		mg/L	5	03/04/21 11:33 AM
Selenium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:43 PM
Sodium	2710	20.0	60.0		mg/L	200	03/03/21 01:47 PM
Thallium	<0.000500	0.000500	0.00150		mg/L	1	03/02/21 01:43 PM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	03/04/21 11:06 AM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	1820	30.0	100		mg/L	100	03/04/21 06:29 PM
Fluoride	<0.500	0.500	2.00		mg/L	5	03/05/21 01:57 AM
Sulfate	4300	100	300		mg/L	100	03/04/21 06:29 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	227	10.0	20.0		mg/L @ pH 4.53	1	03/02/21 02:25 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	03/02/21 02:25 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	03/02/21 02:25 PM
Alkalinity, Total (As CaCO3)	227	20.0	20.0		mg/L @ pH 4.53	1	03/02/21 02:25 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	9800	200	200		mg/L	1	03/01/21 04:00 PM

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C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
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E - TPH pattern not Gas or Diesel Range Pattern

DHL Analytical, Inc.

Date: *08-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	DUP-1
Project:	SMEC Semiannual Groundwater Sampling	**Lab ID:**	2102158-03
Project No:	5076-109	**Collection Date:**	02/24/21
Lab Order:	2102158	**Matrix:**	AQUEOUS

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Antimony	<0.000800	0.000800	0.00250		mg/L	1	03/02/21 01:45 PM
Arsenic	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:45 PM
Barium	0.0135	0.00300	0.0100		mg/L	1	03/02/21 01:45 PM
Beryllium	<0.00150	0.00150	0.00500		mg/L	5	03/04/21 11:35 AM
Boron	23.6	1.00	3.00		mg/L	100	03/03/21 04:56 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 01:45 PM
Calcium	428	20.0	60.0		mg/L	200	03/03/21 01:49 PM
Chromium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:45 PM
Cobalt	<0.00300	0.00300	0.00500		mg/L	1	03/02/21 01:45 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 01:45 PM
Lithium	1.05	0.0250	0.0500		mg/L	5	03/04/21 11:35 AM
Magnesium	44.1	0.500	1.50		mg/L	5	03/04/21 11:35 AM
Molybdenum	0.0127	0.00200	0.00500		mg/L	1	03/02/21 01:45 PM
Potassium	40.0	0.500	1.50		mg/L	5	03/04/21 11:35 AM
Selenium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:45 PM
Sodium	2650	20.0	60.0		mg/L	200	03/03/21 01:49 PM
Thallium	<0.000500	0.000500	0.00150		mg/L	1	03/02/21 01:45 PM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	03/04/21 11:08 AM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	1900	30.0	100		mg/L	100	03/04/21 06:45 PM
Fluoride	1.01	0.500	2.00	J	mg/L	5	03/05/21 02:13 AM
Sulfate	4290	100	300		mg/L	100	03/04/21 06:45 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	224	10.0	20.0		mg/L @ pH 4.53	1	03/02/21 02:52 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	03/02/21 02:52 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	03/02/21 02:52 PM
Alkalinity, Total (As CaCO3)	224	20.0	20.0		mg/L @ pH 4.53	1	03/02/21 02:52 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	9480	200	200		mg/L	1	03/01/21 04:00 PM

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S - Spike Recovery outside control limits
C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

DHL Analytical, Inc.

Date: *08-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	EP-33
Project:	SMEC Semiannual Groundwater Sampling	**Lab ID:**	2102158-04
Project No:	5076-109	**Collection Date:**	02/24/21 02:28 PM
Lab Order:	2102158	**Matrix:**	AQUEOUS

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Antimony	<0.000800	0.000800	0.00250		mg/L	1	03/02/21 01:47 PM
Arsenic	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:47 PM
Barium	0.0165	0.00300	0.0100		mg/L	1	03/02/21 01:47 PM
Beryllium	<0.00150	0.00150	0.00500		mg/L	5	03/04/21 11:37 AM
Boron	82.7	2.00	6.00		mg/L	200	03/03/21 01:52 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 01:47 PM
Calcium	556	20.0	60.0		mg/L	200	03/03/21 01:52 PM
Chromium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:47 PM
Cobalt	<0.00300	0.00300	0.00500		mg/L	1	03/02/21 01:47 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 01:47 PM
Lithium	0.594	0.0250	0.0500		mg/L	5	03/04/21 11:37 AM
Magnesium	43.1	0.500	1.50		mg/L	5	03/04/21 11:37 AM
Molybdenum	0.0363	0.00200	0.00500		mg/L	1	03/02/21 01:47 PM
Potassium	44.8	0.500	1.50		mg/L	5	03/04/21 11:37 AM
Selenium	0.00226	0.00200	0.00500	J	mg/L	1	03/02/21 01:47 PM
Sodium	2820	20.0	60.0		mg/L	200	03/03/21 01:52 PM
Thallium	<0.000500	0.000500	0.00150		mg/L	1	03/02/21 01:47 PM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	03/04/21 11:10 AM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	3210	30.0	100		mg/L	100	03/04/21 07:01 PM
Fluoride	1.36	0.500	2.00	J	mg/L	5	03/05/21 02:29 AM
Sulfate	2970	100	300		mg/L	100	03/04/21 07:01 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	269	10.0	20.0		mg/L @ pH 4.53	1	03/02/21 03:06 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	03/02/21 03:06 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	03/02/21 03:06 PM
Alkalinity, Total (As CaCO3)	269	20.0	20.0		mg/L @ pH 4.53	1	03/02/21 03:06 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	10200	200	200		mg/L	1	03/01/21 04:00 PM

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C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

DHL Analytical, Inc.

Date: *08-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	EP-35
Project:	SMEC Semiannual Groundwater Sampling	**Lab ID:**	2102158-05
Project No:	5076-109	**Collection Date:**	02/24/21 04:47 PM
Lab Order:	2102158	**Matrix:**	AQUEOUS

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Antimony	<0.000800	0.000800	0.00250		mg/L	1	03/02/21 01:49 PM
Arsenic	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:49 PM
Barium	0.0193	0.00300	0.0100		mg/L	1	03/02/21 01:49 PM
Beryllium	<0.00150	0.00150	0.00500		mg/L	5	03/04/21 11:40 AM
Boron	40.0	2.00	6.00		mg/L	200	03/03/21 01:54 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 01:49 PM
Calcium	343	20.0	60.0		mg/L	200	03/03/21 01:54 PM
Chromium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:49 PM
Cobalt	<0.00300	0.00300	0.00500		mg/L	1	03/02/21 01:49 PM
Lead	0.000316	0.000300	0.00100	J	mg/L	1	03/02/21 01:49 PM
Lithium	1.12	0.0250	0.0500		mg/L	5	03/04/21 11:40 AM
Magnesium	56.8	0.500	1.50		mg/L	5	03/04/21 11:40 AM
Molybdenum	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:49 PM
Potassium	44.3	0.500	1.50		mg/L	5	03/04/21 11:40 AM
Selenium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:49 PM
Sodium	3340	20.0	60.0		mg/L	200	03/03/21 01:54 PM
Thallium	<0.000500	0.000500	0.00150		mg/L	1	03/02/21 01:49 PM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	03/04/21 11:13 AM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	3670	30.0	100		mg/L	100	03/04/21 07:17 PM
Fluoride	1.65	0.500	2.00	J	mg/L	5	03/05/21 02:45 AM
Sulfate	2940	100	300		mg/L	100	03/04/21 07:17 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	182	10.0	20.0		mg/L @ pH 4.53	1	03/02/21 03:19 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	03/02/21 03:19 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	03/02/21 03:19 PM
Alkalinity, Total (As CaCO3)	182	20.0	20.0		mg/L @ pH 4.53	1	03/02/21 03:19 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	11000	200	200		mg/L	1	03/01/21 04:00 PM

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C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

DHL Analytical, Inc.

Date: *08-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	EP-34
Project:	SMEC Semiannual Groundwater Sampling	**Lab ID:**	2102158-06
Project No:	5076-109	**Collection Date:**	02/24/21 03:45 PM
Lab Order:	2102158	**Matrix:**	AQUEOUS

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Antimony	<0.000800	0.000800	0.00250		mg/L	1	03/02/21 01:51 PM
Arsenic	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:51 PM
Barium	0.0173	0.00300	0.0100		mg/L	1	03/02/21 01:51 PM
Beryllium	<0.00150	0.00150	0.00500		mg/L	5	03/04/21 11:42 AM
Boron	66.3	2.00	6.00		mg/L	200	03/03/21 01:56 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 01:51 PM
Calcium	489	20.0	60.0		mg/L	200	03/03/21 01:56 PM
Chromium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:51 PM
Cobalt	<0.00300	0.00300	0.00500		mg/L	1	03/02/21 01:51 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 01:51 PM
Lithium	0.799	0.0250	0.0500		mg/L	5	03/04/21 11:42 AM
Magnesium	60.1	0.500	1.50		mg/L	5	03/04/21 11:42 AM
Molybdenum	0.0229	0.00200	0.00500		mg/L	1	03/02/21 01:51 PM
Potassium	47.7	0.500	1.50		mg/L	5	03/04/21 11:42 AM
Selenium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:51 PM
Sodium	3190	20.0	60.0		mg/L	200	03/03/21 01:56 PM
Thallium	<0.000500	0.000500	0.00150		mg/L	1	03/02/21 01:51 PM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	03/04/21 11:15 AM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	3790	30.0	100		mg/L	100	03/04/21 07:33 PM
Fluoride	1.58	0.500	2.00	J	mg/L	5	03/05/21 03:01 AM
Sulfate	2960	100	300		mg/L	100	03/04/21 07:33 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	223	10.0	20.0		mg/L @ pH 4.53	1	03/02/21 03:32 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	03/02/21 03:32 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	03/02/21 03:32 PM
Alkalinity, Total (As CaCO3)	223	20.0	20.0		mg/L @ pH 4.53	1	03/02/21 03:32 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	11100	200	200		mg/L	1	03/01/21 04:00 PM

Qualifiers:

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N - Parameter not NELAP certified
See Final Page of Report for MQLs and MDLs
S - Spike Recovery outside control limits
C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

DHL Analytical, Inc.

Date: *08-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	EP-36
Project:	SMEC Semiannual Groundwater Sampling	**Lab ID:**	2102158-07
Project No:	5076-109	**Collection Date:**	02/24/21 06:19 PM
Lab Order:	2102158	**Matrix:**	AQUEOUS

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Antimony	<0.000800	0.000800	0.00250		mg/L	1	03/02/21 01:53 PM
Arsenic	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:53 PM
Barium	0.0222	0.00300	0.0100		mg/L	1	03/02/21 01:53 PM
Beryllium	<0.00150	0.00150	0.00500		mg/L	5	03/04/21 11:44 AM
Boron	24.2	1.00	3.00		mg/L	100	03/03/21 04:58 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 01:53 PM
Calcium	436	10.0	30.0		mg/L	100	03/03/21 04:58 PM
Chromium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:53 PM
Cobalt	<0.00300	0.00300	0.00500		mg/L	1	03/02/21 01:53 PM
Lead	0.000386	0.000300	0.00100	J	mg/L	1	03/02/21 01:53 PM
Lithium	1.17	0.0250	0.0500		mg/L	5	03/04/21 11:44 AM
Magnesium	72.6	0.500	1.50		mg/L	5	03/04/21 11:44 AM
Molybdenum	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:53 PM
Potassium	50.2	0.500	1.50		mg/L	5	03/04/21 11:44 AM
Selenium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:53 PM
Sodium	3080	20.0	60.0		mg/L	200	03/03/21 01:58 PM
Thallium	<0.000500	0.000500	0.00150		mg/L	1	03/02/21 01:53 PM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	03/04/21 11:17 AM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	3830	30.0	100		mg/L	100	03/04/21 09:09 PM
Fluoride	<0.500	0.500	2.00		mg/L	5	03/05/21 03:17 AM
Sulfate	2490	100	300		mg/L	100	03/04/21 09:09 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	212	10.0	20.0		mg/L @ pH 4.53	1	03/02/21 03:46 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	03/02/21 03:46 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	03/02/21 03:46 PM
Alkalinity, Total (As CaCO3)	212	20.0	20.0		mg/L @ pH 4.53	1	03/02/21 03:46 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	10500	200	200		mg/L	1	03/01/21 04:00 PM

Qualifiers:

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DF- Dilution Factor
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See Final Page of Report for MQLs and MDLs
S - Spike Recovery outside control limits
C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

DHL Analytical, Inc.

Date: *08-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	FB-1-2242021
Project:	SMEC Semiannual Groundwater Sampling	**Lab ID:**	2102158-08
Project No:	5076-109	**Collection Date:**	02/24/21 05:07 PM
Lab Order:	2102158	**Matrix:**	FIELD BLANK

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Antimony	<0.000800	0.000800	0.00250		mg/L	1	03/02/21 01:55 PM
Arsenic	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:55 PM
Barium	<0.00300	0.00300	0.0100		mg/L	1	03/02/21 01:55 PM
Beryllium	<0.000300	0.000300	0.00100		mg/L	1	03/03/21 02:01 PM
Boron	0.0507	0.0100	0.0300		mg/L	1	03/03/21 02:01 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 01:55 PM
Calcium	0.160	0.100	0.300	J	mg/L	1	03/03/21 02:01 PM
Chromium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:55 PM
Cobalt	<0.00300	0.00300	0.00500		mg/L	1	03/02/21 01:55 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 01:55 PM
Lithium	<0.00500	0.00500	0.0100		mg/L	1	03/03/21 02:01 PM
Magnesium	<0.100	0.100	0.300		mg/L	1	03/02/21 01:55 PM
Molybdenum	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:55 PM
Potassium	<0.100	0.100	0.300		mg/L	1	03/02/21 01:55 PM
Selenium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:55 PM
Sodium	0.183	0.100	0.300	J	mg/L	1	03/03/21 02:01 PM
Thallium	<0.000500	0.000500	0.00150		mg/L	1	03/02/21 01:55 PM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	03/04/21 11:19 AM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	<0.300	0.300	1.00		mg/L	1	03/04/21 04:37 PM
Fluoride	<0.100	0.100	0.400		mg/L	1	03/04/21 04:37 PM
Sulfate	<1.00	1.00	3.00		mg/L	1	03/04/21 04:37 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.49	1	03/02/21 03:48 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.49	1	03/02/21 03:48 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.49	1	03/02/21 03:48 PM
Alkalinity, Total (As CaCO3)	<20.0	20.0	20.0		mg/L @ pH 4.49	1	03/02/21 03:48 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	12.0	10.0	10.0		mg/L	1	03/01/21 04:00 PM

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S - Spike Recovery outside control limits
C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

DHL Analytical, Inc.

Date: *08-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	EB-2-2242021
Project:	SMEC Semiannual Groundwater Sampling	**Lab ID:**	2102158-09
Project No:	5076-109	**Collection Date:**	02/24/21 06:30 PM
Lab Order:	2102158	**Matrix:**	EQUIP BLANK

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Antimony	<0.000800	0.000800	0.00250		mg/L	1	03/02/21 01:57 PM
Arsenic	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:57 PM
Barium	<0.00300	0.00300	0.0100		mg/L	1	03/02/21 01:57 PM
Beryllium	<0.000300	0.000300	0.00100		mg/L	1	03/03/21 02:03 PM
Boron	0.0426	0.0100	0.0300		mg/L	1	03/03/21 02:03 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 01:57 PM
Calcium	<0.100	0.100	0.300		mg/L	1	03/02/21 01:57 PM
Chromium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:57 PM
Cobalt	<0.00300	0.00300	0.00500		mg/L	1	03/02/21 01:57 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 01:57 PM
Lithium	<0.00500	0.00500	0.0100		mg/L	1	03/03/21 02:03 PM
Magnesium	<0.100	0.100	0.300		mg/L	1	03/02/21 01:57 PM
Molybdenum	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:57 PM
Potassium	<0.100	0.100	0.300		mg/L	1	03/02/21 01:57 PM
Selenium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:57 PM
Sodium	<0.100	0.100	0.300		mg/L	1	03/03/21 02:03 PM
Thallium	<0.000500	0.000500	0.00150		mg/L	1	03/02/21 01:57 PM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	03/04/21 11:22 AM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	<0.300	0.300	1.00		mg/L	1	03/04/21 04:53 PM
Fluoride	<0.100	0.100	0.400		mg/L	1	03/04/21 04:53 PM
Sulfate	<1.00	1.00	3.00		mg/L	1	03/04/21 04:53 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.48	1	03/02/21 03:50 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.48	1	03/02/21 03:50 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.48	1	03/02/21 03:50 PM
Alkalinity, Total (As CaCO3)	<20.0	20.0	20.0		mg/L @ pH 4.48	1	03/02/21 03:50 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	<10.0	10.0	10.0		mg/L	1	03/01/21 04:00 PM

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SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

DHL Analytical, Inc.

Date: *08-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	EP-37
Project:	SMEC Semiannual Groundwater Sampling	**Lab ID:**	2102158-10
Project No:	5076-109	**Collection Date:**	02/25/21 11:59 AM
Lab Order:	2102158	**Matrix:**	AQUEOUS

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Antimony	<0.000800	0.000800	0.00250		mg/L	1	03/02/21 01:59 PM
Arsenic	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:59 PM
Barium	0.0194	0.00300	0.0100		mg/L	1	03/02/21 01:59 PM
Beryllium	<0.00150	0.00150	0.00500		mg/L	5	03/04/21 11:46 AM
Boron	7.80	0.200	0.600		mg/L	20	03/03/21 05:01 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 01:59 PM
Calcium	426	20.0	60.0		mg/L	200	03/03/21 02:05 PM
Chromium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:59 PM
Cobalt	<0.00300	0.00300	0.00500		mg/L	1	03/02/21 01:59 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 01:59 PM
Lithium	1.30	0.0250	0.0500		mg/L	5	03/04/21 11:46 AM
Magnesium	73.4	2.00	6.00		mg/L	20	03/03/21 05:01 PM
Molybdenum	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:59 PM
Potassium	53.0	2.00	6.00		mg/L	20	03/03/21 05:01 PM
Selenium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 01:59 PM
Sodium	3090	20.0	60.0		mg/L	200	03/03/21 02:05 PM
Thallium	<0.000500	0.000500	0.00150		mg/L	1	03/02/21 01:59 PM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	03/04/21 11:29 AM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	3750	30.0	100		mg/L	100	03/04/21 09:25 PM
Fluoride	2.39	0.500	2.00		mg/L	5	03/05/21 03:33 AM
Sulfate	2740	100	300		mg/L	100	03/04/21 09:25 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	202	10.0	20.0		mg/L @ pH 4.53	1	03/02/21 04:03 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	03/02/21 04:03 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	03/02/21 04:03 PM
Alkalinity, Total (As CaCO3)	202	20.0	20.0		mg/L @ pH 4.53	1	03/02/21 04:03 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	10300	200	200		mg/L	1	03/01/21 04:00 PM

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C - Sample Result or QC discussed in Case Narrative
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SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

DHL Analytical, Inc.

Date: *08-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	MW-04
Project:	SMEC Semiannual Groundwater Sampling	**Lab ID:**	2102158-11
Project No:	5076-109	**Collection Date:**	02/25/21 10:45 AM
Lab Order:	2102158	**Matrix:**	AQUEOUS

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Antimony	<0.000800	0.000800	0.00250		mg/L	1	03/02/21 03:17 PM
Arsenic	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 03:17 PM
Barium	0.0151	0.00300	0.0100		mg/L	1	03/02/21 03:17 PM
Beryllium	<0.00150	0.00150	0.00500		mg/L	5	03/04/21 11:48 AM
Boron	8.63	0.200	0.600		mg/L	20	03/03/21 05:03 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 03:17 PM
Calcium	326	10.0	30.0		mg/L	100	03/03/21 02:37 PM
Chromium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 03:17 PM
Cobalt	<0.00300	0.00300	0.00500		mg/L	1	03/02/21 03:17 PM
Lead	0.000806	0.000300	0.00100	J	mg/L	1	03/02/21 03:17 PM
Lithium	0.766	0.0250	0.0500		mg/L	5	03/04/21 11:48 AM
Magnesium	63.1	2.00	6.00		mg/L	20	03/03/21 05:03 PM
Molybdenum	<0.0100	0.0100	0.0250		mg/L	5	03/04/21 11:48 AM
Potassium	41.9	2.00	6.00		mg/L	20	03/03/21 05:03 PM
Selenium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 03:17 PM
Sodium	1870	10.0	30.0		mg/L	100	03/03/21 02:37 PM
Thallium	<0.000500	0.000500	0.00150		mg/L	1	03/02/21 03:17 PM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	03/04/21 11:31 AM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	1920	30.0	100		mg/L	100	03/04/21 09:41 PM
Fluoride	1.32	0.500	2.00	J	mg/L	5	03/05/21 03:49 AM
Sulfate	2330	100	300		mg/L	100	03/04/21 09:41 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	116	10.0	20.0		mg/L @ pH 4.53	1	03/02/21 04:18 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	03/02/21 04:18 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.53	1	03/02/21 04:18 PM
Alkalinity, Total (As CaCO3)	116	20.0	20.0		mg/L @ pH 4.53	1	03/02/21 04:18 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	6610	50.0	50.0		mg/L	1	03/01/21 04:00 PM

Qualifiers:

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J - Analyte detected between SDL and RL
B - Analyte detected in the associated Method Blank
DF- Dilution Factor
N - Parameter not NELAP certified
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S - Spike Recovery outside control limits
C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

DHL Analytical, Inc.

Date: *08-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	EP-38
Project:	SMEC Semiannual Groundwater Sampling	**Lab ID:**	2102158-12
Project No:	5076-109	**Collection Date:**	02/25/21 09:28 AM
Lab Order:	2102158	**Matrix:**	AQUEOUS

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Antimony	<0.000800	0.000800	0.00250		mg/L	1	03/02/21 03:19 PM
Arsenic	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 03:19 PM
Barium	0.0160	0.00300	0.0100		mg/L	1	03/02/21 03:19 PM
Beryllium	<0.00150	0.00150	0.00500		mg/L	5	03/04/21 11:51 AM
Boron	2.48	0.100	0.300		mg/L	10	03/03/21 05:05 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 03:19 PM
Calcium	437	10.0	30.0		mg/L	100	03/03/21 02:39 PM
Chromium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 03:19 PM
Cobalt	<0.00300	0.00300	0.00500		mg/L	1	03/02/21 03:19 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 03:19 PM
Lithium	0.718	0.0250	0.0500		mg/L	5	03/04/21 11:51 AM
Magnesium	63.1	1.00	3.00		mg/L	10	03/03/21 05:05 PM
Molybdenum	<0.0100	0.0100	0.0250		mg/L	5	03/04/21 11:51 AM
Potassium	40.5	1.00	3.00		mg/L	10	03/03/21 05:05 PM
Selenium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 03:19 PM
Sodium	1460	10.0	30.0		mg/L	100	03/03/21 02:39 PM
Thallium	<0.000500	0.000500	0.00150		mg/L	1	03/02/21 03:19 PM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	03/04/21 11:33 AM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	1600	30.0	100		mg/L	100	03/04/21 09:57 PM
Fluoride	0.728	0.500	2.00	J	mg/L	5	03/05/21 04:05 AM
Sulfate	2070	100	300		mg/L	100	03/04/21 09:57 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	56.6	10.0	20.0		mg/L @ pH 4.51	1	03/02/21 04:24 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.51	1	03/02/21 04:24 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.51	1	03/02/21 04:24 PM
Alkalinity, Total (As CaCO3)	56.6	20.0	20.0		mg/L @ pH 4.51	1	03/02/21 04:24 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	5830	50.0	50.0		mg/L	1	03/01/21 04:00 PM

Qualifiers:

ND - Not Detected at the SDL
J - Analyte detected between SDL and RL
B - Analyte detected in the associated Method Blank
DF- Dilution Factor
N - Parameter not NELAP certified
See Final Page of Report for MQLs and MDLs
S - Spike Recovery outside control limits
C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

DHL Analytical, Inc.

Date: *08-Mar-21*

CLIENT:	GSI Environmental, Inc	**Client Sample ID:**	EB4-2-25-21
Project:	SMEC Semiannual Groundwater Sampling	**Lab ID:**	2102158-13
Project No:	5076-109	**Collection Date:**	02/25/21 04:26 PM
Lab Order:	2102158	**Matrix:**	EQUIP BLANK

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - WATER		**SW6020B**					Analyst: **RO**
Antimony	<0.000800	0.000800	0.00250		mg/L	1	03/02/21 03:21 PM
Arsenic	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 03:21 PM
Barium	<0.00300	0.00300	0.0100		mg/L	1	03/02/21 03:21 PM
Beryllium	<0.000300	0.000300	0.00100		mg/L	1	03/03/21 02:42 PM
Boron	0.0287	0.0100	0.0300	J	mg/L	1	03/03/21 02:42 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 03:21 PM
Calcium	<0.100	0.100	0.300		mg/L	1	03/03/21 02:42 PM
Chromium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 03:21 PM
Cobalt	<0.00300	0.00300	0.00500		mg/L	1	03/02/21 03:21 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/02/21 03:21 PM
Lithium	<0.00500	0.00500	0.0100		mg/L	1	03/03/21 02:42 PM
Magnesium	<0.100	0.100	0.300		mg/L	1	03/02/21 03:21 PM
Molybdenum	<0.00200	0.00200	0.00500		mg/L	1	03/03/21 02:42 PM
Potassium	<0.100	0.100	0.300		mg/L	1	03/02/21 03:21 PM
Selenium	<0.00200	0.00200	0.00500		mg/L	1	03/02/21 03:21 PM
Sodium	<0.100	0.100	0.300		mg/L	1	03/03/21 02:42 PM
Thallium	<0.000500	0.000500	0.00150		mg/L	1	03/02/21 03:21 PM
MERCURY TOTAL: AQUEOUS		**SW7470A**					Analyst: **JVR**
Mercury	<0.0000800	0.0000800	0.000200		mg/L	1	03/04/21 11:35 AM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **BM**
Chloride	<0.300	0.300	1.00		mg/L	1	03/04/21 05:09 PM
Fluoride	<0.100	0.100	0.400		mg/L	1	03/04/21 05:09 PM
Sulfate	<1.00	1.00	3.00		mg/L	1	03/04/21 05:09 PM
ALKALINITY		**M2320 B**					Analyst: **BM**
Alkalinity, Bicarbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.46	1	03/02/21 04:26 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.46	1	03/02/21 04:26 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L @ pH 4.46	1	03/02/21 04:26 PM
Alkalinity, Total (As CaCO3)	<20.0	20.0	20.0		mg/L @ pH 4.46	1	03/02/21 04:26 PM
TOTAL DISSOLVED SOLIDS		**M2540C**					Analyst: **JS**
Total Dissolved Solids (Residue, Filterable)	<10.0	10.0	10.0		mg/L	1	03/01/21 04:00 PM

Qualifiers:

ND - Not Detected at the SDL
J - Analyte detected between SDL and RL
B - Analyte detected in the associated Method Blank
DF- Dilution Factor
N - Parameter not NELAP certified
See Final Page of Report for MQLs and MDLs
S - Spike Recovery outside control limits
C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

CLIENT: GSI Environmental, Inc
Work Order: 2102158
Project: SMEC Semiannual Groundwater Sampling

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC2_HG_210212B

Sample ID: **DCS-99502**	Batch ID: **99502**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **DCS**	Run ID: **CETAC2_HG_210212B**	Analysis Date: **2/12/2021 1:28:16 PM**	Prep Date: **2/11/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.000178	0.000200	0.000200	0	89.0	82	119	0	0	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc

Work Order: 2102158

Project: SMEC Semiannual Groundwater Sampling

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC2_HG_210304B

The QC data in batch 99632 applies to the following samples: 2102158-01A, 2102158-02A, 2102158-03A, 2102158-04A, 2102158-05A, 2102158-06A, 2102158-07A, 2102158-08A, 2102158-09A, 2102158-10A, 2102158-11A, 2102158-12A, 2102158-13A

Sample ID: **MB-99632** Batch ID: **99632** TestNo: **SW7470A** Units: **mg/L**
SampType: **MBLK** Run ID: **CETAC2_HG_210304B** Analysis Date: **3/4/2021 10:45:00 AM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	<0.0000800	0.000200								

Sample ID: **LCS-99632** Batch ID: **99632** TestNo: **SW7470A** Units: **mg/L**
SampType: **LCS** Run ID: **CETAC2_HG_210304B** Analysis Date: **3/4/2021 10:47:16 AM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00192	0.000200	0.00200	0	96.0	85	115			

Sample ID: **LCSD-99632** Batch ID: **99632** TestNo: **SW7470A** Units: **mg/L**
SampType: **LCSD** Run ID: **CETAC2_HG_210304B** Analysis Date: **3/4/2021 10:49:32 AM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00198	0.000200	0.00200	0	99.0	85	115	3.08	15	

Sample ID: **2102158-01A MS** Batch ID: **99632** TestNo: **SW7470A** Units: **mg/L**
SampType: **MS** Run ID: **CETAC2_HG_210304B** Analysis Date: **3/4/2021 10:56:20 AM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00194	0.000200	0.00200	0	97.0	80	120			

Sample ID: **2102158-01A MSD** Batch ID: **99632** TestNo: **SW7470A** Units: **mg/L**
SampType: **MSD** Run ID: **CETAC2_HG_210304B** Analysis Date: **3/4/2021 10:59:36 AM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00196	0.000200	0.00200	0	98.0	80	120	1.03	15	

Sample ID: **2102158-01A SD** Batch ID: **99632** TestNo: **SW7470A** Units: **mg/L**
SampType: **SD** Run ID: **CETAC2_HG_210304B** Analysis Date: **3/4/2021 11:01:52 AM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	<0.000400	0.00100	0	0				0	10	

Sample ID: **2102158-01A PDS** Batch ID: **99632** TestNo: **SW7470A** Units: **mg/L**
SampType: **PDS** Run ID: **CETAC2_HG_210304B** Analysis Date: **3/4/2021 11:04:07 AM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00247	0.000200	0.00250	0	98.8	85	115			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102158
Project: SMEC Semiannual Groundwater Sampling

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC2_HG_210304B

Sample ID: **ICV-210304**	Batch ID: **R114332**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **ICV**	Run ID: **CETAC2_HG_210304B**	Analysis Date: **3/4/2021 10:40:26 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00411	0.000200	0.00400	0	103	90	110			

Sample ID: **CCV1-210304**	Batch ID: **R114332**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **CCV**	Run ID: **CETAC2_HG_210304B**	Analysis Date: **3/4/2021 11:24:33 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00202	0.000200	0.00200	0	101	90	110			

Sample ID: **CCV2-210304**	Batch ID: **R114332**	TestNo: **SW7470A**	Units: **mg/L**
SampType: **CCV**	Run ID: **CETAC2_HG_210304B**	Analysis Date: **3/4/2021 11:40:31 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00201	0.000200	0.00200	0	101	90	110			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

Sample ID: **DCS1-99275** Batch ID: **99275** TestNo: **SW6020B** Units: **mg/L**
SampType: **DCS** Run ID: **ICP-MS4_210126C** Analysis Date: **1/26/2021 12:03:00 PM** Prep Date: **1/25/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.00102	0.00250	0.00100	0	102	70	130	0	0	
Beryllium	0.000591	0.00100	0.000500	0	118	70	130	0	0	
Cadmium	0.000458	0.00100	0.000500	0	91.6	70	130	0	0	
Lead	0.000565	0.00100	0.000500	0	113	70	130	0	0	
Thallium	0.000517	0.00150	0.000500	0	103	70	130	0	0	

Sample ID: **DCS2-99275** Batch ID: **99275** TestNo: **SW6020B** Units: **mg/L**
SampType: **DCS2** Run ID: **ICP-MS4_210126C** Analysis Date: **1/26/2021 12:05:00 PM** Prep Date: **1/25/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	0.352	0.300	0.300	0	117	70	130	0	0	
Magnesium	0.311	0.300	0.300	0	104	70	130	0	0	
Potassium	0.307	0.300	0.300	0	102	70	130	0	0	
Sodium	0.311	0.300	0.300	0	104	70	130	0	0	

Sample ID: **DCS3-99275** Batch ID: **99275** TestNo: **SW6020B** Units: **mg/L**
SampType: **DCS3** Run ID: **ICP-MS4_210126C** Analysis Date: **1/26/2021 12:07:00 PM** Prep Date: **1/25/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.00513	0.00500	0.00500	0	103	70	130	0	0	
Barium	0.00490	0.0100	0.00500	0	97.9	70	130	0	0	
Chromium	0.00525	0.00500	0.00500	0	105	70	130	0	0	
Cobalt	0.00522	0.00500	0.00500	0	104	70	130	0	0	
Lithium	0.00570	0.0100	0.00500	0	114	70	130	0	0	
Molybdenum	0.00507	0.00500	0.00500	0	101	70	130	0	0	
Selenium	0.00515	0.00500	0.00500	0	103	70	130	0	0	

Sample ID: **DCS4-99275** Batch ID: **99275** TestNo: **SW6020B** Units: **mg/L**
SampType: **DCS4** Run ID: **ICP-MS4_210126C** Analysis Date: **1/26/2021 12:09:00 PM** Prep Date: **1/25/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	0.0299	0.0300	0.0300	0	99.8	70	130	0	0	

CLIENT: GSI Environmental, Inc

Work Order: 2102158

Project: SMEC Semiannual Groundwater Sampling

ANALYTICAL QC SUMMARY REPORT

RunID: **ICP-MS4_210302C**

The QC data in batch 99628 applies to the following samples: 2102158-01A, 2102158-02A, 2102158-03A, 2102158-04A, 2102158-05A, 2102158-06A, 2102158-07A, 2102158-08A, 2102158-09A, 2102158-10A, 2102158-11A, 2102158-12A, 2102158-13A

Sample ID: **MB-99628** Batch ID: **99628** TestNo: **SW6020B** Units: **mg/L**

SampType: **MBLK** Run ID: **ICP-MS4_210302C** Analysis Date: **3/2/2021 1:31:00 PM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	<0.000800	0.00250								
Arsenic	<0.00200	0.00500								
Barium	<0.00300	0.0100								
Cadmium	<0.000300	0.00100								
Calcium	<0.100	0.300								
Chromium	<0.00200	0.00500								
Cobalt	<0.00300	0.00500								
Lead	<0.000300	0.00100								
Magnesium	<0.100	0.300								
Molybdenum	<0.00200	0.00500								
Potassium	<0.100	0.300								
Selenium	<0.00200	0.00500								
Sodium	<0.100	0.300								
Thallium	<0.000500	0.00150								

Sample ID: **LCS-99628** Batch ID: **99628** TestNo: **SW6020B** Units: **mg/L**

SampType: **LCS** Run ID: **ICP-MS4_210302C** Analysis Date: **3/2/2021 1:33:00 PM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.193	0.00250	0.200	0	96.7	80	120			
Arsenic	0.193	0.00500	0.200	0	96.5	80	120			
Barium	0.197	0.0100	0.200	0	98.6	80	120			
Cadmium	0.196	0.00100	0.200	0	97.8	80	120			
Calcium	4.94	0.300	5.00	0	98.7	80	120			
Chromium	0.197	0.00500	0.200	0	98.4	80	120			
Cobalt	0.195	0.00500	0.200	0	97.3	80	120			
Lead	0.189	0.00100	0.200	0	94.7	80	120			
Magnesium	4.86	0.300	5.00	0	97.3	80	120			
Molybdenum	0.183	0.00500	0.200	0	91.7	80	120			
Potassium	4.97	0.300	5.00	0	99.4	80	120			
Selenium	0.201	0.00500	0.200	0	101	80	120			
Sodium	4.82	0.300	5.00	0	96.3	80	120			
Thallium	0.194	0.00150	0.200	0	97.0	80	120			

Sample ID: **LCSD-99628** Batch ID: **99628** TestNo: **SW6020B** Units: **mg/L**

SampType: **LCSD** Run ID: **ICP-MS4_210302C** Analysis Date: **3/2/2021 1:35:00 PM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.193	0.00250	0.200	0	96.3	80	120	0.428	15	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102158
Project: SMEC Semiannual Groundwater Sampling

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_210302C

Sample ID: **LCSD-99628**	Batch ID: **99628**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **LCSD**	Run ID: **ICP-MS4_210302C**	Analysis Date: **3/2/2021 1:35:00 PM**	Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.195	0.00500	0.200	0	97.5	80	120	0.988	15	
Barium	0.198	0.0100	0.200	0	99.0	80	120	0.433	15	
Cadmium	0.195	0.00100	0.200	0	97.6	80	120	0.212	15	
Calcium	4.98	0.300	5.00	0	99.5	80	120	0.799	15	
Chromium	0.197	0.00500	0.200	0	98.4	80	120	0.015	15	
Cobalt	0.195	0.00500	0.200	0	97.5	80	120	0.161	15	
Lead	0.192	0.00100	0.200	0	95.8	80	120	1.22	15	
Magnesium	4.91	0.300	5.00	0	98.2	80	120	0.901	15	
Molybdenum	0.184	0.00500	0.200	0	92.1	80	120	0.424	15	
Potassium	4.98	0.300	5.00	0	99.6	80	120	0.192	15	
Selenium	0.206	0.00500	0.200	0	103	80	120	2.10	15	
Sodium	4.83	0.300	5.00	0	96.5	80	120	0.244	15	
Thallium	0.197	0.00150	0.200	0	98.3	80	120	1.29	15	

Sample ID: **2102158-01A SD**	Batch ID: **99628**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **SD**	Run ID: **ICP-MS4_210302C**	Analysis Date: **3/2/2021 1:41:00 PM**	Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	<0.00400	0.0125	0	0				0	20	
Arsenic	0.0219	0.0250	0	0.0206				5.82	20	
Barium	<0.0150	0.0500	0	0.00606				0	20	
Cadmium	0.0278	0.00500	0	0.0255				8.73	20	
Chromium	<0.0100	0.0250	0	0				0	20	
Cobalt	0.134	0.0250	0	0.125				6.36	20	
Lead	0.00238	0.00500	0	0.00225				5.53	20	
Molybdenum	<0.0100	0.0250	0	0				0	20	
Selenium	0.153	0.0250	0	0.146				4.26	20	
Thallium	<0.00250	0.00750	0	0.00212				0	20	

Sample ID: **2102158-01A PDS**	Batch ID: **99628**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **PDS**	Run ID: **ICP-MS4_210302C**	Analysis Date: **3/2/2021 2:09:00 PM**	Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.190	0.00250	0.200	0	95.0	75	125			
Arsenic	0.210	0.00500	0.200	0.0206	94.6	75	125			
Barium	0.207	0.0100	0.200	0.00606	101	75	125			
Cadmium	0.202	0.00100	0.200	0.0255	88.5	75	125			
Chromium	0.186	0.00500	0.200	0	93.1	75	125			
Cobalt	0.294	0.00500	0.200	0.125	84.2	75	125			
Lead	0.198	0.00100	0.200	0.00225	97.8	75	125			
Molybdenum	0.181	0.00500	0.200	0	90.4	75	125			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102158
Project: SMEC Semiannual Groundwater Sampling

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_210302C

Sample ID: **2102158-01A PDS**	Batch ID: **99628**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **PDS**	Run ID: **ICP-MS4_210302C**	Analysis Date: **3/2/2021 2:09:00 PM**	Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	0.377	0.00500	0.200	0.147	115	75	125			
Thallium	0.202	0.00150	0.200	0.00212	100	75	125			

Sample ID: **2102158-01A MS**	Batch ID: **99628**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **MS**	Run ID: **ICP-MS4_210302C**	Analysis Date: **3/2/2021 2:11:00 PM**	Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.185	0.00250	0.200	0	92.3	75	125			
Arsenic	0.210	0.00500	0.200	0.0206	94.6	75	125			
Barium	0.200	0.0100	0.200	0.00606	96.8	75	125			
Cadmium	0.199	0.00100	0.200	0.0255	87.0	75	125			
Calcium	466	0.300	5.00	462	83.6	75	125			
Chromium	0.176	0.00500	0.200	0	87.9	75	125			
Cobalt	0.292	0.00500	0.200	0.125	83.0	75	125			
Lead	0.194	0.00100	0.200	0.00225	95.8	75	125			
Magnesium	52.7	0.300	5.00	49.2	70.8	75	125			S
Molybdenum	0.179	0.00500	0.200	0	89.5	75	125			
Potassium	41.4	0.300	5.00	36.5	97.9	75	125			
Selenium	0.374	0.00500	0.200	0.147	114	75	125			
Sodium	858	0.300	5.00	871	-274	75	125			S
Thallium	0.200	0.00150	0.200	0.00212	98.8	75	125			

Sample ID: **2102158-01A MSD**	Batch ID: **99628**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **MSD**	Run ID: **ICP-MS4_210302C**	Analysis Date: **3/2/2021 2:12:00 PM**	Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.186	0.00250	0.200	0	93.2	75	125	0.930	15	
Arsenic	0.213	0.00500	0.200	0.0206	96.0	75	125	1.36	15	
Barium	0.203	0.0100	0.200	0.00606	98.5	75	125	1.71	15	
Cadmium	0.201	0.00100	0.200	0.0255	88.0	75	125	1.02	15	
Calcium	467	0.300	5.00	462	98.6	75	125	0.160	15	
Chromium	0.175	0.00500	0.200	0	87.7	75	125	0.214	15	
Cobalt	0.295	0.00500	0.200	0.125	84.9	75	125	1.25	15	
Lead	0.194	0.00100	0.200	0.00225	95.8	75	125	0.023	15	
Magnesium	53.1	0.300	5.00	49.2	77.8	75	125	0.666	15	
Molybdenum	0.181	0.00500	0.200	0	90.6	75	125	1.23	15	
Potassium	41.5	0.300	5.00	36.5	99.1	75	125	0.145	15	
Selenium	0.386	0.00500	0.200	0.147	120	75	125	3.17	15	
Sodium	870	0.300	5.00	871	-25.4	75	125	1.44	15	S
Thallium	0.199	0.00150	0.200	0.00212	98.7	75	125	0.110	15	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102158
Project: SMEC Semiannual Groundwater Sampling

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_210302C

Sample ID: **ICV-210302** Batch ID: **R114295** TestNo: **SW6020B** Units: **mg/L**
SampType: **ICV** Run ID: **ICP-MS4_210302C** Analysis Date: **3/2/2021 10:00:00 AM** Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.0966	0.00250	0.100	0	96.6	90	110			
Arsenic	0.0979	0.00500	0.100	0	97.9	90	110			
Barium	0.100	0.0100	0.100	0	100	90	110			
Beryllium	0.0976	0.00100	0.100	0	97.6	90	110			
Cadmium	0.0995	0.00100	0.100	0	99.5	90	110			
Calcium	2.45	0.300	2.50	0	98.0	90	110			
Chromium	0.104	0.00500	0.100	0	104	90	110			
Cobalt	0.101	0.00500	0.100	0	101	90	110			
Lead	0.0988	0.00100	0.100	0	98.8	90	110			
Lithium	0.0963	0.0100	0.100	0	96.3	90	110			
Magnesium	2.40	0.300	2.50	0	96.1	90	110			
Molybdenum	0.0943	0.00500	0.100	0	94.3	90	110			
Potassium	2.47	0.300	2.50	0	98.7	90	110			
Selenium	0.0996	0.00500	0.100	0	99.6	90	110			
Sodium	2.44	0.300	2.50	0	97.7	90	110			
Thallium	0.0996	0.00150	0.100	0	99.6	90	110			

Sample ID: **LCVL-210302** Batch ID: **R114295** TestNo: **SW6020B** Units: **mg/L**
SampType: **LCVL** Run ID: **ICP-MS4_210302C** Analysis Date: **3/2/2021 10:07:00 AM** Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.00201	0.00250	0.00200	0	101	80	120			
Arsenic	0.00514	0.00500	0.00500	0	103	80	120			
Barium	0.00540	0.0100	0.00500	0	108	80	120			
Beryllium	0.000990	0.00100	0.00100	0	99.0	80	120			
Cadmium	0.00114	0.00100	0.00100	0	114	80	120			
Calcium	0.117	0.300	0.100	0	117	80	120			
Chromium	0.00545	0.00500	0.00500	0	109	80	120			
Cobalt	0.00537	0.00500	0.00500	0	107	80	120			
Lead	0.00105	0.00100	0.00100	0	105	80	120			
Lithium	0.0100	0.0100	0.0100	0	100	80	120			
Magnesium	0.107	0.300	0.100	0	107	80	120			
Molybdenum	0.00542	0.00500	0.00500	0	108	80	120			
Potassium	0.109	0.300	0.100	0	109	80	120			
Selenium	0.00539	0.00500	0.00500	0	108	80	120			
Sodium	0.107	0.300	0.100	0	107	80	120			
Thallium	0.00106	0.00150	0.00100	0	106	80	120			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102158
Project: SMEC Semiannual Groundwater Sampling

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_210302C

Sample ID: **CCV5-200302**	Batch ID: **R114295**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS4_210302C**	Analysis Date: **3/2/2021 1:24:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.194	0.00250	0.200	0	97.1	90	110			
Arsenic	0.194	0.00500	0.200	0	96.8	90	110			
Barium	0.195	0.0100	0.200	0	97.6	90	110			
Cadmium	0.194	0.00100	0.200	0	97.2	90	110			
Calcium	5.00	0.300	5.00	0	99.9	90	110			
Chromium	0.195	0.00500	0.200	0	97.5	90	110			
Cobalt	0.192	0.00500	0.200	0	96.0	90	110			
Lead	0.188	0.00100	0.200	0	94.1	90	110			
Magnesium	4.90	0.300	5.00	0	97.9	90	110			
Molybdenum	0.188	0.00500	0.200	0	94.0	90	110			
Potassium	4.96	0.300	5.00	0	99.2	90	110			
Selenium	0.204	0.00500	0.200	0	102	90	110			
Sodium	4.84	0.300	5.00	0	96.7	90	110			
Thallium	0.193	0.00150	0.200	0	96.4	90	110			

Sample ID: **CCV6-200302**	Batch ID: **R114295**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS4_210302C**	Analysis Date: **3/2/2021 3:06:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.192	0.00250	0.200	0	96.0	90	110			
Arsenic	0.189	0.00500	0.200	0	94.6	90	110			
Barium	0.196	0.0100	0.200	0	97.9	90	110			
Cadmium	0.190	0.00100	0.200	0	95.0	90	110			
Calcium	4.98	0.300	5.00	0	99.6	90	110			
Chromium	0.191	0.00500	0.200	0	95.3	90	110			
Cobalt	0.188	0.00500	0.200	0	93.9	90	110			
Lead	0.185	0.00100	0.200	0	92.7	90	110			
Magnesium	4.83	0.300	5.00	0	96.6	90	110			
Molybdenum	0.182	0.00500	0.200	0	90.9	90	110			
Potassium	4.98	0.300	5.00	0	99.5	90	110			
Selenium	0.206	0.00500	0.200	0	103	90	110			
Sodium	4.78	0.300	5.00	0	95.6	90	110			
Thallium	0.190	0.00150	0.200	0	94.8	90	110			

Sample ID: **CCV7-200302**	Batch ID: **R114295**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS4_210302C**	Analysis Date: **3/2/2021 4:00:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.187	0.00250	0.200	0	93.7	90	110			
Arsenic	0.186	0.00500	0.200	0	93.1	90	110			
Barium	0.195	0.0100	0.200	0	97.4	90	110			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102158
Project: SMEC Semiannual Groundwater Sampling

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_210302C

Sample ID: **CCV7-200302** Batch ID: **R114295** TestNo: **SW6020B** Units: **mg/L**
SampType: **CCV** Run ID: **ICP-MS4_210302C** Analysis Date: **3/2/2021 4:00:00 PM** Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.184	0.00100	0.200	0	92.1	90	110			
Chromium	0.185	0.00500	0.200	0	92.6	90	110			
Cobalt	0.184	0.00500	0.200	0	92.2	90	110			
Lead	0.185	0.00100	0.200	0	92.7	90	110			
Magnesium	4.68	0.300	5.00	0	93.6	90	110			
Potassium	4.98	0.300	5.00	0	99.7	90	110			
Selenium	0.202	0.00500	0.200	0	101	90	110			
Thallium	0.191	0.00150	0.200	0	95.3	90	110			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102158
Project: SMEC Semiannual Groundwater Sampling

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_210127B

Sample ID: **DCS1-99275**	Batch ID: **99275**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **DCS**	Run ID: **ICP-MS5_210127B**	Analysis Date: **1/27/2021 11:12:00 AM**	Prep Date: **1/25/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.00103	0.00250	0.00100	0	103	70	130	0	0	
Beryllium	0.000524	0.00100	0.000500	0	105	70	130	0	0	
Cadmium	0.000545	0.00100	0.000500	0	109	70	130	0	0	
Lead	0.000550	0.00100	0.000500	0	110	70	130	0	0	
Thallium	0.000480	0.00150	0.000500	0	96.0	70	130	0	0	

Sample ID: **DCS2-99275**	Batch ID: **99275**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **DCS2**	Run ID: **ICP-MS5_210127B**	Analysis Date: **1/27/2021 11:15:00 AM**	Prep Date: **1/25/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	0.303	0.300	0.300	0	101	70	130	0	0	
Magnesium	0.299	0.300	0.300	0	99.8	70	130	0	0	
Potassium	0.292	0.300	0.300	0	97.4	70	130	0	0	
Sodium	0.300	0.300	0.300	0	99.9	70	130	0	0	

Sample ID: **DCS3-99275**	Batch ID: **99275**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **DCS3**	Run ID: **ICP-MS5_210127B**	Analysis Date: **1/27/2021 11:17:00 AM**	Prep Date: **1/25/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.00492	0.00500	0.00500	0	98.3	70	130	0	0	
Barium	0.00490	0.0100	0.00500	0	98.1	70	130	0	0	
Chromium	0.00513	0.00500	0.00500	0	103	70	130	0	0	
Cobalt	0.00493	0.00500	0.00500	0	98.6	70	130	0	0	
Lithium	0.00508	0.0100	0.00500	0	102	70	130	0	0	
Molybdenum	0.00488	0.00500	0.00500	0	97.5	70	130	0	0	
Selenium	0.00603	0.00500	0.00500	0	120	70	130	0	0	

Sample ID: **DCS4-99275**	Batch ID: **99275**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **DCS4**	Run ID: **ICP-MS5_210127B**	Analysis Date: **1/27/2021 11:19:00 AM**	Prep Date: **1/25/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	0.0311	0.0300	0.0300	0	104	70	130	0	0	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc

Work Order: 2102158

Project: SMEC Semiannual Groundwater Sampling

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_210303A

The QC data in batch 99628 applies to the following samples: 2102158-01A, 2102158-02A, 2102158-03A, 2102158-04A, 2102158-05A, 2102158-06A, 2102158-07A, 2102158-08A, 2102158-09A, 2102158-10A, 2102158-11A, 2102158-12A, 2102158-13A

Sample ID: **MB-99628** Batch ID: **99628** TestNo: **SW6020B** Units: **mg/L**

SampType: **MBLK** Run ID: **ICP-MS5_210303A** Analysis Date: **3/3/2021 1:29:00 PM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	<0.000300	0.00100								
Boron	<0.0100	0.0300								
Lithium	<0.00500	0.0100								

Sample ID: **LCS-99628** Batch ID: **99628** TestNo: **SW6020B** Units: **mg/L**

SampType: **LCS** Run ID: **ICP-MS5_210303A** Analysis Date: **3/3/2021 1:32:00 PM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	0.202	0.00100	0.200	0	101	80	120			
Boron	0.197	0.0300	0.200	0	98.3	80	120			
Lithium	0.200	0.0100	0.200	0	100	80	120			

Sample ID: **LCSD-99628** Batch ID: **99628** TestNo: **SW6020B** Units: **mg/L**

SampType: **LCSD** Run ID: **ICP-MS5_210303A** Analysis Date: **3/3/2021 1:34:00 PM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	0.205	0.00100	0.200	0	102	80	120	1.04	15	
Boron	0.208	0.0300	0.200	0	104	80	120	5.60	15	
Lithium	0.203	0.0100	0.200	0	102	80	120	1.61	15	

Sample ID: **2102158-01A SD** Batch ID: **99628** TestNo: **SW6020B** Units: **mg/L**

SampType: **SD** Run ID: **ICP-MS5_210303A** Analysis Date: **3/3/2021 1:45:00 PM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	6.57	7.50	0	5.75				13.3	20	
Calcium	490	75.0	0	492				0.278	20	
Magnesium	54.9	75.0	0	54.7				0.358	20	
Potassium	40.2	75.0	0	38.8				3.42	20	
Sodium	996	75.0	0	992				0.461	20	

Sample ID: **2102158-01A PDS** Batch ID: **99628** TestNo: **SW6020B** Units: **mg/L**

SampType: **PDS** Run ID: **ICP-MS5_210303A** Analysis Date: **3/3/2021 2:12:00 PM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	14.9	1.50	10.0	5.75	91.6	75	125			
Calcium	734	15.0	250	492	96.9	75	125			
Magnesium	303	15.0	250	54.7	99.2	75	125			
Potassium	294	15.0	250	38.9	102	75	125			
Sodium	1250	15.0	250	992	102	75	125			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102158
Project: SMEC Semiannual Groundwater Sampling

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_210303A

Sample ID: **2102158-01A MS**	Batch ID: **99628**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **MS**	Run ID: **ICP-MS5_210303A**	Analysis Date: **3/3/2021 5:23:00 PM**	Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	0.283	0.0500	0.200	0.0908	96.0	75	125			
Boron	6.24	1.50	0.200	5.75	244	75	125			S
Lithium	1.07	0.500	0.200	0.915	79.6	75	125			

Sample ID: **2102158-01A MSD**	Batch ID: **99628**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **MSD**	Run ID: **ICP-MS5_210303A**	Analysis Date: **3/3/2021 5:25:00 PM**	Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	0.284	0.0500	0.200	0.0908	96.6	75	125	0.406	15	
Boron	6.25	1.50	0.200	5.75	247	75	125	0.097	15	S
Lithium	1.09	0.500	0.200	0.915	87.1	75	125	1.38	15	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102158
Project: SMEC Semiannual Groundwater Sampling

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_210303A

Sample ID: **ICV-210303**	Batch ID: **R114326**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **ICV**	Run ID: **ICP-MS5_210303A**	Analysis Date: **3/3/2021 11:25:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	0.0995	0.00100	0.100	0	99.5	90	110			
Boron	0.100	0.0300	0.100	0	100	90	110			
Calcium	2.53	0.300	2.50	0	101	90	110			
Cobalt	0.105	0.00500	0.100	0	105	90	110			
Lithium	0.0977	0.0100	0.100	0	97.7	90	110			
Magnesium	2.44	0.300	2.50	0	97.4	90	110			
Molybdenum	0.0961	0.00500	0.100	0	96.1	90	110			
Potassium	2.49	0.300	2.50	0	99.7	90	110			
Sodium	2.55	0.300	2.50	0	102	90	110			

Sample ID: **LCVL-210303**	Batch ID: **R114326**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **LCVL**	Run ID: **ICP-MS5_210303A**	Analysis Date: **3/3/2021 11:34:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	0.00108	0.00100	0.00100	0	108	80	120			
Boron	0.0219	0.0300	0.0200	0	110	80	120			
Calcium	0.113	0.300	0.100	0	113	80	120			
Cobalt	0.00531	0.00500	0.00500	0	106	80	120			
Lithium	0.0101	0.0100	0.0100	0	101	80	120			
Magnesium	0.104	0.300	0.100	0	104	80	120			
Molybdenum	0.00514	0.00500	0.00500	0	103	80	120			
Potassium	0.104	0.300	0.100	0	104	80	120			
Sodium	0.109	0.300	0.100	0	109	80	120			

Sample ID: **CCV2-210303**	Batch ID: **R114326**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS5_210303A**	Analysis Date: **3/3/2021 1:23:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	0.201	0.00100	0.200	0	100	90	110			
Boron	0.197	0.0300	0.200	0	98.6	90	110			
Calcium	4.97	0.300	5.00	0	99.5	90	110			
Lithium	0.201	0.0100	0.200	0	100	90	110			
Magnesium	5.04	0.300	5.00	0	101	90	110			
Potassium	5.03	0.300	5.00	0	101	90	110			
Sodium	5.05	0.300	5.00	0	101	90	110			

Sample ID: **CCV3-210303**	Batch ID: **R114326**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS5_210303A**	Analysis Date: **3/3/2021 2:19:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	0.199	0.00100	0.200	0	99.7	90	110			

Qualifiers:

B	Analyte detected in the associated Method Blank
J	Analyte detected between MDL and RL
ND	Not Detected at the Method Detection Limit
RL	Reporting Limit
J	Analyte detected between SDL and RL
DF	Dilution Factor
MDL	Method Detection Limit
R	RPD outside accepted control limits
S	Spike Recovery outside control limits
N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102158
Project: SMEC Semiannual Groundwater Sampling

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_210303A

Sample ID: **CCV3-210303**	Batch ID: **R114326**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS5_210303A**	Analysis Date: **3/3/2021 2:19:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Boron	0.194	0.0300	0.200	0	97.2	90	110			
Calcium	4.99	0.300	5.00	0	99.8	90	110			
Lithium	0.199	0.0100	0.200	0	99.4	90	110			
Magnesium	5.04	0.300	5.00	0	101	90	110			
Molybdenum	0.196	0.00500	0.200	0	98.0	90	110			
Potassium	5.03	0.300	5.00	0	101	90	110			
Sodium	5.03	0.300	5.00	0	101	90	110			

Sample ID: **CCV4-210303**	Batch ID: **R114326**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS5_210303A**	Analysis Date: **3/3/2021 3:13:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	0.198	0.00100	0.200	0	98.8	90	110			
Boron	0.194	0.0300	0.200	0	97.0	90	110			
Calcium	5.04	0.300	5.00	0	101	90	110			
Lithium	0.197	0.0100	0.200	0	98.3	90	110			
Molybdenum	0.196	0.00500	0.200	0	98.1	90	110			
Sodium	5.05	0.300	5.00	0	101	90	110			

Sample ID: **CCV5-210303**	Batch ID: **R114326**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS5_210303A**	Analysis Date: **3/3/2021 4:46:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	0.199	0.00100	0.200	0	99.3	90	110			
Boron	0.191	0.0300	0.200	0	95.3	90	110			
Calcium	5.06	0.300	5.00	0	101	90	110			
Lithium	0.198	0.0100	0.200	0	99.2	90	110			
Magnesium	5.09	0.300	5.00	0	102	90	110			
Potassium	5.08	0.300	5.00	0	102	90	110			

Sample ID: **CCV6-210303**	Batch ID: **R114326**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS5_210303A**	Analysis Date: **3/3/2021 5:46:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	0.199	0.00100	0.200	0	99.5	90	110			
Boron	0.188	0.0300	0.200	0	94.1	90	110			
Calcium	5.18	0.300	5.00	0	104	90	110			
Lithium	0.198	0.0100	0.200	0	98.9	90	110			
Magnesium	5.09	0.300	5.00	0	102	90	110			
Potassium	5.09	0.300	5.00	0	102	90	110			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc

ANALYTICAL QC SUMMARY REPORT

Work Order: 2102158

Project: SMEC Semiannual Groundwater Sampling **RunID: ICP-MS5_210304A**

The QC data in batch 99628 applies to the following samples: 2102158-01A, 2102158-02A, 2102158-03A, 2102158-04A, 2102158-05A, 2102158-06A, 2102158-07A, 2102158-08A, 2102158-09A, 2102158-10A, 2102158-11A, 2102158-12A, 2102158-13A

Sample ID: **2102158-01A SD** Batch ID: **99628** TestNo: **SW6020B** Units: **mg/L**

SampType: **SD** Run ID: **ICP-MS5_210304A** Analysis Date: **3/4/2021 11:31:00 AM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	0.0878	0.0250	0	0.0865				1.60	20	
Lithium	0.911	0.250	0	0.904				0.825	20	

Sample ID: **2102158-01A PDS** Batch ID: **99628** TestNo: **SW6020B** Units: **mg/L**

SampType: **PDS** Run ID: **ICP-MS5_210304A** Analysis Date: **3/4/2021 11:57:00 AM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	1.09	0.00500	1.00	0.0865	101	75	125			
Lithium	1.90	0.0500	1.00	0.904	100	75	125			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102158
Project: SMEC Semiannual Groundwater Sampling

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_210304A

Sample ID: **ICV-210304**	Batch ID: **R114344**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **ICV**	Run ID: **ICP-MS5_210304A**	Analysis Date: **3/4/2021 10:46:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	0.102	0.00100	0.100	0	102	90	110			
Lithium	0.101	0.0100	0.100	0	101	90	110			
Magnesium	2.43	0.300	2.50	0	97.3	90	110			
Molybdenum	0.0970	0.00500	0.100	0	97.0	90	110			
Potassium	2.50	0.300	2.50	0	99.9	90	110			

Sample ID: **LCVL-210304**	Batch ID: **R114344**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **LCVL**	Run ID: **ICP-MS5_210304A**	Analysis Date: **3/4/2021 11:18:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	0.00107	0.00100	0.00100	0	107	80	120			
Lithium	0.0106	0.0100	0.0100	0	106	80	120			
Magnesium	0.105	0.300	0.100	0	105	80	120			
Molybdenum	0.00542	0.00500	0.00500	0	108	80	120			
Potassium	0.112	0.300	0.100	0	112	80	120			

Sample ID: **CCV1-210304**	Batch ID: **R114344**	TestNo: **SW6020B**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS5_210304A**	Analysis Date: **3/4/2021 12:04:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	0.201	0.00100	0.200	0	101	90	110			
Lithium	0.201	0.0100	0.200	0	100	90	110			
Magnesium	4.99	0.300	5.00	0	99.7	90	110			
Molybdenum	0.199	0.00500	0.200	0	99.4	90	110			
Potassium	5.01	0.300	5.00	0	100	90	110			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102158
Project: SMEC Semiannual Groundwater Sampling

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_210302A

Sample ID: **DCS3-99634** Batch ID: **99634** TestNo: **E300** Units: **mg/L**
SampType: **DCS3** Run ID: **IC2_210302A** Analysis Date: **3/2/2021 11:49:16 AM** Prep Date: **3/2/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	1.21	1.00	1.000	0	121	70	130	0	0	
Fluoride	0.331	0.400	0.4000	0	82.8	70	130	0	0	
Sulfate	2.86	3.00	3.000	0	95.4	70	130	0	0	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc

Work Order: 2102158

Project: SMEC Semiannual Groundwater Sampling

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_210305A

The QC data in batch 99686 applies to the following samples: 2102158-01B, 2102158-02B, 2102158-03B, 2102158-04B, 2102158-05B, 2102158-06B, 2102158-07B, 2102158-08B, 2102158-09B, 2102158-10B, 2102158-11B, 2102158-12B, 2102158-13B

Sample ID: **MB-99686** Batch ID: **99686** TestNo: **E300** Units: **mg/L**

SampType: **MBLK** Run ID: **IC2_210305A** Analysis Date: **3/4/2021 10:37:41 AM** Prep Date: **3/4/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	<0.300	1.00								
Fluoride	<0.100	0.400								
Sulfate	<1.00	3.00								

Sample ID: **LCS-99686** Batch ID: **99686** TestNo: **E300** Units: **mg/L**

SampType: **LCS** Run ID: **IC2_210305A** Analysis Date: **3/4/2021 10:53:41 AM** Prep Date: **3/4/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.4	1.00	10.00	0	104	90	110			
Fluoride	3.75	0.400	4.000	0	93.9	90	110			
Sulfate	29.2	3.00	30.00	0	97.5	90	110			

Sample ID: **LCSD-99686** Batch ID: **99686** TestNo: **E300** Units: **mg/L**

SampType: **LCSD** Run ID: **IC2_210305A** Analysis Date: **3/4/2021 11:09:41 AM** Prep Date: **3/4/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.5	1.00	10.00	0	105	90	110	1.10	20	
Fluoride	3.82	0.400	4.000	0	95.5	90	110	1.69	20	
Sulfate	29.0	3.00	30.00	0	96.7	90	110	0.819	20	

Sample ID: **2102158-01BMS** Batch ID: **99686** TestNo: **E300** Units: **mg/L**

SampType: **MS** Run ID: **IC2_210305A** Analysis Date: **3/4/2021 5:57:18 PM** Prep Date: **3/4/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	2380	100	2000	367.3	101	90	110			
Fluoride	1930	40.0	2000	0	96.6	90	110			
Sulfate	4990	300	2000	3066	96.1	90	110			

Sample ID: **2102158-01BMSD** Batch ID: **99686** TestNo: **E300** Units: **mg/L**

SampType: **MSD** Run ID: **IC2_210305A** Analysis Date: **3/4/2021 6:13:18 PM** Prep Date: **3/4/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	2380	100	2000	367.3	101	90	110	0.091	20	
Fluoride	1940	40.0	2000	0	96.8	90	110	0.210	20	
Sulfate	4950	300	2000	3066	94.4	90	110	0.660	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

Sample ID: **ICV-210304**	Batch ID: **R114348**	TestNo: **E300**	Units: **mg/L**
SampType: **ICV**	Run ID: **IC2_210305A**	Analysis Date: **3/4/2021 10:05:41 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	26.3	1.00	25.00	0	105	90	110			
Fluoride	9.79	0.400	10.00	0	97.9	90	110			
Sulfate	75.2	3.00	75.00	0	100	90	110			

Sample ID: **CCV1-210304**	Batch ID: **R114348**	TestNo: **E300**	Units: **mg/L**
SampType: **CCV**	Run ID: **IC2_210305A**	Analysis Date: **3/4/2021 8:37:18 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.6	1.00	10.00	0	106	90	110			
Fluoride	3.87	0.400	4.000	0	96.8	90	110			
Sulfate	29.4	3.00	30.00	0	97.9	90	110			

Sample ID: **CCV2-210304**	Batch ID: **R114348**	TestNo: **E300**	Units: **mg/L**
SampType: **CCV**	Run ID: **IC2_210305A**	Analysis Date: **3/5/2021 1:09:18 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.5	1.00	10.00	0	105	90	110			
Fluoride	3.86	0.400	4.000	0	96.5	90	110			
Sulfate	29.2	3.00	30.00	0	97.4	90	110			

Sample ID: **CCV3-210304**	Batch ID: **R114348**	TestNo: **E300**	Units: **mg/L**
SampType: **CCV**	Run ID: **IC2_210305A**	Analysis Date: **3/5/2021 5:09:18 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.7	1.00	10.00	0	107	90	110			
Fluoride	3.95	0.400	4.000	0	98.7	90	110			
Sulfate	29.5	3.00	30.00	0	98.2	90	110			

CLIENT: GSI Environmental, Inc

ANALYTICAL QC SUMMARY REPORT

Work Order: 2102158

Project: SMEC Semiannual Groundwater Sampling **RunID: TITRATOR_210302B**

The QC data in batch 99663 applies to the following samples: 2102158-01B, 2102158-02B, 2102158-03B, 2102158-04B, 2102158-05B, 2102158-06B, 2102158-07B, 2102158-08B, 2102158-09B, 2102158-10B, 2102158-11B, 2102158-12B, 2102158-13B

Sample ID: **MB-99663** Batch ID: **99663** TestNo: **M2320 B** Units: **mg/L @ pH 4.48**

SampType: **MBLK** Run ID: **TITRATOR_210302B** Analysis Date: **3/2/2021 2:05:00 PM** Prep Date: **3/2/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	<10.0	20.0								
Alkalinity, Carbonate (As CaCO3)	<10.0	20.0								
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0								
Alkalinity, Total (As CaCO3)	<20.0	20.0								

Sample ID: **LCS-99663** Batch ID: **99663** TestNo: **M2320 B** Units: **mg/L @ pH 4.29**

SampType: **LCS** Run ID: **TITRATOR_210302B** Analysis Date: **3/2/2021 2:09:00 PM** Prep Date: **3/2/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	51.8	20.0	50.00	0	104	74	129			

Sample ID: **2102158-01B-DUP** Batch ID: **99663** TestNo: **M2320 B** Units: **mg/L @ pH 3.83**

SampType: **DUP** Run ID: **TITRATOR_210302B** Analysis Date: **3/2/2021 2:12:00 PM** Prep Date: **3/2/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	<10.0	20.0	0	0				0	20	
Alkalinity, Carbonate (As CaCO3)	<10.0	20.0	0	0				0	20	
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0	0	0				0	20	
Alkalinity, Total (As CaCO3)	<20.0	20.0	0	0				0	20	

Sample ID: **2102158-02B-DUP** Batch ID: **99663** TestNo: **M2320 B** Units: **mg/L @ pH 4.53**

SampType: **DUP** Run ID: **TITRATOR_210302B** Analysis Date: **3/2/2021 2:39:00 PM** Prep Date: **3/2/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	223	20.0	0	227.0				1.96	20	
Alkalinity, Carbonate (As CaCO3)	<10.0	20.0	0	0				0	20	
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0	0	0				0	20	
Alkalinity, Total (As CaCO3)	223	20.0	0	227.0				1.96	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102158
Project: SMEC Semiannual Groundwater Sampling

ANALYTICAL QC SUMMARY REPORT

RunID: TITRATOR_210302B

Sample ID: **ICV-210302**	Batch ID: **R114306**	TestNo: **M2320 B**	Units: **mg/L @ pH 4.34**
SampType: **ICV**	Run ID: **TITRATOR_210302B**	Analysis Date: **3/2/2021 9:21:00 AM**	Prep Date: **3/2/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	16.1	20.0	0							
Alkalinity, Carbonate (As CaCO3)	85.3	20.0	0							
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0	0							
Alkalinity, Total (As CaCO3)	101	20.0	100.0	0	101	98	102			

Sample ID: **CCV2-210302**	Batch ID: **R114306**	TestNo: **M2320 B**	Units: **mg/L @ pH 4.47**
SampType: **CCV**	Run ID: **TITRATOR_210302B**	Analysis Date: **3/2/2021 11:53:00 AM**	Prep Date: **3/2/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	25.0	20.0	0							
Alkalinity, Carbonate (As CaCO3)	73.0	20.0	0							
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0	0							
Alkalinity, Total (As CaCO3)	97.9	20.0	100.0	0	97.9	90	110			

Sample ID: **CCV3-210302**	Batch ID: **R114306**	TestNo: **M2320 B**	Units: **mg/L @ pH 4.4**
SampType: **CCV**	Run ID: **TITRATOR_210302B**	Analysis Date: **3/2/2021 4:09:00 PM**	Prep Date: **3/2/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	28.4	20.0	0							
Alkalinity, Carbonate (As CaCO3)	69.3	20.0	0							
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0	0							
Alkalinity, Total (As CaCO3)	97.7	20.0	100.0	0	97.7	90	110			

Sample ID: **CCV4-210302**	Batch ID: **R114306**	TestNo: **M2320 B**	Units: **mg/L @ pH 4.33**
SampType: **CCV**	Run ID: **TITRATOR_210302B**	Analysis Date: **3/2/2021 4:32:00 PM**	Prep Date: **3/2/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	25.0	20.0	0							
Alkalinity, Carbonate (As CaCO3)	73.8	20.0	0							
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0	0							
Alkalinity, Total (As CaCO3)	98.8	20.0	100.0	0	98.8	90	110			

Qualifiers:

B	Analyte detected in the associated Method Blank
J	Analyte detected between MDL and RL
ND	Not Detected at the Method Detection Limit
RL	Reporting Limit
J	Analyte detected between SDL and RL
DF	Dilution Factor
MDL	Method Detection Limit
R	RPD outside accepted control limits
S	Spike Recovery outside control limits
N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102158
Project: SMEC Semiannual Groundwater Sampling

ANALYTICAL QC SUMMARY REPORT

RunID: WC_210301B

The QC data in batch 99633 applies to the following samples: 2102158-01B, 2102158-02B, 2102158-03B, 2102158-04B, 2102158-05B, 2102158-06B, 2102158-07B, 2102158-08B, 2102158-09B, 2102158-10B, 2102158-11B, 2102158-12B, 2102158-13B

Sample ID: **MB-99633** Batch ID: **99633** TestNo: **M2540C** Units: **mg/L**
SampType: **MBLK** Run ID: **WC_210301B** Analysis Date: **3/1/2021 4:00:00 PM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	<10.0	10.0								

Sample ID: **LCS-99633** Batch ID: **99633** TestNo: **M2540C** Units: **mg/L**
SampType: **LCS** Run ID: **WC_210301B** Analysis Date: **3/1/2021 4:00:00 PM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	768	10.0	745.6	0	103	90	113			

Sample ID: **2102158-02B-DUP** Batch ID: **99633** TestNo: **M2540C** Units: **mg/L**
SampType: **DUP** Run ID: **WC_210301B** Analysis Date: **3/1/2021 4:00:00 PM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	9620	200	0	9800				1.85	5	

Sample ID: **2102158-03B-DUP** Batch ID: **99633** TestNo: **M2540C** Units: **mg/L**
SampType: **DUP** Run ID: **WC_210301B** Analysis Date: **3/1/2021 4:00:00 PM** Prep Date: **3/1/2021**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera	9460	200	0	9480				0.211	5	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: GSI Environmental, Inc
Work Order: 2102158
Project: SMEC Semiannual Groundwater Sampling

MQL SUMMARY REPORT

TestNo: E300	**MDL**	**MQL**
Analyte	**mg/L**	**mg/L**
Chloride	0.300	1.00
Fluoride	0.100	0.400
Sulfate	1.00	3.00

TestNo: SW6020B	**MDL**	**MQL**
Analyte	**mg/L**	**mg/L**
Antimony	0.000800	0.00250
Arsenic	0.00200	0.00500
Barium	0.00300	0.0100
Beryllium	0.000300	0.00100
Boron	0.0100	0.0300
Cadmium	0.000300	0.00100
Calcium	0.100	0.300
Chromium	0.00200	0.00500
Cobalt	0.00300	0.00500
Lead	0.000300	0.00100
Lithium	0.00500	0.0100
Magnesium	0.100	0.300
Molybdenum	0.00200	0.00500
Potassium	0.100	0.300
Selenium	0.00200	0.00500
Sodium	0.100	0.300
Thallium	0.000500	0.00150

TestNo: M2320 B	**MDL**	**MQL**
Analyte	**ıg/L @ pH 4.4**	**g/L @ pH 4.4**
Alkalinity, Bicarbonate (As CaCO3)	10.0	20.0
Alkalinity, Carbonate (As CaCO3)	10.0	20.0
Alkalinity, Hydroxide (As CaCO3)	10.0	20.0
Alkalinity, Total (As CaCO3)	20.0	20.0

TestNo: SW7470A	**MDL**	**MQL**
Analyte	**mg/L**	**mg/L**
Mercury	0.0000800	0.000200

TestNo: M2540C	**MDL**	**MQL**
Analyte	**mg/L**	**mg/L**
Total Dissolved Solids (Residue, Filt	10.0	10.0

Qualifiers: MQL -Method Quantitation Limit as defined by TRRP
MDL -Method Detection Limit as defined by TRRP

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109

Location: SMEC Semiannual Groundwater Sampling

DHL Project Number: 2102158

Sample ID: **EP-31**

Lab ID Number: **2102158-01**

PARAMETER	RESULT	UNITS	METHOD
Calcium	492	mg/L	SW6020B
Magnesium	54.7	mg/L	SW6020B
Sodium	992	mg/L	SW6020B
Potassium	38.9	mg/L	SW6020B
Carbonate	0	mg/L @ pH 3.81	M2320 B
Bicarbonate	0	mg/L @ pH 3.81	M2320 B
Sulfate	3070	mg/L	E300
Fluoride	1.42	mg/L	E300
T-Alkalinity	0	mg/L @ pH 3.81	M2320 B
Hardness	1454	mg/L	SM 2340B
Chloride	191	mg/L	E300
TDS	5340	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	0.00
Calcium	24.55
Chloride	5.39
Fluoride	0.07
Magnesium	4.50
Potassium	1.00
Sodium	43.15
Sulfate	63.92
TOTAL ANIONS	69.4
TOTAL CATIONS	73.2
CATION/ANION (% DIFF)	2.68
Calculated TDS	4840
TDS Ratio (Meas/Calc) (0.85 - 1.15)	1.10
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments: _____

Lab Rep Name/Signature: _____

Date: 03/08/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109

Location: SMEC Semiannual Groundwater Sampling

DHL Project Number: 2102158

Sample ID: **EP-32**

Lab ID Number: **2102158-02**

PARAMETER	RESULT	UNITS	METHOD
Calcium	406	mg/L	SW6020B
Magnesium	49.5	mg/L	SW6020B
Sodium	2710	mg/L	SW6020B
Potassium	42.3	mg/L	SW6020B
Carbonate	0	mg/L @ pH 4.53	M2320 B
Bicarbonate	227	mg/L @ pH 4.53	M2320 B
Sulfate	4300	mg/L	E300
Fluoride	0	mg/L	E300
T-Alkalinity	227	mg/L @ pH 4.53	M2320 B
Hardness	1218	mg/L	SM 2340B
Chloride	1820	mg/L	E300
TDS	9800	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	4.54
Calcium	20.26
Chloride	51.34
Fluoride	0.00
Magnesium	4.07
Potassium	1.08
Sodium	117.88
Sulfate	89.53
TOTAL ANIONS	145
TOTAL CATIONS	143
CATION/ANION (% DIFF)	-0.73
Calculated TDS	9442
TDS Ratio (Meas/Calc) (0.85 - 1.15)	1.04
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments: _____

Lab Rep Name/Signature: _____

Date: 03/08/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109

Location: SMEC Semiannual Groundwater Sampling

DHL Project Number: 2102158

Sample ID: **DUP-1**

Lab ID Number: **2102158-03**

PARAMETER	RESULT	UNITS	METHOD
Calcium	428	mg/L	SW6020B
Magnesium	44.1	mg/L	SW6020B
Sodium	2650	mg/L	SW6020B
Potassium	40.0	mg/L	SW6020B
Carbonate	0	mg/L @ pH 4.53	M2320 B
Bicarbonate	224	mg/L @ pH 4.53	M2320 B
Sulfate	4290	mg/L	E300
Fluoride	1.01	mg/L	E300
T-Alkalinity	224	mg/L @ pH 4.53	M2320 B
Hardness	1250	mg/L	SM 2340B
Chloride	1900	mg/L	E300
TDS	9480	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	4.48
Calcium	21.36
Chloride	53.60
Fluoride	0.05
Magnesium	3.63
Potassium	1.03
Sodium	115.27
Sulfate	89.32
TOTAL ANIONS	147
TOTAL CATIONS	141
CATION/ANION (% DIFF)	-2.14
Calculated TDS	9465
TDS Ratio (Meas/Calc) (0.85 - 1.15)	1.00
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments: _____

Lab Rep Name/Signature: _____

Date: 03/08/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109

Location: SMEC Semiannual Groundwater Sampling

DHL Project Number: 2102158

Sample ID: **EP-33**

Lab ID Number: **2102158-04**

PARAMETER	RESULT	UNITS	METHOD
Calcium	556	mg/L	SW6020B
Magnesium	43.1	mg/L	SW6020B
Sodium	2820	mg/L	SW6020B
Potassium	44.8	mg/L	SW6020B
Carbonate	0	mg/L @ pH 4.53	M2320 B
Bicarbonate	269	mg/L @ pH 4.53	M2320 B
Sulfate	2970	mg/L	E300
Fluoride	1.36	mg/L	E300
T-Alkalinity	269	mg/L @ pH 4.53	M2320 B
Hardness	1566	mg/L	SM 2340B
Chloride	3210	mg/L	E300
TDS	10200	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	5.37
Calcium	27.74
Chloride	90.55
Fluoride	0.07
Magnesium	3.54
Potassium	1.15
Sodium	122.66
Sulfate	61.84
TOTAL ANIONS	158
TOTAL CATIONS	155
CATION/ANION (% DIFF)	-0.87
Calculated TDS	9780
TDS Ratio (Meas/Calc) (0.85 - 1.15)	1.04
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments: _____

Lab Rep Name/Signature: _____

Date: 03/08/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109

Location: SMEC Semiannual Groundwater Sampling

DHL Project Number: 2102158

Sample ID: **EP-35**

Lab ID Number: **2102158-05**

PARAMETER	RESULT	UNITS	METHOD
Calcium	343	mg/L	SW6020B
Magnesium	56.8	mg/L	SW6020B
Sodium	3340	mg/L	SW6020B
Potassium	44.3	mg/L	SW6020B
Carbonate	0	mg/L @ pH 4.53	M2320 B
Bicarbonate	182	mg/L @ pH 4.53	M2320 B
Sulfate	2940	mg/L	E300
Fluoride	1.65	mg/L	E300
T-Alkalinity	182	mg/L @ pH 4.53	M2320 B
Hardness	1090	mg/L	SM 2340B
Chloride	3670	mg/L	E300
TDS	11000	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	3.64
Calcium	17.12
Chloride	103.53
Fluoride	0.09
Magnesium	4.67
Potassium	1.14
Sodium	145.28
Sulfate	61.21
TOTAL ANIONS	168
TOTAL CATIONS	168
CATION/ANION (% DIFF)	-0.08
Calculated TDS	10487
TDS Ratio (Meas/Calc) (0.85 - 1.15)	1.05
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments: _____

Lab Rep Name/Signature: _____

Date: 03/08/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109

Location: SMEC Semiannual Groundwater Sampling

DHL Project Number: 2102158

Sample ID: **EP-34**

Lab ID Number: **2102158-06**

PARAMETER	RESULT	UNITS	METHOD
Calcium	489	mg/L	SW6020B
Magnesium	60.1	mg/L	SW6020B
Sodium	3190	mg/L	SW6020B
Potassium	47.7	mg/L	SW6020B
Carbonate	0	mg/L @ pH 4.53	M2320 B
Bicarbonate	223	mg/L @ pH 4.53	M2320 B
Sulfate	2960	mg/L	E300
Fluoride	1.58	mg/L	E300
T-Alkalinity	223	mg/L @ pH 4.53	M2320 B
Hardness	1469	mg/L	SM 2340B
Chloride	3790	mg/L	E300
TDS	11100	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	4.46
Calcium	24.40
Chloride	106.91
Fluoride	0.08
Magnesium	4.94
Potassium	1.22
Sodium	138.76
Sulfate	61.63
TOTAL ANIONS	173
TOTAL CATIONS	169
CATION/ANION (% DIFF)	-1.10
Calculated TDS	10650
TDS Ratio (Meas/Calc) (0.85 - 1.15)	1.04
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments: _____

Lab Rep Name/Signature: _____

Date: 03/08/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109

Location: SMEC Semiannual Groundwater Sampling

DHL Project Number: 2102158

Sample ID: **EP-36**

Lab ID Number: **2102158-07**

PARAMETER	RESULT	UNITS	METHOD
Calcium	436	mg/L	SW6020B
Magnesium	72.6	mg/L	SW6020B
Sodium	3080	mg/L	SW6020B
Potassium	50.2	mg/L	SW6020B
Carbonate	0	mg/L @ pH 4.53	M2320 B
Bicarbonate	212	mg/L @ pH 4.53	M2320 B
Sulfate	2490	mg/L	E300
Fluoride	0	mg/L	E300
T-Alkalinity	212	mg/L @ pH 4.53	M2320 B
Hardness	1388	mg/L	SM 2340B
Chloride	3830	mg/L	E300
TDS	10500	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	4.24
Calcium	21.76
Chloride	108.04
Fluoride	0.00
Magnesium	5.97
Potassium	1.29
Sodium	133.97
Sulfate	51.84
TOTAL ANIONS	164
TOTAL CATIONS	163
CATION/ANION (% DIFF)	-0.35
Calculated TDS	10065
TDS Ratio (Meas/Calc) (0.85 - 1.15)	1.04
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments: _____

Lab Rep Name/Signature: _____

Date: 03/08/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109

Location: SMEC Semiannual Groundwater Sampling

DHL Project Number: 2102158

Sample ID: **FB-1-2242021**

Lab ID Number: **2102158-08**

PARAMETER	RESULT	UNITS	METHOD
Calcium	0.160	mg/L	SW6020B
Magnesium	0	mg/L	SW6020B
Sodium	0.183	mg/L	SW6020B
Potassium	0	mg/L	SW6020B
Carbonate	0	mg/L @ pH 4.49	M2320 B
Bicarbonate	0	mg/L @ pH 4.49	M2320 B
Sulfate	0	mg/L	E300
Fluoride	0	mg/L	E300
T-Alkalinity	0	mg/L @ pH 4.49	M2320 B
Hardness	0	mg/L	SM 2340B
Chloride	0	mg/L	E300
TDS	12.0	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	0.00
Calcium	0.01
Chloride	0.00
Fluoride	0.00
Magnesium	0.00
Potassium	0.00
Sodium	0.01
Sulfate	0.00
TOTAL ANIONS	0
TOTAL CATIONS	0.0160
CATION/ANION (% DIFF)	100.00
Calculated TDS	0
TDS Ratio (Meas/Calc) (0.85 - 1.15)	0.00
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments: _____

Lab Rep Name/Signature: _____

Date: 03/08/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109

Location: SMEC Semiannual Groundwater Sampling

DHL Project Number: 2102158

Sample ID: EB-2-2242021

Lab ID Number: 2102158-09

PARAMETER	RESULT	UNITS	METHOD
Calcium	0	mg/L	SW6020B
Magnesium	0	mg/L	SW6020B
Sodium	0	mg/L	SW6020B
Potassium	0	mg/L	SW6020B
Carbonate	0	mg/L @ pH 4.48	M2320 B
Bicarbonate	0	mg/L @ pH 4.48	M2320 B
Sulfate	0	mg/L	E300
Fluoride	0	mg/L	E300
T-Alkalinity	0	mg/L @ pH 4.48	M2320 B
Hardness	0	mg/L	SM 2340B
Chloride	0	mg/L	E300
TDS	0	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	0.00
Calcium	0.00
Chloride	0.00
Fluoride	0.00
Magnesium	0.00
Potassium	0.00
Sodium	0.00
Sulfate	0.00
TOTAL ANIONS	0
TOTAL CATIONS	0
CATION/ANION (% DIFF)	#Num!
Calculated TDS	0
TDS Ratio (Meas/Calc) (0.85 - 1.15)	0.00
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments: _____

Lab Rep Name/Signature: _____

Date: 03/08/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109

Location: SMEC Semiannual Groundwater Sampling

DHL Project Number: 2102158

Sample ID: **EP-37**

Lab ID Number: **2102158-10**

PARAMETER	RESULT	UNITS	METHOD
Calcium	426	mg/L	SW6020B
Magnesium	73.4	mg/L	SW6020B
Sodium	3090	mg/L	SW6020B
Potassium	53.0	mg/L	SW6020B
Carbonate	0	mg/L @ pH 4.53	M2320 B
Bicarbonate	202	mg/L @ pH 4.53	M2320 B
Sulfate	2740	mg/L	E300
Fluoride	2.39	mg/L	E300
T-Alkalinity	202	mg/L @ pH 4.53	M2320 B
Hardness	1366	mg/L	SM 2340B
Chloride	3750	mg/L	E300
TDS	10300	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	4.04
Calcium	21.26
Chloride	105.78
Fluoride	0.13
Magnesium	6.04
Potassium	1.36
Sodium	134.41
Sulfate	57.05
TOTAL ANIONS	167
TOTAL CATIONS	163
CATION/ANION (% DIFF)	-1.19
Calculated TDS	10236
TDS Ratio (Meas/Calc) (0.85 - 1.15)	1.01
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments: _____

Lab Rep Name/Signature: _____

Date: 03/08/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109

Location: SMEC Semiannual Groundwater Sampling

DHL Project Number: 2102158

Sample ID: **MW-04**

Lab ID Number: **2102158-11**

PARAMETER	RESULT	UNITS	METHOD
Calcium	326	mg/L	SW6020B
Magnesium	63.1	mg/L	SW6020B
Sodium	1870	mg/L	SW6020B
Potassium	41.9	mg/L	SW6020B
Carbonate	0	mg/L @ pH 4.53	M2320 B
Bicarbonate	116	mg/L @ pH 4.53	M2320 B
Sulfate	2330	mg/L	E300
Fluoride	1.32	mg/L	E300
T-Alkalinity	116	mg/L @ pH 4.53	M2320 B
Hardness	1074	mg/L	SM 2340B
Chloride	1920	mg/L	E300
TDS	6610	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	2.32
Calcium	16.27
Chloride	54.16
Fluoride	0.07
Magnesium	5.19
Potassium	1.07
Sodium	81.34
Sulfate	48.51
TOTAL ANIONS	105
TOTAL CATIONS	104
CATION/ANION (% DIFF)	-0.57
Calculated TDS	6610
TDS Ratio (Meas/Calc) (0.85 - 1.15)	1.00
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments: _____

Lab Rep Name/Signature: _____

Date: 03/08/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109

Location: SMEC Semiannual Groundwater Sampling

DHL Project Number: 2102158

Sample ID: EP-38

Lab ID Number: 2102158-12

PARAMETER	RESULT	UNITS	METHOD
Calcium	437	mg/L	SW6020B
Magnesium	63.1	mg/L	SW6020B
Sodium	1460	mg/L	SW6020B
Potassium	40.5	mg/L	SW6020B
Carbonate	0	mg/L @ pH 4.51	M2320 B
Bicarbonate	56.6	mg/L @ pH 4.51	M2320 B
Sulfate	2070	mg/L	E300
Fluoride	0.728	mg/L	E300
T-Alkalinity	56.6	mg/L @ pH 4.51	M2320 B
Hardness	1351	mg/L	SM 2340B
Chloride	1600	mg/L	E300
TDS	5830	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	1.13
Calcium	21.81
Chloride	45.13
Fluoride	0.04
Magnesium	5.19
Potassium	1.04
Sodium	63.51
Sulfate	43.10
TOTAL ANIONS	89.4
TOTAL CATIONS	91.5
CATION/ANION (% DIFF)	1.18
Calculated TDS	5700
TDS Ratio (Meas/Calc) (0.85 - 1.15)	1.02
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments: _____

Lab Rep Name/Signature: _____

Date: 03/08/21

Cation/Anion % Difference calculated per SM1030E.

DHL ANALYTICAL
MINERAL BALANCE REPORT

GSI Environmental, Inc

Client Project Number: 5076-109

Location: SMEC Semiannual Groundwater Sampling

DHL Project Number: 2102158

Sample ID: EB4-2-25-21

Lab ID Number: 2102158-13

PARAMETER	RESULT	UNITS	METHOD
Calcium	0	mg/L	SW6020B
Magnesium	0	mg/L	SW6020B
Sodium	0	mg/L	SW6020B
Potassium	0	mg/L	SW6020B
Carbonate	0	mg/L @ pH 4.46	M2320 B
Bicarbonate	0	mg/L @ pH 4.46	M2320 B
Sulfate	0	mg/L	E300
Fluoride	0	mg/L	E300
T-Alkalinity	0	mg/L @ pH 4.46	M2320 B
Hardness	0	mg/L	SM 2340B
Chloride	0	mg/L	E300
TDS	0	mg/L	M2540C

ANION-CATION BALANCE ACCEPTABLE? YES / NO

ANALYTE	*Meq/L*
T-Alkalinity	0.00
Calcium	0.00
Chloride	0.00
Fluoride	0.00
Magnesium	0.00
Potassium	0.00
Sodium	0.00
Sulfate	0.00
TOTAL ANIONS	0
TOTAL CATIONS	0
CATION/ANION (% DIFF)	#Num!
Calculated TDS	0
TDS Ratio (Meas/Calc) (0.85 - 1.15)	0.00
TDS / Cond Ratio (0.55 - 0.85)	N/A

Comments: _____

Lab Rep Name/Signature: _____

Date: 03/08/21

Cation/Anion % Difference calculated per SM1030E.

GSI ENVIRONMENTAL

DATA USABILITY SUMMARY

February 2021 Sampling Event (SDG: 2102159/L1321687)

OVERVIEW

GSI Environmental Inc. (GSI) reviewed one data package from DHL Analytical (DHL) for radiochemistry analysis of **thirteen groundwater samples collected from the Equalization Pond on 24 - 25 February 2021** at the San Miguel Electric Cooperative, Inc., Christine, Atascosa County, Texas site. DHL subcontracted the job to Pace Analytical (Pace). The DHL data package is **SDG: 2102159**. Note that other samples from this sampling event were analyzed by DHL for other constituents **(SDG: 2102159)**.

Data were reviewed for i) conformance to the requirements of the guidance document *Review and Reporting of COC Concentration Data* (RG-366/TRRP-13) and ii) adherence to project objectives (e.g., GSI 2019). GSI certifies that at the time the laboratory data were generated for the project, Pace was NELAC-accredited under the Texas Laboratory Accreditation Program (Certification Number: T104704245-20-18) for the matrices, analytes, and methods of analysis requested on the chain-of-custody documentation. A copy of Pace Analytical National Environmental Laboratory Accreditation Program (NELAP) certificate applicable to the period during which the laboratory generated the data in this report is included in a separate appendix.

Intended Use of Data

Samples were collected to provide current data on groundwater conditions at the test location. Analyses requested included:

- Method 904 – Radium-226 Analysis
- Method SM7500Ra B M – Radium-228 Analysis
- Method Calculation – Combined Radium (Radium 226 & Radium-228) Analysis

Data were reviewed and validated, as described in *Review and Reporting of COC Concentration Data* (RG-366/TRRP-13), and the results are discussed in this Data Usability Summary (DUS). The following laboratory submittals and field data were examined:

- the reportable data (i.e., results provided in the laboratory data package),
- the laboratory review checklists and associated exception reports, and
- the field notes with respect to field instrument calibrations, filtering procedures (if applicable), sampling procedures, and preservation procedures prior to shipping the samples to the laboratory.

The results of supporting quality control (QC) analyses were summarized on the Laboratory Review Checklist (LRC), Exception Reports (ERs), and in the case narratives, all of which were included in this review. The LRC, associated ERs, and reportable data included in this review are provided are attached to this DUS as Attachment A.

INTRODUCTION

Thirteen (13) groundwater samples were submitted to the laboratory, and all requested analyses were completed. Table 1 lists the sample identifications cross-referenced to laboratory identifications.

PROJECT MEASUREMENT QUALITY OBJECTIVES

The following criteria were used in this review (GSI 2019):

	MS/MSD		LCS/LCSD		Lab Dup		Field Precision
	% R	RPD	% R	RPD	RPD	RER	RPD
Analytes							
All Analytes	70 – 130	20	80 – 120	20	20	3	≤30

DATA REVIEW / VALIDATION RESULTS

Analytical Results

Results from these samples may be considered usable with the limitations and exceptions described in this section. Qualified sample data are listed in Table 2. Non-detected results are reported as less than the value of the sample detection limit (SDL).

Finding: All requested analyses were completed, and results were reported as requested.

Preservation and Holding Times

Samples were evaluated for agreement with the chain-of-custody (C-O-C). The samples were received by the laboratory in the appropriate containers and in good condition, with proper completion of the C-O-C documentation. Samples receipt temperature was within the acceptance criteria, and field preservation was done as specified in the Sampling and Analysis Plan [SAP] (GSI 2019). Samples were prepared and analyzed within method-specified holding times.

Finding: No qualifiers were added per these criteria.

Calibrations

No calibration issues were identified in the laboratory report narrative.

Finding: No qualifiers were added per this evaluation.

Blanks

Method Blank

- Radium-228 and Radium-226 were detected in the method blank above the reported sample detection limit and were qualified as analyte detected in the method blank (B) in the associated field samples.

Finding: B qualifiers were added per these criteria.

Internal Standard and Surrogate Recoveries (Volatile Organic Compounds (VOCs) and Semivolatile Organic Compounds (SVOCs) Only)

Not applicable.

Laboratory Control Samples

Laboratory control sample (LCS) recoveries met the project-defined QC acceptance criteria. Laboratory Control Sample Duplicate (LCSD) Relative Percent Differences (RPDs) were within the project-defined QC acceptance criteria.

Finding: No qualifiers were added per these criteria.

Matrix Spike/Matrix Spike Duplicates (MS/MSD) and Laboratory Duplicates

MS/MSD precision and accuracy were within the project-defined QC acceptance criteria.

All laboratory duplicates were within the project-defined QC acceptance criteria.

Finding: No qualifiers were added per these criteria.

Field Duplicates (Field Precision)

Field precision A field duplicate identified as DUP-1 was collected for sample EP-32 during the field event. Field precision was calculated, and the RPD was not within the project-defined QC acceptance criteria for all analytes except for Radium-226. A comparison of the field sample and the duplicate sample is shown in Table 3.

Finding: No qualifiers were added per these criteria.

Field Procedures

Sample collection and documentation were done according to the Groundwater Sampling and Analysis Plan (GSI, 2019).

Finding: Field activities were consistent with the SAP.

SUMMARY

The analytical data are usable for the purpose of characterizing groundwater conditions. No data were rejected based on this review and validation. However, a limited number of qualifiers were added (see Table 2).

REFERENCES

GSI Environmental, Inc., 2019, Groundwater Sampling and Analysis Plan, San Miguel Electric Cooperative, Inc., December 26.

TCEQ 2010. Review and Reporting of COC Concentration Data under TRRP, RG-366/TRRP-13 https://www.tceq.texas.gov/assets/public/comm_exec/pubs/rg/rg-366-trrp-13.pdf

TABLES

TABLE 1
Cross-Reference Field Sample and Laboratory Identifications

Sample Date	Lab	Lab Sample ID	Field Sample ID	Matrix
2/24/2021	DHL	L1321687-01	EP-31	Groundwater
2/24/2021	DHL	L1321687-02	EP-32	Groundwater
2/24/2021	DHL	L1321687-03	DUP-1	Groundwater
2/24/2021	DHL	L1321687-04	EP-33	Groundwater
2/24/2021	DHL	L1321687-05	EP-35	Groundwater
2/24/2021	DHL	L1321687-06	EP-34	Groundwater
2/24/2021	DHL	L1321687-07	EP-36	Water (Field Blank)
2/24/2021	DHL	L1321687-08	FB-1-2242021	Water (Field Blank)
2/24/2021	DHL	L1321687-09	EB-2-2242021	Water (Equipment Blank)
2/25/2021	DHL	L1321687-10	EP-37	Groundwater
2/25/2021	DHL	L1321687-11	MW-04	Groundwater
2/25/2021	DHL	L1321687-12	EP-38	Groundwater
2/25/2021	DHL	L1321687-13	EB4-2-25-21	Water (Equipment Blank)

TABLE 2
Qualifiers Added During Data Usability Review

Sample ID	Analyte	Lab Result	Unit	DUS Qualifier or Bias Code	Reason for Qualification	Batch Number	Report Number
EP-31	Radium-228	1.36	pCi/l	B	Radium-228 detected in method blank.	WG1638377	L1321687
EP-32	Radium-228	4.19	pCi/l	B	Radium-228 detected in method blank.	WG1638377	L1321687
DUP-1	Radium-228	2.31	pCi/l	B	Radium-228 detected in method blank.	WG1638377	L1321687
EP-33	Radium-228	1.48	pCi/l	B	Radium-228 detected in method blank.	WG1638377	L1321687
EP-35	Radium-228	1.1	pCi/l	B	Radium-228 detected in method blank.	WG1638377	L1321687
EP-36	Radium-228	3.47	pCi/l	B	Radium-228 detected in method blank.	WG1638377	L1321687
FB-1-2242021	Radium-228	-0.0826	pCi/l	B	Radium-228 detected in method blank.	WG1638377	L1321687
EB-2-2242021	Radium-228	-0.559	pCi/l	B	Radium-228 detected in method blank.	WG1638377	L1321687
EP-37	Radium-228	3.83	pCi/l	B	Radium-228 detected in method blank.	WG1638377	L1321687
EP-38	Radium-228	-1.05	pCi/l	B	Radium-228 detected in method blank.	WG1638377	L1321687
EB4-2-25-21	Radium-228	-0.943	pCi/l	B	Radium-228 detected in method blank.	WG1638377	L1321687
EB4-2-25-21	Radium-226	0	pCi/l	B	Radium-226 detected in method blank.	WG1637264	L1321687
EP-31	Combined Radium		pCi/l	B	Radium-228 detected in method blank.	WG1637264	L1321687
EP-32	Combined Radium		pCi/l	B	Radium-228 detected in method blank.	WG1637264	L1321687
DUP-1	Combined Radium		pCi/l	B	Radium-228 detected in method blank.	WG1637264	L1321687
EP-33	Combined Radium		pCi/l	B	Radium-228 detected in method blank.	WG1637264	L1321687
EP-35	Combined Radium		pCi/l	B	Radium-228 detected in method blank.	WG1637264	L1321687

Sample ID	Analyte	Lab Result	Unit	DUS Qualifier or Bias Code	Reason for Qualification	Batch Number	Report Number
EP-34	Combined Radium		pCi/l	B	Radium-228 detected in method blank.	WG1637264	L1321687
EP-36	Combined Radium		pCi/l	B	Radium-228 detected in method blank.	WG1637264	L1321687
FB-1-2242021	Combined Radium		pCi/l	B	Radium-228 detected in method blank.	WG1637264	L1321687
EB-2-2242021	Combined Radium		pCi/l	B	Radium-228 detected in method blank.	WG1637264	L1321687
EP-37	Combined Radium		pCi/l	B	Radium-228 detected in method blank.	WG1637264	L1321687
EP-38	Combined Radium		pCi/l	B	Radium-228 detected in method blank.	WG1637264	L1321687
EB4-2-25-21	Combined Radium		pCi/l	B	Radium-226 detected in method blank.	WG1637264	L1321687

Notes:
1. pCi/L = pico Curies per liter
2. U or "<" = Analyte was not detected at the SDL. J = Analyte detected between SDL and RL.
3. B = Analyte detected in method blank.

TABLE 3
Field Precision Evaluation

Sample ID	Duplicate Sample ID	Sample Date	Matrix	Analyte	Sample Result (pCi/l)	Duplicate Result (pCi/l)	RPD (%)	RPD Result
EP-32	DUP-1	2/25/2021	Groundwater	Combined Radium	5.23 ± 0.829	3.2 ± 0.944	48.2	--
EP-32	DUP-2	2/25/2021	Groundwater	Radium-228	4.19 ± 0.439	2.31 ± 0.537	57.8	--
EP-32	DUP-2	2/25/2021	Groundwater	Radium-226	1.05 ± 0.39	0.884 ± 0.407	17.2	A

Notes:
1. The detection limit was used to calculate Relative Percent Difference (RPD) for non-detect samples.
2. RPD = ((SR - DR) * 200)/(SR + DR).
3. A = Acceptable RPD.

Attachment A

DHL Analytical

Analytical Report

SDG. 2102159

April 01, 2021

Mike Schofield
GSI Environmental, Inc
9600 Great Hills Trail, Suite 350E
Austin, Texas 78759
TEL: (512) 346-4474
FAX

Order No.: 2102159

RE: SMEC Semiannual Groundwater Sampling

Dear Mike Schofield:

DHL Analytical, Inc. received 13 sample(s) on 2/26/2021 for the analyses presented in the following report.

There were no problems with the analyses and all data met requirements of NELAP except where noted in the Case Narrative. All non-NELAP methods will be identified accordingly in the case narrative and all estimated uncertainties of test results are within method or EPA specifications.

If you have any questions regarding these tests results, please feel free to call. Thank you for using DHL Analytical.

Sincerely,

John DuPont
General Manager

This report was performed under the accreditation of the State of Texas Laboratory Certification Number: T104704211-21-26

Table of Contents

Equalization Pond

DHL ANALYTICAL

2300 Double Creek Dr. ■ Round Rock, TX 78664
Phone (512) 388-8222 ■ FAX (512) 388-8229
Web: *www.dhlanalytical.com*
E-Mail: *login@dhlanalytical.com*

№ 67400

CHAIN-OF-CUSTODY

CLIENT: GSI ENVIRONMENTAL
ADDRESS: 9600 GREAT HILLS TRAIL, AUSTIN, TX 78759
PHONE: 512) 346-4474 FAX/E-MAIL:
DATA REPORTED TO: bnzeribe@gsi-net.com
ADDITIONAL REPORT COPIES TO: mlschofield@gsi-net.com

DATE: 2/25/21 PAGE 1 OF 1
PO #:
DHL WORK ORDER #: 2102159
PROJECT LOCATION OR NAME: SMEC Semiannual Groundwater Sampling
CLENT PROJECT #: 5076-109 COLLECTOR: CDR

Authorize 5% surcharge for TRRP Report? ☒ Yes ☐ No

S=SOIL P=PAINT
W=WATER SL=SLUDGE
A=AIR O=OTHER
L=LIQUID SO=SOLID
SE=SEDIMENT

Field Sample I.D.	DHL Lab #	Date	Time	Matrix	Container Type	# of Containers	HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESERVED	BTEX☐ MTBE☐ [METHOD 8021]	TPH 1005☐ TPH 1006☐ HOLD 1006☐	GRO [METHOD 8015]☐ DRO [METHOD 8105]☐	VOC 8260☐ VOC 624☐ VOC 8260/5035☐	SVOC 8270☐ PAH 8270☐ HOLD PAH☐ SVOC 625☐	8270 PEST☐ 625 PEST/PCB☐ 608 PCB☐	8270 O-P PEST☐ 8082 PCB☐ 8270 PCB☐	8321 HERB☐ T PHOS, AMMONIA☐	METALS 6020☒ METALS 200.8☐ DISS. METALS☐	RCRA☐ TX11☐ ☐	PH☐ HEX CHROM☐ ALKALINITY☒ COD☐	CHLORIDE☐ ANIONS E300	TCLP-SVOC☐ VOC☐ PEST☐ HERB☐	TCLP-METALS☐ RCRA 8☐ TX-11☐ Pb☐	RCI☐ FLASHPOINT☐ DGAS☐	TDS☒ TSS☐ % MOISTURE☐ CYANIDE☐	RADIUM 226/228			FIELD NOTES
EP-31	01	2/24/21	0932	W		4		X		X	X									X		X	X				X	X			
EP-31-MS	↓	↓	0936			↓		↓		↓	↓									↓		↓	↓				↓	↓			
EP-31-MSD	↓		0938																												
EP-32	02	↓	1311																												
DUP-1	03	—	—																												
EP-33	04	2/24/21	1428																												
EP-35	05	↓	1047																												
EP-34	06		1545																												
EP-36	07		1919																												
FB-1-2242021	08		1707																												
EB-2-2242021	09	↓	1930																												
EP-37	10	2/25/21	1159																												
MW-04	11		1045																												
EP-38	12		0928			↓		↓		↓	↓									↓		↓	↓				↓	↓			
~~EB4-2-25-21~~	~~13~~	~~2/25/21~~	~~1620~~			X		X		X	X									X		X	X				X	X			Please ignore the dash line

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
[signature]	2/26/21 9:47	[signature]
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)

☒ *DHL DISPOSAL @ $5.00 each* ☐ *Return*

TURN AROUND TIME
RUSH ☐ CALL FIRST
1 DAY ☐ CALL FIRST
2 DAY ☐
NORMAL ☒
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 1.2/1.0/2.8/1.6 0.3/1.9/1.4/1.1 THERM #: 78
CUSTODY SEALS: ☐ BROKEN ☐ INTACT ☒ NOT USED
CARRIER: ☐ LONE STAR ☐ FEDEX ☐ UPS ☐ OTHER
☐ COURIER DELIVERY
☒ HAND DELIVERED

DHL COC Rev 1 | FEB 2010

DHL Analytical, Inc.

Sample Receipt Checklist

Client Name **GSI Environmental, Inc** Date Received: **2/26/2021**

Work Order Number **2102159** Received by: **EL**

Checklist completed by: _____ 2/26/2021 Reviewed by DL 2/26/2021
Signature | Date | Initials | Date

Carrier name: Hand Delivered

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	1.2 °C /1.0/2.8/1.6/0.3/1.9/1.4/1.1
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH<2 acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted? _____		Checked by _____
Water - ph>9 (S) or ph>10 (CN) acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted? _____		Checked by _____

Any No response must be detailed in the comments section below.

Client contacted: _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action: _____

Laboratory Name: DHL Analytical, Inc.

Laboratory Review Checklist: Reportable Data

Project Name: SMEC Semiannual Groundwater Sampling	**LRC Date:** 4/1/21
Reviewer Name: Carlos Castro	**Laboratory Work Order:** 2102159
Prep Batch Number(s): See Prep Dates Report	**Run Batch:** See Analytical Dates Report

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-Custody (C-O-C)					
R1	OI	**1)** Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	**X**				**R1-01**
		2) Were all departures from standard conditions described in an exception report?			**X**		
R2	OI	**Sample and Quality Control (QC) Identification**					
		1) Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	**X**				
		2) Are all laboratory ID numbers cross-referenced to the corresponding QC data?	**X**				
R3	OI	**Test Reports**					
		1) Were all samples prepared and analyzed within holding times?			**X**		
		2) Other than those results < MQL, were all other raw values bracketed by calibration standards?			**X**		
		3) Were calculations checked by a peer or supervisor?			**X**		
		4) Were all analyte identifications checked by a peer or supervisor?			**X**		
		5) Were sample detection limits reported for all analytes not detected?			**X**		
		6) Were all results for soil and sediment samples reported on a dry weight basis?			**X**		
		7) Were % moisture (or solids) reported for all soil and sediment samples?			**X**		
		8) Were bulk soils/solids samples for volatile analysis extracted with methanol per EPA Method 5035?			**X**		
		9) If required for the project, TICs reported?			**X**		
R4	O	**Surrogate Recovery Data**					
		1) Were surrogates added prior to extraction?			**X**		
		2) Were surrogate percent recoveries in all samples within the laboratory QC limits?			**X**		
R5	OI	**Test Reports/Summary Forms for Blank Samples**					
		1) Were appropriate type(s) of blanks analyzed?			**X**		
		2) Were blanks analyzed at the appropriate frequency?			**X**		
		3) Where method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?			**X**		
		4) Were blank concentrations < MDL?			**X**		
		5) For analyte(s) detected in a blank sample, was the concentration, unadjusted for sample specific factors, in all associated field samples, **greater** than 10 times the concentration in the blank sample?			**X**		
R6	OI	**Laboratory Control Samples (LCS):**					
		1) Were all COCs included in the LCS?			**X**		
		2) Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?			**X**		
		3) Were LCSs analyzed at the required frequency?			**X**		
		4) Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?			**X**		
		5) Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?			**X**		
		6) Was the LCSD RPD within QC limits (if applicable)?			**X**		
R7	OI	**Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Data**					
		1) Were the project/method specified analytes included in the MS and MSD?			**X**		
		2) Were MS/MSD analyzed at the appropriate frequency?			**X**		
		3) Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			**X**		
		4) Were MS/MSD RPDs within laboratory QC limits?			**X**		
R8	OI	**Analytical Duplicate Data**					
		1) Were appropriate analytical duplicates analyzed for each matrix?			**X**		
		2) Were analytical duplicates analyzed at the appropriate frequency?			**X**		
		3) Were RPDs or relative standard deviations within the laboratory QC limits?			**X**		
R9	OI	**Method Quantitation Limits (MQLs):**					
		1) Are the MQLs for each method analyte included in the laboratory data package?			**X**		
		2) Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?			**X**		
		3) Are unadjusted MQLs and DCSs included in the laboratory data package?			**X**		
R10	OI	**Other Problems/Anomalies**					
		1) Are all known problems/anomalies/special conditions noted in this LRC and ER?			**X**		
		2) Was applicable and available technology used to lower the SDL to minimize the matrix interference affects on the sample results?			**X**		
		3) Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?			**X**		

Laboratory Name: DHL Analytical, Inc.

Laboratory Review Checklist (continued): Supporting Data

Project Name: SMEC Semiannual Groundwater Sampling	**LRC Date:** 4/1/21
Reviewer Name: Carlos Castro	**Laboratory Work Order:** 2102159
Prep Batch Number(s): See Prep Dates Report	**Run Batch:** See Analytical Dates Report

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial Calibration (ICAL)**					
		1) Were response factors and/or relative response factors for each analyte within QC limits?			X		
		2) Were percent RSDs or correlation coefficient criteria met?			X		
		3) Was the number of standards recommended in the method used for all analytes?			X		
		4) Were all points generated between the lowest and highest standard used to calculate the curve?			X		
		5) Are ICAL data available for all instruments used?			X		
		6) Has the initial calibration curve been verified using an appropriate second source standard?			X		
S2	OI	**Initial and Continuing calibration Verification (ICCV and CCV) and Continuing Calibration blank (CCB):**					
		1) Was the CCV analyzed at the method-required frequency?			X		
		2) Were percent differences for each analyte within the method-required QC limits?			X		
		3) Was the ICAL curve verified for each analyte?			X		
		4) Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	**Mass Spectral Tuning:**					
		1) Was the appropriate compound for the method used for tuning?			X		
		2) Were ion abundance data within the method-required QC limits?			X		
S4	O	**Internal Standards (IS):**					
		1) Were IS area counts and retention times within the method-required QC limits?			X		
S5	OI	**Raw Data (NELAC Section 5.5.10)**					
		1) Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?			X		
		2) Were data associated with manual integrations flagged on the raw data?			X		
S6	O	**Dual Column Confirmation**					
		1) Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively Identified Compounds (TICs):**					
		1) If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) Results:**					
		1) Were percent recoveries within method QC limits?			X		
S9	I	**Serial Dilutions, Post Digestion Spikes, and Method of Standard Additions**					
		1) Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	**Method Detection Limit (MDL) Studies**					
		1) Was a MDL study performed for each reported analyte?			X		
		2) Is the MDL either adjusted or supported by the analysis of DCSs?			X		
S11	OI	**Proficiency Test Reports:**					
		1) Was the lab's performance acceptable on the applicable proficiency tests or evaluation studies?			X		
S12	OI	**Standards Documentation**					
		1) Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?			X		
S13	OI	**Compound/Analyte Identification Procedures**					
		1) Are the procedures for compound/analyte identification documented?			X		
S14	OI	**Demonstration of Analyst Competency (DOC)**					
		1) Was DOC conducted consistent with NELAC Chapter 5 – Appendix C?			X		
		2) Is documentation of the analyst's competency up-to-date and on file?			X		
S15	OI	**Verification/Validation Documentation for Methods** (NELAC Chapter 5)					
		1) Are all the methods used to generate the data documented, verified, and validated, where applicable?			X		
S16	OI	**Laboratory Standard Operating Procedures (SOPs):**					
		1) Are laboratory SOPs current and on file for each method performed?			X		

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
3 NA = Not applicable.
4 NR = Not Reviewed.
5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Data Package Signature Page – RG-366/TRRP-13

This data package consists of:

This signature page, the laboratory review checklist, and the following reportable data:

R1 Field chain-of-custody documentation;
R2 Sample identification cross-reference;
R3 Test reports (analytical data sheets) for each environmental sample that includes:
  a) Items consistent with NELAC Chapter 5,
  b) dilution factors,
  c) preparation methods,
  d) cleanup methods, and
  e) if required for the project, tentatively identified compounds (TICs).
R4 Surrogate recovery data including:
  a) Calculated recovery (%R), and
  b) The laboratory's surrogate QC limits.
R5 Test reports/summary forms for blank samples;
R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  a) LCS spiking amounts,
  b) Calculated %R for each analyte, and
  c) The laboratory's LCS QC limits.
R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a) Samples associated with the MS/MSD clearly identified,
  b) MS/MSD spiking amounts,
  c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d) Calculated %Rs and relative percent differences (RPDs), and
  e) The laboratory's MS/MSD QC limits
R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  a) The amount of analyte measured in the duplicate,
  b) The calculated RPD, and
  c) The laboratory's QC limits for analytical duplicates.
R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;
R10 Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in the Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory is not accredited under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge that all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information or data affecting the quality of the data has been knowingly withheld.

This laboratory was last inspected by TCEQ on February 25-28 2019. Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Name: John DuPont
Official Title: General Manager

Signature

04/01/21

Date

Name: Dr. Derhsing Luu
Official Title: Technical Director

DHL Analytical, Inc. **Date:** *01-Apr-21*

CLIENT:	GSI Environmental, Inc
Project:	SMEC Semiannual Groundwater Sampling
Lab Order:	2102159

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Sub-contract - Radiochemistry by method 904, SM7500Ra B M. Analyzed at Pace Analytical.

Exception Report R1-01

The samples were received and log-in performed on 2/26/21. A total of 13 samples were received. The samples arrived in good condition and were properly packaged.

DHL Analytical, Inc.

Date: *01-Apr-21*

CLIENT: GSI Environmental, Inc
Project: SMEC Semiannual Groundwater Sampling
Lab Order: 2102159

Work Order Sample Summary

Lab Smp ID	Client Sample ID	Tag Number	Date Collected	Date Recved
2102159-01	EP-31		02/24/21 09:38 AM	2/26/2021
2102159-02	EP-32		02/24/21 01:11 PM	2/26/2021
2102159-03	DUP-1		02/24/21	2/26/2021
2102159-04	EP-33		02/24/21 02:28 PM	2/26/2021
2102159-05	EP-35		02/24/21 04:47 PM	2/26/2021
2102159-06	EP-34		02/24/21 03:45 PM	2/26/2021
2102159-07	EP-36		02/24/21 06:19 PM	2/26/2021
2102159-08	FB-1-2242021		02/24/21 05:07 PM	2/26/2021
2102159-09	EB-2-2242021		02/24/21 06:30 PM	2/26/2021
2102159-10	EP-37		02/25/21 11:59 AM	2/26/2021
2102159-11	MW-04		02/25/21 10:45 AM	2/26/2021
2102159-12	EP-38		02/25/21 09:28 AM	2/26/2021
2102159-13	EB4-2-25-21		02/25/21 04:26 PM	2/26/2021

ANALYTICAL REPORT

April 01, 2021

DHL Analytical, Inc.

Sample Delivery Group:	L1321687
Samples Received:	03/02/2021
Project Number:	2102159
Description:	

Report To: John DuPont
2300 Double Creek Drive
Round Rock, TX 78664

Entire Report Reviewed By:

Donna Eidson
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

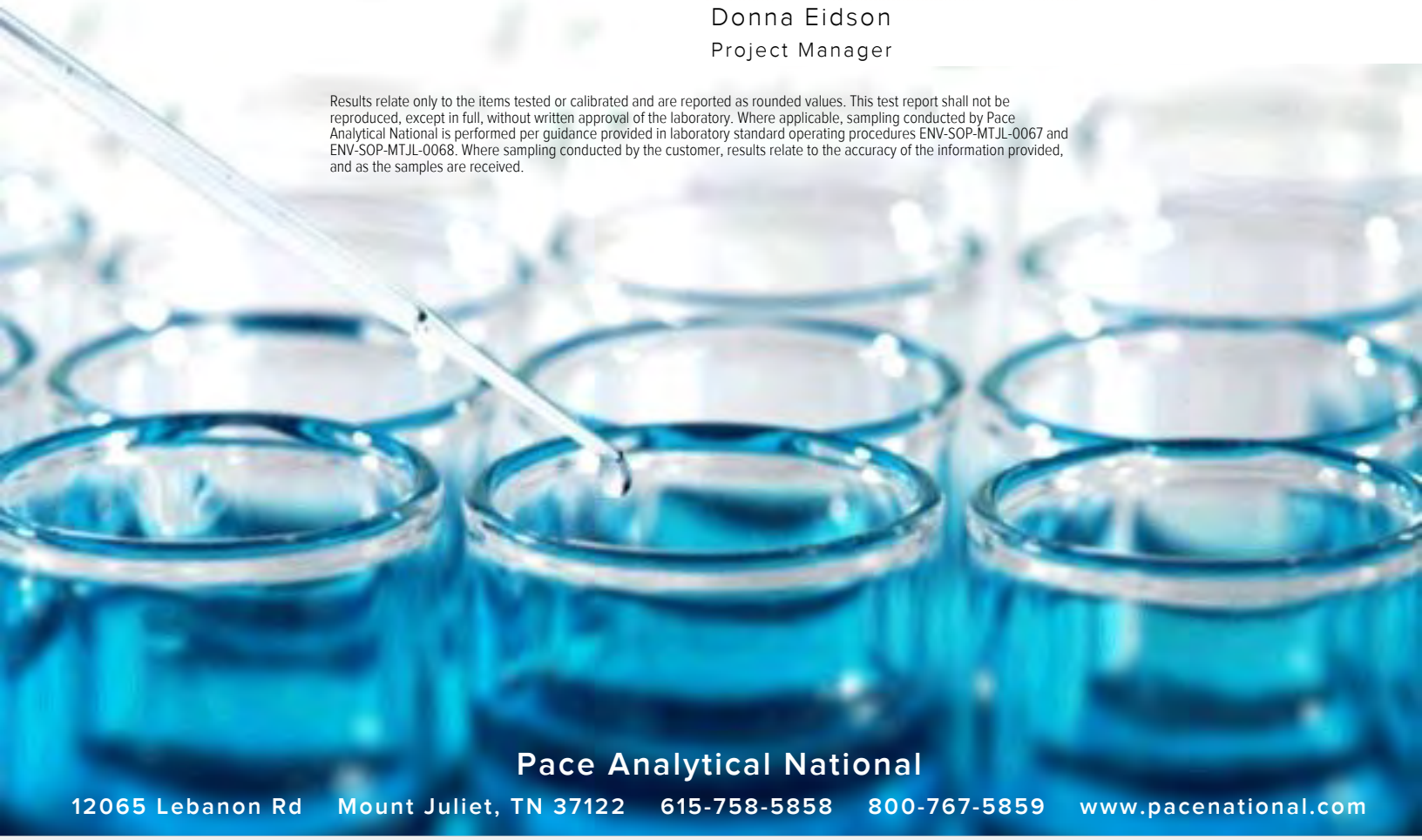

TABLE OF CONTENTS

EP-31 L1321687-01 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/24/21 09:38	03/02/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904	WG1638377	1	03/22/21 11:40	03/25/21 09:30	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1637264	1	03/25/21 12:53	03/26/21 16:03	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1637264	1	03/25/21 12:53	03/26/21 16:03	RGT	Mt. Juliet, TN

EP-32 L1321687-02 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/24/21 13:11	03/02/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904	WG1638377	1	03/22/21 11:40	03/25/21 09:30	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1637264	1	03/25/21 12:53	03/26/21 16:03	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1637264	1	03/25/21 12:53	03/26/21 16:03	RGT	Mt. Juliet, TN

DUP-1 L1321687-03 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/24/21 00:00	03/02/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904	WG1638377	1	03/22/21 11:40	03/31/21 09:50	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1637264	1	03/25/21 12:53	03/31/21 09:50	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1637264	1	03/25/21 12:53	03/26/21 16:03	RGT	Mt. Juliet, TN

EP-33 L1321687-04 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/24/21 14:28	03/02/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904	WG1638377	1	03/22/21 11:40	03/25/21 09:30	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1637264	1	03/25/21 12:53	03/26/21 16:03	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1637264	1	03/25/21 12:53	03/26/21 16:03	RGT	Mt. Juliet, TN

EP-35 L1321687-05 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/24/21 16:47	03/02/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904	WG1638377	1	03/22/21 11:40	03/25/21 09:30	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1637264	1	03/25/21 12:53	03/26/21 16:03	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1637264	1	03/25/21 12:53	03/26/21 16:03	RGT	Mt. Juliet, TN

EP-34 L1321687-06 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/24/21 15:45	03/02/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904	WG1638377	1	03/22/21 11:40	03/25/21 09:30	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1637264	1	03/25/21 12:53	03/30/21 00:13	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1637264	1	03/25/21 12:53	03/30/21 00:13	RGT	Mt. Juliet, TN

EP-36 L1321687-07 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/24/21 18:19	03/02/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904	WG1638377	1	03/22/21 11:40	03/25/21 09:30	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1637264	1	03/25/21 12:53	03/26/21 16:03	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1637264	1	03/25/21 12:53	03/26/21 16:03	RGT	Mt. Juliet, TN

FB-1-2242021 L1321687-08 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/24/21 17:07	03/02/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904	WG1638377	1	03/22/21 11:40	03/25/21 09:30	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1637264	1	03/25/21 12:53	03/26/21 16:03	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1637264	1	03/25/21 12:53	03/26/21 16:03	RGT	Mt. Juliet, TN

EB-2-2242021 L1321687-09 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/24/21 18:30	03/02/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904	WG1638377	1	03/22/21 11:40	03/25/21 09:30	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1637264	1	03/25/21 12:53	03/26/21 16:03	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1637264	1	03/25/21 12:53	03/26/21 16:03	RGT	Mt. Juliet, TN

EP-37 L1321687-10 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/25/21 11:59	03/02/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904	WG1638377	1	03/22/21 11:40	03/25/21 09:30	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1637264	1	03/25/21 12:53	03/26/21 16:03	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1637264	1	03/25/21 12:53	03/26/21 16:03	RGT	Mt. Juliet, TN

MW-04 L1321687-11 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/25/21 10:45	03/02/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904	WG1638377	1	03/22/21 11:40	03/25/21 09:30	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1637264	1	03/25/21 12:53	03/26/21 16:03	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1637264	1	03/25/21 12:53	03/26/21 16:03	RGT	Mt. Juliet, TN

EP-38 L1321687-12 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/25/21 09:28	03/02/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904	WG1638377	1	03/22/21 11:40	03/25/21 09:30	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1637264	1	03/25/21 12:53	03/26/21 16:03	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1637264	1	03/25/21 12:53	03/26/21 16:03	RGT	Mt. Juliet, TN

EB4-2-25-21 L1321687-13 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/25/21 16:26	03/02/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904	WG1638377	1	03/22/21 11:40	03/25/21 09:30	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1637264	1	03/25/21 12:53	03/26/21 16:03	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1637264	1	03/25/21 12:53	03/26/21 16:03	RGT	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Donna Eidson
Project Manager

Radiochemistry by Method 904

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	1.36		0.437	0.784	03/25/2021 09:30	WG1638377
(T) Barium	*107*			*62.0-143*	*03/25/2021 09:30*	WG1638377
(T) Yttrium	*102*			*79.0-136*	*03/25/2021 09:30*	WG1638377

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.71		0.681	0.998	03/26/2021 16:03	WG1637264

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.349		0.244	0.214	03/26/2021 16:03	WG1637264
(T) Barium-133	*91.0*			*30.0-143*	*03/26/2021 16:03*	WG1637264

Radiochemistry by Method 904

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	4.19		0.439	0.712	03/25/2021 09:30	WG1638377
(T) Barium	*113*			*62.0-143*	*03/25/2021 09:30*	WG1638377
(T) Yttrium	*102*			*79.0-136*	*03/25/2021 09:30*	WG1638377

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	5.23		0.829	0.935	03/26/2021 16:03	WG1637264

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	1.05		0.390	0.223	03/26/2021 16:03	WG1637264
(T) Barium-133	*84.4*			*30.0-143*	*03/26/2021 16:03*	WG1637264

Radiochemistry by Method 904

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	2.31		0.537	0.929	03/31/2021 09:50	WG1638377
(T) Barium	*84.6*			*62.0-143*	*03/31/2021 09:50*	WG1638377
(T) Yttrium	*92.8*			*79.0-136*	*03/31/2021 09:50*	WG1638377

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	3.20		0.944	1.32	03/31/2021 09:50	WG1637264

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.884		0.407	0.394	03/26/2021 16:03	WG1637264
(T) Barium-133	*85.3*			*30.0-143*	*03/26/2021 16:03*	WG1637264

Radiochemistry by Method 904

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	1.48		0.457	0.82	03/25/2021 09:30	WG1638377
(T) Barium	*108*			*62.0-143*	*03/25/2021 09:30*	WG1638377
(T) Yttrium	*101*			*79.0-136*	*03/25/2021 09:30*	WG1638377

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.98		0.742	1.03	03/26/2021 16:03	WG1637264

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.501		0.285	0.21	03/26/2021 16:03	WG1637264
(T) Barium-133	*91.7*			*30.0-143*	*03/26/2021 16:03*	WG1637264

Radiochemistry by Method 904

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	1.10		0.421	0.762	03/25/2021 09:30	WG1638377
(T) Barium	*111*			*62.0-143*	*03/25/2021 09:30*	WG1638377
(T) Yttrium	*102*			*79.0-136*	*03/25/2021 09:30*	WG1638377

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.78		0.729	1.05	03/26/2021 16:03	WG1637264

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.686		0.308	0.283	03/26/2021 16:03	WG1637264
(T) Barium-133	*99.5*			*30.0-143*	*03/26/2021 16:03*	WG1637264

Radiochemistry by Method 904

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	6.04		0.423	0.644	03/25/2021 09:30	WG1638377
(T) Barium	*113*			*62.0-143*	*03/25/2021 09:30*	WG1638377
(T) Yttrium	*98.3*			*79.0-136*	*03/25/2021 09:30*	WG1638377

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	7.35		0.896	0.95	03/30/2021 00:13	WG1637264

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	1.31		0.473	0.306	03/30/2021 00:13	WG1637264
(T) Barium-133	*87.3*			*30.0-143*	*03/30/2021 00:13*	WG1637264

Radiochemistry by Method 904

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	3.47		0.385	0.638	03/25/2021 09:30	WG1638377
(T) Barium	*103*			*62.0-143*	*03/25/2021 09:30*	WG1638377
(T) Yttrium	*103*			*79.0-136*	*03/25/2021 09:30*	WG1638377

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	4.15		0.708	0.854	03/26/2021 16:03	WG1637264

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.686		0.323	0.216	03/26/2021 16:03	WG1637264
(T) Barium-133	*88.4*			*30.0-143*	*03/26/2021 16:03*	WG1637264

Radiochemistry by Method 904

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	-0.0826	U	0.334	0.635	03/25/2021 09:30	WG1638377
(T) Barium	*108*			*62.0-143*	*03/25/2021 09:30*	WG1638377
(T) Yttrium	*100*			*79.0-136*	*03/25/2021 09:30*	WG1638377

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.000	U	0.458	0.932	03/26/2021 16:03	WG1637264

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	-0.0236	U	0.124	0.297	03/26/2021 16:03	WG1637264
(T) Barium-133	*90.0*			*30.0-143*	*03/26/2021 16:03*	WG1637264

Radiochemistry by Method 904

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	-0.559	U	0.538	0.598	03/25/2021 09:30	WG1638377
(T) Barium	*107*			*62.0-143*	*03/25/2021 09:30*	WG1638377
(T) Yttrium	*106*			*79.0-136*	*03/25/2021 09:30*	WG1638377

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.0546	U	0.770	1.01	03/26/2021 16:03	WG1637264

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.0546	U	0.232	0.411	03/26/2021 16:03	WG1637264
(T) Barium-133	*86.9*			*30.0-143*	*03/26/2021 16:03*	WG1637264

Radiochemistry by Method 904

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	3.83		0.687	0.69	03/25/2021 09:30	WG1638377
(T) Barium	*98.1*			*62.0-143*	*03/25/2021 09:30*	WG1638377
(T) Yttrium	*108*			*79.0-136*	*03/25/2021 09:30*	WG1638377

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	4.63		1.08	0.983	03/26/2021 16:03	WG1637264

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.798		0.389	0.293	03/26/2021 16:03	WG1637264
(T) Barium-133	*88.9*			*30.0-143*	*03/26/2021 16:03*	WG1637264

Radiochemistry by Method 904

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	4.96		0.586	0.549	03/25/2021 09:30	WG1638377
(T) Barium	*93.4*			*62.0-143*	*03/25/2021 09:30*	WG1638377
(T) Yttrium	*104*			*79.0-136*	*03/25/2021 09:30*	WG1638377

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	5.50		0.884	0.761	03/26/2021 16:03	WG1637264

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.545		0.298	0.212	03/26/2021 16:03	WG1637264
(T) Barium-133	*98.5*			*30.0-143*	*03/26/2021 16:03*	WG1637264

Radiochemistry by Method 904

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-1.05	U	0.647	0.716	03/25/2021 09:30	WG1638377
(T) Barium	*99.5*			*62.0-143*	*03/25/2021 09:30*	WG1638377
(T) Yttrium	*101*			*79.0-136*	*03/25/2021 09:30*	WG1638377

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.521	J	0.951	1	03/26/2021 16:03	WG1637264

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.521		0.304	0.288	03/26/2021 16:03	WG1637264
(T) Barium-133	*97.1*			*30.0-143*	*03/26/2021 16:03*	WG1637264

Radiochemistry by Method 904

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.943	U	0.614	0.685	03/25/2021 09:30	WG1638377
(T) Barium	*96.9*			*62.0-143*	*03/25/2021 09:30*	WG1638377
(T) Yttrium	*103*			*79.0-136*	*03/25/2021 09:30*	WG1638377

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.000	U	0.783	1.03	03/26/2021 16:03	WG1637264

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.000	U	0.169	0.348	03/26/2021 16:03	WG1637264
(T) Barium-133	*97.1*			*30.0-143*	*03/26/2021 16:03*	WG1637264

Method Blank (MB)

(MB) R3635249-1 03/25/21 09:30

Analyte	MB Result pCi/l	MB Qualifier	MB MDA pCi/l
Radium-228	0.852		0.436
(T) Barium	*113*		
(T) Yttrium	*104*		

L1328685-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1328685-01 03/25/21 09:30 • (DUP) R3635249-5 03/25/21 09:30

Analyte	Original Result pCi/l	DUP Result pCi/l	Dilution	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	-1.32	0.163	1	200	1.68	U	20	3
(T) Barium	*86.8*	*91.4*						
(T) Yttrium	*104*	*90.7*						

Laboratory Control Sample (LCS)

(LCS) R3635249-2 03/25/21 09:30

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.54	111	80.0-120	
(T) Barium			*107*		
(T) Yttrium			*98.8*		

L1321687-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1321687-01 03/25/21 09:30 • (MS) R3635249-3 03/25/21 09:30 • (MSD) R3635249-4 03/25/21 09:30

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	10.0	1.36	12.7	11.8	113	104	1	70.0-130			6.95		20
(T) Barium		*107*			*116*	*116*							
(T) Yttrium		*102*			*103*	*104*							

Method Blank (MB)

(MB) R3636162-1 03/26/21 16:03

Analyte	MB Result pCi/l	MB Qualifier	MB MDA pCi/l
Radium-226	0.00809	U	0.0447
(T) Barium-133	*86.1*		

L1321687-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1321687-02 03/26/21 16:03 • (DUP) R3636162-5 03/26/21 16:03

Analyte	Original Result pCi/l	DUP Result pCi/l	Dilution	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	1.05	0.902	1	14.9	0.266		20	3
(T) Barium-133	*84.4*	*84.3*						

Laboratory Control Sample (LCS)

(LCS) R3636162-2 03/26/21 16:03

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.02	5.19	103	80.0-120	
(T) Barium-133			*88.4*		

L1321687-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1321687-01 03/26/21 16:03 • (MS) R3636162-3 03/26/21 16:03 • (MSD) R3636162-4 03/26/21 16:03

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.1	0.349	25.1	24.8	123	121	1	75.0-125			1.28		20
(T) Barium-133		*91.0*			*90.4*	*85.0*							

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDA	Minimum Detectable Activity.
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(T)	Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
U	Below Detectable Limits: Indicates that the analyte was not detected.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

G110

CHAIN-OF-CUSTODY RECORD

DHL Analytical, Inc.
2300 Double Creek Drive
Round Rock, TX 78664
TEL: *(512) 388-8222* FAX: *(512) 388-8229*

Work Order: 2102159

1321687

Subcontractor:
Pace Analytical
12065 Lebanon Rd
Mt. Juliet, TN 37122

TEL: (615) 773-5923
FAX:
Acct #: DHLRRTX

26-Feb-21

Sample ID	Matrix	DHL#	Date Collected	Bottle Type	Requested Tests					
					Ra-228 E904.0	Ra-226 M7500 Ra B M				
EP-31	Aqueous	01A	02/24/21 09:38 AM	1LHDPEHNO3	3					- c1
****MS/MSD Requested****										
EP-31	Aqueous	01B	02/24/21 09:38 AM	1LHDPEHNO3		3				c1
****MS/MSD Requested****										
EP-32	Aqueous	02A	02/24/21 01:11 PM	1LHDPEHNO3	1					02
EP-32	Aqueous	02B	02/24/21 01:11 PM	1LHDPEHNO3		1				1
DUP-1	Aqueous	03A	02/24/21	1LHDPEHNO3	1					03
DUP-1	Aqueous	03B	02/24/21	1LHDPEHNO3		1				1
EP-33	Aqueous	04A	02/24/21 02:28 PM	1LHDPEHNO3	1					04
EP-33	Aqueous	04B	02/24/21 02:28 PM	1LHDPEHNO3		1				1
EP-35	Aqueous	05A	02/24/21 04:47 PM	1LHDPEHNO3	1					05
EP-35	Aqueous	05B	02/24/21 04:47 PM	1LHDPEHNO3		1				1
EP-34	Aqueous	06A	02/24/21 03:45 PM	1LHDPEHNO3	1					06
EP-34	Aqueous	06B	02/24/21 03:45 PM	1LHDPEHNO3		1				1
EP-36	Aqueous	07A	02/24/21 06:19 PM	1LHDPEHNO3	1					07
EP-36	Aqueous	07B	02/24/21 06:19 PM	1LHDPEHNO3		1				1
FB-1-2242021	Field Blank	08A	02/24/21 05:07 PM	1LHDPEHNO3	1					08

General Comments:

Please analyze these samples with Normal Turnaround Time.
Report RA-226, Ra-228 & Combined per Specs.
Quality Control Package Needed: Standard - NELAC Rad Test compliant
Email to cac@dhlanalytical.com & dupont@dhlanalytical.com

	Date/Time		Date/Time
Relinquished by: E		Received by: Kaley Miller	3/2/21 @ 1030
Relinquished by:		Received by:	

DHL Analytical, Inc.
2300 Double Creek Drive
Round Rock, TX 78664
TEL: *(512) 388-8222* FAX: *(512) 388-8229*

CHAIN-OF-CUSTODY RECORD

Work Order: 2102159

Subcontractor:
Pace Analytical
12065 Lebanon Rd
Mt. Juliet, TN 37122

TEL: (615) 773-5923
FAX:
Acct #: DHLRRTX

132687

26-Feb-21

Sample ID	Matrix	DHL#	Date Collected	Bottle Type	Requested Tests					
					Ra-228 E904.0	Ra-226 M7500 Ra B M				
FB-1-2242021	Field Blank	08B	02/24/21 05:07 PM	1LHDPEHNO3		1				08
EB-2-2242021	Equip Blank	09A	02/24/21 06:30 PM	1LHDPEHNO3	1					09
EB-2-2242021	Equip Blank	09B	02/24/21 06:30 PM	1LHDPEHNO3		1				"
EP-37	Aqueous	10A	02/25/21 11:59 AM	1LHDPEHNO3	1					10
EP-37	Aqueous	10B	02/25/21 11:59 AM	1LHDPEHNO3		1				"
MW-04	Aqueous	11A	02/25/21 10:45 AM	1LHDPEHNO3	1					11
MW-04	Aqueous	11B	02/25/21 10:45 AM	1LHDPEHNO3		1				"
EP-38	Aqueous	12A	02/25/21 09:28 AM	1LHDPEHNO3	1					12
EP-38	Aqueous	12B	02/25/21 09:28 AM	1LHDPEHNO3		1				"
EB4-2-25-21	Equip Blank	13A	02/25/21 04:26 PM	1LHDPEHNO3	1					13
EB4-2-25-21	Equip Blank	13B	02/25/21 04:26 PM	1LHDPEHNO3		1				"

Sample Receipt Checklist

COC Seal Present/Intact:	__Y__N	If Applicable	
COC Signed/Accurate:	__Y__N	VOA Zero Headspace:	__Y__N
Bottles arrive intact:	__Y__N	Pres.Correct/Check:	__Y__N
Correct bottles used:	__Y__N		
Sufficient volume sent:	__Y__N		
RAD Screen <0.5 mR/hr:	Y N		

General Comments:

Please analyze these samples with Normal Turnaround Time.
Report RA-226, Ra-228 & Combined per Specs.
Quality Control Package Needed: Standard - NELAC Rad Test compliant
Email to cac@dhlanalytical.com & dupont@dhlanalytical.com

		Date/Time			Date/Time
Relinquished by:			**Received by:**	Kailey Miller	3/2/21 @ 1030
Relinquished by:			**Received by:**		

Job No. 5076
Issued: 31 January 2022

GSI ENVIRONMENTAL

2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

San Miguel Electric Cooperative, Inc.
Christine, Atascosa County, Texas

Appendix B.2 Data Usability Summaries – August 2021

GSI ENVIRONMENTAL

DATA USABILITY SUMMARY

August 2021 Sampling Event (Job ID: 860-10243-1)

OVERVIEW

GSI Environmental Inc. (GSI) reviewed one data package from Eurofins Xenco located in Stafford, Texas (XEN STF) for the analysis of **seven groundwater samples collected at the Ash Pile on 18 August 2021** at the San Miguel Electric Cooperative, Inc., Christine, Atascosa County, Texas site. Data were reviewed for i) conformance to the requirements of the guidance document *Review and Reporting of COC Concentration Data* (RG-366/TRRP-13) and ii) adherence to project objectives (e.g., GSI 2019). GSI certifies that at the time the laboratory data were generated for the project, XEN STF was National Environmental Laboratory Accreditation Program (NELAP)-accredited under the Texas Laboratory Accreditation Program (Certification Number: T104704215-21-44) for the matrices, analytes, and methods of analysis requested on the chain-of-custody documentation. A copy of XEN STF's NELAP certificate applicable to the period during which the laboratory generated the data in this report is included in a separate appendix. No radiochemistry analyses were performed because the Ash Pile is in detection monitoring.

Intended Use of Data

Samples were collected to provide current data on groundwater conditions at the test location. Analyses requested included:

- Method 6010C - Metals (Inductively Coupled Plasma (ICP))
- Method 300.0 – Anions, Ion Chromatography
- Method SM2320 B - Alkalinity
- Method SM2540C - Total Dissolved Solids (TDS)

Data were reviewed and validated, as described in *Review and Reporting of COC Concentration Data* (RG-366/TRRP-13), and the results are discussed in this Data Usability Summary (DUS). The following laboratory submittals and field data were examined:

- the reportable data (i.e., results provided in the laboratory data package),
- the laboratory review checklists and associated exception reports, and
- the field notes with respect to field instrument calibrations, filtering procedures (if applicable), and sampling procedures.

The results of supporting quality control (QC) analyses were summarized in the case narrative, which was included in this review. The case narrative and reportable data included in this review are attached to this DUS as Attachment A.

INTRODUCTION

Seven (7) water samples were submitted to the laboratory, and all requested analyses were completed. Table 1 lists the sample identifications cross-referenced to laboratory identifications.

PROJECT MEASUREMENT QUALITY OBJECTIVES

The following criteria were used in this review (RG-366/TRRP-13):

Analytes	MS/MSD % R	MS/MSD RPD	LCS/LCSD % R	LCS/LCSD RPD	Lab Dup RPD	Field Precision RPD
Metals	75 – 125	15	80 – 120	15	-	≤ 30%
Inorganic Anions	90 – 110	20	90 – 110	20	10	
Alkalinity	-		74 – 129	20	20	
Total Dissolved Solids (TDS)	-		90 – 113	-	5	

DATA REVIEW / VALIDATION RESULTS

Analytical Results

Results from these samples may be considered usable with the limitations and exceptions described in this section. Sample data qualified as a result of this DUS, if any, are listed in Table 2. Non-detected results are reported as less than the value of the sample detection limit (SDL). Results between the SDL and sample quantitation limit (SQL) are J-flagged.

Finding: All requested analyses were completed, and results were reported as requested.

Preservation and Holding Times

The samples were evaluated for agreement with the chain-of-custody (C-O-C). The samples were received by the laboratory in the appropriate containers and in good condition, with proper completion of the C-O-C documentation. Samples receipt temperature was within the acceptance criteria, and field preservation was done as specified in the Sampling and Analysis Plan [SAP] (GSI, 2019). Samples were prepared and analyzed within method-specified holding times.

Finding: No qualifiers were added per these criteria.

Calibrations

No calibration issues were identified in the laboratory report narrative or during review of the laboratory data package.

Finding: No qualifiers were added per this evaluation.

Blanks

Equipment (Field) blank

- Chloride, sulfate, boron, and calcium were detected in the equipment blank at concentrations above the method detection limit (MDL). However, no qualifiers were assigned because the concentrations in the associated sample were greater than five times the blank concentrations.

Finding: No qualifiers were added per this evaluation.

Internal Standard and Surrogate Recoveries (VOCs and SVOCs Only)

Not applicable.

Laboratory Control Samples

The Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD) recoveries and Relative Percent Differences (RPDs) were within the project-defined QC acceptance criteria.

Finding: No qualifiers were added per this evaluation.

Matrix Spike/Matrix Spike Duplicates and Laboratory Duplicates

The LRC indicated the following issues with matrix spike (MS)/matrix spike duplicate (MSD) data:

- The percent recovery (%R) for chloride, sulfate, and calcium were outside the project-defined QC acceptance criteria. However, no qualifier was assigned because the spiking amount was less than four times the result in the unspiked parent sample.
- The %R for fluoride was outside the project-defined QC acceptance criteria and the spiking amount was greater than four times the result in the unspiked parent sample. Sample matrix interference and/or non-homogeneity are suspected because the associated LCS recovery was within acceptance limits.

Findings: GSI added JH qualifiers to affected fluoride results because the %R was above specifications.

Field Duplicates (Field Precision)

A field duplicate identified as DUP-1 was collected for sample SP-02 during the field event. Field precision was calculated and the RPD was within the project-defined QC acceptance criteria. A comparison of the field sample and the duplicate sample is shown in Table 3.

Finding: No qualifiers were added per these criteria.

Field Procedures

Sample collection and documentation was done in accordance with the Groundwater Sampling and Analysis Plan (SAP; GSI, 2019).

Finding: Field activities were consistent with the SAP.

SUMMARY

The analytical data are usable for the purpose of characterizing groundwater conditions. No data were rejected based on this review and validation. However, a limited number of qualifiers were added to affected samples.

REFERENCES

GSI Environmental, Inc., 2019, Groundwater Sampling and Analysis Plan, San Miguel Electric Cooperative, Inc., December 26.

TCEQ 2010. Review and Reporting of COC Concentration Data under TRRP, RG-366/TRRP-13 https://www.tceq.texas.gov/assets/public/comm_exec/pubs/rg/rg-366-trrp-13.pdf

TABLES

TABLE 1
Cross-Reference Field Sample and Laboratory Identifications

Sample Date	Lab	Lab Sample ID	Field Sample ID	Matrix
8/18/2021	XEN STF	860-10243-1	SP-34	Water
8/18/2021	XEN STF	860-10243-2	SP-01	Water
8/18/2021	XEN STF	860-10243-3	SP-02	Water
8/18/2021	XEN STF	860-10243-4	SP-03	Water
8/18/2021	XEN STF	860-10243-5	SP-32	Water
8/18/2021	XEN STF	860-10243-6	DUP-1	Water
8/18/2021	XEN STF	860-10243-7	FB-01	Water

Notes:
1. XEN STF: Eurofins Xenco, Stafford, Texas

TABLE 2
Qualifiers Added During Data Usability Review

Sample ID	Analyte	Lab Result	Unit	DUS Qualifier or Bias Code	Reason for Qualification	Batch Number	Report Number
SP-34	Fluoride	5.18 J F1	mg/L	JH	%R above specifications	860-20165	860-10243-1
SP-01	Fluoride	16.8 J	mg/L	JH	%R above specifications	860-20165	860-10243-1
SP-32	Fluoride	8.51 J	mg/L	JH	%R above specifications	860-20165	860-10243-1

Notes:
1. mg/L: milligrams per liter.
2. F1: MS and/or MSD recovery exceeds control limits
3. J: Estimated value.
4. JH: Estimated value, biased high
5. %R: Percent recovery

TABLE 3
Field Duplicate Detections

Analyte	MQL (MDL) (mg/L)	Primary Sample Result (mg/L)	Field Duplicate Result (mg/L)	Relative Percent Difference	Notes
SP-02 and DUP-1					
Chloride	10	3750	3770	0.53%	A
Sulfate	5.44	1840	1830	0.55 %	A
Boron	0.000343	10.5	10.4	0.96 %	A
Calcium	1.47	1060	1070	0.94 %	A
Total Alkalinity	4.0	46.9	46.9	0.00 %	A
Bicarbonate Alkalinity as CaCO3	4.0	46.9	46.9	0.00 %	A
Total Dissolved Solids	100	8740	8930	2.15 %	A

Notes:
1. MQL: Method Quantitation Limit
2. MDL: Method Detection Limit
3. mg/L: milligrams per liter
4. RPD = (PR-FD)/AVERAGE(PR+FD)*100), where PR is the Primary Sample and FD is the Field Duplicate
5. A = Acceptable RPD.

Attachment A

Eurofins Xenco, Stafford

Analytical Report

Job ID.: 860-10243-1

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Stafford
4147 Greenbriar Dr
Stafford, TX 77477
Tel: (281)240-4200

Laboratory Job ID: 860-10243-1
Client Project/Site: Ash Pile

For:
GSI Environmental, Inc
9600 Great Hills Trail
Suite 350E
Austin, Texas 78759

Attn: Mike Schofield

Authorized for release by:
9/9/2021 3:16:18 PM

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
Sachin.Kudchadkar@Eurofinset.com

Table of Contents

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
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.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

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

Client: GSI Environmental, Inc
Project/Site: Ash Pile

Job ID: 860-10243-1

Job ID: 860-10243-1

Laboratory: Eurofins Xenco, Stafford

Narrative

Job Narrative
860-10243-1

Receipt
The samples were received on 8/19/2021 9:49 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.3°C

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-20165 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6010C: Due to the high concentration of Calcium and Magnesium, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 860-20902 and analytical batch 860-21107 could not be evaluated for accuracy and precision. The associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) met acceptance criteria.

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.

Detection Summary

Client: GSI Environmental, Inc
Project/Site: Ash Pile

Job ID: 860-10243-1

Client Sample ID: SP-34 — Lab Sample ID: 860-10243-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2810		25.0	10.0	mg/L	50		300.0	Total/NA
Fluoride	5.18	J F1	25.0	5.00	mg/L	50		300.0	Total/NA
Sulfate	2490		25.0	5.44	mg/L	50		300.0	Total/NA
Boron	10.4		0.0500	0.00343	mg/L	1		6010C	Total/NA
Calcium	812		10.0	1.47	mg/L	50		6010C	Total/NA
Total Dissolved Solids	6430		100	100	mg/L	1		SM 2540C	Total/NA

Client Sample ID: SP-01 — Lab Sample ID: 860-10243-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3210		25.0	10.0	mg/L	50		300.0	Total/NA
Fluoride	16.8	J	25.0	5.00	mg/L	50		300.0	Total/NA
Sulfate	7200		25.0	5.44	mg/L	50		300.0	Total/NA
Boron	4.79		0.0500	0.00343	mg/L	1		6010C	Total/NA
Calcium	581		10.0	1.47	mg/L	50		6010C	Total/NA
Total Dissolved Solids	4960		100	100	mg/L	1		SM 2540C	Total/NA

Client Sample ID: SP-02 — Lab Sample ID: 860-10243-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3750		25.0	10.0	mg/L	50		300.0	Total/NA
Sulfate	1840		25.0	5.44	mg/L	50		300.0	Total/NA
Boron	10.5		0.0500	0.00343	mg/L	1		6010C	Total/NA
Calcium	1060		10.0	1.47	mg/L	50		6010C	Total/NA
Total Alkalinity	46.9		4.00	4.00	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	46.9		4.00	4.00	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	8740		100	100	mg/L	1		SM 2540C	Total/NA

Client Sample ID: SP-03 — Lab Sample ID: 860-10243-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	4710		25.0	10.0	mg/L	50		300.0	Total/NA
Sulfate	2530		25.0	5.44	mg/L	50		300.0	Total/NA
Boron	6.97		0.0500	0.00343	mg/L	1		6010C	Total/NA
Calcium	913		10.0	1.47	mg/L	50		6010C	Total/NA
Total Dissolved Solids	10100		100	100	mg/L	1		SM 2540C	Total/NA

Client Sample ID: SP-32 — Lab Sample ID: 860-10243-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1570		25.0	10.0	mg/L	50		300.0	Total/NA
Fluoride	8.51	J	25.0	5.00	mg/L	50		300.0	Total/NA
Sulfate	6950		25.0	5.44	mg/L	50		300.0	Total/NA
Boron	7.92		0.0500	0.00343	mg/L	1		6010C	Total/NA
Calcium	497		10.0	1.47	mg/L	50		6010C	Total/NA
Total Dissolved Solids	11800		100	100	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-01 — Lab Sample ID: 860-10243-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3770		25.0	10.0	mg/L	50		300.0	Total/NA
Sulfate	1830		25.0	5.44	mg/L	50		300.0	Total/NA
Boron	10.4		0.0500	0.00343	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Xenco, Stafford

Client Sample ID: DUP-01 (Continued)

Lab Sample ID: 860-10243-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	1070		10.0	1.47	mg/L	50		6010C	Total/NA
Total Alkalinity	46.9		4.00	4.00	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	46.9		4.00	4.00	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	8930		100	100	mg/L	1		SM 2540C	Total/NA

Client Sample ID: FB-01

Lab Sample ID: 860-10243-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	20.5	J	25.0	10.0	mg/L	50		300.0	Total/NA
Sulfate	6.24	J	25.0	5.44	mg/L	50		300.0	Total/NA
Boron	0.00574	J	0.0500	0.00343	mg/L	1		6010C	Total/NA
Calcium	0.442		0.200	0.0293	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SP-34

Lab Sample ID: 860-10243-1

Date Collected: 08/18/21 14:35

Matrix: Water

Date Received: 08/19/21 09:49

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2810		25.0	10.0	mg/L			08/26/21 15:42	50
Fluoride	5.18	J F1	25.0	5.00	mg/L			08/26/21 15:42	50
Sulfate	2490		25.0	5.44	mg/L			08/26/21 15:42	50

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	10.4		0.0500	0.00343	mg/L		08/31/21 08:30	09/01/21 02:02	1
Calcium	812		10.0	1.47	mg/L		08/31/21 08:30	09/01/21 02:20	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 12:03	1
Bicarbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 12:03	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 12:03	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 12:03	1
Total Dissolved Solids	6430		100	100	mg/L			08/25/21 22:15	1

Client Sample ID: SP-01

Lab Sample ID: 860-10243-2

Date Collected: 08/18/21 11:35

Matrix: Water

Date Received: 08/19/21 09:49

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3210		25.0	10.0	mg/L			08/26/21 16:10	50
Fluoride	16.8	J	25.0	5.00	mg/L			08/26/21 16:10	50
Sulfate	7200		25.0	5.44	mg/L			08/26/21 16:10	50

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	4.79		0.0500	0.00343	mg/L		08/31/21 08:30	09/01/21 02:38	1
Calcium	581		10.0	1.47	mg/L		08/31/21 08:30	09/01/21 02:56	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 12:18	1
Bicarbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 12:18	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 12:18	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 12:18	1
Total Dissolved Solids	4960		100	100	mg/L			08/25/21 22:15	1

Client Sample ID: SP-02

Lab Sample ID: 860-10243-3

Date Collected: 08/18/21 13:45

Matrix: Water

Date Received: 08/19/21 09:49

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3750		25.0	10.0	mg/L			08/26/21 16:20	50
Fluoride	5.00	U	25.0	5.00	mg/L			08/26/21 16:20	50
Sulfate	1840		25.0	5.44	mg/L			08/26/21 16:20	50

Client: GSI Environmental, Inc
Project/Site: Ash Pile

Job ID: 860-10243-1

Client Sample ID: SP-02

Lab Sample ID: 860-10243-3

Date Collected: 08/18/21 13:45

Matrix: Water

Date Received: 08/19/21 09:49

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**10.5**		0.0500	0.00343	mg/L		08/31/21 08:30	09/01/21 02:42	1
Calcium	**1060**		10.0	1.47	mg/L		08/31/21 08:30	09/01/21 03:00	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	**46.9**		4.00	4.00	mg/L			08/25/21 12:23	1
Bicarbonate Alkalinity as CaCO3	**46.9**		4.00	4.00	mg/L			08/25/21 12:23	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 12:23	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 12:23	1
Total Dissolved Solids	**8740**		100	100	mg/L			08/25/21 22:15	1

Client Sample ID: SP-03

Lab Sample ID: 860-10243-4

Date Collected: 08/18/21 13:05

Matrix: Water

Date Received: 08/19/21 09:49

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4710**		25.0	10.0	mg/L			08/26/21 16:29	50
Fluoride	5.00	U	25.0	5.00	mg/L			08/26/21 16:29	50
Sulfate	**2530**		25.0	5.44	mg/L			08/26/21 16:29	50

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**6.97**		0.0500	0.00343	mg/L		08/31/21 08:30	09/01/21 02:45	1
Calcium	**913**		10.0	1.47	mg/L		08/31/21 08:30	09/01/21 03:04	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 12:26	1
Bicarbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 12:26	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 12:26	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 12:26	1
Total Dissolved Solids	**10100**		100	100	mg/L			08/25/21 22:15	1

Client Sample ID: SP-32

Lab Sample ID: 860-10243-5

Date Collected: 08/18/21 12:25

Matrix: Water

Date Received: 08/19/21 09:49

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1570**		25.0	10.0	mg/L			08/26/21 16:38	50
Fluoride	**8.51**	**J**	25.0	5.00	mg/L			08/26/21 16:38	50
Sulfate	**6950**		25.0	5.44	mg/L			08/26/21 16:38	50

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**7.92**		0.0500	0.00343	mg/L		08/31/21 08:30	09/01/21 03:14	1
Calcium	**497**		10.0	1.47	mg/L		08/31/21 08:30	09/01/21 03:33	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 12:29	1

Client Sample ID: SP-32

Lab Sample ID: 860-10243-5

Date Collected: 08/18/21 12:25

Matrix: Water

Date Received: 08/19/21 09:49

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 12:29	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 12:29	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 12:29	1
Total Dissolved Solids	**11800**		100	100	mg/L			08/25/21 22:15	1

Client Sample ID: DUP-01

Lab Sample ID: 860-10243-6

Date Collected: 08/18/21 12:00

Matrix: Water

Date Received: 08/19/21 09:49

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3770**		25.0	10.0	mg/L			08/26/21 17:10	50
Fluoride	5.00	U	25.0	5.00	mg/L			08/26/21 17:10	50
Sulfate	**1830**		25.0	5.44	mg/L			08/26/21 17:10	50

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**10.4**		0.0500	0.00343	mg/L		08/31/21 08:30	09/01/21 03:18	1
Calcium	**1070**		10.0	1.47	mg/L		08/31/21 08:30	09/01/21 03:36	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	**46.9**		4.00	4.00	mg/L			08/25/21 12:34	1
Bicarbonate Alkalinity as CaCO3	**46.9**		4.00	4.00	mg/L			08/25/21 12:34	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 12:34	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 12:34	1
Total Dissolved Solids	**8930**		100	100	mg/L			08/25/21 22:15	1

Client Sample ID: FB-01

Lab Sample ID: 860-10243-7

Date Collected: 08/18/21 13:15

Matrix: Water

Date Received: 08/19/21 09:49

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**20.5**	**J**	25.0	10.0	mg/L			08/26/21 17:19	50
Fluoride	5.00	U	25.0	5.00	mg/L			08/26/21 17:19	50
Sulfate	**6.24**	**J**	25.0	5.44	mg/L			08/26/21 17:19	50

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.00574**	**J**	0.0500	0.00343	mg/L		08/31/21 08:30	09/01/21 03:22	1
Calcium	**0.442**		0.200	0.0293	mg/L		08/31/21 08:30	09/01/21 03:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.00	U	5.00	5.00	mg/L			08/25/21 22:15	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-20165/120
Matrix: Water
Analysis Batch: 20165

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.200	U	0.500	0.200	mg/L			08/26/21 12:53	1
Fluoride	0.100	U	0.500	0.100	mg/L			08/26/21 12:53	1
Sulfate	0.109	U	0.500	0.109	mg/L			08/26/21 12:53	1

Lab Sample ID: LCS 860-20165/121
Matrix: Water
Analysis Batch: 20165

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.961		mg/L		100	90 - 110
Fluoride	10.0	9.197		mg/L		92	90 - 110
Sulfate	10.0	9.696		mg/L		97	90 - 110

Lab Sample ID: LCSD 860-20165/122
Matrix: Water
Analysis Batch: 20165

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	10.0	10.02		mg/L		100	90 - 110	1	20
Fluoride	10.0	9.300		mg/L		93	90 - 110	1	20
Sulfate	10.0	9.208		mg/L		92	90 - 110	5	20

Lab Sample ID: 860-10243-1 MS
Matrix: Water
Analysis Batch: 20165

Client Sample ID: SP-34
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2810		500	3416	4	mg/L		122	90 - 110
Fluoride	5.18	J F1	500	597.5	F1	mg/L		118	90 - 110
Sulfate	2490		500	3311	4	mg/L		165	90 - 110

Lab Sample ID: 860-10243-1 MSD
Matrix: Water
Analysis Batch: 20165

Client Sample ID: SP-34
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	2810		500	3409	4	mg/L		120	90 - 110	0	20
Fluoride	5.18	J F1	500	613.3	F1	mg/L		122	90 - 110	3	20
Sulfate	2490		500	3295	4	mg/L		162	90 - 110	1	20

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 860-20902/1-A
Matrix: Water
Analysis Batch: 21107

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20902

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.00343	U	0.0500	0.00343	mg/L		08/31/21 08:30	09/01/21 01:51	1
Calcium	0.0293	U	0.200	0.0293	mg/L		08/31/21 08:30	09/01/21 01:51	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 860-20902/2-A
Matrix: Water
Analysis Batch: 21107

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20902

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Boron			1.00	1.033		mg/L		103	80 - 120		
Calcium			25.0	26.42		mg/L		106	80 - 120		

Lab Sample ID: LCSD 860-20902/3-A
Matrix: Water
Analysis Batch: 21107

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 20902

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron			1.00	1.038		mg/L		104	80 - 120	0	20
Calcium			25.0	26.37		mg/L		105	80 - 120	0	20

Lab Sample ID: 860-10243-1 MS
Matrix: Water
Analysis Batch: 21107

Client Sample ID: SP-34
Prep Type: Total/NA
Prep Batch: 20902

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Boron	10.4		1.00	11.27	4	mg/L		91	75 - 125		
Calcium	686	E	25.0	701.1	E 4	mg/L		61	75 - 125		

Lab Sample ID: 860-10243-1 MSD
Matrix: Water
Analysis Batch: 21107

Client Sample ID: SP-34
Prep Type: Total/NA
Prep Batch: 20902

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	10.4		1.00	11.24	4	mg/L		88	75 - 125	0	20
Calcium	686	E	25.0	701.5	E 4	mg/L		63	75 - 125	0	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-20239/4
Matrix: Water
Analysis Batch: 20239

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 10:24	1
Bicarbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 10:24	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 10:24	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 10:24	1

Lab Sample ID: LCS 860-20239/5
Matrix: Water
Analysis Batch: 20239

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Alkalinity			250	269.0		mg/L		108	85 - 115		

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCSD 860-20239/6
Matrix: Water
Analysis Batch: 20239

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Alkalinity			250	268.4		mg/L		107	85 - 115	0	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 860-20329/1
Matrix: Water
Analysis Batch: 20329

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	5.00	U	5.00	5.00	mg/L			08/25/21 22:15	1

Lab Sample ID: LCS 860-20329/2
Matrix: Water
Analysis Batch: 20329

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			1000	999.0		mg/L		100	80 - 120		

Lab Sample ID: LCSD 860-20329/3
Matrix: Water
Analysis Batch: 20329

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Dissolved Solids			1000	1036		mg/L		104	80 - 120	4	10

HPLC/IC

Analysis Batch: 20165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10243-1	SP-34	Total/NA	Water	300.0	
860-10243-2	SP-01	Total/NA	Water	300.0	
860-10243-3	SP-02	Total/NA	Water	300.0	
860-10243-4	SP-03	Total/NA	Water	300.0	
860-10243-5	SP-32	Total/NA	Water	300.0	
860-10243-6	DUP-01	Total/NA	Water	300.0	
860-10243-7	FB-01	Total/NA	Water	300.0	
MB 860-20165/120	Method Blank	Total/NA	Water	300.0	
LCS 860-20165/121	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-20165/122	Lab Control Sample Dup	Total/NA	Water	300.0	
860-10243-1 MS	SP-34	Total/NA	Water	300.0	
860-10243-1 MSD	SP-34	Total/NA	Water	300.0	

Metals

Prep Batch: 20902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10243-1	SP-34	Total/NA	Water	3010A	
860-10243-2	SP-01	Total/NA	Water	3010A	
860-10243-3	SP-02	Total/NA	Water	3010A	
860-10243-4	SP-03	Total/NA	Water	3010A	
860-10243-5	SP-32	Total/NA	Water	3010A	
860-10243-6	DUP-01	Total/NA	Water	3010A	
860-10243-7	FB-01	Total/NA	Water	3010A	
MB 860-20902/1-A	Method Blank	Total/NA	Water	3010A	
LCS 860-20902/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 860-20902/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	
860-10243-1 MS	SP-34	Total/NA	Water	3010A	
860-10243-1 MSD	SP-34	Total/NA	Water	3010A	

Analysis Batch: 21107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10243-1	SP-34	Total/NA	Water	6010C	20902
860-10243-1	SP-34	Total/NA	Water	6010C	20902
860-10243-2	SP-01	Total/NA	Water	6010C	20902
860-10243-2	SP-01	Total/NA	Water	6010C	20902
860-10243-3	SP-02	Total/NA	Water	6010C	20902
860-10243-3	SP-02	Total/NA	Water	6010C	20902
860-10243-4	SP-03	Total/NA	Water	6010C	20902
860-10243-4	SP-03	Total/NA	Water	6010C	20902
860-10243-5	SP-32	Total/NA	Water	6010C	20902
860-10243-5	SP-32	Total/NA	Water	6010C	20902
860-10243-6	DUP-01	Total/NA	Water	6010C	20902
860-10243-6	DUP-01	Total/NA	Water	6010C	20902
860-10243-7	FB-01	Total/NA	Water	6010C	20902
MB 860-20902/1-A	Method Blank	Total/NA	Water	6010C	20902
LCS 860-20902/2-A	Lab Control Sample	Total/NA	Water	6010C	20902
LCSD 860-20902/3-A	Lab Control Sample Dup	Total/NA	Water	6010C	20902
860-10243-1 MS	SP-34	Total/NA	Water	6010C	20902
860-10243-1 MSD	SP-34	Total/NA	Water	6010C	20902

QC Association Summary

Client: GSI Environmental, Inc
Project/Site: Ash Pile

Job ID: 860-10243-1

General Chemistry

Analysis Batch: 20239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10243-1	SP-34	Total/NA	Water	SM 2320B	
860-10243-2	SP-01	Total/NA	Water	SM 2320B	
860-10243-3	SP-02	Total/NA	Water	SM 2320B	
860-10243-4	SP-03	Total/NA	Water	SM 2320B	
860-10243-5	SP-32	Total/NA	Water	SM 2320B	
860-10243-6	DUP-01	Total/NA	Water	SM 2320B	
MB 860-20239/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-20239/5	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-20239/6	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 20329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10243-1	SP-34	Total/NA	Water	SM 2540C	
860-10243-2	SP-01	Total/NA	Water	SM 2540C	
860-10243-3	SP-02	Total/NA	Water	SM 2540C	
860-10243-4	SP-03	Total/NA	Water	SM 2540C	
860-10243-5	SP-32	Total/NA	Water	SM 2540C	
860-10243-6	DUP-01	Total/NA	Water	SM 2540C	
860-10243-7	FB-01	Total/NA	Water	SM 2540C	
MB 860-20329/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 860-20329/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 860-20329/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	

Lab Chronicle

Client: GSI Environmental, Inc
Project/Site: Ash Pile

Job ID: 860-10243-1

Client Sample ID: SP-34

Lab Sample ID: 860-10243-1

Date Collected: 08/18/21 14:35

Matrix: Water

Date Received: 08/19/21 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			20165	08/26/21 15:42	WP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20902	08/31/21 08:30	MD	XEN STF
Total/NA	Analysis	6010C		1			21107	09/01/21 02:02	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20902	08/31/21 08:30	MD	XEN STF
Total/NA	Analysis	6010C		50			21107	09/01/21 02:20	DP	XEN STF
Total/NA	Analysis	SM 2320B		1			20239	08/25/21 12:03	ANP	XEN STF
Total/NA	Analysis	SM 2540C		1	10 mL	200 mL	20329	08/25/21 22:15	YGG	XEN STF

Client Sample ID: SP-01

Lab Sample ID: 860-10243-2

Date Collected: 08/18/21 11:35

Matrix: Water

Date Received: 08/19/21 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			20165	08/26/21 16:10	WP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20902	08/31/21 08:30	MD	XEN STF
Total/NA	Analysis	6010C		1			21107	09/01/21 02:38	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20902	08/31/21 08:30	MD	XEN STF
Total/NA	Analysis	6010C		50			21107	09/01/21 02:56	DP	XEN STF
Total/NA	Analysis	SM 2320B		1			20239	08/25/21 12:18	ANP	XEN STF
Total/NA	Analysis	SM 2540C		1	10 mL	200 mL	20329	08/25/21 22:15	YGG	XEN STF

Client Sample ID: SP-02

Lab Sample ID: 860-10243-3

Date Collected: 08/18/21 13:45

Matrix: Water

Date Received: 08/19/21 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			20165	08/26/21 16:20	WP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20902	08/31/21 08:30	MD	XEN STF
Total/NA	Analysis	6010C		1			21107	09/01/21 02:42	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20902	08/31/21 08:30	MD	XEN STF
Total/NA	Analysis	6010C		50			21107	09/01/21 03:00	DP	XEN STF
Total/NA	Analysis	SM 2320B		1			20239	08/25/21 12:23	ANP	XEN STF
Total/NA	Analysis	SM 2540C		1	10 mL	200 mL	20329	08/25/21 22:15	YGG	XEN STF

Client Sample ID: SP-03

Lab Sample ID: 860-10243-4

Date Collected: 08/18/21 13:05

Matrix: Water

Date Received: 08/19/21 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			20165	08/26/21 16:29	WP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20902	08/31/21 08:30	MD	XEN STF
Total/NA	Analysis	6010C		1			21107	09/01/21 02:45	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20902	08/31/21 08:30	MD	XEN STF
Total/NA	Analysis	6010C		50			21107	09/01/21 03:04	DP	XEN STF

Lab Chronicle

Client: GSI Environmental, Inc
Project/Site: Ash Pile

Job ID: 860-10243-1

Client Sample ID: SP-03

Lab Sample ID: 860-10243-4

Date Collected: 08/18/21 13:05

Matrix: Water

Date Received: 08/19/21 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2320B		1			20239	08/25/21 12:26	ANP	XEN STF
Total/NA	Analysis	SM 2540C		1	10 mL	200 mL	20329	08/25/21 22:15	YGG	XEN STF

Client Sample ID: SP-32

Lab Sample ID: 860-10243-5

Date Collected: 08/18/21 12:25

Matrix: Water

Date Received: 08/19/21 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			20165	08/26/21 16:38	WP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20902	08/31/21 08:30	MD	XEN STF
Total/NA	Analysis	6010C		1			21107	09/01/21 03:14	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20902	08/31/21 08:30	MD	XEN STF
Total/NA	Analysis	6010C		50			21107	09/01/21 03:33	DP	XEN STF
Total/NA	Analysis	SM 2320B		1			20239	08/25/21 12:29	ANP	XEN STF
Total/NA	Analysis	SM 2540C		1	10 mL	200 mL	20329	08/25/21 22:15	YGG	XEN STF

Client Sample ID: DUP-01

Lab Sample ID: 860-10243-6

Date Collected: 08/18/21 12:00

Matrix: Water

Date Received: 08/19/21 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			20165	08/26/21 17:10	WP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20902	08/31/21 08:30	MD	XEN STF
Total/NA	Analysis	6010C		1			21107	09/01/21 03:18	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20902	08/31/21 08:30	MD	XEN STF
Total/NA	Analysis	6010C		50			21107	09/01/21 03:36	DP	XEN STF
Total/NA	Analysis	SM 2320B		1			20239	08/25/21 12:34	ANP	XEN STF
Total/NA	Analysis	SM 2540C		1	10 mL	200 mL	20329	08/25/21 22:15	YGG	XEN STF

Client Sample ID: FB-01

Lab Sample ID: 860-10243-7

Date Collected: 08/18/21 13:15

Matrix: Water

Date Received: 08/19/21 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			20165	08/26/21 17:19	WP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20902	08/31/21 08:30	MD	XEN STF
Total/NA	Analysis	6010C		1			21107	09/01/21 03:22	DP	XEN STF
Total/NA	Analysis	SM 2540C		1	200 mL	200 mL	20329	08/25/21 22:15	YGG	XEN STF

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4147 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: GSI Environmental, Inc
Project/Site: Ash Pile

Job ID: 860-10243-1

Laboratory: Eurofins Xenco, Stafford

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-21-44	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3
SM 2320B		Water	Carbonate Alkalinity as CaCO3
SM 2320B		Water	Hydroxide Alkalinity

Method Summary

Client: GSI Environmental, Inc
Project/Site: Ash Pile

Job ID: 860-10243-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	XEN STF
6010C	Metals (ICP)	SW846	XEN STF
SM 2320B	Alkalinity	SM	XEN STF
SM 2540C	Solids, Total Dissolved (TDS)	SM	XEN STF
3010A	Preparation, Total Metals	SW846	XEN STF

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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:

XEN STF = Eurofins Xenco, Stafford, 4147 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: GSI Environmental, Inc
Project/Site: Ash Pile

Job ID: 860-10243-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
860-10243-1	SP-34	Water	08/18/21 14:35	08/19/21 09:49
860-10243-2	SP-01	Water	08/18/21 11:35	08/19/21 09:49
860-10243-3	SP-02	Water	08/18/21 13:45	08/19/21 09:49
860-10243-4	SP-03	Water	08/18/21 13:05	08/19/21 09:49
860-10243-5	SP-32	Water	08/18/21 12:25	08/19/21 09:49
860-10243-6	DUP-01	Water	08/18/21 12:00	08/19/21 09:49
860-10243-7	FB-01	Water	08/18/21 13:15	08/19/21 09:49

Eurofins Xenco, Stafford
4147 Greenbriar Dr
Stafford, TX 77477
Phone (281) 240-4200

Chain of Custody

eurofins

860-10243 Chain of Custody

9/9/2021

Client Information	Sampler: Scott Ude + HMI Team	Lab PM:	COC No: 860-3614-1220.1
Client Contact: Mike Schofield	Phone: 832-347-4521	TX	Page: Page 1 of 1
Company: GSI Environmental, Inc	PWSID:		Job #:
Address: 9600 Great Hills Trail Suite 350E	Due Date Requested:		
City: Austin	TAT Requested (days):		
State, Zip: TX, 78759	Compliance Project: Δ Yes Δ No		
Phone: 512-346-4474(Tel) 512-346-4476(Fax)	PO #:		
Email: mlschofield@gsi-net.com	WO #:		
Project Name: San Miguel Electrical Co-Op 2H21 GW	Project #: 86001746		
Site: Ash Pile	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	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)	2320B, Alkalinity	6010C - B, Ca	2540C_TDS	300 - Cl, F, SO4	O = MS/MSD volume provided	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	N	N			
SP-34	8/18/21	1435	G	Water	N	Y	✓	✓	✓	✓			
SP-01		1135		Water		N	✓	✓	✓	✓			
SP-02		1345		Water			✓	✓	✓	✓			
SP 03		1305		Water			✓	✓	✓	✓			
SP-32		1225		Water			✓	✓	✓	✓			
Dup-01		1200		Water			✓	✓	✓	✓			
FB-01		1315		Water				✓	✓	✓			
				Water									
				Water									
				Water									
				Water									

Temp. 2.1 IR ID HOU-272
C/F +0.2
Corrected Temp: 2.3

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: Cons. Delivery		
Relinquished by:	Date/Time: 8-19-21 949	Company: HMI	Received by:	Date/Time: 8/19/21 949	Company: Xenco
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.	Cooler Temperature(s) °C and Other Remarks:

Ver 01/16/2019

Login Sample Receipt Checklist

Client: GSI Environmental, Inc

Job Number: 860-10243-1

Login Number: 10243
List Number: 1
Creator: Torrez, Lisandra

List Source: Eurofins Xenco, Stafford

Question	Answer	Comment
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	

GSI ENVIRONMENTAL

DATA USABILITY SUMMARY

August 2021 Sampling Event (Job ID: 860-10240-1)

OVERVIEW

GSI Environmental Inc. (GSI) reviewed one data package from Eurofins Xenco located in Stafford, Texas (XEN STF) for the analysis of **fourteen groundwater samples collected from the Ash Ponds on 18 August 2021** at the San Miguel Electric Cooperative, Inc., Christine, Atascosa County, Texas site. XEN STF sent the samples to Eurofins TestAmerica located in St. Louis, Missouri (TAL SL) for Radium-226 and Radium-228 analysis. Data were reviewed for i) conformance to the requirements of the guidance document *Review and Reporting of COC Concentration Data* (RG-366/TRRP-13) and ii) adherence to project objectives (e.g., GSI 2019).

GSI certifies that at the time the laboratory data were generated for the project, XEN STF and TAL SL were National Environmental Laboratory Accreditation Program (NELAP)-accredited under the Texas Laboratory Accreditation Program (Certification Number: T104704215-21-44 and T104704193, respectively) for the matrices, analytes, and methods of analysis requested on the chain-of-custody documentation, with the following exceptions. XEN STF is not certified for silicon dioxide (SiO2) analysis by method 6010C or Bicarbonate Alkalinity as calcium carbonate (CaCO3), Carbonate Alkalinity as CaCO3 or Hydroxide Alkalinity by method 2320B. TAL SL is not certified for Radium-226 or Radium-228 by method 901.1. A copy of XEN STF's NELAP certificate applicable to the period during which the laboratory generated the data in this report is included in a separate appendix.

Intended Use of Data

Samples were collected to provide current data on groundwater conditions at the test location. Analyses requested included:

- Method 6010C - Metals (Inductively Coupled Plasma (ICP))
- Method 300.0 – Anions, Ion Chromatography
- Method SM2320B - Alkalinity
- Method SM2540C - Total Dissolved Solids (TDS)
- Method 7470S – Mercury (Cold Vapor Atomic Absorption (CVAA) Spectroscopy)
- Method 901.1 – Radium-226 & Other Gamma Emitters

Data were reviewed and validated, as described in *Review and Reporting of COC Concentration Data* (RG-366/TRRP-13), and the results are discussed in this Data Usability Summary (DUS). The following laboratory submittals and field data were examined:

- the reportable data (i.e., results provided in the laboratory data package),
- the laboratory review checklists and associated exception reports, and
- the field notes with respect to field instrument calibrations, filtering procedures (if applicable), and sampling procedures.

The results of supporting quality control (QC) analyses were summarized in the case narrative, which was included in this review. The case narrative and reportable data included in this review are attached to this DUS as Attachment A.

INTRODUCTION

Fourteen (14) water samples were submitted to the laboratory, and all requested analyses were completed. However, the radium method used was not the method approved in the Sampling and Analysis Plan [SAP] (GSI, 2019).

A systematic increase in combined radium results was noted at the Ash Pond monitoring network during this sampling event. The increase appeared in both upgradient and downgradient wells and was likely related to the laboratory subcontractor transition between the February and August sampling events. February 2021 radium analyses were performed by Pace Analytical National, Mount Juliet, TN on behalf of DHL Analytical, Austin, TX, whereas August 2021 radium analyses were performed by Eurofins TestAmerica, St. Louis, MO on behalf of Eurofins Xenco, Stafford, TX. Eurofins TestAmerica noted in the laboratory job narrative (LJN) that August 2021 results were produced using Method 901.1, which infers Radium-226 from Bismuth-214 and infers Radium-228 from Actinium-228. February 2021 and prior results were from Methods 904 and SM 7500 Ra B, which use different tracers (Ra-226 is inferred from Ba-133 and Ra-228 is inferred from a combination of Barium & Yttrium). Methods 904 and SM 7500 Ra B (used in February 2021) are the approved methods per the SAP, and GSI is actively working with the laboratories to understand the discrepancy between semiannual radium results and to resolve any deviations from the SAP analyte list for future sampling events. Table 1 lists the sample identifications cross-referenced to laboratory identifications.

PROJECT MEASUREMENT QUALITY OBJECTIVES

The following criteria were used in this review (RG-366/TRRP-13):

	MS/MSD		**LCS/LCSD**		**Lab Dup**	**Field Precision**
Analytes	% R	RPD	% R	RPD	RPD	RPD
Metals	75 – 125	15	80 – 120	15	-	≤ 30%
Inorganic Anions	90 – 110	20	90 – 110	20	10	
Alkalinity	-		74 – 129	20	20	
Total Dissolved Solids (TDS)	-		90 – 113	-	5	

DATA REVIEW / VALIDATION RESULTS

Analytical Results

Results from these samples may be considered usable with the limitations and exceptions described in this section. Sample data qualified as a result of this DUS, if any, are listed in Table 2. Non-detected results are reported as less than the value of the sample detection limit (SDL). Results between the SDL and sample quantitation limit (SQL) are J-flagged.

Finding: All requested analyses were completed, and results were reported as requested.

Radium Results

According to the LJN, many isotopes requested for analysis do not have any gamma emissions, or the gamma emissions they do have are very poor. Often, such analytes are reported by gamma spectrometry assuming secular equilibrium with a longer-lived parent. The LJN indicates that reported Radium-226 results were inferred from Bismuth-214 and Radium-228 results were inferred from Actinium-228.

The detection goal of 50.0 picocuries per liter of air (pCi/L) was not met for Radium-226 in samples MW-03 or AP-36. The LJN states than an elevated minimum detectable concentration (MDC) for radiochemistry analysis can occur when higher background counts are applied to a peak ROI. This is due to the relatively small size of the peak or subsequent "force-fit" of the non-existent peak which results in higher-than-normal background counts due to statistical fluctuations in the Compton baseline. The laboratory does not believe this adversely affects the data as the Radium-226 result is well below the reporting limit (RL) and MDC.

The LJN also states that sample AP-36 exhibited a negative result for Radium-226 greater in magnitude than the 3 sigma TPU. The laboratory indicates that this occurrence was evaluated and determined to be random in nature. Sporadic occurrences such as this are statistically expected, and no further action was taken by the laboratory.

Finding: The laboratory method is acceptable for Radium-226 and Radium-228 analysis, and the laboratory added a G qualifier to the Radium-226 results for MW-03 and AP-36 to indicate that the sample MDC was greater than the requested RL. No additional qualifiers were added to affected sample results.

The samples were evaluated for agreement with the chain-of-custody (C-O-C). The samples were received by the laboratory in the appropriate containers and in good condition, with proper completion of the C-O-C documentation. Samples receipt temperature was within the acceptance criteria, and field preservation was done as specified in the Sampling and Analysis Plan [SAP] (GSI, 2019). Samples were prepared and analyzed within method-specified holding times.

Finding: No additional qualifiers were added per this evaluation.

Calibrations

No calibration issues were identified in the laboratory report narrative or during review of the laboratory data package.

Finding: No qualifiers were added per this evaluation.

Blanks

Method Blanks

- The method blank for preparation batch 860-20705 and analytical batch 860-21463 contained lead and selenium above the method detection limit (MDL). The target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed by the laboratory.

- The method blank for analytical batch 860-20165 contained sulfate above the MDL. The target analyte concentration was less than the RL; therefore, re-extraction and/or re-analysis of the samples was not performed by the laboratory.

Field Blanks

- One field blank, FB-02, was collected during sampling activities at the same location as PZ-05 and analyzed for the same parameters as "normal" sample. Chloride, fluoride, sulfate, boron, calcium, potassium, sodium, selenium, silicon dioxide (SiO2) and total dissolved solids (TDS) were detected at concentrations above the MDL.

Equipment Blanks

- One equipment blank, EB-01, was collected during sampling activities at the same location as PZ-06 and analyzed for the same parameters as "normal" sample. Chloride, fluoride, sulfate, boron, calcium, chromium, molybdenum, potassium, sodium, SiO2, TDS and radium-228 were detected at concentrations above the MDL (and MDC in the case of radium).

Finding: In addition to the B qualifiers added by the laboratory for method blank detections, GSI added U qualifiers to detected lead and selenium samples with concentrations that were less than five times (5X) the concentration method blank.

GSI added JH qualifiers to analyte concentrations in PZ-05 and PZ-06 that were within 5X of the concentration detected in the associated Field Blank and Equipment Blank, respectively.

Internal Standard and Surrogate Recoveries (VOCs and SVOCs Only)

Not applicable.

Laboratory Control Samples

The Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD) recoveries and Relative Percent Differences (RPDs) were within the project-defined QC acceptance criteria.

Finding: No qualifiers were added per this evaluation.

Matrix Spike/Matrix Spike Duplicates and Laboratory Duplicates

The LRC indicated the following issues with matrix spike (MS)/matrix spike duplicate (MSD) data:

- The MS/MSD recoveries for preparation batch 860-20705 and analytical batch 860-21463 were outside control limits for barium, beryllium, calcium, cobalt, magnesium, lead, sodium, and thallium. The spiking amount was less than four times (4X) the result in the un-spiked parent sample for calcium, sodium, cobalt, and magnesium; therefore, the MS/MSD recoveries for these analytes do not represent the matrix effect. However, barium, beryllium, lead, and thallium results are greater than 4X the result in the un-spiked parent sample and sample matrix interference and/or high target concentration is suspected.
- The MS/MSD recoveries for analytical batch 860-20163 were outside control limits for fluoride and chloride. However, the spiking amount was less than 4X the result in the un-spiked parent sample. Therefore, the MS/MSD data do not represent the matrix effect.

- The MS/MSD recoveries for analytical batch 860-20520 were outside control limits for sulfate. However, the spiking amount was less than 4X the result in the un-spiked parent sample. Therefore, the MS/MSD data do not represent the matrix effect.

Findings: GSI added JL qualifiers to detected results and UJL qualifiers to non-detected results of barium, beryllium, lead, and thallium because the Percent Recovery (%R) was below specifications and greater than 30%.

Field Duplicates (Field Precision)

A field duplicate identified as DUP-02 was collected for sample MW-03 during the field event. Field precision was calculated and the RPD was within the project-defined QC acceptance criteria for all analytes, except for arsenic and mercury. However, both the arsenic and mercury concentrations were less than 5X the Method Quantitation Limit (MQL) A comparison of the field sample and the duplicate sample is shown in Table 3.

Finding: No qualifiers were added per this evaluation.

Field Procedures

Sample collection and documentation was done in accordance with the Groundwater Sampling and Analysis Plan (SAP; GSI, 2019).

Finding: Field activities were consistent with the SAP.

SUMMARY

The analytical data are usable for the purpose of characterizing groundwater conditions. No data were rejected based on this review and validation. However, a limited number of qualifiers were added to affected samples.

REFERENCES

GSI Environmental, Inc., 2019, Groundwater Sampling and Analysis Plan, San Miguel Electric Cooperative, Inc., December 26.

TCEQ 2010. Review and Reporting of COC Concentration Data under TRRP, RG-366/TRRP-13 https://www.tceq.texas.gov/assets/public/comm_exec/pubs/rg/rg-366-trrp-13.pdf

TABLES

TABLE 1
Cross-Reference Field Sample and Laboratory Identifications

Sample Date	Lab	Lab Sample ID	Field Sample ID	Matrix
8/18/2021	XEN STF	860-10240-1	PZ-02	Water
8/18/2021	XEN STF	860-10240-2	PZ-03	Water
8/18/2021	XEN STF	860-10240-3	AP-31	Water
8/18/2021	XEN STF	860-10240-4	AP-32	Water
8/18/2021	XEN STF	860-10240-5	AP-33	Water
8/18/2021	XEN STF	860-10240-6	AP-34	Water
8/18/2021	XEN STF	860-10240-7	AP-35	Water
8/18/2021	XEN STF	860-10240-8	AP-36	Water
8/18/2021	XEN STF	860-10240-9	MW-03	Water
8/18/2021	XEN STF	860-10240-10	PZ-05	Water
8/18/2021	XEN STF	860-10240-11	PZ-06	Water
8/18/2021	XEN STF	860-10240-12	DUP-02	Water
8/18/2021	XEN STF	860-10240-13	FB-02	Water
8/18/2021	XEN STF	860-10240-14	EB-01	Water

Notes:
XEN STF: Eurofins Xenco, Stafford, Texas

TABLE 2
Qualifiers Added During Data Usability Review

Sample ID	Analyte	Lab Result	Unit	DUS Qualifier or Bias Code	Reason for Qualification	Batch Number	Report Number
PZ-02	Barium	0.0195	mg/L	JL	%R below specifications and greater than 30%	21463	860-10240-1
PZ-02	Beryllium	0.00224 J	mg/L	JL	%R below specifications and greater than 30%	21463	860-10240-1
PZ-02	Lead	0.00237 U	mg/L	UJL	%R below specifications and greater than 30%	21463	860-10240-1
PZ-02	Thallium	0.00621 U	mg/L	UJL	%R below specifications and greater than 30%	21463	860-10240-1
PZ-03	Barium	0.0141 F1	mg/L	JL	%R below specifications and greater than 30%	21463	860-10240-1
PZ-03	Beryllium	0.196 F1	mg/L	JL	%R below specifications and greater than 30%	21463	860-10240-1
PZ-03	Lead	0.0218 F1 B	mg/L	JL	%R below specifications and greater than 30%	21463	860-10240-1
PZ-03	Selenium	0.0130 B	mg/L	U	Analyte detected above MDL and ≤ 5X the method blank	21463	860-10240-1
PZ-03	Thallium	0.00621 U F1	mg/L	UJL	%R below specifications and greater than 30%	21463	860-10240-1
AP-31	Barium	0.00948 J	mg/L	JL	%R below specifications and greater than 30%	21463	860-10240-1
AP-31	Beryllium	0.0129	mg/L	JL	%R below specifications and greater than 30%	21463	860-10240-1
AP-31	Lead	0.00473 J B	mg/L	U	Analyte detected above MDL and ≤ 5X the method blank	21463	860-10240-1
AP-31	Selenium	0.0104 J B	mg/L	U	Analyte detected above MDL and ≤ 5X the method blank	21463	860-10240-1
AP-31	Thallium	0.00621 U	mg/L	UJL	%R below specifications and greater than 30%	21463	860-10240-1
AP-32	Barium	0.0101	mg/L	JL	%R below specifications and greater than 30%	21463	860-10240-1
AP-32	Beryllium	0.0517	mg/L	JL	%R below specifications and greater than 30%	21463	860-10240-1
AP-32	Lead	0.0159 B	mg/L	JL	%R below specifications and greater than 30%	21463	860-10240-1
AP-32	Thallium	0.00621 U	mg/L	UJL	%R below specifications and greater than 30%	21463	860-10240-1
AP-33	Barium	0.00827 J	mg/L	JL	%R below specifications and greater than 30%	21463	860-10240-1
AP-33	Beryllium	0.197	mg/L	JL	%R below specifications and greater than 30%	21463	860-10240-1
AP-33	Lead	0.0233 B	mg/L	JL	%R below specifications and greater than 30%	21463	860-10240-1
AP-33	Thallium	0.00621 U	mg/L	UJL	%R below specifications and greater than 30%	21463	860-10240-1

TABLE 2 (continued)
Qualifiers Added During Data Usability Review

Sample ID	Analyte	Lab Result	Unit	DUS Qualifier or Bias Code	Reason for Qualification	Batch Number	Report Number
AP-34	Barium	0.00839 J	mg/L	JL	%R below specifications and greater than 30%	21463	860-10240-1
AP-34	Beryllium	0.230	mg/L	JL	%R below specifications and greater than 30%	21463	860-10240-1
AP-34	Lead	0.0166 B	mg/L	JL	%R below specifications and greater than 30%	21463	860-10240-1
AP-34	Thallium	0.00621 U	mg/L	UJL	%R below specifications and greater than 30%	21463	860-10240-1
AP-35	Barium	0.0115	mg/L	JL	%R below specifications and greater than 30%	21463	860-10240-1
AP-35	Beryllium	0.0673	mg/L	JL	%R below specifications and greater than 30%	21463	860-10240-1
AP-35	Lead	0.0123 B	mg/L	U	Analyte detected above MDL and ≤ 5X the method blank	21463	860-10240-1
AP-35	Thallium	0.00621 U	mg/L	UJL	%R below specifications and greater than 30%	21463	860-10240-1
AP-36	Barium	0.0137	mg/L	JL	%R below specifications and greater than 30%	21463	860-10240-1
AP-36	Beryllium	0.0117	mg/L	JL	%R below specifications and greater than 30%	21463	860-10240-1
AP-36	Lead	0.0102 B	mg/L	U	Analyte detected above MDL and ≤ 5X the method blank	21463	860-10240-1
AP-36	Thallium	0.00621 U	mg/L	UJL	%R below specifications and greater than 30%	21463	860-10240-1
MW-03	Barium	0.00533 J	mg/L	JL	%R below specifications and greater than 30%	21463	860-10240-1
MW-03	Beryllium	0.0251	mg/L	JL	%R below specifications and greater than 30%	21463	860-10240-1
MW-03	Lead	0.0102 B	mg/L	U	Analyte detected above MDL and ≤ 5X the method blank	21463	860-10240-1
MW-03	Thallium	0.00621 U	mg/L	UJL	%R below specifications and greater than 30%	21463	860-10240-1
PZ-05	Barium	0.0102	mg/L	JL	%R below specifications and greater than 30%	21463	860-10240-1
PZ-05	Beryllium	0.188	mg/L	JL	%R below specifications and greater than 30%	21463	860-10240-1
PZ-05	Lead	0.0130 B	mg/L	JL	%R below specifications and greater than 30%	21463	860-10240-1
PZ-05	Thallium	0.00621 U	mg/L	UJL	%R below specifications and greater than 30%	21463	860-10240-1
PZ-06	Barium	0.0168	mg/L	JL	%R below specifications and greater than 30%	21463	860-10240-1
PZ-06	Beryllium	0.00331	mg/L	JL	%R below specifications and greater than 30%	21463	860-10240-1
PZ-06	Lead	0.00237 U	mg/L	UJL	%R below specifications and greater than 30%	21463	860-10240-1
PZ-06	Molybdenum	0.00417 J	mg/L	JH	Analyte detected above MDL and within 5X the EB	21463	860-10240-1
PZ-06	Thallium	0.00621 U	mg/L	UJL	%R below specifications and greater than 30%	21463	860-10240-1

TABLE 2 (continued)
Qualifiers Added During Data Usability Review

Sample ID	Analyte	Lab Result	Unit	DUS Qualifier or Bias Code	Reason for Qualification	Batch Number	Report Number
DUP-02	Barium	0.00691 J	mg/L	JL	%R below specifications and greater than 30%	21463	860-10240-1
DUP-02	Beryllium	0.0239	mg/L	JL	%R below specifications and greater than 30%	21463	860-10240-1
DUP-02	Lead	0.000802 J B	mg/L	U	Analyte detected above MDL and ≤ 5X the method blank	21463	860-10240-1
DUP-02	Thallium	0.00621 U	mg/L	UJL	%R below specifications and greater than 30%	21463	860-10240-1
FB-02	Barium	0.00135 U	mg/L	UJL	%R below specifications and greater than 30%	21463	860-10240-1
FB-02	Beryllium	0.000490 U	mg/L	UJL	%R below specifications and greater than 30%	21463	860-10240-1
FB-02	Lead	0.00237 U	mg/L	UJL	%R below specifications and greater than 30%	21463	860-10240-1
FB-02	Selenium	0.00961 J B	mg/L	U	Analyte detected above MDL and ≤ 5X the method blank	21463	860-10240-1
FB-02	Thallium	0.00621 U	mg/L	UJL	%R below specifications and greater than 30%	21463	860-10240-1
EB-01	Barium	0.00135 U	mg/L	UJL	%R below specifications and greater than 30%	21463	860-10240-1
EB-01	Beryllium	0.000490 U	mg/L	UJL	%R below specifications and greater than 30%	21463	860-10240-1
EB-01	Lead	0.000237 U	mg/L	UJL	%R below specifications and greater than 30%	21463	860-10240-1
EB-01	Thallium	0.000621 U	mg/L	UJL	%R below specifications and greater than 30%	21463	860-10240-1

Notes:
1. mg/L: milligrams per liter.
2. U: Not detected.
3. JL: Estimated value, biased low
4. B: The compound was found in the blank and sample
5. 5X: Five times
6. MDL: Method Detection Limit
7. EB: Equipment Blank

GSI ENVIRONMENTAL

TABLE 3

Field Duplicate Detections

Analyte	MQL (MDL) (mg/L)	Primary Sample Result (mg/L)	Field Duplicate Result (mg/L)	Relative Percent Difference	Notes
MW-03 and DUP-02					
Chloride	10.0	1860	2070	10.67 %	A
Sulfate	5.44	4040	4150	2.69 %	A
Arsenic	0.0055	0.00985 J	0.0164	49.91 %	< 5X MQL; A
Barium	0.00135	0.00533 J	0.00691 J	25.82 %	A
Beryllium	0.00049	0.0251	0.0239	4.90 %	A
Boron	0.00343	12.3	11.8	4.15 %	A
Cadmium	0.005	0.0519	0.0505	2.73 %	A
Calcium	1.47	632	709	11.48 %	A
Chromium	0.0000811	0.0195	0.0210	7.41 %	A
Cobalt	0.000673	0.326	0.316	3.12 %	A
Magnesium	2.5	115	130	12.25 %	A
Lead	0.00237	0.0102 B	0.00802 J B	23.93 %	A
Molybdenum	0.00123	0.00470 J	0.00448 J	4.79 %	A
Potassium	0.107	36.5	40.5	10.39 %	A
Sodium	3.33	2590	2880	10.60 %	A
Lithium	0.00448	2.0	2.23	10.87 %	A
SiO2	0.0781	119	130	8.84 %	A
Mercury	0.0000263	0.0000550 J	0.0000850 J	42.86 %	< 5X MQL; A
TDS	100	7980	8610	7.59 %	A

Notes:

1. MQL: Method Quantitation Limit
2. MDL: Method Detection Limit
3. J: The result is less than the RL but greater than or equal to the MDL and the result is estimated
4. B: Compound was found in the blank and sample
5. mg/L: milligrams per liter
6. RPD = (PR-FD)/AVERAGE(PR+FD)*100), where PR is the Primary Sample and FD is the Field Duplicate
7. A = Acceptable RPD.
8. <5MQL; The sample result is less than five times the MQL/MDL.

Attachment A

Eurofins Xenco, Stafford

Analytical Report

Job ID.: 860-10240-1

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Stafford
4147 Greenbriar Dr
Stafford, TX 77477
Tel: (281)240-4200

Laboratory Job ID: 860-10240-1
Client Project/Site: Ash Ponds

For:
GSI Environmental, Inc
9600 Great Hills Trail
Suite 350E
Austin, Texas 78759

Attn: Mike Schofield

Authorized for release by:
9/23/2021 5:23:43 PM

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
Sachin.Kudchadkar@Eurofinset.com

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Qualifiers

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
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.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
E	Result exceeded calibration range.
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.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Rad

Qualifier	Qualifier Description
G	The Sample MDC is greater than the requested RL.
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

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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

Job ID: 860-10240-1

Laboratory: Eurofins Xenco, Stafford

Narrative

Job Narrative
860-10240-1

Comments
No additional comments.

Receipt
The samples were received on 8/19/2021 9:49 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 5.1° C and 5.7° C.

RAD
Method 901.1: Gamma prep batch 160-523927
The detection goal of 50.0 pCi/L was not met for Ra-226 for the following sample. An elevated MDC can occur when higher background counts are applied to a peak ROI. This is due to the relatively small size of the peak or subsequent “force-fit” of the non-existent peak which resulted in higher than normal background counts due to statistical fluctuations in the Compton baseline. The laboratory does not believe this adversely affects the data, as the Ra-226 result is well below the RL and MDC.
MW-03 (860-10240-9)

Method 901.1: Gamma Prep Batch 160-523927

Many isotopes requested for analysis do not have any gamma emissions, or the gamma emissions they do have are very poor. Often, such analytes are reported by gamma spectrometry assuming secular equilibrium with a longer-lived parent. The client should ensure that such inference is acceptable for their sample based upon process knowledge. The following assumptions were made for this report:

Inferred from	Reported to Analyte
Th-234	Pa-234
Th-234	U-238
Pb-210	Po-210
Pb-210	Bi-210
Cs-137	Ba-137m
Pb-212	Po-216
Xe-131m	Xe-131
Sb-125	Te-125m
Ag-108m	Ag-108
Rh-106	Ru-106
Pb-212	Th-228
Pb-212	Ra-224
U-235	Th-231
Ac-228	Th-232
Ac-228	Ra-228
Th-227	Ra-223
Th-227	Ac-227
Th-227	Bi-211
Th-227	Pb-211
Bi-214	Ra-226

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.

MW-03 (860-10240-9), PZ-05 (860-10240-10), PZ-06 (860-10240-11), DUP-02 (860-10240-12), (LCS 160-523927/2-A), (MB 160-523927/1-A), (860-10244-A-1-A) and (860-10244-A-1-B DU)

Job ID: 860-10240-1 (Continued)

Laboratory: Eurofins Xenco, Stafford (Continued)

Method 901.1: Gamma prep batch 160-523926
The detection goal of 50 pCi/L was not met for Ra-226 for the following sample. An elevated MDC can occur when higher background counts are applied to a peak ROI. This is due to the relatively small size of the peak or subsequent “force-fit” of the non-existent peak which resulted in higher than normal background counts due to statistical fluctuations in the Compton baseline. The laboratory does not believe this adversely affects the data, as the Ra-226 result is well below the RL and MDC.
AP-36 (860-10240-8)

Method 901.1: Gamma prep batch 160-523926

The following sample exhibited a negative result greater in magnitude than the 3 sigma TPU for Ra-226: AP-36 (860-10240-8)
This occurrence was evaluated and determined to be random in nature. Sporadic occurrences such as this are statistically expected. No further action is required.

Method 901.1: Gamma Prep Batch 160-523926

Many isotopes requested for analysis do not have any gamma emissions, or the gamma emissions they do have are very poor. Often, such analytes are reported by gamma spectrometry assuming secular equilibrium with a longer-lived parent. The client should ensure that such inference is acceptable for their sample based upon process knowledge. The following assumptions were made for this report:

Inferred from	Reported to Analyte
Th-234	Pa-234
Th-234	U-238
Pb-210	Po-210
Pb-210	Bi-210
Cs-137	Ba-137m
Pb-212	Po-216
Xe-131m	Xe-131
Sb-125	Te-125m
Ag-108m	Ag-108
Rh-106	Ru-106
Pb-212	Th-228
Pb-212	Ra-224
U-235	Th-231
Ac-228	Th-232
Ac-228	Ra-228
Th-227	Ra-223
Th-227	Ac-227
Th-227	Bi-211
Th-227	Pb-211
Bi-214	Ra-226

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.

PZ-02 (860-10240-1), PZ-03 (860-10240-2), AP-31 (860-10240-3), AP-32 (860-10240-4), AP-33 (860-10240-5), AP-34 (860-10240-6), AP-35 (860-10240-7), AP-36 (860-10240-8), FB-02 (860-10240-13), EB-01 (860-10240-14), (LCS 160-523926/2-A), (MB 160-523926/1-A) and (860-10240-A-14-B DU)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Job ID: 860-10240-1 (Continued)

Laboratory: Eurofins Xenco, Stafford (Continued)

Method 6010C: The method blank for preparation batch 860-20705 and analytical batch 860-21463 contained Lead and Selenium above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Methods 6010B, 6010C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 860-20705 and analytical batch 860-21463 were outside control limits. Sample matrix interference and high target concentration is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

Method 300.0: The method blank for analytical batch 860-20165 contained Sulfate above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: GSI Environmental, Inc
Project/Site: Ash Ponds

Job ID: 860-10240-1

Client Sample ID: PZ-02 — Lab Sample ID: 860-10240-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	4010		10.0	4.00	mg/L	20		300.0	Total/NA
Fluoride	0.110	J	0.500	0.100	mg/L	1		300.0	Total/NA
Sulfate	2910		25.0	5.44	mg/L	50		300.0	Total/NA
Barium	0.0195		0.0100	0.00135	mg/L	1		6010C	Total/NA
Beryllium	0.00224	J	0.00400	0.000490	mg/L	1		6010C	Total/NA
Boron	6.74		0.0500	0.00343	mg/L	1		6010C	Total/NA
Calcium	949		10.0	1.47	mg/L	50		6010C	Total/NA
Chromium	0.0538		0.0100	0.000811	mg/L	1		6010C	Total/NA
Cobalt	0.00881	J	0.0100	0.000673	mg/L	1		6010C	Total/NA
Magnesium	147		10.0	2.50	mg/L	50		6010C	Total/NA
Molybdenum	0.00788	J	0.0100	0.00123	mg/L	1		6010C	Total/NA
Potassium	55.4		0.500	0.107	mg/L	1		6010C	Total/NA
Sodium	3160		25.0	3.33	mg/L	50		6010C	Total/NA
Lithium	2.48		0.0200	0.00448	mg/L	1		6010C	Total/NA
SiO2	75.8		1.07	0.0781	mg/L	1		6010C	Total/NA
Total Alkalinity	110		4.00	4.00	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	110		4.00	4.00	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	9970		100	100	mg/L	1		SM 2540C	Total/NA

Client Sample ID: PZ-03 — Lab Sample ID: 860-10240-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5300		10.0	4.00	mg/L	20		300.0	Total/NA
Fluoride	5.38	F1	0.500	0.100	mg/L	1		300.0	Total/NA
Sulfate	4120		25.0	5.44	mg/L	50		300.0	Total/NA
Antimony	0.00762	J	0.0200	0.00589	mg/L	1		6010C	Total/NA
Arsenic	0.0311		0.0100	0.00550	mg/L	1		6010C	Total/NA
Barium	0.0141	F1	0.0100	0.00135	mg/L	1		6010C	Total/NA
Beryllium	0.196	F1	0.00400	0.000490	mg/L	1		6010C	Total/NA
Boron	7.48		0.0500	0.00343	mg/L	1		6010C	Total/NA
Cadmium	0.428		0.00500	0.00243	mg/L	1		6010C	Total/NA
Calcium	979		10.0	1.47	mg/L	50		6010C	Total/NA
Cobalt	1.09	F1	0.0100	0.000673	mg/L	1		6010C	Total/NA
Magnesium	324		10.0	2.50	mg/L	50		6010C	Total/NA
Lead	0.0218	F1 B	0.0100	0.00237	mg/L	1		6010C	Total/NA
Molybdenum	0.00939	J	0.0100	0.00123	mg/L	1		6010C	Total/NA
Potassium	26.2		0.500	0.107	mg/L	1		6010C	Total/NA
Sodium	3840		25.0	3.33	mg/L	50		6010C	Total/NA
Selenium	0.0130	J B	0.0300	0.00439	mg/L	1		6010C	Total/NA
Lithium	2.20		0.0200	0.00448	mg/L	1		6010C	Total/NA
SiO2	106		1.07	0.0781	mg/L	1		6010C	Total/NA
Total Dissolved Solids	12700		100	100	mg/L	1		SM 2540C	Total/NA

Client Sample ID: AP-31 — Lab Sample ID: 860-10240-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1960		10.0	4.00	mg/L	20		300.0	Total/NA
Fluoride	0.450	J	0.500	0.100	mg/L	1		300.0	Total/NA
Sulfate	3300		25.0	5.44	mg/L	50		300.0	Total/NA
Barium	0.00948	J	0.0100	0.00135	mg/L	1		6010C	Total/NA
Beryllium	0.0129		0.00400	0.000490	mg/L	1		6010C	Total/NA
Boron	55.8		2.50	0.171	mg/L	50		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: AP-31 (Continued) — Lab Sample ID: 860-10240-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.00581		0.00500	0.00243	mg/L	1		6010C	Total/NA
Calcium	708		10.0	1.47	mg/L	50		6010C	Total/NA
Chromium	0.0341		0.0100	0.000811	mg/L	1		6010C	Total/NA
Cobalt	0.242		0.0100	0.000673	mg/L	1		6010C	Total/NA
Magnesium	58.6		0.200	0.0500	mg/L	1		6010C	Total/NA
Lead	0.00473	J B	0.0100	0.00237	mg/L	1		6010C	Total/NA
Molybdenum	0.0157		0.0100	0.00123	mg/L	1		6010C	Total/NA
Potassium	12.9		0.500	0.107	mg/L	1		6010C	Total/NA
Sodium	2330		25.0	3.33	mg/L	50		6010C	Total/NA
Selenium	0.0104	J B	0.0300	0.00439	mg/L	1		6010C	Total/NA
Lithium	1.25		0.0200	0.00448	mg/L	1		6010C	Total/NA
SiO2	100		1.07	0.0781	mg/L	1		6010C	Total/NA
Mercury	0.000464		0.000200	0.0000263	mg/L	1		7470A	Total/NA
Total Dissolved Solids	7150		100	100	mg/L	1		SM 2540C	Total/NA

Client Sample ID: AP-32 — Lab Sample ID: 860-10240-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2850		10.0	4.00	mg/L	20		300.0	Total/NA
Fluoride	1.46		0.500	0.100	mg/L	1		300.0	Total/NA
Sulfate	3530		25.0	5.44	mg/L	50		300.0	Total/NA
Arsenic	0.0296		0.0100	0.00550	mg/L	1		6010C	Total/NA
Barium	0.0101		0.0100	0.00135	mg/L	1		6010C	Total/NA
Beryllium	0.0517		0.00400	0.000490	mg/L	1		6010C	Total/NA
Boron	19.5		0.0500	0.00343	mg/L	1		6010C	Total/NA
Cadmium	0.0719		0.00500	0.00243	mg/L	1		6010C	Total/NA
Calcium	860		10.0	1.47	mg/L	50		6010C	Total/NA
Chromium	0.0133		0.0100	0.000811	mg/L	1		6010C	Total/NA
Cobalt	0.512		0.0100	0.000673	mg/L	1		6010C	Total/NA
Magnesium	75.8		0.200	0.0500	mg/L	1		6010C	Total/NA
Lead	0.0159	B	0.0100	0.00237	mg/L	1		6010C	Total/NA
Molybdenum	0.00707	J	0.0100	0.00123	mg/L	1		6010C	Total/NA
Potassium	38.3		0.500	0.107	mg/L	1		6010C	Total/NA
Sodium	2870		25.0	3.33	mg/L	50		6010C	Total/NA
Lithium	1.75		0.0200	0.00448	mg/L	1		6010C	Total/NA
SiO2	119		1.07	0.0781	mg/L	1		6010C	Total/NA
Mercury	0.00566		0.000200	0.0000263	mg/L	1		7470A	Total/NA
Total Dissolved Solids	9080		100	100	mg/L	1		SM 2540C	Total/NA

Client Sample ID: AP-33 — Lab Sample ID: 860-10240-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	4360		10.0	4.00	mg/L	20		300.0	Total/NA
Fluoride	1.78		0.500	0.100	mg/L	1		300.0	Total/NA
Sulfate	3450	B	10.0	2.18	mg/L	20		300.0	Total/NA
Arsenic	0.0325		0.0100	0.00550	mg/L	1		6010C	Total/NA
Barium	0.00827	J	0.0100	0.00135	mg/L	1		6010C	Total/NA
Beryllium	0.197		0.00400	0.000490	mg/L	1		6010C	Total/NA
Boron	70.5		2.50	0.171	mg/L	50		6010C	Total/NA
Cadmium	0.0951		0.00500	0.00243	mg/L	1		6010C	Total/NA
Calcium	922		10.0	1.47	mg/L	50		6010C	Total/NA
Cobalt	1.14		0.0100	0.000673	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: AP-33 (Continued)

Lab Sample ID: 860-10240-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	239		10.0	2.50	mg/L	50		6010C	Total/NA
Lead	0.0233	B	0.0100	0.00237	mg/L	1		6010C	Total/NA
Molybdenum	0.00762	J	0.0100	0.00123	mg/L	1		6010C	Total/NA
Potassium	24.8		0.500	0.107	mg/L	1		6010C	Total/NA
Sodium	3180		25.0	3.33	mg/L	50		6010C	Total/NA
Lithium	1.18		0.0200	0.00448	mg/L	1		6010C	Total/NA
SiO2	105		1.07	0.0781	mg/L	1		6010C	Total/NA
Mercury	0.00667		0.000200	0.0000263	mg/L	1		7470A	Total/NA
Total Dissolved Solids	11000		100	100	mg/L	1		SM 2540C	Total/NA

Client Sample ID: AP-34

Lab Sample ID: 860-10240-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2990		10.0	4.00	mg/L	20		300.0	Total/NA
Fluoride	1.57		0.500	0.100	mg/L	1		300.0	Total/NA
Sulfate	3470	B	10.0	2.18	mg/L	20		300.0	Total/NA
Arsenic	0.0260		0.0100	0.00550	mg/L	1		6010C	Total/NA
Barium	0.00839	J	0.0100	0.00135	mg/L	1		6010C	Total/NA
Beryllium	0.230		0.00400	0.000490	mg/L	1		6010C	Total/NA
Boron	18.4		0.0500	0.00343	mg/L	1		6010C	Total/NA
Cadmium	0.0222		0.00500	0.00243	mg/L	1		6010C	Total/NA
Calcium	848		10.0	1.47	mg/L	50		6010C	Total/NA
Cobalt	0.962		0.0100	0.000673	mg/L	1		6010C	Total/NA
Magnesium	177		10.0	2.50	mg/L	50		6010C	Total/NA
Lead	0.0166	B	0.0100	0.00237	mg/L	1		6010C	Total/NA
Molybdenum	0.0118		0.0100	0.00123	mg/L	1		6010C	Total/NA
Potassium	15.1		0.500	0.107	mg/L	1		6010C	Total/NA
Sodium	2170		25.0	3.33	mg/L	50		6010C	Total/NA
Lithium	1.35		0.0200	0.00448	mg/L	1		6010C	Total/NA
SiO2	112		1.07	0.0781	mg/L	1		6010C	Total/NA
Mercury	0.0106		0.00200	0.000263	mg/L	10		7470A	Total/NA
Total Dissolved Solids	9590		100	100	mg/L	1		SM 2540C	Total/NA

Client Sample ID: AP-35

Lab Sample ID: 860-10240-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2250		10.0	4.00	mg/L	20		300.0	Total/NA
Fluoride	0.868		0.500	0.100	mg/L	1		300.0	Total/NA
Sulfate	2670	B	10.0	2.18	mg/L	20		300.0	Total/NA
Barium	0.0115		0.0100	0.00135	mg/L	1		6010C	Total/NA
Beryllium	0.0673		0.00400	0.000490	mg/L	1		6010C	Total/NA
Boron	55.5		2.50	0.171	mg/L	50		6010C	Total/NA
Cadmium	0.0218		0.00500	0.00243	mg/L	1		6010C	Total/NA
Calcium	810		10.0	1.47	mg/L	50		6010C	Total/NA
Chromium	0.0362		0.0100	0.000811	mg/L	1		6010C	Total/NA
Cobalt	0.157		0.0100	0.000673	mg/L	1		6010C	Total/NA
Magnesium	112		10.0	2.50	mg/L	50		6010C	Total/NA
Lead	0.0123	B	0.0100	0.00237	mg/L	1		6010C	Total/NA
Molybdenum	0.00640	J	0.0100	0.00123	mg/L	1		6010C	Total/NA
Potassium	47.9		0.500	0.107	mg/L	1		6010C	Total/NA
Sodium	2010		25.0	3.33	mg/L	50		6010C	Total/NA
Lithium	1.48		0.0200	0.00448	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: AP-35 (Continued) — Lab Sample ID: 860-10240-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
SiO2	124		1.07	0.0781	mg/L	1		6010C	Total/NA
Mercury	0.0192		0.00200	0.000263	mg/L	10		7470A	Total/NA
Total Dissolved Solids	6640		100	100	mg/L	1		SM 2540C	Total/NA

Client Sample ID: AP-36 — Lab Sample ID: 860-10240-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1720		25.0	10.0	mg/L	50		300.0	Total/NA
Fluoride	0.171	J	0.500	0.100	mg/L	1		300.0	Total/NA
Sulfate	2730		25.0	5.44	mg/L	50		300.0	Total/NA
Arsenic	0.00725	J	0.0100	0.00550	mg/L	1		6010C	Total/NA
Barium	0.0137		0.0100	0.00135	mg/L	1		6010C	Total/NA
Beryllium	0.0117		0.00400	0.000490	mg/L	1		6010C	Total/NA
Boron	2.27		0.0500	0.00343	mg/L	1		6010C	Total/NA
Calcium	782		10.0	1.47	mg/L	50		6010C	Total/NA
Chromium	0.0313		0.0100	0.000811	mg/L	1		6010C	Total/NA
Cobalt	0.0690		0.0100	0.000673	mg/L	1		6010C	Total/NA
Magnesium	124		10.0	2.50	mg/L	50		6010C	Total/NA
Lead	0.00275	J B	0.0100	0.00237	mg/L	1		6010C	Total/NA
Molybdenum	0.00541	J	0.0100	0.00123	mg/L	1		6010C	Total/NA
Potassium	41.9		0.500	0.107	mg/L	1		6010C	Total/NA
Sodium	1730		25.0	3.33	mg/L	50		6010C	Total/NA
Lithium	1.49		0.0200	0.00448	mg/L	1		6010C	Total/NA
SiO2	105		1.07	0.0781	mg/L	1		6010C	Total/NA
Total Dissolved Solids	6280		40.0	40.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-03 — Lab Sample ID: 860-10240-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1860		25.0	10.0	mg/L	50		300.0	Total/NA
Sulfate	4040		25.0	5.44	mg/L	50		300.0	Total/NA
Arsenic	0.00985	J	0.0100	0.00550	mg/L	1		6010C	Total/NA
Barium	0.00533	J	0.0100	0.00135	mg/L	1		6010C	Total/NA
Beryllium	0.0251		0.00400	0.000490	mg/L	1		6010C	Total/NA
Boron	12.3		0.0500	0.00343	mg/L	1		6010C	Total/NA
Cadmium	0.0519		0.00500	0.00243	mg/L	1		6010C	Total/NA
Calcium	632		10.0	1.47	mg/L	50		6010C	Total/NA
Chromium	0.0195		0.0100	0.000811	mg/L	1		6010C	Total/NA
Cobalt	0.326		0.0100	0.000673	mg/L	1		6010C	Total/NA
Magnesium	115		10.0	2.50	mg/L	50		6010C	Total/NA
Lead	0.0102	B	0.0100	0.00237	mg/L	1		6010C	Total/NA
Molybdenum	0.00470	J	0.0100	0.00123	mg/L	1		6010C	Total/NA
Potassium	36.5		0.500	0.107	mg/L	1		6010C	Total/NA
Sodium	2590		25.0	3.33	mg/L	50		6010C	Total/NA
Lithium	2.00		0.0200	0.00448	mg/L	1		6010C	Total/NA
SiO2	119		1.07	0.0781	mg/L	1		6010C	Total/NA
Mercury	0.0000550	J	0.000200	0.0000263	mg/L	1		7470A	Total/NA
Total Dissolved Solids	7980		100	100	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GSI Environmental, Inc
Project/Site: Ash Ponds

Job ID: 860-10240-1

Client Sample ID: PZ-05 — Lab Sample ID: 860-10240-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2700		25.0	10.0	mg/L	50		300.0	Total/NA
Fluoride	7.45	J	25.0	5.00	mg/L	50		300.0	Total/NA
Sulfate	41200		250	54.4	mg/L	500		300.0	Total/NA
Arsenic	0.0236		0.0100	0.00550	mg/L	1		6010C	Total/NA
Barium	0.0102		0.0100	0.00135	mg/L	1		6010C	Total/NA
Beryllium	0.188		0.00400	0.000490	mg/L	1		6010C	Total/NA
Boron	33.9		2.50	0.171	mg/L	50		6010C	Total/NA
Cadmium	0.0518		0.00500	0.00243	mg/L	1		6010C	Total/NA
Calcium	733		10.0	1.47	mg/L	50		6010C	Total/NA
Chromium	0.00793	J	0.0100	0.000811	mg/L	1		6010C	Total/NA
Cobalt	0.737		0.0100	0.000673	mg/L	1		6010C	Total/NA
Magnesium	134		10.0	2.50	mg/L	50		6010C	Total/NA
Lead	0.0130	B	0.0100	0.00237	mg/L	1		6010C	Total/NA
Molybdenum	0.00519	J	0.0100	0.00123	mg/L	1		6010C	Total/NA
Potassium	16.2		0.500	0.107	mg/L	1		6010C	Total/NA
Sodium	2020		25.0	3.33	mg/L	50		6010C	Total/NA
Lithium	1.03		0.0200	0.00448	mg/L	1		6010C	Total/NA
SiO2	100		1.07	0.0781	mg/L	1		6010C	Total/NA
Mercury	0.00121		0.000200	0.0000263	mg/L	1		7470A	Total/NA
Total Dissolved Solids	7140		100	100	mg/L	1		SM 2540C	Total/NA

Client Sample ID: PZ-06 — Lab Sample ID: 860-10240-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1810		25.0	10.0	mg/L	50		300.0	Total/NA
Sulfate	3170		25.0	5.44	mg/L	50		300.0	Total/NA
Barium	0.0168		0.0100	0.00135	mg/L	1		6010C	Total/NA
Beryllium	0.00331	J	0.00400	0.000490	mg/L	1		6010C	Total/NA
Boron	2.66		0.0500	0.00343	mg/L	1		6010C	Total/NA
Calcium	773		10.0	1.47	mg/L	50		6010C	Total/NA
Chromium	0.0456		0.0100	0.000811	mg/L	1		6010C	Total/NA
Cobalt	0.00713	J	0.0100	0.000673	mg/L	1		6010C	Total/NA
Magnesium	116		10.0	2.50	mg/L	50		6010C	Total/NA
Molybdenum	0.00417	J	0.0100	0.00123	mg/L	1		6010C	Total/NA
Potassium	45.0		0.500	0.107	mg/L	1		6010C	Total/NA
Sodium	1800		25.0	3.33	mg/L	50		6010C	Total/NA
Lithium	1.48		0.0200	0.00448	mg/L	1		6010C	Total/NA
SiO2	90.8		1.07	0.0781	mg/L	1		6010C	Total/NA
Total Alkalinity	83.0		4.00	4.00	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	83.0		4.00	4.00	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	6550		100	100	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-02 — Lab Sample ID: 860-10240-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2070		25.0	10.0	mg/L	50		300.0	Total/NA
Sulfate	4150		25.0	5.44	mg/L	50		300.0	Total/NA
Arsenic	0.0164		0.0100	0.00550	mg/L	1		6010C	Total/NA
Barium	0.00691	J	0.0100	0.00135	mg/L	1		6010C	Total/NA
Beryllium	0.0239		0.00400	0.000490	mg/L	1		6010C	Total/NA
Boron	11.8		0.0500	0.00343	mg/L	1		6010C	Total/NA
Cadmium	0.0505		0.00500	0.00243	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP-02 (Continued)

Lab Sample ID: 860-10240-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	709		10.0	1.47	mg/L	50		6010C	Total/NA
Chromium	0.0210		0.0100	0.000811	mg/L	1		6010C	Total/NA
Cobalt	0.316		0.0100	0.000673	mg/L	1		6010C	Total/NA
Magnesium	130		10.0	2.50	mg/L	50		6010C	Total/NA
Lead	0.00802	J B	0.0100	0.00237	mg/L	1		6010C	Total/NA
Molybdenum	0.00448	J	0.0100	0.00123	mg/L	1		6010C	Total/NA
Potassium	40.5		0.500	0.107	mg/L	1		6010C	Total/NA
Sodium	2880		25.0	3.33	mg/L	50		6010C	Total/NA
Lithium	2.23		0.0200	0.00448	mg/L	1		6010C	Total/NA
SiO2	130		1.07	0.0781	mg/L	1		6010C	Total/NA
Mercury	0.0000850	J	0.000200	0.0000263	mg/L	1		7470A	Total/NA
Total Dissolved Solids	8610		100	100	mg/L	1		SM 2540C	Total/NA

Client Sample ID: FB-02

Lab Sample ID: 860-10240-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	0.619		0.500	0.200	mg/L	1		300.0	Total/NA
Fluoride	0.301	J	0.500	0.100	mg/L	1		300.0	Total/NA
Sulfate	0.150	J F1	0.500	0.109	mg/L	1		300.0	Total/NA
Boron	0.00703	J	0.0500	0.00343	mg/L	1		6010C	Total/NA
Calcium	0.165	J	0.200	0.0293	mg/L	1		6010C	Total/NA
Potassium	0.306	J	0.500	0.107	mg/L	1		6010C	Total/NA
Sodium	2.30		0.500	0.0667	mg/L	1		6010C	Total/NA
Selenium	0.00961	J B	0.0300	0.00439	mg/L	1		6010C	Total/NA
SiO2	1.41		1.07	0.0781	mg/L	1		6010C	Total/NA
Total Dissolved Solids	6.50		5.00	5.00	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-01

Lab Sample ID: 860-10240-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	0.682		0.500	0.200	mg/L	1		300.0	Total/NA
Fluoride	0.345	J	0.500	0.100	mg/L	1		300.0	Total/NA
Boron	0.0104	J	0.0500	0.00343	mg/L	1		6010C	Total/NA
Calcium	0.126	J	0.200	0.0293	mg/L	1		6010C	Total/NA
Chromium	0.00164	J	0.0100	0.000811	mg/L	1		6010C	Total/NA
Molybdenum	0.0200		0.0100	0.00123	mg/L	1		6010C	Total/NA
Potassium	0.126	J	0.500	0.107	mg/L	1		6010C	Total/NA
Sodium	1.52		0.500	0.0667	mg/L	1		6010C	Total/NA
SiO2	0.628	J	1.07	0.0781	mg/L	1		6010C	Total/NA
Total Dissolved Solids	17.0		5.00	5.00	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: PZ-02

Lab Sample ID: 860-10240-1

Date Collected: 08/18/21 14:35

Matrix: Water

Date Received: 08/19/21 09:49

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4010**		10.0	4.00	mg/L			08/25/21 18:15	20
Fluoride	**0.110**	**J**	0.500	0.100	mg/L			08/25/21 16:45	1
Sulfate	**2910**		25.0	5.44	mg/L			08/27/21 09:34	50

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00589	U	0.0200	0.00589	mg/L		08/29/21 11:30	09/02/21 17:56	1
Arsenic	0.00550	U	0.0100	0.00550	mg/L		08/29/21 11:30	09/02/21 17:56	1
Barium	**0.0195**		0.0100	0.00135	mg/L		08/29/21 11:30	09/02/21 17:56	1
Beryllium	**0.00224**	**J**	0.00400	0.000490	mg/L		08/29/21 11:30	09/02/21 17:56	1
Boron	**6.74**		0.0500	0.00343	mg/L		08/29/21 11:30	09/02/21 17:56	1
Cadmium	0.00243	U	0.00500	0.00243	mg/L		08/29/21 11:30	09/02/21 17:56	1
Calcium	**949**		10.0	1.47	mg/L		08/29/21 11:30	09/02/21 18:14	50
Chromium	**0.0538**		0.0100	0.000811	mg/L		08/29/21 11:30	09/02/21 17:56	1
Cobalt	**0.00881**	**J**	0.0100	0.000673	mg/L		08/29/21 11:30	09/02/21 17:56	1
Magnesium	**147**		10.0	2.50	mg/L		08/29/21 11:30	09/02/21 18:14	50
Lead	0.00237	U	0.0100	0.00237	mg/L		08/29/21 11:30	09/02/21 17:56	1
Molybdenum	**0.00788**	**J**	0.0100	0.00123	mg/L		08/29/21 11:30	09/02/21 17:56	1
Potassium	**55.4**		0.500	0.107	mg/L		08/29/21 11:30	09/02/21 17:56	1
Sodium	**3160**		25.0	3.33	mg/L		08/29/21 11:30	09/02/21 18:14	50
Selenium	0.00439	U	0.0300	0.00439	mg/L		08/29/21 11:30	09/02/21 17:56	1
Thallium	0.00621	U	0.0200	0.00621	mg/L		08/29/21 11:30	09/02/21 17:56	1
Lithium	**2.48**		0.0200	0.00448	mg/L		08/29/21 11:30	09/02/21 17:56	1
SiO2	**75.8**		1.07	0.0781	mg/L		08/29/21 11:30	09/02/21 17:56	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000263	U	0.000200	0.0000263	mg/L		08/25/21 07:45	08/25/21 13:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	**110**		4.00	4.00	mg/L			08/25/21 11:04	1
Bicarbonate Alkalinity as CaCO3	**110**		4.00	4.00	mg/L			08/25/21 11:04	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 11:04	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 11:04	1
Total Dissolved Solids	**9970**		100	100	mg/L			08/25/21 22:00	1

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	11.6	U	16.7	16.7	50.0	19.7	pCi/L	08/24/21 15:31	09/19/21 21:35	1
Radium-228	8.53	U	28.5	28.6	50.0	32.2	pCi/L	08/24/21 15:31	09/19/21 21:35	1

Client Sample ID: PZ-03

Lab Sample ID: 860-10240-2

Date Collected: 08/18/21 15:35

Matrix: Water

Date Received: 08/19/21 09:49

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5300**		10.0	4.00	mg/L			08/25/21 18:26	20

Client Sample ID: PZ-03

Lab Sample ID: 860-10240-2

Date Collected: 08/18/21 15:35

Matrix: Water

Date Received: 08/19/21 09:49

Method: 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	5.38	F1	0.500	0.100	mg/L			08/25/21 16:56	1
Sulfate	4120		25.0	5.44	mg/L			08/27/21 09:46	50

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00762	J	0.0200	0.00589	mg/L		08/29/21 11:30	09/02/21 17:08	1
Arsenic	0.0311		0.0100	0.00550	mg/L		08/29/21 11:30	09/02/21 17:08	1
Barium	0.0141	F1	0.0100	0.00135	mg/L		08/29/21 11:30	09/02/21 17:08	1
Beryllium	0.196	F1	0.00400	0.000490	mg/L		08/29/21 11:30	09/02/21 17:08	1
Boron	7.48		0.0500	0.00343	mg/L		08/29/21 11:30	09/02/21 17:08	1
Cadmium	0.428		0.00500	0.00243	mg/L		08/29/21 11:30	09/02/21 17:08	1
Calcium	979		10.0	1.47	mg/L		08/29/21 11:30	09/02/21 17:41	50
Chromium	0.000811	U	0.0100	0.000811	mg/L		08/29/21 11:30	09/02/21 17:08	1
Cobalt	1.09	F1	0.0100	0.000673	mg/L		08/29/21 11:30	09/02/21 17:08	1
Magnesium	324		10.0	2.50	mg/L		08/29/21 11:30	09/02/21 17:41	50
Lead	0.0218	F1 B	0.0100	0.00237	mg/L		08/29/21 11:30	09/02/21 17:08	1
Molybdenum	0.00939	J	0.0100	0.00123	mg/L		08/29/21 11:30	09/02/21 17:08	1
Potassium	26.2		0.500	0.107	mg/L		08/29/21 11:30	09/02/21 17:08	1
Sodium	3840		25.0	3.33	mg/L		08/29/21 11:30	09/02/21 17:41	50
Selenium	0.0130	J B	0.0300	0.00439	mg/L		08/29/21 11:30	09/02/21 17:08	1
Thallium	0.00621	U F1	0.0200	0.00621	mg/L		08/29/21 11:30	09/02/21 17:08	1
Lithium	2.20		0.0200	0.00448	mg/L		08/29/21 11:30	09/02/21 17:08	1
SiO2	106		1.07	0.0781	mg/L		08/29/21 11:30	09/02/21 17:08	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000263	U	0.000200	0.0000263	mg/L		08/25/21 07:45	08/25/21 13:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 11:07	1
Bicarbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 11:07	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 11:07	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 11:07	1
Total Dissolved Solids	12700		100	100	mg/L			08/25/21 22:00	1

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-17.3	U	23.0	23.1	50.0	44.8	pCi/L	08/24/21 15:31	09/19/21 21:36	1
Radium-228	6.31	U	17.1	17.1	50.0	35.0	pCi/L	08/24/21 15:31	09/19/21 21:36	1

Client Sample ID: AP-31

Lab Sample ID: 860-10240-3

Date Collected: 08/18/21 13:45

Matrix: Water

Date Received: 08/19/21 09:49

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1960		10.0	4.00	mg/L			08/25/21 18:59	20
Fluoride	0.450	J	0.500	0.100	mg/L			08/25/21 17:52	1

Client Sample ID: AP-31

Lab Sample ID: 860-10240-3

Date Collected: 08/18/21 13:45

Matrix: Water

Date Received: 08/19/21 09:49

Method: 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	3300		25.0	5.44	mg/L			08/27/21 10:19	50

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00589	U	0.0200	0.00589	mg/L		08/29/21 11:30	09/02/21 17:59	1
Arsenic	0.00550	U	0.0100	0.00550	mg/L		08/29/21 11:30	09/02/21 17:59	1
Barium	0.00948	J	0.0100	0.00135	mg/L		08/29/21 11:30	09/02/21 17:59	1
Beryllium	0.0129		0.00400	0.000490	mg/L		08/29/21 11:30	09/02/21 17:59	1
Boron	55.8		2.50	0.171	mg/L		08/29/21 11:30	09/02/21 18:17	50
Cadmium	0.00581		0.00500	0.00243	mg/L		08/29/21 11:30	09/02/21 17:59	1
Calcium	708		10.0	1.47	mg/L		08/29/21 11:30	09/02/21 18:17	50
Chromium	0.0341		0.0100	0.000811	mg/L		08/29/21 11:30	09/02/21 17:59	1
Cobalt	0.242		0.0100	0.000673	mg/L		08/29/21 11:30	09/02/21 17:59	1
Magnesium	58.6		0.200	0.0500	mg/L		08/29/21 11:30	09/02/21 17:59	1
Lead	0.00473	J B	0.0100	0.00237	mg/L		08/29/21 11:30	09/02/21 17:59	1
Molybdenum	0.0157		0.0100	0.00123	mg/L		08/29/21 11:30	09/02/21 17:59	1
Potassium	12.9		0.500	0.107	mg/L		08/29/21 11:30	09/02/21 17:59	1
Sodium	2330		25.0	3.33	mg/L		08/29/21 11:30	09/02/21 18:17	50
Selenium	0.0104	J B	0.0300	0.00439	mg/L		08/29/21 11:30	09/02/21 17:59	1
Thallium	0.00621	U	0.0200	0.00621	mg/L		08/29/21 11:30	09/02/21 17:59	1
Lithium	1.25		0.0200	0.00448	mg/L		08/29/21 11:30	09/02/21 17:59	1
SiO2	100		1.07	0.0781	mg/L		08/29/21 11:30	09/02/21 17:59	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000464		0.000200	0.0000263	mg/L		08/25/21 07:45	08/25/21 13:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 11:11	1
Bicarbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 11:11	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 11:11	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 11:11	1
Total Dissolved Solids	7150		100	100	mg/L			08/25/21 22:00	1

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	22.4		17.7	17.9	50.0	21.5	pCi/L	08/24/21 15:31	09/20/21 06:43	1
Radium-228	3.69	U	7.07	7.08	50.0	39.3	pCi/L	08/24/21 15:31	09/20/21 06:43	1

Client Sample ID: AP-32

Lab Sample ID: 860-10240-4

Date Collected: 08/18/21 17:35

Matrix: Water

Date Received: 08/19/21 09:49

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2850		10.0	4.00	mg/L			08/25/21 19:11	20
Fluoride	1.46		0.500	0.100	mg/L			08/25/21 18:03	1
Sulfate	3530		25.0	5.44	mg/L			08/27/21 10:31	50

Client Sample ID: AP-32

Lab Sample ID: 860-10240-4

Date Collected: 08/18/21 17:35

Matrix: Water

Date Received: 08/19/21 09:49

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00589	U	0.0200	0.00589	mg/L		08/29/21 11:30	09/02/21 18:03	1
Arsenic	**0.0296**		0.0100	0.00550	mg/L		08/29/21 11:30	09/02/21 18:03	1
Barium	**0.0101**		0.0100	0.00135	mg/L		08/29/21 11:30	09/02/21 18:03	1
Beryllium	**0.0517**		0.00400	0.000490	mg/L		08/29/21 11:30	09/02/21 18:03	1
Boron	**19.5**		0.0500	0.00343	mg/L		08/29/21 11:30	09/02/21 18:03	1
Cadmium	**0.0719**		0.00500	0.00243	mg/L		08/29/21 11:30	09/02/21 18:03	1
Calcium	**860**		10.0	1.47	mg/L		08/29/21 11:30	09/02/21 18:21	50
Chromium	**0.0133**		0.0100	0.000811	mg/L		08/29/21 11:30	09/02/21 18:03	1
Cobalt	**0.512**		0.0100	0.000673	mg/L		08/29/21 11:30	09/02/21 18:03	1
Magnesium	**75.8**		0.200	0.0500	mg/L		08/29/21 11:30	09/02/21 18:03	1
Lead	**0.0159**	**B**	0.0100	0.00237	mg/L		08/29/21 11:30	09/02/21 18:03	1
Molybdenum	**0.00707**	**J**	0.0100	0.00123	mg/L		08/29/21 11:30	09/02/21 18:03	1
Potassium	**38.3**		0.500	0.107	mg/L		08/29/21 11:30	09/02/21 18:03	1
Sodium	**2870**		25.0	3.33	mg/L		08/29/21 11:30	09/02/21 18:21	50
Selenium	0.00439	U	0.0300	0.00439	mg/L		08/29/21 11:30	09/02/21 18:03	1
Thallium	0.00621	U	0.0200	0.00621	mg/L		08/29/21 11:30	09/02/21 18:03	1
Lithium	**1.75**		0.0200	0.00448	mg/L		08/29/21 11:30	09/02/21 18:03	1
SiO2	**119**		1.07	0.0781	mg/L		08/29/21 11:30	09/02/21 18:03	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00566**		0.000200	0.0000263	mg/L		08/25/21 07:45	08/25/21 13:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 11:14	1
Bicarbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 11:14	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 11:14	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 11:14	1
Total Dissolved Solids	**9080**		100	100	mg/L			08/25/21 22:00	1

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	15.7	U	10.9	11.1	50.0	41.9	pCi/L	08/24/21 15:31	09/20/21 06:41	1
Radium-228	19.7	U	23.3	23.4	50.0	30.5	pCi/L	08/24/21 15:31	09/20/21 06:41	1

Client Sample ID: AP-33

Lab Sample ID: 860-10240-5

Date Collected: 08/18/21 16:55

Matrix: Water

Date Received: 08/19/21 09:49

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4360**		10.0	4.00	mg/L			08/25/21 16:28	20
Fluoride	**1.78**		0.500	0.100	mg/L			08/25/21 16:19	1
Sulfate	**3450**	**B**	10.0	2.18	mg/L			08/25/21 16:28	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00589	U	0.0200	0.00589	mg/L		08/29/21 11:30	09/02/21 18:07	1

Client Sample ID: AP-33

Lab Sample ID: 860-10240-5

Date Collected: 08/18/21 16:55

Matrix: Water

Date Received: 08/19/21 09:49

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0325**		0.0100	0.00550	mg/L		08/29/21 11:30	09/02/21 18:07	1
Barium	**0.00827**	**J**	0.0100	0.00135	mg/L		08/29/21 11:30	09/02/21 18:07	1
Beryllium	**0.197**		0.00400	0.000490	mg/L		08/29/21 11:30	09/02/21 18:07	1
Boron	**70.5**		2.50	0.171	mg/L		08/29/21 11:30	09/02/21 18:25	50
Cadmium	**0.0951**		0.00500	0.00243	mg/L		08/29/21 11:30	09/02/21 18:07	1
Calcium	**922**		10.0	1.47	mg/L		08/29/21 11:30	09/02/21 18:25	50
Chromium	0.000811	U	0.0100	0.000811	mg/L		08/29/21 11:30	09/02/21 18:07	1
Cobalt	**1.14**		0.0100	0.000673	mg/L		08/29/21 11:30	09/02/21 18:07	1
Magnesium	**239**		10.0	2.50	mg/L		08/29/21 11:30	09/02/21 18:25	50
Lead	**0.0233**	**B**	0.0100	0.00237	mg/L		08/29/21 11:30	09/02/21 18:07	1
Molybdenum	**0.00762**	**J**	0.0100	0.00123	mg/L		08/29/21 11:30	09/02/21 18:07	1
Potassium	**24.8**		0.500	0.107	mg/L		08/29/21 11:30	09/02/21 18:07	1
Sodium	**3180**		25.0	3.33	mg/L		08/29/21 11:30	09/02/21 18:25	50
Selenium	0.00439	U	0.0300	0.00439	mg/L		08/29/21 11:30	09/02/21 18:07	1
Thallium	0.00621	U	0.0200	0.00621	mg/L		08/29/21 11:30	09/02/21 18:07	1
Lithium	**1.18**		0.0200	0.00448	mg/L		08/29/21 11:30	09/02/21 18:07	1
SiO2	**105**		1.07	0.0781	mg/L		08/29/21 11:30	09/02/21 18:07	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00667**		0.000200	0.0000263	mg/L		08/25/21 07:45	08/25/21 13:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 11:30	1
Bicarbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 11:30	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 11:30	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 11:30	1
Total Dissolved Solids	**11000**		100	100	mg/L			08/25/21 22:00	1

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**38.2**		17.1	17.7	50.0	20.7	pCi/L	08/24/21 15:31	09/20/21 08:47	1
Radium-228	18.7	U	25.5	25.6	50.0	30.5	pCi/L	08/24/21 15:31	09/20/21 08:47	1

Client Sample ID: AP-34

Lab Sample ID: 860-10240-6

Date Collected: 08/18/21 15:20

Matrix: Water

Date Received: 08/19/21 09:49

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2990**		10.0	4.00	mg/L			08/25/21 16:47	20
Fluoride	**1.57**		0.500	0.100	mg/L			08/25/21 16:38	1
Sulfate	**3470**	**B**	10.0	2.18	mg/L			08/25/21 16:47	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00589	U	0.0200	0.00589	mg/L		08/29/21 11:30	09/02/21 18:10	1
Arsenic	**0.0260**		0.0100	0.00550	mg/L		08/29/21 11:30	09/02/21 18:10	1

Client Sample ID: AP-34

Lab Sample ID: 860-10240-6

Date Collected: 08/18/21 15:20

Matrix: Water

Date Received: 08/19/21 09:49

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.00839**	**J**	0.0100	0.00135	mg/L		08/29/21 11:30	09/02/21 18:10	1
Beryllium	**0.230**		0.00400	0.000490	mg/L		08/29/21 11:30	09/02/21 18:10	1
Boron	**18.4**		0.0500	0.00343	mg/L		08/29/21 11:30	09/02/21 18:10	1
Cadmium	**0.0222**		0.00500	0.00243	mg/L		08/29/21 11:30	09/02/21 18:10	1
Calcium	**848**		10.0	1.47	mg/L		08/29/21 11:30	09/02/21 18:28	50
Chromium	0.000811	U	0.0100	0.000811	mg/L		08/29/21 11:30	09/02/21 18:10	1
Cobalt	**0.962**		0.0100	0.000673	mg/L		08/29/21 11:30	09/02/21 18:10	1
Magnesium	**177**		10.0	2.50	mg/L		08/29/21 11:30	09/02/21 18:28	50
Lead	**0.0166**	**B**	0.0100	0.00237	mg/L		08/29/21 11:30	09/02/21 18:10	1
Molybdenum	**0.0118**		0.0100	0.00123	mg/L		08/29/21 11:30	09/02/21 18:10	1
Potassium	**15.1**		0.500	0.107	mg/L		08/29/21 11:30	09/02/21 18:10	1
Sodium	**2170**		25.0	3.33	mg/L		08/29/21 11:30	09/02/21 18:28	50
Selenium	0.00439	U	0.0300	0.00439	mg/L		08/29/21 11:30	09/02/21 18:10	1
Thallium	0.00621	U	0.0200	0.00621	mg/L		08/29/21 11:30	09/02/21 18:10	1
Lithium	**1.35**		0.0200	0.00448	mg/L		08/29/21 11:30	09/02/21 18:10	1
SiO2	**112**		1.07	0.0781	mg/L		08/29/21 11:30	09/02/21 18:10	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0106**		0.00200	0.000263	mg/L		08/25/21 07:45	08/25/21 14:04	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 11:34	1
Bicarbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 11:34	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 11:34	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 11:34	1
Total Dissolved Solids	**9590**		100	100	mg/L			08/25/21 22:00	1

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**27.8**		18.2	18.5	50.0	21.8	pCi/L	08/24/21 15:31	09/20/21 08:47	1
Radium-228	11.6	U	33.0	33.0	50.0	37.2	pCi/L	08/24/21 15:31	09/20/21 08:47	1

Client Sample ID: AP-35

Lab Sample ID: 860-10240-7

Date Collected: 08/18/21 15:50

Matrix: Water

Date Received: 08/19/21 09:49

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2250**		10.0	4.00	mg/L			08/25/21 17:06	20
Fluoride	**0.868**		0.500	0.100	mg/L			08/25/21 16:56	1
Sulfate	**2670**	**B**	10.0	2.18	mg/L			08/25/21 17:06	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00589	U	0.0200	0.00589	mg/L		08/29/21 11:30	09/02/21 20:57	1
Arsenic	0.00550	U	0.0100	0.00550	mg/L		08/29/21 11:30	09/02/21 20:57	1
Barium	**0.0115**		0.0100	0.00135	mg/L		08/29/21 11:30	09/02/21 20:57	1

Client Sample ID: AP-35

Lab Sample ID: 860-10240-7

Date Collected: 08/18/21 15:50

Matrix: Water

Date Received: 08/19/21 09:49

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	**0.0673**		0.00400	0.000490	mg/L		08/29/21 11:30	09/02/21 20:57	1
Boron	**55.5**		2.50	0.171	mg/L		08/29/21 11:30	09/02/21 21:15	50
Cadmium	**0.0218**		0.00500	0.00243	mg/L		08/29/21 11:30	09/02/21 20:57	1
Calcium	**810**		10.0	1.47	mg/L		08/29/21 11:30	09/02/21 21:15	50
Chromium	**0.0362**		0.0100	0.000811	mg/L		08/29/21 11:30	09/02/21 20:57	1
Cobalt	**0.157**		0.0100	0.000673	mg/L		08/29/21 11:30	09/02/21 20:57	1
Magnesium	**112**		10.0	2.50	mg/L		08/29/21 11:30	09/02/21 21:15	50
Lead	**0.0123**	**B**	0.0100	0.00237	mg/L		08/29/21 11:30	09/02/21 20:57	1
Molybdenum	**0.00640**	**J**	0.0100	0.00123	mg/L		08/29/21 11:30	09/02/21 20:57	1
Potassium	**47.9**		0.500	0.107	mg/L		08/29/21 11:30	09/02/21 20:57	1
Sodium	**2010**		25.0	3.33	mg/L		08/29/21 11:30	09/02/21 21:15	50
Selenium	0.00439	U	0.0300	0.00439	mg/L		08/29/21 11:30	09/02/21 20:57	1
Thallium	0.00621	U	0.0200	0.00621	mg/L		08/29/21 11:30	09/02/21 20:57	1
Lithium	**1.48**		0.0200	0.00448	mg/L		08/29/21 11:30	09/02/21 20:57	1
SiO2	**124**		1.07	0.0781	mg/L		08/29/21 11:30	09/02/21 20:57	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0192**		0.00200	0.000263	mg/L		08/25/21 07:45	08/25/21 14:06	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 11:37	1
Bicarbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 11:37	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 11:37	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 11:37	1
Total Dissolved Solids	**6640**		100	100	mg/L			08/25/21 22:00	1

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**32.9**		20.6	20.9	50.0	21.9	pCi/L	08/24/21 15:31	09/20/21 10:50	1
Radium-228	31.2	U	29.3	29.5	50.0	32.2	pCi/L	08/24/21 15:31	09/20/21 10:50	1

Client Sample ID: AP-36

Lab Sample ID: 860-10240-8

Date Collected: 08/18/21 16:35

Matrix: Water

Date Received: 08/19/21 09:49

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1720**		25.0	10.0	mg/L			08/26/21 13:21	50
Fluoride	**0.171**	**J**	0.500	0.100	mg/L			08/25/21 17:15	1
Sulfate	**2730**		25.0	5.44	mg/L			08/26/21 13:21	50

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00589	U	0.0200	0.00589	mg/L		08/29/21 11:30	09/02/21 21:00	1
Arsenic	**0.00725**	**J**	0.0100	0.00550	mg/L		08/29/21 11:30	09/02/21 21:00	1
Barium	**0.0137**		0.0100	0.00135	mg/L		08/29/21 11:30	09/02/21 21:00	1
Beryllium	**0.0117**		0.00400	0.000490	mg/L		08/29/21 11:30	09/02/21 21:00	1

Client Sample ID: AP-36

Lab Sample ID: 860-10240-8

Date Collected: 08/18/21 16:35

Matrix: Water

Date Received: 08/19/21 09:49

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**2.27**		0.0500	0.00343	mg/L		08/29/21 11:30	09/02/21 21:00	1
Cadmium	0.00243	U	0.00500	0.00243	mg/L		08/29/21 11:30	09/02/21 21:00	1
Calcium	**782**		10.0	1.47	mg/L		08/29/21 11:30	09/02/21 21:18	50
Chromium	**0.0313**		0.0100	0.000811	mg/L		08/29/21 11:30	09/02/21 21:00	1
Cobalt	**0.0690**		0.0100	0.000673	mg/L		08/29/21 11:30	09/02/21 21:00	1
Magnesium	**124**		10.0	2.50	mg/L		08/29/21 11:30	09/02/21 21:18	50
Lead	**0.00275**	**J B**	0.0100	0.00237	mg/L		08/29/21 11:30	09/02/21 21:00	1
Molybdenum	**0.00541**	**J**	0.0100	0.00123	mg/L		08/29/21 11:30	09/02/21 21:00	1
Potassium	**41.9**		0.500	0.107	mg/L		08/29/21 11:30	09/02/21 21:00	1
Sodium	**1730**		25.0	3.33	mg/L		08/29/21 11:30	09/02/21 21:18	50
Selenium	0.00439	U	0.0300	0.00439	mg/L		08/29/21 11:30	09/02/21 21:00	1
Thallium	0.00621	U	0.0200	0.00621	mg/L		08/29/21 11:30	09/02/21 21:00	1
Lithium	**1.49**		0.0200	0.00448	mg/L		08/29/21 11:30	09/02/21 21:00	1
SiO2	**105**		1.07	0.0781	mg/L		08/29/21 11:30	09/02/21 21:00	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000263	U	0.000200	0.0000263	mg/L		08/25/21 07:45	08/25/21 13:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 11:41	1
Bicarbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 11:41	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 11:41	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 11:41	1
Total Dissolved Solids	**6280**		40.0	40.0	mg/L			08/25/21 22:00	1

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-29.5	U G	17.3	17.7	50.0	53.0	pCi/L	08/24/21 15:31	09/21/21 15:21	1
Radium-228	**34.7**		23.4	23.8	50.0	24.0	pCi/L	08/24/21 15:31	09/21/21 15:21	1

Client Sample ID: MW-03

Lab Sample ID: 860-10240-9

Date Collected: 08/18/21 14:25

Matrix: Water

Date Received: 08/19/21 09:49

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1860**		25.0	10.0	mg/L			08/26/21 13:30	50
Fluoride	5.00	U	25.0	5.00	mg/L			08/26/21 13:30	50
Sulfate	**4040**		25.0	5.44	mg/L			08/26/21 13:30	50

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00589	U	0.0200	0.00589	mg/L		08/29/21 11:30	09/02/21 21:04	1
Arsenic	**0.00985**	**J**	0.0100	0.00550	mg/L		08/29/21 11:30	09/02/21 21:04	1
Barium	**0.00533**	**J**	0.0100	0.00135	mg/L		08/29/21 11:30	09/02/21 21:04	1
Beryllium	**0.0251**		0.00400	0.000490	mg/L		08/29/21 11:30	09/02/21 21:04	1
Boron	**12.3**		0.0500	0.00343	mg/L		08/29/21 11:30	09/02/21 21:04	1

Client Sample ID: MW-03

Lab Sample ID: 860-10240-9

Date Collected: 08/18/21 14:25

Matrix: Water

Date Received: 08/19/21 09:49

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.0519**		0.00500	0.00243	mg/L		08/29/21 11:30	09/02/21 21:04	1
Calcium	**632**		10.0	1.47	mg/L		08/29/21 11:30	09/02/21 21:22	50
Chromium	**0.0195**		0.0100	0.000811	mg/L		08/29/21 11:30	09/02/21 21:04	1
Cobalt	**0.326**		0.0100	0.000673	mg/L		08/29/21 11:30	09/02/21 21:04	1
Magnesium	**115**		10.0	2.50	mg/L		08/29/21 11:30	09/02/21 21:22	50
Lead	**0.0102**	**B**	0.0100	0.00237	mg/L		08/29/21 11:30	09/02/21 21:04	1
Molybdenum	**0.00470**	**J**	0.0100	0.00123	mg/L		08/29/21 11:30	09/02/21 21:04	1
Potassium	**36.5**		0.500	0.107	mg/L		08/29/21 11:30	09/02/21 21:04	1
Sodium	**2590**		25.0	3.33	mg/L		08/29/21 11:30	09/02/21 21:22	50
Selenium	0.00439	U	0.0300	0.00439	mg/L		08/29/21 11:30	09/02/21 21:04	1
Thallium	0.00621	U	0.0200	0.00621	mg/L		08/29/21 11:30	09/02/21 21:04	1
Lithium	**2.00**		0.0200	0.00448	mg/L		08/29/21 11:30	09/02/21 21:04	1
SiO2	**119**		1.07	0.0781	mg/L		08/29/21 11:30	09/02/21 21:04	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0000550**	**J**	0.000200	0.0000263	mg/L		08/25/21 07:45	08/25/21 13:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 11:44	1
Bicarbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 11:44	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 11:44	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 11:44	1
Total Dissolved Solids	**7980**		100	100	mg/L			08/25/21 22:00	1

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-27.7	U G	19.1	19.4	50.0	57.6	pCi/L	08/24/21 15:34	09/16/21 11:11	1
Radium-228	7.02	U	20.6	20.6	50.0	39.3	pCi/L	08/24/21 15:34	09/16/21 11:11	1

Client Sample ID: PZ-05

Lab Sample ID: 860-10240-10

Date Collected: 08/18/21 16:05

Matrix: Water

Date Received: 08/19/21 09:49

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2700**		25.0	10.0	mg/L			08/26/21 13:40	50
Fluoride	**7.45**	**J**	25.0	5.00	mg/L			08/26/21 13:40	50
Sulfate	**41200**		250	54.4	mg/L			08/26/21 14:27	500

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00589	U	0.0200	0.00589	mg/L		08/29/21 11:30	09/02/21 21:08	1
Arsenic	**0.0236**		0.0100	0.00550	mg/L		08/29/21 11:30	09/02/21 21:08	1
Barium	**0.0102**		0.0100	0.00135	mg/L		08/29/21 11:30	09/02/21 21:08	1
Beryllium	**0.188**		0.00400	0.000490	mg/L		08/29/21 11:30	09/02/21 21:08	1
Boron	**33.9**		2.50	0.171	mg/L		08/29/21 11:30	09/02/21 21:26	50
Cadmium	**0.0518**		0.00500	0.00243	mg/L		08/29/21 11:30	09/02/21 21:08	1

Client Sample ID: PZ-05

Lab Sample ID: 860-10240-10

Date Collected: 08/18/21 16:05

Matrix: Water

Date Received: 08/19/21 09:49

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	733		10.0	1.47	mg/L		08/29/21 11:30	09/02/21 21:26	50
Chromium	0.00793	J	0.0100	0.000811	mg/L		08/29/21 11:30	09/02/21 21:08	1
Cobalt	0.737		0.0100	0.000673	mg/L		08/29/21 11:30	09/02/21 21:08	1
Magnesium	134		10.0	2.50	mg/L		08/29/21 11:30	09/02/21 21:26	50
Lead	0.0130	B	0.0100	0.00237	mg/L		08/29/21 11:30	09/02/21 21:08	1
Molybdenum	0.00519	J	0.0100	0.00123	mg/L		08/29/21 11:30	09/02/21 21:08	1
Potassium	16.2		0.500	0.107	mg/L		08/29/21 11:30	09/02/21 21:08	1
Sodium	2020		25.0	3.33	mg/L		08/29/21 11:30	09/02/21 21:26	50
Selenium	0.00439	U	0.0300	0.00439	mg/L		08/29/21 11:30	09/02/21 21:08	1
Thallium	0.00621	U	0.0200	0.00621	mg/L		08/29/21 11:30	09/02/21 21:08	1
Lithium	1.03		0.0200	0.00448	mg/L		08/29/21 11:30	09/02/21 21:08	1
SiO2	100		1.07	0.0781	mg/L		08/29/21 11:30	09/02/21 21:08	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00121		0.000200	0.0000263	mg/L		08/25/21 07:45	08/25/21 13:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 11:51	1
Bicarbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 11:51	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 11:51	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 11:51	1
Total Dissolved Solids	7140		100	100	mg/L			08/25/21 22:00	1

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	82.9		20.2	22.4	50.0	19.3	pCi/L	08/24/21 15:34	09/16/21 13:52	1
Radium-228	42.8		18.1	18.8	50.0	15.2	pCi/L	08/24/21 15:34	09/16/21 13:52	1

Client Sample ID: PZ-06

Lab Sample ID: 860-10240-11

Date Collected: 08/18/21 17:05

Matrix: Water

Date Received: 08/19/21 09:49

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1810		25.0	10.0	mg/L			08/26/21 13:49	50
Fluoride	5.00	U	25.0	5.00	mg/L			08/26/21 13:49	50
Sulfate	3170		25.0	5.44	mg/L			08/26/21 13:49	50

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00589	U	0.0200	0.00589	mg/L		08/29/21 11:30	09/02/21 21:11	1
Arsenic	0.00550	U	0.0100	0.00550	mg/L		08/29/21 11:30	09/02/21 21:11	1
Barium	0.0168		0.0100	0.00135	mg/L		08/29/21 11:30	09/02/21 21:11	1
Beryllium	0.00331	J	0.00400	0.000490	mg/L		08/29/21 11:30	09/02/21 21:11	1
Boron	2.66		0.0500	0.00343	mg/L		08/29/21 11:30	09/02/21 21:11	1
Cadmium	0.00243	U	0.00500	0.00243	mg/L		08/29/21 11:30	09/02/21 21:11	1
Calcium	773		10.0	1.47	mg/L		08/29/21 11:30	09/02/21 21:29	50

Client Sample ID: PZ-06

Lab Sample ID: 860-10240-11

Date Collected: 08/18/21 17:05

Matrix: Water

Date Received: 08/19/21 09:49

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**0.0456**		0.0100	0.000811	mg/L		08/29/21 11:30	09/02/21 21:11	1
Cobalt	**0.00713**	**J**	0.0100	0.000673	mg/L		08/29/21 11:30	09/02/21 21:11	1
Magnesium	**116**		10.0	2.50	mg/L		08/29/21 11:30	09/02/21 21:29	50
Lead	0.00237	U	0.0100	0.00237	mg/L		08/29/21 11:30	09/02/21 21:11	1
Molybdenum	**0.00417**	**J**	0.0100	0.00123	mg/L		08/29/21 11:30	09/02/21 21:11	1
Potassium	**45.0**		0.500	0.107	mg/L		08/29/21 11:30	09/02/21 21:11	1
Sodium	**1800**		25.0	3.33	mg/L		08/29/21 11:30	09/02/21 21:29	50
Selenium	0.00439	U	0.0300	0.00439	mg/L		08/29/21 11:30	09/02/21 21:11	1
Thallium	0.00621	U	0.0200	0.00621	mg/L		08/29/21 11:30	09/02/21 21:11	1
Lithium	**1.48**		0.0200	0.00448	mg/L		08/29/21 11:30	09/02/21 21:11	1
SiO2	**90.8**		1.07	0.0781	mg/L		08/29/21 11:30	09/02/21 21:11	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000263	U	0.000200	0.0000263	mg/L		08/25/21 07:45	08/25/21 13:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	**83.0**		4.00	4.00	mg/L			08/25/21 11:56	1
Bicarbonate Alkalinity as CaCO3	**83.0**		4.00	4.00	mg/L			08/25/21 11:56	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 11:56	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 11:56	1
Total Dissolved Solids	**6550**		100	100	mg/L			08/25/21 22:00	1

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**25.5**		18.4	18.7	50.0	21.3	pCi/L	08/24/21 15:34	09/16/21 16:12	1
Radium-228	14.2	U	22.6	22.7	50.0	32.6	pCi/L	08/24/21 15:34	09/16/21 16:12	1

Client Sample ID: DUP-02

Lab Sample ID: 860-10240-12

Date Collected: 08/18/21 13:00

Matrix: Water

Date Received: 08/19/21 09:49

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2070**		25.0	10.0	mg/L			08/26/21 13:58	50
Fluoride	5.00	U	25.0	5.00	mg/L			08/26/21 13:58	50
Sulfate	**4150**		25.0	5.44	mg/L			08/26/21 13:58	50

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00589	U	0.0200	0.00589	mg/L		08/29/21 11:30	09/02/21 21:40	1
Arsenic	**0.0164**		0.0100	0.00550	mg/L		08/29/21 11:30	09/02/21 21:40	1
Barium	**0.00691**	**J**	0.0100	0.00135	mg/L		08/29/21 11:30	09/02/21 21:40	1
Beryllium	**0.0239**		0.00400	0.000490	mg/L		08/29/21 11:30	09/02/21 21:40	1
Boron	**11.8**		0.0500	0.00343	mg/L		08/29/21 11:30	09/02/21 21:40	1
Cadmium	**0.0505**		0.00500	0.00243	mg/L		08/29/21 11:30	09/02/21 21:40	1
Calcium	**709**		10.0	1.47	mg/L		08/29/21 11:30	09/02/21 21:58	50
Chromium	**0.0210**		0.0100	0.000811	mg/L		08/29/21 11:30	09/02/21 21:40	1

Client Sample ID: DUP-02

Lab Sample ID: 860-10240-12

Date Collected: 08/18/21 13:00

Matrix: Water

Date Received: 08/19/21 09:49

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	0.316		0.0100	0.000673	mg/L		08/29/21 11:30	09/02/21 21:40	1
Magnesium	130		10.0	2.50	mg/L		08/29/21 11:30	09/02/21 21:58	50
Lead	0.00802	J B	0.0100	0.00237	mg/L		08/29/21 11:30	09/02/21 21:40	1
Molybdenum	0.00448	J	0.0100	0.00123	mg/L		08/29/21 11:30	09/02/21 21:40	1
Potassium	40.5		0.500	0.107	mg/L		08/29/21 11:30	09/02/21 21:40	1
Sodium	2880		25.0	3.33	mg/L		08/29/21 11:30	09/02/21 21:58	50
Selenium	0.00439	U	0.0300	0.00439	mg/L		08/29/21 11:30	09/02/21 21:40	1
Thallium	0.00621	U	0.0200	0.00621	mg/L		08/29/21 11:30	09/02/21 21:40	1
Lithium	2.23		0.0200	0.00448	mg/L		08/29/21 11:30	09/02/21 21:40	1
SiO2	130		1.07	0.0781	mg/L		08/29/21 11:30	09/02/21 21:40	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000850	J	0.000200	0.0000263	mg/L		08/25/21 07:45	08/25/21 13:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 11:59	1
Bicarbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 11:59	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 11:59	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 11:59	1
Total Dissolved Solids	8610		100	100	mg/L			08/25/21 22:00	1

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	37.8		18.1	18.7	50.0	19.7	pCi/L	08/24/21 15:34	09/17/21 09:16	1
Radium-228	7.57	U	11.8	11.9	50.0	39.3	pCi/L	08/24/21 15:34	09/17/21 09:16	1

Client Sample ID: FB-02

Lab Sample ID: 860-10240-13

Date Collected: 08/18/21 16:10

Matrix: Water

Date Received: 08/19/21 09:49

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.619		0.500	0.200	mg/L			08/26/21 14:08	1
Fluoride	0.301	J	0.500	0.100	mg/L			08/26/21 14:08	1
Sulfate	0.150	J F1	0.500	0.109	mg/L			08/26/21 14:08	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00589	U	0.0200	0.00589	mg/L		08/29/21 11:30	09/02/21 21:44	1
Arsenic	0.00550	U	0.0100	0.00550	mg/L		08/29/21 11:30	09/02/21 21:44	1
Barium	0.00135	U	0.0100	0.00135	mg/L		08/29/21 11:30	09/02/21 21:44	1
Beryllium	0.000490	U	0.00400	0.000490	mg/L		08/29/21 11:30	09/02/21 21:44	1
Boron	0.00703	J	0.0500	0.00343	mg/L		08/29/21 11:30	09/02/21 21:44	1
Cadmium	0.00243	U	0.00500	0.00243	mg/L		08/29/21 11:30	09/02/21 21:44	1
Calcium	0.165	J	0.200	0.0293	mg/L		08/29/21 11:30	09/02/21 21:44	1
Chromium	0.000811	U	0.0100	0.000811	mg/L		08/29/21 11:30	09/02/21 21:44	1
Cobalt	0.000673	U	0.0100	0.000673	mg/L		08/29/21 11:30	09/02/21 21:44	1

Client Sample ID: FB-02

Lab Sample ID: 860-10240-13

Date Collected: 08/18/21 16:10

Matrix: Water

Date Received: 08/19/21 09:49

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	0.0500	U	0.200	0.0500	mg/L		08/29/21 11:30	09/02/21 21:44	1
Lead	0.00237	U	0.0100	0.00237	mg/L		08/29/21 11:30	09/02/21 21:44	1
Molybdenum	0.00123	U	0.0100	0.00123	mg/L		08/29/21 11:30	09/02/21 21:44	1
Potassium	**0.306**	**J**	0.500	0.107	mg/L		08/29/21 11:30	09/02/21 21:44	1
Sodium	**2.30**		0.500	0.0667	mg/L		08/29/21 11:30	09/02/21 21:44	1
Selenium	**0.00961**	**J B**	0.0300	0.00439	mg/L		08/29/21 11:30	09/02/21 21:44	1
Thallium	0.00621	U	0.0200	0.00621	mg/L		08/29/21 11:30	09/02/21 21:44	1
Lithium	0.00448	U	0.0200	0.00448	mg/L		08/29/21 11:30	09/02/21 21:44	1
SiO2	**1.41**		1.07	0.0781	mg/L		08/29/21 11:30	09/02/21 21:44	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000263	U	0.000200	0.0000263	mg/L		08/25/21 07:45	08/25/21 13:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**6.50**		5.00	5.00	mg/L			08/25/21 22:00	1

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-9.61	U	23.1	23.1	50.0	38.2	pCi/L	08/24/21 15:31	09/20/21 12:54	1
Radium-228	16.8	U	26.8	26.9	50.0	30.1	pCi/L	08/24/21 15:31	09/20/21 12:54	1

Client Sample ID: EB-01

Lab Sample ID: 860-10240-14

Date Collected: 08/18/21 17:20

Matrix: Water

Date Received: 08/19/21 09:49

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**0.682**		0.500	0.200	mg/L			08/26/21 15:23	1
Fluoride	**0.345**	**J**	0.500	0.100	mg/L			08/26/21 15:23	1
Sulfate	0.109	U	0.500	0.109	mg/L			08/26/21 15:23	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00589	U	0.0200	0.00589	mg/L		08/29/21 11:30	09/02/21 21:47	1
Arsenic	0.00550	U	0.0100	0.00550	mg/L		08/29/21 11:30	09/02/21 21:47	1
Barium	0.00135	U	0.0100	0.00135	mg/L		08/29/21 11:30	09/02/21 21:47	1
Beryllium	0.000490	U	0.00400	0.000490	mg/L		08/29/21 11:30	09/02/21 21:47	1
Boron	**0.0104**	**J**	0.0500	0.00343	mg/L		08/29/21 11:30	09/02/21 21:47	1
Cadmium	0.00243	U	0.00500	0.00243	mg/L		08/29/21 11:30	09/02/21 21:47	1
Calcium	**0.126**	**J**	0.200	0.0293	mg/L		08/29/21 11:30	09/02/21 21:47	1
Chromium	**0.00164**	**J**	0.0100	0.000811	mg/L		08/29/21 11:30	09/02/21 21:47	1
Cobalt	0.000673	U	0.0100	0.000673	mg/L		08/29/21 11:30	09/02/21 21:47	1
Magnesium	0.0500	U	0.200	0.0500	mg/L		08/29/21 11:30	09/02/21 21:47	1
Lead	0.00237	U	0.0100	0.00237	mg/L		08/29/21 11:30	09/02/21 21:47	1
Molybdenum	**0.0200**		0.0100	0.00123	mg/L		08/29/21 11:30	09/02/21 21:47	1
Potassium	**0.126**	**J**	0.500	0.107	mg/L		08/29/21 11:30	09/02/21 21:47	1
Sodium	**1.52**		0.500	0.0667	mg/L		08/29/21 11:30	09/02/21 21:47	1

Client: GSI Environmental, Inc
Project/Site: Ash Ponds

Job ID: 860-10240-1

Client Sample ID: EB-01
Date Collected: 08/18/21 17:20
Date Received: 08/19/21 09:49

Lab Sample ID: 860-10240-14
Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.00439	U	0.0300	0.00439	mg/L		08/29/21 11:30	09/02/21 21:47	1
Thallium	0.00621	U	0.0200	0.00621	mg/L		08/29/21 11:30	09/02/21 21:47	1
Lithium	0.00448	U	0.0200	0.00448	mg/L		08/29/21 11:30	09/02/21 21:47	1
SiO2	**0.628**	**J**	1.07	0.0781	mg/L		08/29/21 11:30	09/02/21 21:47	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000263	U	0.000200	0.0000263	mg/L		08/25/21 07:45	08/25/21 13:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**17.0**		5.00	5.00	mg/L			08/25/21 22:00	1

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-3.47	U	9.60	9.61	50.0	40.3	pCi/L	08/24/21 15:31	09/20/21 10:50	1
Radium-228	**27.7**		25.4	25.6	50.0	27.2	pCi/L	08/24/21 15:31	09/20/21 10:50	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-20163/3
Matrix: Water
Analysis Batch: 20163

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.200	U	0.500	0.200	mg/L			08/25/21 08:53	1
Fluoride	0.100	U	0.500	0.100	mg/L			08/25/21 08:53	1
Sulfate	0.109	U	0.500	0.109	mg/L			08/25/21 08:53	1

Lab Sample ID: MB 860-20163/58
Matrix: Water
Analysis Batch: 20163

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.200	U	0.500	0.200	mg/L			08/25/21 19:56	1
Fluoride	0.100	U	0.500	0.100	mg/L			08/25/21 19:56	1
Sulfate	0.109	U	0.500	0.109	mg/L			08/25/21 19:56	1

Lab Sample ID: LCS 860-20163/4
Matrix: Water
Analysis Batch: 20163

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.821		mg/L		98	90 - 110
Fluoride	10.0	10.11		mg/L		101	90 - 110
Sulfate	10.0	9.502		mg/L		95	90 - 110

Lab Sample ID: LCS 860-20163/59
Matrix: Water
Analysis Batch: 20163

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.917		mg/L		99	90 - 110
Fluoride	10.0	10.05		mg/L		100	90 - 110

Lab Sample ID: LCSD 860-20163/5
Matrix: Water
Analysis Batch: 20163

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	10.0	9.811		mg/L		98	90 - 110	0	20
Fluoride	10.0	10.12		mg/L		101	90 - 110	0	20
Sulfate	10.0	9.500		mg/L		95	90 - 110	0	20

Lab Sample ID: LCSD 860-20163/60
Matrix: Water
Analysis Batch: 20163

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	10.0	9.935		mg/L		99	90 - 110	0	20
Fluoride	10.0	10.10		mg/L		101	90 - 110	0	20

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 860-10240-2 MS
Matrix: Water
Analysis Batch: 20163

Client Sample ID: PZ-03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	5.38	F1	10.0	10.70	F1	mg/L		53	90 - 110

Lab Sample ID: 860-10240-2 MS
Matrix: Water
Analysis Batch: 20163

Client Sample ID: PZ-03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5300		200	5565	4	mg/L		131	90 - 110

Lab Sample ID: 860-10240-2 MSD
Matrix: Water
Analysis Batch: 20163

Client Sample ID: PZ-03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	5.38	F1	10.0	10.55	F1	mg/L		52	90 - 110	1	20

Lab Sample ID: 860-10240-2 MSD
Matrix: Water
Analysis Batch: 20163

Client Sample ID: PZ-03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	5300		200	5571	4	mg/L		134	90 - 110	0	20

Lab Sample ID: MB 860-20165/120
Matrix: Water
Analysis Batch: 20165

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.200	U	0.500	0.200	mg/L			08/26/21 12:53	1
Fluoride	0.100	U	0.500	0.100	mg/L			08/26/21 12:53	1
Sulfate	0.109	U	0.500	0.109	mg/L			08/26/21 12:53	1

Lab Sample ID: MB 860-20165/42
Matrix: Water
Analysis Batch: 20165

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.200	U	0.500	0.200	mg/L			08/25/21 15:50	1
Fluoride	0.100	U	0.500	0.100	mg/L			08/25/21 15:50	1
Sulfate	0.2109	J	0.500	0.109	mg/L			08/25/21 15:50	1

Lab Sample ID: LCS 860-20165/121
Matrix: Water
Analysis Batch: 20165

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.961		mg/L		100	90 - 110
Fluoride	10.0	9.197		mg/L		92	90 - 110
Sulfate	10.0	9.696		mg/L		97	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 860-20165/43
Matrix: Water
Analysis Batch: 20165

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			10.0	10.23		mg/L		102	90 - 110		
Fluoride			10.0	10.56		mg/L		106	90 - 110		
Sulfate			10.0	10.29		mg/L		103	90 - 110		

Lab Sample ID: LCSD 860-20165/122
Matrix: Water
Analysis Batch: 20165

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			10.0	10.02		mg/L		100	90 - 110	1	20
Fluoride			10.0	9.300		mg/L		93	90 - 110	1	20
Sulfate			10.0	9.208		mg/L		92	90 - 110	5	20

Lab Sample ID: LCSD 860-20165/44
Matrix: Water
Analysis Batch: 20165

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			10.0	10.03		mg/L		100	90 - 110	2	20
Fluoride			10.0	10.39		mg/L		104	90 - 110	2	20
Sulfate			10.0	10.14		mg/L		101	90 - 110	1	20

Lab Sample ID: 860-10240-13 MS
Matrix: Water
Analysis Batch: 20165

Client Sample ID: FB-02
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	0.619		10.0	10.27		mg/L		97	90 - 110		
Fluoride	0.301	J	10.0	9.288		mg/L		90	90 - 110		
Sulfate	0.150	J F1	10.0	9.441		mg/L		93	90 - 110		

Lab Sample ID: 860-10240-13 MSD
Matrix: Water
Analysis Batch: 20165

Client Sample ID: FB-02
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	0.619		10.0	10.28		mg/L		97	90 - 110	0	20
Fluoride	0.301	J	10.0	9.503		mg/L		92	90 - 110	2	20
Sulfate	0.150	J F1	10.0	9.250		mg/L		91	90 - 110	2	20

Lab Sample ID: MB 860-20520/3
Matrix: Water
Analysis Batch: 20520

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.200	U	0.500	0.200	mg/L			08/27/21 08:38	1
Fluoride	0.100	U	0.500	0.100	mg/L			08/27/21 08:38	1
Sulfate	0.109	U	0.500	0.109	mg/L			08/27/21 08:38	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 860-20520/4
Matrix: Water
Analysis Batch: 20520

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			10.0	9.925		mg/L		99	90 - 110		
Fluoride			10.0	10.26		mg/L		103	90 - 110		
Sulfate			10.0	9.316		mg/L		93	90 - 110		

Lab Sample ID: LCSD 860-20520/5
Matrix: Water
Analysis Batch: 20520

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			10.0	9.926		mg/L		99	90 - 110	0	20
Fluoride			10.0	10.27		mg/L		103	90 - 110	0	20
Sulfate			10.0	9.313		mg/L		93	90 - 110	0	20

Lab Sample ID: 860-10240-2 MS
Matrix: Water
Analysis Batch: 20520

Client Sample ID: PZ-03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	4120		500	4504	4	mg/L		77	90 - 110		

Lab Sample ID: 860-10240-2 MSD
Matrix: Water
Analysis Batch: 20520

Client Sample ID: PZ-03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	4120		500	4487	4	mg/L		74	90 - 110	0	20

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 860-20705/1-A
Matrix: Water
Analysis Batch: 21463

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20705

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00589	U	0.0200	0.00589	mg/L		08/29/21 11:30	09/02/21 16:58	1
Arsenic	0.00550	U	0.0100	0.00550	mg/L		08/29/21 11:30	09/02/21 16:58	1
Barium	0.00135	U	0.0100	0.00135	mg/L		08/29/21 11:30	09/02/21 16:58	1
Beryllium	0.000490	U	0.00400	0.000490	mg/L		08/29/21 11:30	09/02/21 16:58	1
Boron	0.00343	U	0.0500	0.00343	mg/L		08/29/21 11:30	09/02/21 16:58	1
Cadmium	0.00243	U	0.00500	0.00243	mg/L		08/29/21 11:30	09/02/21 16:58	1
Calcium	0.0293	U	0.200	0.0293	mg/L		08/29/21 11:30	09/02/21 16:58	1
Chromium	0.000811	U	0.0100	0.000811	mg/L		08/29/21 11:30	09/02/21 16:58	1
Cobalt	0.000673	U	0.0100	0.000673	mg/L		08/29/21 11:30	09/02/21 16:58	1
Magnesium	0.0500	U	0.200	0.0500	mg/L		08/29/21 11:30	09/02/21 16:58	1
Lead	0.002597	J	0.0100	0.00237	mg/L		08/29/21 11:30	09/02/21 16:58	1
Molybdenum	0.00123	U	0.0100	0.00123	mg/L		08/29/21 11:30	09/02/21 16:58	1
Potassium	0.107	U	0.500	0.107	mg/L		08/29/21 11:30	09/02/21 16:58	1
Sodium	0.0667	U	0.500	0.0667	mg/L		08/29/21 11:30	09/02/21 16:58	1
Selenium	0.007764	J	0.0300	0.00439	mg/L		08/29/21 11:30	09/02/21 16:58	1
Thallium	0.00621	U	0.0200	0.00621	mg/L		08/29/21 11:30	09/02/21 16:58	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 860-20705/1-A
Matrix: Water
Analysis Batch: 21463

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20705

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.00448	U	0.0200	0.00448	mg/L		08/29/21 11:30	09/02/21 16:58	1
SiO2	0.0781	U	1.07	0.0781	mg/L		08/29/21 11:30	09/02/21 16:58	1

Lab Sample ID: LCS 860-20705/2-A
Matrix: Water
Analysis Batch: 21463

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20705

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.00	0.9764		mg/L		98	80 - 120
Arsenic	1.00	0.9677		mg/L		97	80 - 120
Barium	1.00	0.9552		mg/L		96	80 - 120
Beryllium	1.00	0.9637		mg/L		96	80 - 120
Boron	1.00	0.9624		mg/L		96	80 - 120
Cadmium	1.00	0.9671		mg/L		97	80 - 120
Calcium	25.0	25.21		mg/L		101	80 - 120
Chromium	1.00	1.037		mg/L		104	80 - 120
Cobalt	1.00	0.9746		mg/L		97	80 - 120
Magnesium	25.0	24.84		mg/L		99	80 - 120
Lead	1.00	1.000		mg/L		100	80 - 120
Molybdenum	1.00	1.004		mg/L		100	80 - 120
Potassium	10.0	10.02		mg/L		100	80 - 120
Silicon	10.0	9.542		mg/L		95	80 - 120
Sodium	25.0	25.13		mg/L		101	80 - 120
Selenium	1.00	0.9630		mg/L		96	80 - 120
Thallium	1.00	1.033		mg/L		103	80 - 120
Lithium	1.00	0.9851		mg/L		99	80 - 120

Lab Sample ID: LCSD 860-20705/3-A
Matrix: Water
Analysis Batch: 21463

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 20705

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	1.00	0.9703		mg/L		97	80 - 120	1	20
Arsenic	1.00	0.9630		mg/L		96	80 - 120	0	20
Barium	1.00	0.9554		mg/L		96	80 - 120	0	20
Beryllium	1.00	0.9647		mg/L		96	80 - 120	0	20
Boron	1.00	0.9668		mg/L		97	80 - 120	0	20
Cadmium	1.00	0.9638		mg/L		96	80 - 120	0	20
Calcium	25.0	25.16		mg/L		101	80 - 120	0	20
Chromium	1.00	1.036		mg/L		104	80 - 120	0	20
Cobalt	1.00	0.9715		mg/L		97	80 - 120	0	20
Magnesium	25.0	24.76		mg/L		99	80 - 120	0	20
Lead	1.00	0.9973		mg/L		100	80 - 120	0	20
Molybdenum	1.00	1.002		mg/L		100	80 - 120	0	20
Potassium	10.0	9.997		mg/L		100	80 - 120	0	20
Silicon	10.0	9.546		mg/L		95	80 - 120	0	20
Sodium	25.0	25.10		mg/L		100	80 - 120	0	20
Selenium	1.00	0.9490		mg/L		95	80 - 120	1	20
Thallium	1.00	1.039		mg/L		104	80 - 120	1	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSD 860-20705/3-A
Matrix: Water
Analysis Batch: 21463

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 20705

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lithium			1.00	0.9791		mg/L		98	80 - 120	1	20

Lab Sample ID: 860-10240-2 MS
Matrix: Water
Analysis Batch: 21463

Client Sample ID: PZ-03
Prep Type: Total/NA
Prep Batch: 20705

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.00762	J	1.00	0.8166		mg/L		81	75 - 125
Arsenic	0.0311		1.00	0.8390		mg/L		81	75 - 125
Barium	0.0141	F1	1.00	0.7428	F1	mg/L		73	75 - 125
Beryllium	0.196	F1	1.00	0.9426		mg/L		75	75 - 125
Boron	7.48		1.00	8.284	4	mg/L		80	75 - 125
Cadmium	0.428		1.00	1.234		mg/L		81	75 - 125
Calcium	569	E	25.0	586.9	E 4	mg/L		73	75 - 125
Chromium	0.000811	U	1.00	0.7662		mg/L		77	75 - 125
Cobalt	1.09	F1	1.00	1.838		mg/L		75	75 - 125
Magnesium	195	E	25.0	214.6	E 4	mg/L		77	75 - 125
Lead	0.0218	F1 B	1.00	0.7559	F1	mg/L		73	75 - 125
Molybdenum	0.00939	J	1.00	0.7911		mg/L		78	75 - 125
Potassium	26.2		10.0	35.44		mg/L		92	75 - 125
Silicon	49.7		10.0	59.85	4	mg/L		102	75 - 125
Sodium	2120	E	25.0	2100	E 4	mg/L		-62	75 - 125
Selenium	0.0130	J B	1.00	0.8258		mg/L		81	75 - 125
Thallium	0.00621	U F1	1.00	0.7097	F1	mg/L		71	75 - 125
Lithium	2.20		1.00	3.066		mg/L		86	

Lab Sample ID: 860-10240-2 MSD
Matrix: Water
Analysis Batch: 21463

Client Sample ID: PZ-03
Prep Type: Total/NA
Prep Batch: 20705

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.00762	J	1.00	0.8154		mg/L		81	75 - 125	0	20
Arsenic	0.0311		1.00	0.8543		mg/L		82	75 - 125	2	20
Barium	0.0141	F1	1.00	0.7345	F1	mg/L		72	75 - 125	1	20
Beryllium	0.196	F1	1.00	0.9389	F1	mg/L		74	75 - 125	0	20
Boron	7.48		1.00	8.252	4	mg/L		77	75 - 125	0	20
Cadmium	0.428		1.00	1.224		mg/L		80	75 - 125	1	20
Calcium	569	E	25.0	584.3	E 4	mg/L		63	75 - 125	0	20
Chromium	0.000811	U	1.00	0.7618		mg/L		76	75 - 125	1	20
Cobalt	1.09	F1	1.00	1.829	F1	mg/L		74	75 - 125	1	20
Magnesium	195	E	25.0	213.6	E 4	mg/L		73	75 - 125	0	20
Lead	0.0218	F1 B	1.00	0.7507	F1	mg/L		73	75 - 125	1	20
Molybdenum	0.00939	J	1.00	0.7827		mg/L		77	75 - 125	1	20
Potassium	26.2		10.0	35.26		mg/L		90	75 - 125	0	20
Silicon	49.7		10.0	59.42	4	mg/L		97	75 - 125	1	20
Sodium	2120	E	25.0	2079	E 4	mg/L		-144	75 - 125	1	20
Selenium	0.0130	J B	1.00	0.8257		mg/L		81	75 - 125	0	20
Thallium	0.00621	U F1	1.00	0.7062	F1	mg/L		71	75 - 125	0	20
Lithium	2.20		1.00	3.024		mg/L		82		1	

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 860-19980/10-A
Matrix: Water
Analysis Batch: 20268

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19980

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000263	U	0.000200	0.0000263	mg/L		08/25/21 07:45	08/25/21 13:20	1

Lab Sample ID: LCS 860-19980/11-A
Matrix: Water
Analysis Batch: 20268

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19980

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.002025		mg/L		101	80 - 120

Lab Sample ID: LCSD 860-19980/12-A
Matrix: Water
Analysis Batch: 20268

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 19980

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00200	0.002039		mg/L		102	80 - 120	1	20

Lab Sample ID: 860-10240-2 MS
Matrix: Water
Analysis Batch: 20268

Client Sample ID: PZ-03
Prep Type: Total/NA
Prep Batch: 19980

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0000263	U	0.00200	0.001789		mg/L		89	75 - 125

Lab Sample ID: 860-10240-2 MSD
Matrix: Water
Analysis Batch: 20268

Client Sample ID: PZ-03
Prep Type: Total/NA
Prep Batch: 19980

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.0000263	U	0.00200	0.001807		mg/L		90	75 - 125	1	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-20239/4
Matrix: Water
Analysis Batch: 20239

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 10:24	1
Bicarbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 10:24	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/25/21 10:24	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/25/21 10:24	1

Lab Sample ID: LCS 860-20239/5
Matrix: Water
Analysis Batch: 20239

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity	250	269.0		mg/L		108	85 - 115

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCSD 860-20239/6
Matrix: Water
Analysis Batch: 20239

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Alkalinity			250	268.4		mg/L		107	85 - 115	0	20

Lab Sample ID: 860-10240-9 DU
Matrix: Water
Analysis Batch: 20239

Client Sample ID: MW-03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Alkalinity	4.00	U		4.00	U	mg/L				NC	20
Bicarbonate Alkalinity as CaCO3	4.00	U		4.00	U	mg/L				NC	20
Carbonate Alkalinity as CaCO3	4.00	U		4.00	U	mg/L				NC	20
Hydroxide Alkalinity	4.00	U		4.00	U	mg/L				NC	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 860-20328/1
Matrix: Water
Analysis Batch: 20328

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	5.00	U	5.00	5.00	mg/L			08/25/21 22:00	1

Lab Sample ID: LCS 860-20328/2
Matrix: Water
Analysis Batch: 20328

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			1000	1018		mg/L		102	80 - 120		

Lab Sample ID: LCSD 860-20328/3
Matrix: Water
Analysis Batch: 20328

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Dissolved Solids			1000	1043		mg/L		104	80 - 120	2	10

Lab Sample ID: 860-10240-6 DU
Matrix: Water
Analysis Batch: 20328

Client Sample ID: AP-34
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	9590			8940		mg/L				7	10

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Lab Sample ID: MB 160-523926/1-A
Matrix: Water
Analysis Batch: 527651

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 523926

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-17.32	U	21.9	21.9	50.0	48.7	pCi/L	08/24/21 15:31	09/20/21 15:56	1
Radium-228	17.76	U	24.3	24.4	50.0	30.1	pCi/L	08/24/21 15:31	09/20/21 15:56	1

Lab Sample ID: LCS 160-523926/2-A
Matrix: Water
Analysis Batch: 527651

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 523926

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Americium-241	135000	131100		15400		471	pCi/L	97	86 - 111
Cesium-137	42300	41150		4850		136	pCi/L	97	90 - 110
Cobalt-60	21700	21130		2490		115	pCi/L	97	89 - 110

Lab Sample ID: 860-10240-14 DU
Matrix: Water
Analysis Batch: 527649

Client Sample ID: EB-01
Prep Type: Total/NA
Prep Batch: 523926

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	-3.47	U	-0.8689	U	1.45	50.0	41.9	pCi/L	0.24	1
Radium-228	27.7		-1.896	U	33.7	50.0	38.2	pCi/L	0.50	1

Lab Sample ID: MB 160-523927/1-A
Matrix: Water
Analysis Batch: 527649

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 523927

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-26.56	U	18.3	18.6	50.0	48.9	pCi/L	08/24/21 15:34	09/20/21 18:12	1
Radium-228	7.659	U	21.2	21.2	50.0	33.8	pCi/L	08/24/21 15:34	09/20/21 18:12	1

Lab Sample ID: LCS 160-523927/2-A
Matrix: Water
Analysis Batch: 527496

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 523927

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Americium-241	135000	131400		15500		422	pCi/L	97	86 - 111
Cesium-137	42300	38650		4550		206	pCi/L	91	90 - 110
Cobalt-60	21800	21660		2560		116	pCi/L	100	89 - 110

HPLC/IC

Analysis Batch: 20163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10240-1	PZ-02	Total/NA	Water	300.0	
860-10240-1	PZ-02	Total/NA	Water	300.0	
860-10240-2	PZ-03	Total/NA	Water	300.0	
860-10240-2	PZ-03	Total/NA	Water	300.0	
860-10240-3	AP-31	Total/NA	Water	300.0	
860-10240-3	AP-31	Total/NA	Water	300.0	
860-10240-4	AP-32	Total/NA	Water	300.0	
860-10240-4	AP-32	Total/NA	Water	300.0	
MB 860-20163/3	Method Blank	Total/NA	Water	300.0	
MB 860-20163/58	Method Blank	Total/NA	Water	300.0	
LCS 860-20163/4	Lab Control Sample	Total/NA	Water	300.0	
LCS 860-20163/59	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-20163/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 860-20163/60	Lab Control Sample Dup	Total/NA	Water	300.0	
860-10240-2 MS	PZ-03	Total/NA	Water	300.0	
860-10240-2 MS	PZ-03	Total/NA	Water	300.0	
860-10240-2 MSD	PZ-03	Total/NA	Water	300.0	
860-10240-2 MSD	PZ-03	Total/NA	Water	300.0	

Analysis Batch: 20165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10240-5	AP-33	Total/NA	Water	300.0	
860-10240-5	AP-33	Total/NA	Water	300.0	
860-10240-6	AP-34	Total/NA	Water	300.0	
860-10240-6	AP-34	Total/NA	Water	300.0	
860-10240-7	AP-35	Total/NA	Water	300.0	
860-10240-7	AP-35	Total/NA	Water	300.0	
860-10240-8	AP-36	Total/NA	Water	300.0	
860-10240-8	AP-36	Total/NA	Water	300.0	
860-10240-9	MW-03	Total/NA	Water	300.0	
860-10240-10	PZ-05	Total/NA	Water	300.0	
860-10240-10	PZ-05	Total/NA	Water	300.0	
860-10240-11	PZ-06	Total/NA	Water	300.0	
860-10240-12	DUP-02	Total/NA	Water	300.0	
860-10240-13	FB-02	Total/NA	Water	300.0	
860-10240-14	EB-01	Total/NA	Water	300.0	
MB 860-20165/120	Method Blank	Total/NA	Water	300.0	
MB 860-20165/42	Method Blank	Total/NA	Water	300.0	
LCS 860-20165/121	Lab Control Sample	Total/NA	Water	300.0	
LCS 860-20165/43	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-20165/122	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 860-20165/44	Lab Control Sample Dup	Total/NA	Water	300.0	
860-10240-13 MS	FB-02	Total/NA	Water	300.0	
860-10240-13 MSD	FB-02	Total/NA	Water	300.0	

Analysis Batch: 20520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10240-1	PZ-02	Total/NA	Water	300.0	
860-10240-2	PZ-03	Total/NA	Water	300.0	
860-10240-3	AP-31	Total/NA	Water	300.0	
860-10240-4	AP-32	Total/NA	Water	300.0	

HPLC/IC (Continued)

Analysis Batch: 20520 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-20520/3	Method Blank	Total/NA	Water	300.0	
LCS 860-20520/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-20520/5	Lab Control Sample Dup	Total/NA	Water	300.0	
860-10240-2 MS	PZ-03	Total/NA	Water	300.0	
860-10240-2 MSD	PZ-03	Total/NA	Water	300.0	

Metals

Prep Batch: 19980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10240-1	PZ-02	Total/NA	Water	7470A	
860-10240-2	PZ-03	Total/NA	Water	7470A	
860-10240-3	AP-31	Total/NA	Water	7470A	
860-10240-4	AP-32	Total/NA	Water	7470A	
860-10240-5	AP-33	Total/NA	Water	7470A	
860-10240-6	AP-34	Total/NA	Water	7470A	
860-10240-7	AP-35	Total/NA	Water	7470A	
860-10240-8	AP-36	Total/NA	Water	7470A	
860-10240-9	MW-03	Total/NA	Water	7470A	
860-10240-10	PZ-05	Total/NA	Water	7470A	
860-10240-11	PZ-06	Total/NA	Water	7470A	
860-10240-12	DUP-02	Total/NA	Water	7470A	
860-10240-13	FB-02	Total/NA	Water	7470A	
860-10240-14	EB-01	Total/NA	Water	7470A	
MB 860-19980/10-A	Method Blank	Total/NA	Water	7470A	
LCS 860-19980/11-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 860-19980/12-A	Lab Control Sample Dup	Total/NA	Water	7470A	
860-10240-2 MS	PZ-03	Total/NA	Water	7470A	
860-10240-2 MSD	PZ-03	Total/NA	Water	7470A	

Analysis Batch: 20268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10240-1	PZ-02	Total/NA	Water	7470A	19980
860-10240-2	PZ-03	Total/NA	Water	7470A	19980
860-10240-3	AP-31	Total/NA	Water	7470A	19980
860-10240-4	AP-32	Total/NA	Water	7470A	19980
860-10240-5	AP-33	Total/NA	Water	7470A	19980
860-10240-6	AP-34	Total/NA	Water	7470A	19980
860-10240-7	AP-35	Total/NA	Water	7470A	19980
860-10240-8	AP-36	Total/NA	Water	7470A	19980
860-10240-9	MW-03	Total/NA	Water	7470A	19980
860-10240-10	PZ-05	Total/NA	Water	7470A	19980
860-10240-11	PZ-06	Total/NA	Water	7470A	19980
860-10240-12	DUP-02	Total/NA	Water	7470A	19980
860-10240-13	FB-02	Total/NA	Water	7470A	19980
860-10240-14	EB-01	Total/NA	Water	7470A	19980
MB 860-19980/10-A	Method Blank	Total/NA	Water	7470A	19980
LCS 860-19980/11-A	Lab Control Sample	Total/NA	Water	7470A	19980
LCSD 860-19980/12-A	Lab Control Sample Dup	Total/NA	Water	7470A	19980
860-10240-2 MS	PZ-03	Total/NA	Water	7470A	19980
860-10240-2 MSD	PZ-03	Total/NA	Water	7470A	19980

Metals

Prep Batch: 20705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10240-1	PZ-02	Total/NA	Water	3010A	
860-10240-2	PZ-03	Total/NA	Water	3010A	
860-10240-3	AP-31	Total/NA	Water	3010A	
860-10240-4	AP-32	Total/NA	Water	3010A	
860-10240-5	AP-33	Total/NA	Water	3010A	
860-10240-6	AP-34	Total/NA	Water	3010A	
860-10240-7	AP-35	Total/NA	Water	3010A	
860-10240-8	AP-36	Total/NA	Water	3010A	
860-10240-9	MW-03	Total/NA	Water	3010A	
860-10240-10	PZ-05	Total/NA	Water	3010A	
860-10240-11	PZ-06	Total/NA	Water	3010A	
860-10240-12	DUP-02	Total/NA	Water	3010A	
860-10240-13	FB-02	Total/NA	Water	3010A	
860-10240-14	EB-01	Total/NA	Water	3010A	
MB 860-20705/1-A	Method Blank	Total/NA	Water	3010A	
LCS 860-20705/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 860-20705/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	
860-10240-2 MS	PZ-03	Total/NA	Water	3010A	
860-10240-2 MSD	PZ-03	Total/NA	Water	3010A	

Analysis Batch: 21463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10240-1	PZ-02	Total/NA	Water	6010C	20705
860-10240-1	PZ-02	Total/NA	Water	6010C	20705
860-10240-2	PZ-03	Total/NA	Water	6010C	20705
860-10240-2	PZ-03	Total/NA	Water	6010C	20705
860-10240-3	AP-31	Total/NA	Water	6010C	20705
860-10240-3	AP-31	Total/NA	Water	6010C	20705
860-10240-4	AP-32	Total/NA	Water	6010C	20705
860-10240-4	AP-32	Total/NA	Water	6010C	20705
860-10240-5	AP-33	Total/NA	Water	6010C	20705
860-10240-5	AP-33	Total/NA	Water	6010C	20705
860-10240-6	AP-34	Total/NA	Water	6010C	20705
860-10240-6	AP-34	Total/NA	Water	6010C	20705
860-10240-7	AP-35	Total/NA	Water	6010C	20705
860-10240-7	AP-35	Total/NA	Water	6010C	20705
860-10240-8	AP-36	Total/NA	Water	6010C	20705
860-10240-8	AP-36	Total/NA	Water	6010C	20705
860-10240-9	MW-03	Total/NA	Water	6010C	20705
860-10240-9	MW-03	Total/NA	Water	6010C	20705
860-10240-10	PZ-05	Total/NA	Water	6010C	20705
860-10240-10	PZ-05	Total/NA	Water	6010C	20705
860-10240-11	PZ-06	Total/NA	Water	6010C	20705
860-10240-11	PZ-06	Total/NA	Water	6010C	20705
860-10240-12	DUP-02	Total/NA	Water	6010C	20705
860-10240-12	DUP-02	Total/NA	Water	6010C	20705
860-10240-13	FB-02	Total/NA	Water	6010C	20705
860-10240-14	EB-01	Total/NA	Water	6010C	20705
MB 860-20705/1-A	Method Blank	Total/NA	Water	6010C	20705
LCS 860-20705/2-A	Lab Control Sample	Total/NA	Water	6010C	20705
LCSD 860-20705/3-A	Lab Control Sample Dup	Total/NA	Water	6010C	20705

Metals (Continued)

Analysis Batch: 21463 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10240-2 MS	PZ-03	Total/NA	Water	6010C	20705
860-10240-2 MSD	PZ-03	Total/NA	Water	6010C	20705

General Chemistry

Analysis Batch: 20239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10240-1	PZ-02	Total/NA	Water	SM 2320B	
860-10240-2	PZ-03	Total/NA	Water	SM 2320B	
860-10240-3	AP-31	Total/NA	Water	SM 2320B	
860-10240-4	AP-32	Total/NA	Water	SM 2320B	
860-10240-5	AP-33	Total/NA	Water	SM 2320B	
860-10240-6	AP-34	Total/NA	Water	SM 2320B	
860-10240-7	AP-35	Total/NA	Water	SM 2320B	
860-10240-8	AP-36	Total/NA	Water	SM 2320B	
860-10240-9	MW-03	Total/NA	Water	SM 2320B	
860-10240-10	PZ-05	Total/NA	Water	SM 2320B	
860-10240-11	PZ-06	Total/NA	Water	SM 2320B	
860-10240-12	DUP-02	Total/NA	Water	SM 2320B	
MB 860-20239/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-20239/5	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-20239/6	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
860-10240-9 DU	MW-03	Total/NA	Water	SM 2320B	

Analysis Batch: 20328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10240-1	PZ-02	Total/NA	Water	SM 2540C	
860-10240-2	PZ-03	Total/NA	Water	SM 2540C	
860-10240-3	AP-31	Total/NA	Water	SM 2540C	
860-10240-4	AP-32	Total/NA	Water	SM 2540C	
860-10240-5	AP-33	Total/NA	Water	SM 2540C	
860-10240-6	AP-34	Total/NA	Water	SM 2540C	
860-10240-7	AP-35	Total/NA	Water	SM 2540C	
860-10240-8	AP-36	Total/NA	Water	SM 2540C	
860-10240-9	MW-03	Total/NA	Water	SM 2540C	
860-10240-10	PZ-05	Total/NA	Water	SM 2540C	
860-10240-11	PZ-06	Total/NA	Water	SM 2540C	
860-10240-12	DUP-02	Total/NA	Water	SM 2540C	
860-10240-13	FB-02	Total/NA	Water	SM 2540C	
860-10240-14	EB-01	Total/NA	Water	SM 2540C	
MB 860-20328/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 860-20328/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 860-20328/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
860-10240-6 DU	AP-34	Total/NA	Water	SM 2540C	

Rad

Prep Batch: 523926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10240-1	PZ-02	Total/NA	Water	Fill_Geo-21	
860-10240-2	PZ-03	Total/NA	Water	Fill_Geo-21	
860-10240-3	AP-31	Total/NA	Water	Fill_Geo-21	

Rad (Continued)

Prep Batch: 523926 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10240-4	AP-32	Total/NA	Water	Fill_Geo-21	
860-10240-5	AP-33	Total/NA	Water	Fill_Geo-21	
860-10240-6	AP-34	Total/NA	Water	Fill_Geo-21	
860-10240-7	AP-35	Total/NA	Water	Fill_Geo-21	
860-10240-8	AP-36	Total/NA	Water	Fill_Geo-21	
860-10240-13	FB-02	Total/NA	Water	Fill_Geo-21	
860-10240-14	EB-01	Total/NA	Water	Fill_Geo-21	
MB 160-523926/1-A	Method Blank	Total/NA	Water	Fill_Geo-21	
LCS 160-523926/2-A	Lab Control Sample	Total/NA	Water	Fill_Geo-21	
860-10240-14 DU	EB-01	Total/NA	Water	Fill_Geo-21	

Prep Batch: 523927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10240-9	MW-03	Total/NA	Water	Fill_Geo-21	
860-10240-10	PZ-05	Total/NA	Water	Fill_Geo-21	
860-10240-11	PZ-06	Total/NA	Water	Fill_Geo-21	
860-10240-12	DUP-02	Total/NA	Water	Fill_Geo-21	
MB 160-523927/1-A	Method Blank	Total/NA	Water	Fill_Geo-21	
LCS 160-523927/2-A	Lab Control Sample	Total/NA	Water	Fill_Geo-21	

Client Sample ID: PZ-02

Lab Sample ID: 860-10240-1

Date Collected: 08/18/21 14:35

Matrix: Water

Date Received: 08/19/21 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			20163	08/25/21 16:45	JM	XEN STF
Total/NA	Analysis	300.0		20			20163	08/25/21 18:15	JM	XEN STF
Total/NA	Analysis	300.0		50			20520	08/27/21 09:34	JM	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20705	08/29/21 11:30	MD	XEN STF
Total/NA	Analysis	6010C		1			21463	09/02/21 17:56	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20705	08/29/21 11:30	MD	XEN STF
Total/NA	Analysis	6010C		50			21463	09/02/21 18:14	DP	XEN STF
Total/NA	Prep	7470A			50 mL	50 mL	19980	08/25/21 07:45	AGR	XEN STF
Total/NA	Analysis	7470A		1			20268	08/25/21 13:33	AV	XEN STF
Total/NA	Analysis	SM 2320B		1			20239	08/25/21 11:04	ANP	XEN STF
Total/NA	Analysis	SM 2540C		1	10 mL	200 mL	20328	08/25/21 22:00	YGG	XEN STF
Total/NA	Prep	Fill_Geo-21			1000 mL	1.0 g	523926	08/24/21 15:31	ZTH	TAL SL
Total/NA	Analysis	901.1		1			527625	09/19/21 21:35	RMJ	TAL SL

Client Sample ID: PZ-03

Lab Sample ID: 860-10240-2

Date Collected: 08/18/21 15:35

Matrix: Water

Date Received: 08/19/21 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			20163	08/25/21 16:56	JM	XEN STF
Total/NA	Analysis	300.0		20			20163	08/25/21 18:26	JM	XEN STF
Total/NA	Analysis	300.0		50			20520	08/27/21 09:46	JM	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20705	08/29/21 11:30	MD	XEN STF
Total/NA	Analysis	6010C		1			21463	09/02/21 17:08	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20705	08/29/21 11:30	MD	XEN STF
Total/NA	Analysis	6010C		50			21463	09/02/21 17:41	DP	XEN STF
Total/NA	Prep	7470A			50 mL	50 mL	19980	08/25/21 07:45	AGR	XEN STF
Total/NA	Analysis	7470A		1			20268	08/25/21 13:24	AV	XEN STF
Total/NA	Analysis	SM 2320B		1			20239	08/25/21 11:07	ANP	XEN STF
Total/NA	Analysis	SM 2540C		1	10 mL	200 mL	20328	08/25/21 22:00	YGG	XEN STF
Total/NA	Prep	Fill_Geo-21			1000 mL	1.0 g	523926	08/24/21 15:31	ZTH	TAL SL
Total/NA	Analysis	901.1		1			527624	09/19/21 21:36	RMJ	TAL SL

Client Sample ID: AP-31

Lab Sample ID: 860-10240-3

Date Collected: 08/18/21 13:45

Matrix: Water

Date Received: 08/19/21 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			20163	08/25/21 17:52	JM	XEN STF
Total/NA	Analysis	300.0		20			20163	08/25/21 18:59	JM	XEN STF
Total/NA	Analysis	300.0		50			20520	08/27/21 10:19	JM	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20705	08/29/21 11:30	MD	XEN STF
Total/NA	Analysis	6010C		1			21463	09/02/21 17:59	DP	XEN STF

Client Sample ID: AP-31

Lab Sample ID: 860-10240-3

Date Collected: 08/18/21 13:45

Matrix: Water

Date Received: 08/19/21 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	20705	08/29/21 11:30	MD	XEN STF
Total/NA	Analysis	6010C		50			21463	09/02/21 18:17	DP	XEN STF
Total/NA	Prep	7470A			50 mL	50 mL	19980	08/25/21 07:45	AGR	XEN STF
Total/NA	Analysis	7470A		1			20268	08/25/21 13:35	AV	XEN STF
Total/NA	Analysis	SM 2320B		1			20239	08/25/21 11:11	ANP	XEN STF
Total/NA	Analysis	SM 2540C		1	10 mL	200 mL	20328	08/25/21 22:00	YGG	XEN STF
Total/NA	Prep	Fill_Geo-21			1000 mL	1.0 g	523926	08/24/21 15:31	ZTH	TAL SL
Total/NA	Analysis	901.1		1			527651	09/20/21 06:43	RMJ	TAL SL

Client Sample ID: AP-32

Lab Sample ID: 860-10240-4

Date Collected: 08/18/21 17:35

Matrix: Water

Date Received: 08/19/21 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			20163	08/25/21 18:03	JM	XEN STF
Total/NA	Analysis	300.0		20			20163	08/25/21 19:11	JM	XEN STF
Total/NA	Analysis	300.0		50			20520	08/27/21 10:31	JM	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20705	08/29/21 11:30	MD	XEN STF
Total/NA	Analysis	6010C		1			21463	09/02/21 18:03	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20705	08/29/21 11:30	MD	XEN STF
Total/NA	Analysis	6010C		50			21463	09/02/21 18:21	DP	XEN STF
Total/NA	Prep	7470A			50 mL	50 mL	19980	08/25/21 07:45	AGR	XEN STF
Total/NA	Analysis	7470A		1			20268	08/25/21 13:36	AV	XEN STF
Total/NA	Analysis	SM 2320B		1			20239	08/25/21 11:14	ANP	XEN STF
Total/NA	Analysis	SM 2540C		1	10 mL	200 mL	20328	08/25/21 22:00	YGG	XEN STF
Total/NA	Prep	Fill_Geo-21			1000 mL	1.0 g	523926	08/24/21 15:31	ZTH	TAL SL
Total/NA	Analysis	901.1		1			527649	09/20/21 06:41	RMJ	TAL SL

Client Sample ID: AP-33

Lab Sample ID: 860-10240-5

Date Collected: 08/18/21 16:55

Matrix: Water

Date Received: 08/19/21 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			20165	08/25/21 16:19	WP	XEN STF
Total/NA	Analysis	300.0		20			20165	08/25/21 16:28	WP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20705	08/29/21 11:30	MD	XEN STF
Total/NA	Analysis	6010C		1			21463	09/02/21 18:07	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20705	08/29/21 11:30	MD	XEN STF
Total/NA	Analysis	6010C		50			21463	09/02/21 18:25	DP	XEN STF
Total/NA	Prep	7470A			50 mL	50 mL	19980	08/25/21 07:45	AGR	XEN STF
Total/NA	Analysis	7470A		1			20268	08/25/21 13:38	AV	XEN STF
Total/NA	Analysis	SM 2320B		1			20239	08/25/21 11:30	ANP	XEN STF
Total/NA	Analysis	SM 2540C		1	10 mL	200 mL	20328	08/25/21 22:00	YGG	XEN STF

Client Sample ID: AP-33

Lab Sample ID: 860-10240-5

Date Collected: 08/18/21 16:55

Matrix: Water

Date Received: 08/19/21 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	Fill_Geo-21			1000 mL	1.0 g	523926	08/24/21 15:31	ZTH	TAL SL
Total/NA	Analysis	901.1		1			527649	09/20/21 08:47	RMJ	TAL SL

Client Sample ID: AP-34

Lab Sample ID: 860-10240-6

Date Collected: 08/18/21 15:20

Matrix: Water

Date Received: 08/19/21 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			20165	08/25/21 16:38	WP	XEN STF
Total/NA	Analysis	300.0		20			20165	08/25/21 16:47	WP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20705	08/29/21 11:30	MD	XEN STF
Total/NA	Analysis	6010C		1			21463	09/02/21 18:10	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20705	08/29/21 11:30	MD	XEN STF
Total/NA	Analysis	6010C		50			21463	09/02/21 18:28	DP	XEN STF
Total/NA	Prep	7470A			50 mL	50 mL	19980	08/25/21 07:45	AGR	XEN STF
Total/NA	Analysis	7470A		10			20268	08/25/21 14:04	AV	XEN STF
Total/NA	Analysis	SM 2320B		1			20239	08/25/21 11:34	ANP	XEN STF
Total/NA	Analysis	SM 2540C		1	10 mL	200 mL	20328	08/25/21 22:00	YGG	XEN STF
Total/NA	Prep	Fill_Geo-21			1000 mL	1.0 g	523926	08/24/21 15:31	ZTH	TAL SL
Total/NA	Analysis	901.1		1			527651	09/20/21 08:47	RMJ	TAL SL

Client Sample ID: AP-35

Lab Sample ID: 860-10240-7

Date Collected: 08/18/21 15:50

Matrix: Water

Date Received: 08/19/21 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			20165	08/25/21 16:56	WP	XEN STF
Total/NA	Analysis	300.0		20			20165	08/25/21 17:06	WP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20705	08/29/21 11:30	MD	XEN STF
Total/NA	Analysis	6010C		1			21463	09/02/21 20:57	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20705	08/29/21 11:30	MD	XEN STF
Total/NA	Analysis	6010C		50			21463	09/02/21 21:15	DP	XEN STF
Total/NA	Prep	7470A			50 mL	50 mL	19980	08/25/21 07:45	AGR	XEN STF
Total/NA	Analysis	7470A		10			20268	08/25/21 14:06	AV	XEN STF
Total/NA	Analysis	SM 2320B		1			20239	08/25/21 11:37	ANP	XEN STF
Total/NA	Analysis	SM 2540C		1	10 mL	200 mL	20328	08/25/21 22:00	YGG	XEN STF
Total/NA	Prep	Fill_Geo-21			1000 mL	1.0 g	523926	08/24/21 15:31	ZTH	TAL SL
Total/NA	Analysis	901.1		1			527649	09/20/21 10:50	RMJ	TAL SL

Client Sample ID: AP-36

Lab Sample ID: 860-10240-8

Date Collected: 08/18/21 16:35

Matrix: Water

Date Received: 08/19/21 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			20165	08/25/21 17:15	WP	XEN STF
Total/NA	Analysis	300.0		50			20165	08/26/21 13:21	WP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20705	08/29/21 11:30	MD	XEN STF
Total/NA	Analysis	6010C		1			21463	09/02/21 21:00	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20705	08/29/21 11:30	MD	XEN STF
Total/NA	Analysis	6010C		50			21463	09/02/21 21:18	DP	XEN STF
Total/NA	Prep	7470A			50 mL	50 mL	19980	08/25/21 07:45	AGR	XEN STF
Total/NA	Analysis	7470A		1			20268	08/25/21 13:42	AV	XEN STF
Total/NA	Analysis	SM 2320B		1			20239	08/25/21 11:41	ANP	XEN STF
Total/NA	Analysis	SM 2540C		1	25 mL	200 mL	20328	08/25/21 22:00	YGG	XEN STF
Total/NA	Prep	Fill_Geo-21			1000 mL	1.0 g	523926	08/24/21 15:31	ZTH	TAL SL
Total/NA	Analysis	901.1		1			527819	09/21/21 15:21	RMJ	TAL SL

Client Sample ID: MW-03

Lab Sample ID: 860-10240-9

Date Collected: 08/18/21 14:25

Matrix: Water

Date Received: 08/19/21 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			20165	08/26/21 13:30	WP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20705	08/29/21 11:30	MD	XEN STF
Total/NA	Analysis	6010C		1			21463	09/02/21 21:04	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20705	08/29/21 11:30	MD	XEN STF
Total/NA	Analysis	6010C		50			21463	09/02/21 21:22	DP	XEN STF
Total/NA	Prep	7470A			50 mL	50 mL	19980	08/25/21 07:45	AGR	XEN STF
Total/NA	Analysis	7470A		1			20268	08/25/21 13:44	AV	XEN STF
Total/NA	Analysis	SM 2320B		1			20239	08/25/21 11:44	ANP	XEN STF
Total/NA	Analysis	SM 2540C		1	10 mL	200 mL	20328	08/25/21 22:00	YGG	XEN STF
Total/NA	Prep	Fill_Geo-21			1000 mL	1.0 g	523927	08/24/21 15:34	SRE	TAL SL
Total/NA	Analysis	901.1		1			527253	09/16/21 11:11	JCB	TAL SL

Client Sample ID: PZ-05

Lab Sample ID: 860-10240-10

Date Collected: 08/18/21 16:05

Matrix: Water

Date Received: 08/19/21 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			20165	08/26/21 13:40	WP	XEN STF
Total/NA	Analysis	300.0		500			20165	08/26/21 14:27	WP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20705	08/29/21 11:30	MD	XEN STF
Total/NA	Analysis	6010C		1			21463	09/02/21 21:08	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20705	08/29/21 11:30	MD	XEN STF
Total/NA	Analysis	6010C		50			21463	09/02/21 21:26	DP	XEN STF
Total/NA	Prep	7470A			50 mL	50 mL	19980	08/25/21 07:45	AGR	XEN STF
Total/NA	Analysis	7470A		1			20268	08/25/21 13:45	AV	XEN STF
Total/NA	Analysis	SM 2320B		1			20239	08/25/21 11:51	ANP	XEN STF

Client Sample ID: PZ-05

Lab Sample ID: 860-10240-10

Date Collected: 08/18/21 16:05

Matrix: Water

Date Received: 08/19/21 09:49

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	10 mL	200 mL	20328	08/25/21 22:00	YGG	XEN STF
Total/NA	Prep	Fill_Geo-21			1000 mL	1.0 g	523927	08/24/21 15:34	SRE	TAL SL
Total/NA	Analysis	901.1		1			527253	09/16/21 13:52	JCB	TAL SL

Client Sample ID: PZ-06

Lab Sample ID: 860-10240-11

Date Collected: 08/18/21 17:05

Matrix: Water

Date Received: 08/19/21 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			20165	08/26/21 13:49	WP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20705	08/29/21 11:30	MD	XEN STF
Total/NA	Analysis	6010C		1			21463	09/02/21 21:11	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20705	08/29/21 11:30	MD	XEN STF
Total/NA	Analysis	6010C		50			21463	09/02/21 21:29	DP	XEN STF
Total/NA	Prep	7470A			50 mL	50 mL	19980	08/25/21 07:45	AGR	XEN STF
Total/NA	Analysis	7470A		1			20268	08/25/21 13:49	AV	XEN STF
Total/NA	Analysis	SM 2320B		1			20239	08/25/21 11:56	ANP	XEN STF
Total/NA	Analysis	SM 2540C		1	10 mL	200 mL	20328	08/25/21 22:00	YGG	XEN STF
Total/NA	Prep	Fill_Geo-21			1000 mL	1.0 g	523927	08/24/21 15:34	SRE	TAL SL
Total/NA	Analysis	901.1		1			527253	09/16/21 16:12	JCB	TAL SL

Client Sample ID: DUP-02

Lab Sample ID: 860-10240-12

Date Collected: 08/18/21 13:00

Matrix: Water

Date Received: 08/19/21 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			20165	08/26/21 13:58	WP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20705	08/29/21 11:30	MD	XEN STF
Total/NA	Analysis	6010C		1			21463	09/02/21 21:40	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20705	08/29/21 11:30	MD	XEN STF
Total/NA	Analysis	6010C		50			21463	09/02/21 21:58	DP	XEN STF
Total/NA	Prep	7470A			50 mL	50 mL	19980	08/25/21 07:45	AGR	XEN STF
Total/NA	Analysis	7470A		1			20268	08/25/21 13:50	AV	XEN STF
Total/NA	Analysis	SM 2320B		1			20239	08/25/21 11:59	ANP	XEN STF
Total/NA	Analysis	SM 2540C		1	10 mL	200 mL	20328	08/25/21 22:00	YGG	XEN STF
Total/NA	Prep	Fill_Geo-21			1000 mL	1.0 g	523927	08/24/21 15:34	SRE	TAL SL
Total/NA	Analysis	901.1		1			527496	09/17/21 09:16	RMJ	TAL SL

Client Sample ID: FB-02

Lab Sample ID: 860-10240-13

Date Collected: 08/18/21 16:10

Matrix: Water

Date Received: 08/19/21 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			20165	08/26/21 14:08	WP	XEN STF

Lab Chronicle

Client: GSI Environmental, Inc
Project/Site: Ash Ponds

Job ID: 860-10240-1

Client Sample ID: FB-02

Lab Sample ID: 860-10240-13

Date Collected: 08/18/21 16:10

Matrix: Water

Date Received: 08/19/21 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	20705	08/29/21 11:30	MD	XEN STF
Total/NA	Analysis	6010C		1			21463	09/02/21 21:44	DP	XEN STF
Total/NA	Prep	7470A			50 mL	50 mL	19980	08/25/21 07:45	AGR	XEN STF
Total/NA	Analysis	7470A		1			20268	08/25/21 13:52	AV	XEN STF
Total/NA	Analysis	SM 2540C		1	200 mL	200 mL	20328	08/25/21 22:00	YGG	XEN STF
Total/NA	Prep	Fill_Geo-21			1000 mL	1.0 g	523926	08/24/21 15:31	ZTH	TAL SL
Total/NA	Analysis	901.1		1			527651	09/20/21 12:54	RMJ	TAL SL

Client Sample ID: EB-01

Lab Sample ID: 860-10240-14

Date Collected: 08/18/21 17:20

Matrix: Water

Date Received: 08/19/21 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			20165	08/26/21 15:23	WP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	20705	08/29/21 11:30	MD	XEN STF
Total/NA	Analysis	6010C		1			21463	09/02/21 21:47	DP	XEN STF
Total/NA	Prep	7470A			50 mL	50 mL	19980	08/25/21 07:45	AGR	XEN STF
Total/NA	Analysis	7470A		1			20268	08/25/21 13:53	AV	XEN STF
Total/NA	Analysis	SM 2540C		1	200 mL	200 mL	20328	08/25/21 22:00	YGG	XEN STF
Total/NA	Prep	Fill_Geo-21			1000 mL	1.0 g	523926	08/24/21 15:31	ZTH	TAL SL
Total/NA	Analysis	901.1		1			527651	09/20/21 10:50	RMJ	TAL SL

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

XEN STF = Eurofins Xenco, Stafford, 4147 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: GSI Environmental, Inc
Project/Site: Ash Ponds

Job ID: 860-10240-1

Laboratory: Eurofins Xenco, Stafford

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-21-44	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6010C	3010A	Water	SiO2
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3
SM 2320B		Water	Carbonate Alkalinity as CaCO3
SM 2320B		Water	Hydroxide Alkalinity

Laboratory: Eurofins TestAmerica, St. Louis

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704193	07-31-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
901.1	Fill_Geo-21	Water	Radium-226
901.1	Fill_Geo-21	Water	Radium-228

Method Summary

Client: GSI Environmental, Inc
Project/Site: Ash Ponds

Job ID: 860-10240-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	XEN STF
6010C	Metals (ICP)	SW846	XEN STF
7470A	Mercury (CVAA)	SW846	XEN STF
SM 2320B	Alkalinity	SM	XEN STF
SM 2540C	Solids, Total Dissolved (TDS)	SM	XEN STF
901.1	Radium-226 & Other Gamma Emitters (GS)	EPA	TAL SL
3010A	Preparation, Total Metals	SW846	XEN STF
7470A	Preparation, Mercury	SW846	XEN STF
Fill_Geo-21	Fill Geometry, 21-Day In-Growth	None	TAL SL

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

None = None

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 SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

XEN STF = Eurofins Xenco, Stafford, 4147 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: GSI Environmental, Inc
Project/Site: Ash Ponds

Job ID: 860-10240-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
860-10240-1	PZ-02	Water	08/18/21 14:35	08/19/21 09:49
860-10240-2	PZ-03	Water	08/18/21 15:35	08/19/21 09:49
860-10240-3	AP-31	Water	08/18/21 13:45	08/19/21 09:49
860-10240-4	AP-32	Water	08/18/21 17:35	08/19/21 09:49
860-10240-5	AP-33	Water	08/18/21 16:55	08/19/21 09:49
860-10240-6	AP-34	Water	08/18/21 15:20	08/19/21 09:49
860-10240-7	AP-35	Water	08/18/21 15:50	08/19/21 09:49
860-10240-8	AP-36	Water	08/18/21 16:35	08/19/21 09:49
860-10240-9	MW-03	Water	08/18/21 14:25	08/19/21 09:49
860-10240-10	PZ-05	Water	08/18/21 16:05	08/19/21 09:49
860-10240-11	PZ-06	Water	08/18/21 17:05	08/19/21 09:49
860-10240-12	DUP-02	Water	08/18/21 13:00	08/19/21 09:49
860-10240-13	FB-02	Water	08/18/21 16:10	08/19/21 09:49
860-10240-14	EB-01	Water	08/18/21 17:20	08/19/21 09:49

Temp: 5.5 IR ID:HOU-272
C/F:+0.2
Corrected Temp: 5.7

Temp: 4.9 IR ID:HOU-272
C/F:+0.2
Corrected Temp: 5.1

Eurofins Xenco,
4147 Greenbriar Dr
Stafford, TX 77477
Phone (281) 240-4200

Chain of Custody Record

860-10240 Chain of Custody

urofins Environment Testing America

9/23/2021

Client Information

Client Contact: Mike Schofield	Sampler: Scott Ude + HMI Team	Lab PM: Kudchadkar Sachin G	No: -3614-1220.1
Company: GSI Environmental Inc	Phone: 832 347-4521	E-Mail: Sachin.Kudchadkar@Eurofinset.com	State of Origin: TX
Address: 9600 Great Hills Trail Suite 350E	PWSID:	Page: Page 1 of 2	Job #:
City: Austin	Due Date Requested:		
State, Zip: TX, 78759	TAT Requested (days):		
Phone: 512-346-4474(Tel) 512-346-4476(Fax)	Compliance Project: Δ Yes Δ No		
Email: mlschofield@gsi-net.com	PO #:		
Project Name: San Miguel Electrical Co-Op 2H21 GW	WO #:		
Site: Ash Ponds	Project #: 86001746		
	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	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)	2320B_Alkalinity	6010C_7471- B, Ca,Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl;Hg	2540C_TDS	300- Cl, F, SO4	901.1_Ra- Rad 226/ 228 Eurofins St Louis	O = MS/MSD volume provided	Total Number of containers	Special Instructions/Note:
Preservation Code:							N	D	N	N				
PZ-02	8/18/21	1435	G	Water	N	N	✓	✓	✓	✓	✓			
PZ-03		1535		Water		Y	✓	✓	✓	✓	✓			
AP-31		1345		Water		N	✓	✓	✓	✓	✓			
AP-32		1735		Water			✓	✓	✓	✓	✓			
AP-33		1655		Water			✓	✓	✓	✓	✓			
AP-34		1520		Water			✓	✓	✓	✓	✓			
AP-35		1550		Water			✓	✓	✓	✓	✓			
AP-36		1635		Water			✓	✓	✓	✓	✓			
MW-03		1425		Water			✓	✓	✓	✓	✓			
PZ-05		1605		Water			✓	✓	✓	✓	✓			
PZ-06	↓	1705	↓	Water			✓	✓	✓	✓	✓			

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: Cons Delivery		
Relinquished by:	Date/Time: 8-19-21 949	Company: HMI	Received by:	Date/Time: 8/19/21 949	Company: Xenco
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. | Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins Xenco, Stafford
4147 Greenbriar Dr
Stafford, TX 77477
Phone (281) 240-4200

Chain of Custody Record

eurofins Environment Testing America

9/23/2021

Client Information	Sampler: Scott Ude + HMI Team	Lab PM: Kudchadkar Sachin G	Carrier Tracking No(s):	COC No: 860-3614-1220.1
Client Contact: Mike Schofield	Phone: 832-347-4521	E-Mail: Sachin.Kudchadkar@Eurofinset.com	State of Origin: TX	Page: Page 2 of 2
Company: GSI Environmental, Inc	PWSID:			Job #:
Address: 9600 Great Hills Trail Suite 350E	Due Date Requested:			
City: Austin	TAT Requested (days):			
State, Zip: TX, 78759	Compliance Project: Δ Yes Δ No			
Phone: 512-346-4474(Tel) 512-346-4476(Fax)	PO #:			
Email: mlschofield@gsi-net.com	WO #:			
Project Name: San Miguel Electrical Co-Op 2H21 GW	Project #: 86001746			
Site: Ash Ponds	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	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)	2320B, Alkalinity	6010C -7471- B, Ca,Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Ti;Hg	2540C_TDS	300- Cl, F, SO4	901.1_Ra- Rad 226/ 228 Eurofins St Louis	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	D	N	N		X	
Dup-02	8/18/21	1300	G	Water	N	N	✓	✓	✓	✓	✓		
FB-02	↓	1610	↓	Water	N	N		✓	✓	✓	✓		
EB-01	↓	1720	↓	Water	N	N		✓	✓	✓	✓		
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

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)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: Cons. Delivery	
Relinquished by: Mike	Date/Time: 8-19-21 949	Company: HMI	Received by: Sachin Dore	Date/Time: 8/19/21 949 Company: Xenco
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.	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins Xenco, Stafford
4147 Greenbriar Dr
Stafford, TX 77477
Phone: 281-240-4200

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 860-4714.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sachin.Kudchadkar@Eurofinset.com	State of Origin: Texas	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 860-10240-1
Address: 13715 Rider Trail North,	Due Date Requested: 8/31/2021			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: San Miguel Electrical Co-Op 2H21 GW	Project #: 86001746			
Site:	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)	901.1_Ra/Fill_Geo_21 Radium-226/228	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
PZ-02 (860-10240-1)	8/18/21	14:35 Central		Water			X	1	
PZ-03 (860-10240-2)	8/18/21	15:35 Central		Water			X	1	
PZ-03 (860-10240-2MS)	8/18/21	15:35 Central	MS	Water			X	1	
PZ-03 (860-10240-2MSD)	8/18/21	15:35 Central	MSD	Water			X	1	
AP-31 (860-10240-3)	8/18/21	13:45 Central		Water			X	1	
AP-32 (860-10240-4)	8/18/21	17:35 Central		Water			X	1	
AP-33 (860-10240-5)	8/18/21	16:55 Central		Water			X	1	
AP-34 (860-10240-6)	8/18/21	15:20 Central		Water			X	1	
AP-35 (860-10240-7)	8/18/21	15:50 Central		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC 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 Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.

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:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by: FF	Date/Time:	Company	Received by: FF	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 8/20/21 0846	Company EHST
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:	Date/Time:	Company

Ver: 06/08/2021

Eurofins Xenco, Stafford
4147 Greenbriar Dr
Stafford, TX 77477
Phone: 281-240-4200

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 860-4714.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sachin.Kudchadkar@Eurofinset.com	State of Origin: Texas	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 860-10240-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 8/31/2021			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				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			Other:
Email:	WO #:			
Project Name: San Miguel Electrical Co-Op 2H21 GW	Project #: 86001746			
Site:	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)	901.1_Ra/FIII_Geo_21 Radium-226/228	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
AP-36 (860-10240-8)	8/18/21	16:35 Central		Water			X	1	
MW-03 (860-10240-9)	8/18/21	14:25 Central		Water			X	1	
PZ-05 (860-10240-10)	8/18/21	16:05 Central		Water			X	1	
PZ-06 (860-10240-11)	8/18/21	17:05 Central		Water			X	1	
DUP-02 (860-10240-12)	8/18/21	13:00 Central		Water			X	1	
FB-02 (860-10240-13)	8/18/21	16:10 Central		Water			X	1	
EB-01 (860-10240-14)	8/18/21	17:20 Central		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC 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 Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

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
		8/19/21 1100		FE		
	Relinquished by: FE	Date/Time:	Company	Received by:	Date/Time:	Company
					8/20/21 0846	ETAST
	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

9/23/2021

Login Sample Receipt Checklist

Client: GSI Environmental, Inc

Job Number: 860-10240-1

Login Number: 10240

List Source: Eurofins Xenco, Stafford

List Number: 1

Creator: Torres, Sandra

Question	Answer	Comment
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	5.7, 5.1
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	

Login Sample Receipt Checklist

Client: GSI Environmental, Inc

Job Number: 860-10240-1

Login Number: 10240
List Number: 2
Creator: Mazariegos, Leonel A

List Source: Eurofins TestAmerica, St. Louis
List Creation: 08/20/21 07:24 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.	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	

GSI ENVIRONMENTAL

DATA USABILITY SUMMARY

August 2021 Sampling Event (Job ID: 860-10239-1)

OVERVIEW

GSI Environmental Inc. (GSI) reviewed one data package from Eurofins Xenco located in Stafford, Texas (XEN STF) for the analysis of **twelve groundwater samples collected from the Equalization Pond on 18 August 2021** at the San Miguel Electric Cooperative, Inc., Christine, Atascosa County, Texas site. XEN STF sent the samples to Eurofins TestAmerica located in St. Louis, Missouri (TAL SL) for Radium-226 and Radium-228 analysis. Data were reviewed for i) conformance to the requirements of the guidance document *Review and Reporting of COC Concentration Data* (RG-366/TRRP-13) and ii) adherence to project objectives (e.g., GSI 2019).

GSI certifies that at the time the laboratory data were generated for the project, XEN STF and TAL SL were National Environmental Laboratory Accreditation Program (NELAP)-accredited under the Texas Laboratory Accreditation Program (Certification Number: T104704215-21-44 and T104704193, respectively) for the matrices, analytes, and methods of analysis requested on the chain-of-custody documentation, with the following exceptions. XEN STF is not certified for silicon dioxide (SiO2) analysis by method 6010C or Bicarbonate Alkalinity as calcium carbonate (CaCO3), Carbonate Alkalinity as CaCO3 or Hydroxide Alkalinity by method 2320B. TAL SL is not certified for Radium-226 or Radium-228 by method 901.1. A copy of XEN STF's NELAP certificate applicable to the period during which the laboratory generated the data in this report is included in a separate appendix.

Intended Use of Data

Samples were collected to provide current data on groundwater conditions at the test location. Analyses requested included:

- Method 6010C - Metals (Inductively Coupled Plasma (ICP))
- Method 300.0 – Anions, Ion Chromatography
- Method SM2320B - Alkalinity
- Method SM2540C - Total Dissolved Solids (TDS)
- Method 7470S – Mercury (Cold Vapor Atomic Absorption (CVAA) Spectroscopy)
- Method 901.1 – Radium-226 & Other Gamma Emitters

Data were reviewed and validated, as described in *Review and Reporting of COC Concentration Data* (RG-366/TRRP-13), and the results are discussed in this Data Usability Summary (DUS). The following laboratory submittals and field data were examined:

- the reportable data (i.e., results provided in the laboratory data package),
- the laboratory review checklists and associated exception reports, and
- the field notes with respect to field instrument calibrations, filtering procedures (if applicable), and sampling procedures.

The results of supporting quality control (QC) analyses were summarized in the case narrative, which was included in this review. The case narrative and reportable data included in this review are attached to this DUS as Attachment A.

INTRODUCTION

Twelve (12) water samples were submitted to the laboratory, and all requested analyses were completed. However, the radium method used was not the method approved in the Sampling and Analysis Plan [SAP] (GSI, 2019).

A systematic increase in combined radium results was noted at the East Equalization Pond monitoring network during this sampling event. The increase appeared in both upgradient and downgradient wells and was likely related to the laboratory subcontractor transition between the February and August sampling events. February 2021 radium analyses were performed by Pace Analytical National, Mount Juliet, TN on behalf of DHL Analytical, Austin, TX, whereas August 2021 radium analyses were performed by Eurofins TestAmerica, St. Louis, MO on behalf of Eurofins Xenco, Stafford, TX. Eurofins TestAmerica noted in the laboratory job narrative (LJN) that August 2021 results were produced using Method 901.1, which infers Radium-226 from Bismuth-214 and infers Radium-228 from Actinium-228. February 2021 and prior results were from Methods 904 and SM 7500 Ra B, which use different tracers (Ra-226 is inferred from Ba-133 and Ra-228 is inferred from a combination of Barium & Yttrium). Methods 904 and SM 7500 Ra B (used in February 2021) are the approved methods per the SAP, and GSI is actively working with the laboratories to understand the discrepancy between semiannual radium results and to resolve any deviations from the SAP analyte list for future sampling events. Table 1 lists the sample identifications cross-referenced to laboratory identifications.

PROJECT MEASUREMENT QUALITY OBJECTIVES

The following criteria were used in this review (RG-366/TRRP-13):

	MS/MSD		**LCS/LCSD**		**Lab Dup**	**Field Precision**
Analytes	% R	RPD	% R	RPD	RPD	RPD
Metals	75 – 125	15	80 – 120	15	-	≤ 30%
Inorganic Anions	90 – 110	20	90 – 110	20	10	
Alkalinity	-		74 – 129	20	20	
Total Dissolved Solids (TDS)	-		90 – 113	-	5	

DATA REVIEW / VALIDATION RESULTS

Analytical Results

Results from these samples may be considered usable with the limitations and exceptions described in this section. Sample data qualified as a result of this DUS, if any, are listed in Table 2. Non-detected results are reported as less than the value of the sample detection limit (SDL). Results between the SDL and sample quantitation limit (SQL) are J-flagged.

Finding: All requested analyses were completed, and results were reported as requested.

Radium Results

According to the LJN, many isotopes requested for analysis do not have any gamma emissions, or the gamma emissions they do have are very poor. Often, such analytes are reported by gamma spectrometry assuming secular equilibrium with a longer-lived parent. The LJN indicates that reported Radium-226 results were inferred from Bismuth-214 and Radium-228 results were inferred from Actinium-228.

The detection goal of 50.0 picocuries per liter of air (pCi/L) was not met for sample EP-31. The LJN states than an elevated minimum detectable concentration (MDC) for radiochemistry analysis can occur when higher background counts are applied to a peak ROI. This is due to the relatively small size of the peak or subsequent "force-fit" of the non-existent peak which results in higher-than-normal background counts due to statistical fluctuations in the Compton baseline. The laboratory does not believe this adversely affects the data as the Radium-226 result is well below the reporting limit (RL) and MDC.

Finding: The laboratory method is acceptable for Radium-226 and Radium-228 analysis, and the laboratory added a G qualifier to the Radium-226 results for EP-31 to indicate that the sample MDC is greater than the requested RL. No additional qualifiers were added to affected sample results.

The samples were evaluated for agreement with the chain-of-custody (C-O-C). The samples were received by the laboratory in the appropriate containers and in good condition, with proper completion of the C-O-C documentation. Samples receipt temperature was within the acceptance criteria, and field preservation was done as specified in the Sampling and Analysis Plan [SAP] (GSI, 2019). Samples were prepared and analyzed within method-specified holding times.

Finding: No additional qualifiers were added per this evaluation.

Calibrations

No calibration issues were identified in the laboratory report narrative or during review of the laboratory data package.

Finding: No qualifiers were added per this evaluation.

Blanks

Method Blanks

- The method blank for preparation batch 860-19660 and analytical batch 860-19883 contained antimony, boron, chromium, and selenium above the method detection limit (MDL). Antimony, boron, and chromium were detected in some samples, while selenium was not.

Field Blanks

- One field blank, FB-03, was collected at the same location as EP-36 and analyzed for the same parameters as the "normal" sample. Chloride, sulfate, boron, calcium, cobalt, magnesium, potassium, sodium, lithium, silicon dioxide (SiO2), total alkalinity, bicarbonate alkalinity as calcium carbonate (CaCO3), total dissolved solids (TDS) and radium-226 were detected at concentrations above the MDL (and MDC in the case of radium).

Equipment Blanks

- One equipment blank, EB-02, was collected at the same location as MW-04 and analyzed for the same parameters as the "normal" sample. Chloride, sulfate, arsenic, barium, boron, calcium, chromium, cobalt, magnesium, potassium, sodium, SiO2, TDS, radium-226 and radium-228 were detected at concentrations above the MDL (and MDC in the case of radium).

Finding: In addition to the B qualifiers added by the laboratory for method blank detections, GSI added U qualifiers to affected arsenic and chromium samples because the concentration was detected above the MDL in the blank and sample.

GSI added JH qualifiers to analyte concentrations in EP-36 that were within 5X of the concentration detected in the associated Field Blank.

GSI added JH qualifiers to analyte concentrations in MW-04 that were within 5X of the concentration detected in the associated Equipment Blank.

Internal Standard and Surrogate Recoveries (VOCs and SVOCs Only)

Not applicable.

Laboratory Control Samples

The Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD) recoveries and Relative Percent Differences (RPDs) were within the project-defined QC acceptance criteria.

Finding: No qualifiers were added per this evaluation.

Matrix Spike/Matrix Spike Duplicates and Laboratory Duplicates

The LRC indicated the following issues with matrix spike (MS)/matrix spike duplicate (MSD) data:

- Due to the high concentration of calcium and sodium, the MS/MSD for preparation batch 860-19660 and analytical batch 860-19883 could not be evaluated for accuracy and precision. However, the associated LCS met acceptance criteria.
- The percent recovery (%R) for chloride and sulfate were below specifications in analytical batch 810-21063. However, the spiking amount was less than four times the result in the un-spiked parent sample. Therefore, the MS/MSD data is not representative of the matrix effect.

Findings: No qualifiers were added per this evaluation.

Field Duplicates (Field Precision)

A field duplicate identified as DUP-03 was collected for sample EP-33 during the field event. Field precision was calculated and the RPD was within the project-defined QC acceptance criteria for all analytes, with the exception of arsenic. However, the arsenic contractions were less than 5 times (5X) the Method Quantitation Limit (MQL) A comparison of the field sample and the duplicate sample is shown in Table 3.

Finding: No qualifiers were added per this evaluation.

Field Procedures

Sample collection and documentation was done in accordance with the Groundwater Sampling and Analysis Plan (SAP; GSI, 2019).

Finding: Field activities were consistent with the SAP.

SUMMARY

The analytical data are usable for the purpose of characterizing groundwater conditions. No data were rejected based on this review and validation. However, a limited number of qualifiers were added to affected samples.

REFERENCES

GSI Environmental, Inc., 2019, Groundwater Sampling and Analysis Plan, San Miguel Electric Cooperative, Inc., December 26.

TCEQ 2010. Review and Reporting of COC Concentration Data under TRRP, RG-366/TRRP-13 https://www.tceq.texas.gov/assets/public/comm_exec/pubs/rg/rg-366-trrp-13.pdf

TABLES

TABLE 1
Cross-Reference Field Sample and Laboratory Identifications

Sample Date	Lab	Lab Sample ID	Field Sample ID	Matrix
8/18/2021	XEN STF	860-10239-1	EP-31	Water
8/18/2021	XEN STF	860-10239-2	EP-32	Water
8/18/2021	XEN STF	860-10239-3	EP-33	Water
8/18/2021	XEN STF	860-10239-4	EP-34	Water
8/18/2021	XEN STF	860-10239-5	EP-35	Water
8/18/2021	XEN STF	860-10239-6	EP-36	Water
8/18/2021	XEN STF	860-10239-7	EP-37	Water
8/18/2021	XEN STF	860-10239-8	EP-38	Water
8/18/2021	XEN STF	860-10239-9	MW-004	Water
8/18/2021	XEN STF	860-10239-10	DUP-03	Water
8/18/2021	XEN STF	860-10239-11	FB-03	Water
8/18/2021	XEN STF	860-10239-12	EB-02	Water

Notes:
1. XEN STF: Eurofins Xenco, Stafford, Texas

TABLE 2
Qualifiers Added During Data Usability Review

Sample ID	Analyte	Lab Result	Unit	DUS Qualifier or Bias Code	Reason for Qualification	Batch Number	Report Number
EP-34	Antimony	0.00931 JB	mg/L	U	Analyte detected above the MDL at a concentration >5X the MB	19660	860-10239-1
EP-34	Barium	0.0123	mg/L	JH	Analyte detected above MDL and within 5X of EB concentration	19883	860-10239-1
EP-34	Cobalt	0.00646 J	mg/L	JH	Analyte detected above MDL and within 5X of EB concentration	19883	860-10239-1
EP-36	Radium-226	65.2	pCi/L	JH	Analyte detected above MDL and within 5X of EB and FB concentrations	523927	860-10239-1
MW-004	Barium	0.0170	mg/L	JH	Analyte detected above MDL and within 5X of EB concentration	19883	860-10239-1
MW-004	Cobalt	0.00357 J	mg/L	JH	Analyte detected above MDL and within 5X of EB and FB concentration	19883	860-10239-1
MW-004	Radium-226	36.0	pCi/L	JH	Analyte detected above MDL and within 5X of EB and FB concentrations	523927	860-10239-1

Notes:
1. mg/L: milligrams per liter.
2. pCi/L: picocuries per liter of air
3. U: Not detected.
4. JH: Estimated value, biased high
5. 5X: Five times
6. MDL: Method Detection Limit
7. EB: Equipment Blank
8. FB: Field Blank

GSI ENVIRONMENTAL

TABLE 3

Field Duplicate Detections

Analyte	MQL (MDL) (mg/L)	Primary Sample Result (mg/L)	Field Duplicate Result (mg/L)	Relative Percent Difference	Notes
EP-33 and DUP-03					
Chloride	4.00	2980	2920	2.03 %	A
Fluoride	0.100	0.235 J	0.231 J	1.72 %	A
Sulfate	2.18	3330	3270	1.82 %	A
Arsenic	0.0055	0.00972 J	0.00618 J	44.53 %	< 5X MQL; A
Barium	0.00135	0.00932 J	0.00980 J	5.02 %	A
Beryllium	0.00049	0.00136 J	0.001450J	6.41 %	A
Boron	0.171	93.7 B	95.7B	2.11 %	A
Calcium	1.47	721	788	8.88 %	A
Cobalt	0.000673	0.00627 J	0.00683 J	8.55 %	A
Magnesium	2.5	543.9	47.4	7.67 %	A
Molybdenum	0.00123	0.0267	0.0299	11.31 %	A
Potassium	0.107	49.7	53.1	6.62 %	A
Sodium	3.33	2530	2700	6.50 %	A
Lithium	0.00488	0.672	0.707	5.08 %	A
SiO2	0.781	90.1	96.1	6.45 %	A
Total Alkalinity	4.00	270	273	1.11 %	A
Bicarbonate Alkalinity as CaCo3	4.00	270	273	1.11 %	A
TDS	100	9210	9110	1.09 %	A
Radium	20.2 pCi/L	33.3	11.5 U	97.32 %	< 5X MDL; A

Notes:
1. MQL: Method Quantitation Limit
2. MDL: Method Detection Limit
3. J: The result is less than the RL but greater than or equal to the MDL and the result is estimated
4. B: Compound was found in the blank and sample
5. mg/L: milligrams per liter
6. pCi/L: picocuries per liter of air
7. RPD = (PR-FD)/AVERAGE(PR+FD)*100), where PR is the Primary Sample and FD is the Field Duplicate
8. A = Acceptable RPD.
9. <5MQL; The sample result is less than five times the MQL/MDL.

Attachment A

Eurofins Xenco, Stafford

Analytical Report

Job ID.: 860-10245-1

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Stafford
4147 Greenbriar Dr
Stafford, TX 77477
Tel: (281)240-4200

Laboratory Job ID: 860-10239-1
Client Project/Site: Equalization Pond

For:
GSI Environmental, Inc
9600 Great Hills Trail
Suite 350E
Austin, Texas 78759

Attn: Mike Schofield

Authorized for release by:
9/21/2021 2:01:46 PM

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
Sachin.Kudchadkar@Eurofinset.com

Table of Contents

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Rad

Qualifier	Qualifier Description
G	The Sample MDC is greater than the requested RL.
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

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: GSI Environmental, Inc
Project/Site: Equalization Pond

Job ID: 860-10239-1

Job ID: 860-10239-1

Laboratory: Eurofins Xenco, Stafford

Narrative

Job Narrative
860-10239-1

Receipt
The samples were received on 8/19/2021 10:50 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 3.2°C, 3.3°C and 3.6°C

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6010C: The method blank for preparation batch 860-19660 and analytical batch 860-19883 contained Boron, Chromium, Antimony and selenium above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 6010C: Due to the high concentration of Calcium and Sodium, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 860-19660 and analytical batch 860-19883 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

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.

Gamma Spectroscopy
Method 901.1_Ra: Gamma prep batch 160-523927The detection goal of 50.0 pCi/L was not met for Ra-226 for the following sample. An elevated MDC can occur when higher background counts are applied to a peak ROI. This is due to the relatively small size of the peak or subsequent “force-fit” of the non-existent peak which resulted in higher than normal background counts due to statistical fluctuations in the Compton baseline. The laboratory does not believe this adversely affects the data, as the Ra-226 result is well below the RL and MDC. EP-31 (860-10239-1)

Method 901.1_Ra: Gamma Prep Batch 160-523927Many isotopes requested for analysis do not have any gamma emissions, or the gamma emissions they do have are very poor. Often, such analytes are reported by gamma spectrometry assuming secular equilibrium with a longer-lived parent. The client should ensure that such inference is acceptable for their sample based upon process knowledge. The following assumptions were made for this report:Inferred from Reported to AnalyteTh-234 Pa-234Th-234 U-238Pb-210 Po-210 Pb-210 Bi-210Cs-137 Ba-137mPb-212 Po-216Xe-131m Xe-131Sb-125 Te-125mAg-108m Ag-108Rh-106 Ru-106Pb-212 Th-228Pb-212 Ra-224 U-235 Th-231Ac-228 Th-232Ac-228 Ra-228Th-227 Ra-223Th-227 Ac-227Th-227 Bi-211Th-227 Pb-211Bi-214 Ra-226Any 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. EP-31 (860-10239-1), EP-32 (860-10239-2), EP-33 (860-10239-3), EP-34 (860-10239-4), EP-35 (860-10239-5), EP-36 (860-10239-6), EP-37 (860-10239-7), EP-38 (860-10239-8), MW-004 (860-10239-9), DUP-03 (860-10239-10), FB-03 (860-10239-11), EB-02 (860-10239-12), (LCS 160-523927/2-A), (MB 160-523927/1-A), (860-10244-A-1-A) and (860-10244-A-1-B DU)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: GSI Environmental, Inc
Project/Site: Equalization Pond

Job ID: 860-10239-1

Client Sample ID: EP-31 — Lab Sample ID: 860-10239-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	217		0.500	0.200	mg/L	1		300.0	Total/NA
Fluoride	2.01		0.500	0.100	mg/L	1		300.0	Total/NA
Sulfate	3190		10.0	2.18	mg/L	20		300.0	Total/NA
Arsenic	0.0465		0.0100	0.00550	mg/L	1		6010C	Total/NA
Barium	0.00175	J	0.0100	0.00135	mg/L	1		6010C	Total/NA
Beryllium	0.0700		0.00400	0.000490	mg/L	1		6010C	Total/NA
Boron	5.40	B	0.0500	0.00343	mg/L	1		6010C	Total/NA
Cadmium	0.0182		0.00500	0.00243	mg/L	1		6010C	Total/NA
Calcium	645		10.0	1.47	mg/L	50		6010C	Total/NA
Cobalt	0.114		0.0100	0.000673	mg/L	1		6010C	Total/NA
Magnesium	44.5		0.200	0.0500	mg/L	1		6010C	Total/NA
Lead	0.00427	J	0.0100	0.00237	mg/L	1		6010C	Total/NA
Molybdenum	0.0102		0.0100	0.00123	mg/L	1		6010C	Total/NA
Potassium	42.9		0.500	0.107	mg/L	1		6010C	Total/NA
Sodium	1330		25.0	3.33	mg/L	50		6010C	Total/NA
Lithium	0.664		0.0200	0.00448	mg/L	1		6010C	Total/NA
SiO2	116		1.07	0.0781	mg/L	1		6010C	Total/NA
Total Dissolved Solids	4890		40.0	40.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EP-32 — Lab Sample ID: 860-10239-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3220		10.0	4.00	mg/L	20		300.0	Total/NA
Sulfate	4310		10.0	2.18	mg/L	20		300.0	Total/NA
Barium	0.0101		0.0100	0.00135	mg/L	1		6010C	Total/NA
Beryllium	0.00122	J	0.00400	0.000490	mg/L	1		6010C	Total/NA
Boron	28.3	B	2.50	0.171	mg/L	50		6010C	Total/NA
Calcium	660		10.0	1.47	mg/L	50		6010C	Total/NA
Cobalt	0.00584	J	0.0100	0.000673	mg/L	1		6010C	Total/NA
Magnesium	60.0		0.200	0.0500	mg/L	1		6010C	Total/NA
Molybdenum	0.0116		0.0100	0.00123	mg/L	1		6010C	Total/NA
Potassium	57.1		0.500	0.107	mg/L	1		6010C	Total/NA
Sodium	3500		25.0	3.33	mg/L	50		6010C	Total/NA
Lithium	1.27		0.0200	0.00448	mg/L	1		6010C	Total/NA
SiO2	66.8		1.07	0.0781	mg/L	1		6010C	Total/NA
Total Alkalinity	274		4.00	4.00	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	274		4.00	4.00	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	12100		100	100	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EP-33 — Lab Sample ID: 860-10239-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2980		10.0	4.00	mg/L	20		300.0	Total/NA
Fluoride	0.235	J	0.500	0.100	mg/L	1		300.0	Total/NA
Sulfate	3330		10.0	2.18	mg/L	20		300.0	Total/NA
Arsenic	0.00972	J	0.0100	0.00550	mg/L	1		6010C	Total/NA
Barium	0.00932	J	0.0100	0.00135	mg/L	1		6010C	Total/NA
Beryllium	0.00136	J	0.00400	0.000490	mg/L	1		6010C	Total/NA
Boron	93.7	B	2.50	0.171	mg/L	50		6010C	Total/NA
Calcium	721		10.0	1.47	mg/L	50		6010C	Total/NA
Cobalt	0.00627	J	0.0100	0.000673	mg/L	1		6010C	Total/NA
Magnesium	43.9		0.200	0.0500	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: EP-33 (Continued) — Lab Sample ID: 860-10239-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Molybdenum	0.0267		0.0100	0.00123	mg/L	1		6010C	Total/NA
Potassium	49.7		0.500	0.107	mg/L	1		6010C	Total/NA
Sodium	2530		25.0	3.33	mg/L	50		6010C	Total/NA
Lithium	0.672		0.0200	0.00448	mg/L	1		6010C	Total/NA
SiO2	90.1		1.07	0.0781	mg/L	1		6010C	Total/NA
Total Alkalinity	270		4.00	4.00	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	270		4.00	4.00	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	9210		100	100	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EP-34 — Lab Sample ID: 860-10239-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	4070		10.0	4.00	mg/L	20		300.0	Total/NA
Sulfate	3600		10.0	2.18	mg/L	20		300.0	Total/NA
Antimony	0.00931	J B	0.0200	0.00589	mg/L	1		6010C	Total/NA
Barium	0.0123		0.0100	0.00135	mg/L	1		6010C	Total/NA
Beryllium	0.00123	J	0.00400	0.000490	mg/L	1		6010C	Total/NA
Boron	32.4	B	2.50	0.171	mg/L	50		6010C	Total/NA
Calcium	668		10.0	1.47	mg/L	50		6010C	Total/NA
Cobalt	0.00646	J	0.0100	0.000673	mg/L	1		6010C	Total/NA
Magnesium	65.1		0.200	0.0500	mg/L	1		6010C	Total/NA
Molybdenum	0.00911	J	0.0100	0.00123	mg/L	1		6010C	Total/NA
Potassium	60.3		0.500	0.107	mg/L	1		6010C	Total/NA
Sodium	3630		25.0	3.33	mg/L	50		6010C	Total/NA
Lithium	1.22		0.0200	0.00448	mg/L	1		6010C	Total/NA
SiO2	64.4		1.07	0.0781	mg/L	1		6010C	Total/NA
Total Alkalinity	281		4.00	4.00	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	281		4.00	4.00	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	11400		100	100	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EP-35 — Lab Sample ID: 860-10239-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3710		10.0	4.00	mg/L	20		300.0	Total/NA
Sulfate	3170		10.0	2.18	mg/L	20		300.0	Total/NA
Barium	0.0202		0.0100	0.00135	mg/L	1		6010C	Total/NA
Beryllium	0.00114	J	0.00400	0.000490	mg/L	1		6010C	Total/NA
Boron	43.4	B	2.50	0.171	mg/L	50		6010C	Total/NA
Calcium	433		10.0	1.47	mg/L	50		6010C	Total/NA
Cobalt	0.00438	J	0.0100	0.000673	mg/L	1		6010C	Total/NA
Magnesium	56.7		0.200	0.0500	mg/L	1		6010C	Total/NA
Molybdenum	0.00321	J	0.0100	0.00123	mg/L	1		6010C	Total/NA
Potassium	51.8		0.500	0.107	mg/L	1		6010C	Total/NA
Sodium	3250		25.0	3.33	mg/L	50		6010C	Total/NA
Lithium	1.17		0.0200	0.00448	mg/L	1		6010C	Total/NA
SiO2	94.9		1.07	0.0781	mg/L	1		6010C	Total/NA
Total Alkalinity	197		4.00	4.00	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	197		4.00	4.00	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	10000		100	100	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GSI Environmental, Inc
Project/Site: Equalization Pond

Job ID: 860-10239-1

Client Sample ID: EP-36 — Lab Sample ID: 860-10239-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3900		10.0	4.00	mg/L	20		300.0	Total/NA
Sulfate	2520		10.0	2.18	mg/L	20		300.0	Total/NA
Arsenic	0.00972	J	0.0100	0.00550	mg/L	1		6010C	Total/NA
Barium	0.0188		0.0100	0.00135	mg/L	1		6010C	Total/NA
Beryllium	0.00130	J	0.00400	0.000490	mg/L	1		6010C	Total/NA
Boron	40.1	B	2.50	0.171	mg/L	50		6010C	Total/NA
Calcium	596		10.0	1.47	mg/L	50		6010C	Total/NA
Cobalt	0.00586	J	0.0100	0.000673	mg/L	1		6010C	Total/NA
Magnesium	110		10.0	2.50	mg/L	50		6010C	Total/NA
Molybdenum	0.00266	J	0.0100	0.00123	mg/L	1		6010C	Total/NA
Potassium	58.7		0.500	0.107	mg/L	1		6010C	Total/NA
Sodium	2810		25.0	3.33	mg/L	50		6010C	Total/NA
Lithium	1.22		0.0200	0.00448	mg/L	1		6010C	Total/NA
SiO2	78.6		1.07	0.0781	mg/L	1		6010C	Total/NA
Total Alkalinity	169		4.00	4.00	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	169		4.00	4.00	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	8700		100	100	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EP-37 — Lab Sample ID: 860-10239-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3570		10.0	4.00	mg/L	20		300.0	Total/NA
Sulfate	2810		10.0	2.18	mg/L	20		300.0	Total/NA
Arsenic	0.0116		0.0100	0.00550	mg/L	1		6010C	Total/NA
Barium	0.0246		0.0100	0.00135	mg/L	1		6010C	Total/NA
Beryllium	0.00130	J	0.00400	0.000490	mg/L	1		6010C	Total/NA
Boron	7.74	B	0.0500	0.00343	mg/L	1		6010C	Total/NA
Calcium	557		10.0	1.47	mg/L	50		6010C	Total/NA
Cobalt	0.00560	J	0.0100	0.000673	mg/L	1		6010C	Total/NA
Magnesium	73.6		0.200	0.0500	mg/L	1		6010C	Total/NA
Molybdenum	0.00387	J	0.0100	0.00123	mg/L	1		6010C	Total/NA
Potassium	61.6		0.500	0.107	mg/L	1		6010C	Total/NA
Sodium	2980		25.0	3.33	mg/L	50		6010C	Total/NA
Lithium	1.34		0.0200	0.00448	mg/L	1		6010C	Total/NA
SiO2	70.9		1.07	0.0781	mg/L	1		6010C	Total/NA
Total Alkalinity	227		4.00	4.00	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	227		4.00	4.00	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	9110		100	100	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EP-38 — Lab Sample ID: 860-10239-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1320		10.0	4.00	mg/L	20		300.0	Total/NA
Fluoride	0.121	J	0.500	0.100	mg/L	1		300.0	Total/NA
Sulfate	2300		10.0	2.18	mg/L	20		300.0	Total/NA
Arsenic	0.324	J	0.500	0.275	mg/L	50		6010C	Total/NA
Barium	0.0156		0.0100	0.00135	mg/L	1		6010C	Total/NA
Beryllium	0.00197	J	0.00400	0.000490	mg/L	1		6010C	Total/NA
Boron	2.40	B	0.0500	0.00343	mg/L	1		6010C	Total/NA
Calcium	556		10.0	1.47	mg/L	50		6010C	Total/NA
Cobalt	0.00699	J	0.0100	0.000673	mg/L	1		6010C	Total/NA
Magnesium	57.8		0.200	0.0500	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: EP-38 (Continued) — Lab Sample ID: 860-10239-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Molybdenum	0.00527	J	0.0100	0.00123	mg/L	1		6010C	Total/NA
Potassium	42.4		0.500	0.107	mg/L	1		6010C	Total/NA
Sodium	1320		25.0	3.33	mg/L	50		6010C	Total/NA
Lithium	0.693		0.0200	0.00448	mg/L	1		6010C	Total/NA
SiO2	128		1.07	0.0781	mg/L	1		6010C	Total/NA
Total Alkalinity	59.1		4.00	4.00	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	59.1		4.00	4.00	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	5120		40.0	40.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-004 — Lab Sample ID: 860-10239-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1690		10.0	4.00	mg/L	20		300.0	Total/NA
Fluoride	0.122	J	0.500	0.100	mg/L	1		300.0	Total/NA
Sulfate	2400		10.0	2.18	mg/L	20		300.0	Total/NA
Barium	0.0170		0.0100	0.00135	mg/L	1		6010C	Total/NA
Beryllium	0.00138	J	0.00400	0.000490	mg/L	1		6010C	Total/NA
Boron	8.62	B	0.0500	0.00343	mg/L	1		6010C	Total/NA
Calcium	445		10.0	1.47	mg/L	50		6010C	Total/NA
Cobalt	0.00357	J	0.0100	0.000673	mg/L	1		6010C	Total/NA
Magnesium	60.2		0.200	0.0500	mg/L	1		6010C	Total/NA
Molybdenum	0.00337	J	0.0100	0.00123	mg/L	1		6010C	Total/NA
Potassium	47.3		0.500	0.107	mg/L	1		6010C	Total/NA
Sodium	1820		25.0	3.33	mg/L	50		6010C	Total/NA
Lithium	0.789		0.0200	0.00448	mg/L	1		6010C	Total/NA
SiO2	97.8		1.07	0.0781	mg/L	1		6010C	Total/NA
Total Alkalinity	136		4.00	4.00	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	136		4.00	4.00	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	6220		40.0	40.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-03 — Lab Sample ID: 860-10239-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2920		10.0	4.00	mg/L	20		300.0	Total/NA
Fluoride	0.231	J	0.500	0.100	mg/L	1		300.0	Total/NA
Sulfate	3270		10.0	2.18	mg/L	20		300.0	Total/NA
Arsenic	0.00618	J	0.0100	0.00550	mg/L	1		6010C	Total/NA
Barium	0.00980	J	0.0100	0.00135	mg/L	1		6010C	Total/NA
Beryllium	0.00145	J	0.00400	0.000490	mg/L	1		6010C	Total/NA
Boron	95.7	B	2.50	0.171	mg/L	50		6010C	Total/NA
Calcium	788		10.0	1.47	mg/L	50		6010C	Total/NA
Cobalt	0.00683	J	0.0100	0.000673	mg/L	1		6010C	Total/NA
Magnesium	47.4		0.200	0.0500	mg/L	1		6010C	Total/NA
Molybdenum	0.0299		0.0100	0.00123	mg/L	1		6010C	Total/NA
Potassium	53.1		0.500	0.107	mg/L	1		6010C	Total/NA
Sodium	2700		25.0	3.33	mg/L	50		6010C	Total/NA
Lithium	0.707		0.0200	0.00448	mg/L	1		6010C	Total/NA
SiO2	96.1		1.07	0.0781	mg/L	1		6010C	Total/NA
Total Alkalinity	273		4.00	4.00	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	273		4.00	4.00	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	9110		100	100	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GSI Environmental, Inc
Project/Site: Equalization Pond

Job ID: 860-10239-1

Client Sample ID: FB-03 — Lab Sample ID: 860-10239-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	0.871		0.500	0.200	mg/L	1		300.0	Total/NA
Sulfate	0.357	J	0.500	0.109	mg/L	1		300.0	Total/NA
Boron	0.0787	B	0.0500	0.00343	mg/L	1		6010C	Total/NA
Cobalt	0.000802	J	0.0100	0.000673	mg/L	1		6010C	Total/NA
Potassium	0.814		0.500	0.107	mg/L	1		6010C	Total/NA
Total Dissolved Solids	37.5		5.00	5.00	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-02 — Lab Sample ID: 860-10239-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	0.839		0.500	0.200	mg/L	1		300.0	Total/NA
Sulfate	0.344	J	0.500	0.109	mg/L	1		300.0	Total/NA
Arsenic	0.00589	J	0.0100	0.00550	mg/L	1		6010C	Total/NA
Barium	0.00455	J	0.0100	0.00135	mg/L	1		6010C	Total/NA
Boron	0.0384	J B	0.0500	0.00343	mg/L	1		6010C	Total/NA
Calcium	1.58		0.200	0.0293	mg/L	1		6010C	Total/NA
Chromium	0.00120	J B	0.0100	0.000811	mg/L	1		6010C	Total/NA
Cobalt	0.00108	J	0.0100	0.000673	mg/L	1		6010C	Total/NA
Magnesium	0.116	J	0.200	0.0500	mg/L	1		6010C	Total/NA
Potassium	0.597		0.500	0.107	mg/L	1		6010C	Total/NA
Sodium	3.16		0.500	0.0667	mg/L	1		6010C	Total/NA
SiO2	16.1		1.07	0.0781	mg/L	1		6010C	Total/NA
Total Dissolved Solids	16.5		5.00	5.00	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: EP-31

Lab Sample ID: 860-10239-1

Date Collected: 08/18/21 13:35

Matrix: Water

Date Received: 08/19/21 10:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**217**		0.500	0.200	mg/L			08/25/21 11:07	1
Fluoride	**2.01**		0.500	0.100	mg/L			08/25/21 11:07	1
Sulfate	**3190**		10.0	2.18	mg/L			08/25/21 14:07	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00589	U	0.0200	0.00589	mg/L		08/20/21 09:25	08/20/21 17:10	1
Arsenic	**0.0465**		0.0100	0.00550	mg/L		08/20/21 09:25	08/20/21 17:10	1
Barium	**0.00175**	**J**	0.0100	0.00135	mg/L		08/20/21 09:25	08/20/21 17:10	1
Beryllium	**0.0700**		0.00400	0.000490	mg/L		08/20/21 09:25	08/20/21 17:10	1
Boron	**5.40**	**B**	0.0500	0.00343	mg/L		08/20/21 09:25	08/20/21 17:10	1
Cadmium	**0.0182**		0.00500	0.00243	mg/L		08/20/21 09:25	08/20/21 17:10	1
Calcium	**645**		10.0	1.47	mg/L		08/20/21 09:25	08/20/21 17:33	50
Chromium	0.000811	U	0.0100	0.000811	mg/L		08/20/21 09:25	08/20/21 17:10	1
Cobalt	**0.114**		0.0100	0.000673	mg/L		08/20/21 09:25	08/20/21 17:10	1
Magnesium	**44.5**		0.200	0.0500	mg/L		08/20/21 09:25	08/20/21 17:10	1
Lead	**0.00427**	**J**	0.0100	0.00237	mg/L		08/20/21 09:25	08/20/21 17:10	1
Molybdenum	**0.0102**		0.0100	0.00123	mg/L		08/20/21 09:25	08/20/21 17:10	1
Potassium	**42.9**		0.500	0.107	mg/L		08/20/21 09:25	08/20/21 17:10	1
Sodium	**1330**		25.0	3.33	mg/L		08/20/21 09:25	08/20/21 17:33	50
Selenium	0.00439	U	0.0300	0.00439	mg/L		08/20/21 09:25	08/20/21 17:10	1
Thallium	0.00621	U	0.0200	0.00621	mg/L		08/20/21 09:25	08/20/21 17:10	1
Lithium	**0.664**		0.0200	0.00448	mg/L		08/20/21 09:25	08/20/21 17:10	1
SiO2	**116**		1.07	0.0781	mg/L		08/20/21 09:25	08/20/21 17:10	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000526	U	0.000400	0.0000526	mg/L		08/24/21 09:00	08/24/21 13:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	4.00	U	4.00	4.00	mg/L			08/24/21 10:39	1
Bicarbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/24/21 10:39	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/24/21 10:39	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/24/21 10:39	1
Total Dissolved Solids	**4890**		40.0	40.0	mg/L			08/25/21 22:00	1

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-6.08	U G	31.0	31.0	50.0	51.4	pCi/L	08/24/21 15:34	09/14/21 17:27	1
Radium-228	11.5	U	30.2	30.2	50.0	35.0	pCi/L	08/24/21 15:34	09/14/21 17:27	1

Client Sample ID: EP-32

Lab Sample ID: 860-10239-2

Date Collected: 08/18/21 11:45

Matrix: Water

Date Received: 08/19/21 10:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3220**		10.0	4.00	mg/L			08/25/21 14:41	20

Client Sample ID: EP-32

Lab Sample ID: 860-10239-2

Date Collected: 08/18/21 11:45

Matrix: Water

Date Received: 08/19/21 10:50

Method: 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.100	U	0.500	0.100	mg/L			08/25/21 11:41	1
Sulfate	**4310**		10.0	2.18	mg/L			08/25/21 14:41	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00589	U	0.0200	0.00589	mg/L		08/20/21 09:25	08/20/21 17:44	1
Arsenic	0.00550	U	0.0100	0.00550	mg/L		08/20/21 09:25	08/20/21 17:44	1
Barium	**0.0101**		0.0100	0.00135	mg/L		08/20/21 09:25	08/20/21 17:44	1
Beryllium	**0.00122**	**J**	0.00400	0.000490	mg/L		08/20/21 09:25	08/20/21 17:44	1
Boron	**28.3**	**B**	2.50	0.171	mg/L		08/20/21 09:25	08/20/21 18:02	50
Cadmium	0.00243	U	0.00500	0.00243	mg/L		08/20/21 09:25	08/20/21 17:44	1
Calcium	**660**		10.0	1.47	mg/L		08/20/21 09:25	08/20/21 18:02	50
Chromium	0.000811	U	0.0100	0.000811	mg/L		08/20/21 09:25	08/20/21 17:44	1
Cobalt	**0.00584**	**J**	0.0100	0.000673	mg/L		08/20/21 09:25	08/20/21 17:44	1
Magnesium	**60.0**		0.200	0.0500	mg/L		08/20/21 09:25	08/20/21 17:44	1
Lead	0.00237	U	0.0100	0.00237	mg/L		08/20/21 09:25	08/20/21 17:44	1
Molybdenum	**0.0116**		0.0100	0.00123	mg/L		08/20/21 09:25	08/20/21 17:44	1
Potassium	**57.1**		0.500	0.107	mg/L		08/20/21 09:25	08/20/21 17:44	1
Sodium	**3500**		25.0	3.33	mg/L		08/20/21 09:25	08/24/21 22:51	50
Selenium	0.00439	U	0.0300	0.00439	mg/L		08/20/21 09:25	08/20/21 17:44	1
Thallium	0.00621	U	0.0200	0.00621	mg/L		08/20/21 09:25	08/20/21 17:44	1
Lithium	**1.27**		0.0200	0.00448	mg/L		08/20/21 09:25	08/20/21 17:44	1
SiO2	**66.8**		1.07	0.0781	mg/L		08/20/21 09:25	08/20/21 17:44	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000263	U	0.000200	0.0000263	mg/L		08/24/21 09:00	08/24/21 13:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	**274**		4.00	4.00	mg/L			08/24/21 10:50	1
Bicarbonate Alkalinity as CaCO3	**274**		4.00	4.00	mg/L			08/24/21 10:50	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/24/21 10:50	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/24/21 10:50	1
Total Dissolved Solids	**12100**		100	100	mg/L			08/25/21 22:00	1

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**25.7**		15.6	15.9	50.0	22.4	pCi/L	08/24/21 15:34	09/14/21 19:38	1
Radium-228	16.9	U	24.1	24.2	50.0	30.1	pCi/L	08/24/21 15:34	09/14/21 19:38	1

Client Sample ID: EP-33

Lab Sample ID: 860-10239-3

Date Collected: 08/18/21 14:05

Matrix: Water

Date Received: 08/19/21 10:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2980**		10.0	4.00	mg/L			08/25/21 14:52	20
Fluoride	**0.235**	**J**	0.500	0.100	mg/L			08/25/21 11:53	1

Client Sample ID: EP-33

Lab Sample ID: 860-10239-3

Date Collected: 08/18/21 14:05

Matrix: Water

Date Received: 08/19/21 10:50

Method: 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**3330**		10.0	2.18	mg/L			08/25/21 14:52	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00589	U	0.0200	0.00589	mg/L		08/20/21 09:25	08/20/21 17:48	1
Arsenic	**0.00972**	**J**	0.0100	0.00550	mg/L		08/20/21 09:25	08/20/21 17:48	1
Barium	**0.00932**	**J**	0.0100	0.00135	mg/L		08/20/21 09:25	08/20/21 17:48	1
Beryllium	**0.00136**	**J**	0.00400	0.000490	mg/L		08/20/21 09:25	08/20/21 17:48	1
Boron	**93.7**	**B**	2.50	0.171	mg/L		08/20/21 09:25	08/20/21 18:06	50
Cadmium	0.00243	U	0.00500	0.00243	mg/L		08/20/21 09:25	08/20/21 17:48	1
Calcium	**721**		10.0	1.47	mg/L		08/20/21 09:25	08/20/21 18:06	50
Chromium	0.000811	U	0.0100	0.000811	mg/L		08/20/21 09:25	08/20/21 17:48	1
Cobalt	**0.00627**	**J**	0.0100	0.000673	mg/L		08/20/21 09:25	08/20/21 17:48	1
Magnesium	**43.9**		0.200	0.0500	mg/L		08/20/21 09:25	08/20/21 17:48	1
Lead	0.00237	U	0.0100	0.00237	mg/L		08/20/21 09:25	08/20/21 17:48	1
Molybdenum	**0.0267**		0.0100	0.00123	mg/L		08/20/21 09:25	08/20/21 17:48	1
Potassium	**49.7**		0.500	0.107	mg/L		08/20/21 09:25	08/20/21 17:48	1
Sodium	**2530**		25.0	3.33	mg/L		08/20/21 09:25	08/24/21 22:55	50
Selenium	0.00439	U	0.0300	0.00439	mg/L		08/20/21 09:25	08/20/21 17:48	1
Thallium	0.00621	U	0.0200	0.00621	mg/L		08/20/21 09:25	08/20/21 17:48	1
Lithium	**0.672**		0.0200	0.00448	mg/L		08/20/21 09:25	08/20/21 17:48	1
SiO2	**90.1**		1.07	0.0781	mg/L		08/20/21 09:25	08/20/21 17:48	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000263	U	0.000200	0.0000263	mg/L		08/24/21 09:00	08/24/21 13:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	**270**		4.00	4.00	mg/L			08/24/21 10:56	1
Bicarbonate Alkalinity as CaCO3	**270**		4.00	4.00	mg/L			08/24/21 10:56	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/24/21 10:56	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/24/21 10:56	1
Total Dissolved Solids	**9210**		100	100	mg/L			08/25/21 22:00	1

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**33.3**		16.7	17.2	50.0	20.2	pCi/L	08/24/21 15:34	09/14/21 21:42	1
Radium-228	13.6	U	21.8	21.9	50.0	39.3	pCi/L	08/24/21 15:34	09/14/21 21:42	1

Client Sample ID: EP-34

Lab Sample ID: 860-10239-4

Date Collected: 08/18/21 14:00

Matrix: Water

Date Received: 08/19/21 10:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4070**		10.0	4.00	mg/L			08/25/21 15:03	20
Fluoride	0.100	U	0.500	0.100	mg/L			08/25/21 12:04	1
Sulfate	**3600**		10.0	2.18	mg/L			08/25/21 15:03	20

Client Sample ID: EP-34

Lab Sample ID: 860-10239-4

Date Collected: 08/18/21 14:00

Matrix: Water

Date Received: 08/19/21 10:50

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.00931**	**J B**	0.0200	0.00589	mg/L		08/20/21 09:25	08/20/21 17:51	1
Arsenic	0.00550	U	0.0100	0.00550	mg/L		08/20/21 09:25	08/20/21 17:51	1
Barium	**0.0123**		0.0100	0.00135	mg/L		08/20/21 09:25	08/20/21 17:51	1
Beryllium	**0.00123**	**J**	0.00400	0.000490	mg/L		08/20/21 09:25	08/20/21 17:51	1
Boron	**32.4**	**B**	2.50	0.171	mg/L		08/20/21 09:25	08/20/21 18:09	50
Cadmium	0.00243	U	0.00500	0.00243	mg/L		08/20/21 09:25	08/20/21 17:51	1
Calcium	**668**		10.0	1.47	mg/L		08/20/21 09:25	08/20/21 18:09	50
Chromium	0.000811	U	0.0100	0.000811	mg/L		08/20/21 09:25	08/20/21 17:51	1
Cobalt	**0.00646**	**J**	0.0100	0.000673	mg/L		08/20/21 09:25	08/20/21 17:51	1
Magnesium	**65.1**		0.200	0.0500	mg/L		08/20/21 09:25	08/20/21 17:51	1
Lead	0.00237	U	0.0100	0.00237	mg/L		08/20/21 09:25	08/20/21 17:51	1
Molybdenum	**0.00911**	**J**	0.0100	0.00123	mg/L		08/20/21 09:25	08/20/21 17:51	1
Potassium	**60.3**		0.500	0.107	mg/L		08/20/21 09:25	08/20/21 17:51	1
Sodium	**3630**		25.0	3.33	mg/L		08/20/21 09:25	08/24/21 22:58	50
Selenium	0.00439	U	0.0300	0.00439	mg/L		08/20/21 09:25	08/20/21 17:51	1
Thallium	0.00621	U	0.0200	0.00621	mg/L		08/20/21 09:25	08/20/21 17:51	1
Lithium	**1.22**		0.0200	0.00448	mg/L		08/20/21 09:25	08/20/21 17:51	1
SiO2	**64.4**		1.07	0.0781	mg/L		08/20/21 09:25	08/20/21 17:51	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000263	U	0.000200	0.0000263	mg/L		08/24/21 09:00	08/24/21 13:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	**281**		4.00	4.00	mg/L			08/24/21 11:03	1
Bicarbonate Alkalinity as CaCO3	**281**		4.00	4.00	mg/L			08/24/21 11:03	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/24/21 11:03	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/24/21 11:03	1
Total Dissolved Solids	**11400**		100	100	mg/L			08/25/21 22:00	1

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-5.62	U	7.71	7.73	50.0	45.2	pCi/L	08/24/21 15:34	09/14/21 23:52	1
Radium-228	20.3	U	29.9	30.0	50.0	35.0	pCi/L	08/24/21 15:34	09/14/21 23:52	1

Client Sample ID: EP-35

Lab Sample ID: 860-10239-5

Date Collected: 08/18/21 14:50

Matrix: Water

Date Received: 08/19/21 10:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3710**		10.0	4.00	mg/L			08/25/21 15:37	20
Fluoride	0.100	U	0.500	0.100	mg/L			08/25/21 12:15	1
Sulfate	**3170**		10.0	2.18	mg/L			08/25/21 15:37	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00589	U	0.0200	0.00589	mg/L		08/20/21 09:25	08/20/21 17:55	1

Client Sample ID: EP-35

Lab Sample ID: 860-10239-5

Date Collected: 08/18/21 14:50

Matrix: Water

Date Received: 08/19/21 10:50

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00550	U	0.0100	0.00550	mg/L		08/20/21 09:25	08/20/21 17:55	1
Barium	**0.0202**		0.0100	0.00135	mg/L		08/20/21 09:25	08/20/21 17:55	1
Beryllium	**0.00114**	**J**	0.00400	0.000490	mg/L		08/20/21 09:25	08/20/21 17:55	1
Boron	**43.4**	**B**	2.50	0.171	mg/L		08/20/21 09:25	08/20/21 18:13	50
Cadmium	0.00243	U	0.00500	0.00243	mg/L		08/20/21 09:25	08/20/21 17:55	1
Calcium	**433**		10.0	1.47	mg/L		08/20/21 09:25	08/20/21 18:13	50
Chromium	0.000811	U	0.0100	0.000811	mg/L		08/20/21 09:25	08/20/21 17:55	1
Cobalt	**0.00438**	**J**	0.0100	0.000673	mg/L		08/20/21 09:25	08/20/21 17:55	1
Magnesium	**56.7**		0.200	0.0500	mg/L		08/20/21 09:25	08/20/21 17:55	1
Lead	0.00237	U	0.0100	0.00237	mg/L		08/20/21 09:25	08/20/21 17:55	1
Molybdenum	**0.00321**	**J**	0.0100	0.00123	mg/L		08/20/21 09:25	08/20/21 17:55	1
Potassium	**51.8**		0.500	0.107	mg/L		08/20/21 09:25	08/20/21 17:55	1
Sodium	**3250**		25.0	3.33	mg/L		08/20/21 09:25	08/24/21 23:13	50
Selenium	0.00439	U	0.0300	0.00439	mg/L		08/20/21 09:25	08/20/21 17:55	1
Thallium	0.00621	U	0.0200	0.00621	mg/L		08/20/21 09:25	08/20/21 17:55	1
Lithium	**1.17**		0.0200	0.00448	mg/L		08/20/21 09:25	08/20/21 17:55	1
SiO2	**94.9**		1.07	0.0781	mg/L		08/20/21 09:25	08/20/21 17:55	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000263	U	0.000200	0.0000263	mg/L		08/24/21 09:00	08/24/21 13:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	**197**		4.00	4.00	mg/L			08/24/21 11:09	1
Bicarbonate Alkalinity as CaCO3	**197**		4.00	4.00	mg/L			08/24/21 11:09	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/24/21 11:09	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/24/21 11:09	1
Total Dissolved Solids	**10000**		100	100	mg/L			08/24/21 01:37	1

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**77.4**		21.9	23.7	50.0	22.1	pCi/L	08/24/21 15:34	09/15/21 06:53	1
Radium-228	6.61	U	18.5	18.5	50.0	39.3	pCi/L	08/24/21 15:34	09/15/21 06:53	1

Client Sample ID: EP-36

Lab Sample ID: 860-10239-6

Date Collected: 08/18/21 15:40

Matrix: Water

Date Received: 08/19/21 10:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3900**		10.0	4.00	mg/L			08/25/21 15:48	20
Fluoride	0.100	U	0.500	0.100	mg/L			08/25/21 12:26	1
Sulfate	**2520**		10.0	2.18	mg/L			08/25/21 15:48	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00589	U	0.0200	0.00589	mg/L		08/20/21 09:25	08/20/21 17:58	1
Arsenic	**0.00972**	**J**	0.0100	0.00550	mg/L		08/20/21 09:25	08/20/21 17:58	1

Client Sample ID: EP-36

Lab Sample ID: 860-10239-6

Date Collected: 08/18/21 15:40

Matrix: Water

Date Received: 08/19/21 10:50

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.0188**		0.0100	0.00135	mg/L		08/20/21 09:25	08/20/21 17:58	1
Beryllium	**0.00130**	**J**	0.00400	0.000490	mg/L		08/20/21 09:25	08/20/21 17:58	1
Boron	**40.1**	**B**	2.50	0.171	mg/L		08/20/21 09:25	08/20/21 18:17	50
Cadmium	0.00243	U	0.00500	0.00243	mg/L		08/20/21 09:25	08/20/21 17:58	1
Calcium	**596**		10.0	1.47	mg/L		08/20/21 09:25	08/20/21 18:17	50
Chromium	0.000811	U	0.0100	0.000811	mg/L		08/20/21 09:25	08/20/21 17:58	1
Cobalt	**0.00586**	**J**	0.0100	0.000673	mg/L		08/20/21 09:25	08/20/21 17:58	1
Magnesium	**110**		10.0	2.50	mg/L		08/20/21 09:25	08/20/21 18:17	50
Lead	0.00237	U	0.0100	0.00237	mg/L		08/20/21 09:25	08/20/21 17:58	1
Molybdenum	**0.00266**	**J**	0.0100	0.00123	mg/L		08/20/21 09:25	08/20/21 17:58	1
Potassium	**58.7**		0.500	0.107	mg/L		08/20/21 09:25	08/20/21 17:58	1
Sodium	**2810**		25.0	3.33	mg/L		08/20/21 09:25	08/24/21 23:17	50
Selenium	0.00439	U	0.0300	0.00439	mg/L		08/20/21 09:25	08/20/21 17:58	1
Thallium	0.00621	U	0.0200	0.00621	mg/L		08/20/21 09:25	08/20/21 17:58	1
Lithium	**1.22**		0.0200	0.00448	mg/L		08/20/21 09:25	08/20/21 17:58	1
SiO2	**78.6**		1.07	0.0781	mg/L		08/20/21 09:25	08/20/21 17:58	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000263	U	0.000200	0.0000263	mg/L		08/24/21 09:00	08/24/21 13:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	**169**		4.00	4.00	mg/L			08/24/21 11:15	1
Bicarbonate Alkalinity as CaCO3	**169**		4.00	4.00	mg/L			08/24/21 11:15	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/24/21 11:15	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/24/21 11:15	1
Total Dissolved Solids	**8700**		100	100	mg/L			08/24/21 22:30	1

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**65.2**		22.6	23.9	50.0	22.1	pCi/L	08/24/21 15:34	09/15/21 09:00	1
Radium-228	15.5	U	25.4	25.5	50.0	32.6	pCi/L	08/24/21 15:34	09/15/21 09:00	1

Client Sample ID: EP-37

Lab Sample ID: 860-10239-7

Date Collected: 08/18/21 16:35

Matrix: Water

Date Received: 08/19/21 10:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3570**		10.0	4.00	mg/L			08/25/21 16:00	20
Fluoride	0.100	U	0.500	0.100	mg/L			08/25/21 12:37	1
Sulfate	**2810**		10.0	2.18	mg/L			08/25/21 16:00	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00589	U	0.0200	0.00589	mg/L		08/20/21 09:25	08/20/21 18:27	1
Arsenic	**0.0116**		0.0100	0.00550	mg/L		08/20/21 09:25	08/20/21 18:27	1
Barium	**0.0246**		0.0100	0.00135	mg/L		08/20/21 09:25	08/20/21 18:27	1

Client Sample ID: EP-37

Lab Sample ID: 860-10239-7

Date Collected: 08/18/21 16:35

Matrix: Water

Date Received: 08/19/21 10:50

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	**0.00130**	**J**	0.00400	0.000490	mg/L		08/20/21 09:25	08/20/21 18:27	1
Boron	**7.74**	**B**	0.0500	0.00343	mg/L		08/20/21 09:25	08/20/21 18:27	1
Cadmium	0.00243	U	0.00500	0.00243	mg/L		08/20/21 09:25	08/20/21 18:27	1
Calcium	**557**		10.0	1.47	mg/L		08/20/21 09:25	08/20/21 18:49	50
Chromium	0.000811	U	0.0100	0.000811	mg/L		08/20/21 09:25	08/20/21 18:27	1
Cobalt	**0.00560**	**J**	0.0100	0.000673	mg/L		08/20/21 09:25	08/20/21 18:27	1
Magnesium	**73.6**		0.200	0.0500	mg/L		08/20/21 09:25	08/20/21 18:27	1
Lead	0.00237	U	0.0100	0.00237	mg/L		08/20/21 09:25	08/20/21 18:27	1
Molybdenum	**0.00387**	**J**	0.0100	0.00123	mg/L		08/20/21 09:25	08/20/21 18:27	1
Potassium	**61.6**		0.500	0.107	mg/L		08/20/21 09:25	08/20/21 18:27	1
Sodium	**2980**		25.0	3.33	mg/L		08/20/21 09:25	08/24/21 23:20	50
Selenium	0.00439	U	0.0300	0.00439	mg/L		08/20/21 09:25	08/20/21 18:27	1
Thallium	0.00621	U	0.0200	0.00621	mg/L		08/20/21 09:25	08/20/21 18:27	1
Lithium	**1.34**		0.0200	0.00448	mg/L		08/20/21 09:25	08/20/21 18:27	1
SiO2	**70.9**		1.07	0.0781	mg/L		08/20/21 09:25	08/20/21 18:27	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000263	U	0.000200	0.0000263	mg/L		08/24/21 09:00	08/24/21 13:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	**227**		4.00	4.00	mg/L			08/24/21 11:33	1
Bicarbonate Alkalinity as CaCO3	**227**		4.00	4.00	mg/L			08/24/21 11:33	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/24/21 11:33	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/24/21 11:33	1
Total Dissolved Solids	**9110**		100	100	mg/L			08/24/21 22:30	1

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**31.3**		21.2	21.5	50.0	22.8	pCi/L	08/24/21 15:34	09/15/21 13:33	1
Radium-228	21.1	U	25.4	25.6	50.0	30.1	pCi/L	08/24/21 15:34	09/15/21 13:33	1

Client Sample ID: EP-38

Lab Sample ID: 860-10239-8

Date Collected: 08/18/21 12:00

Matrix: Water

Date Received: 08/19/21 10:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1320**		10.0	4.00	mg/L			08/25/21 16:11	20
Fluoride	**0.121**	**J**	0.500	0.100	mg/L			08/25/21 12:49	1
Sulfate	**2300**		10.0	2.18	mg/L			08/25/21 16:11	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00589	U	0.0200	0.00589	mg/L		08/20/21 09:25	08/20/21 18:31	1
Arsenic	**0.324**	**J**	0.500	0.275	mg/L		08/20/21 09:25	08/20/21 18:53	50
Barium	**0.0156**		0.0100	0.00135	mg/L		08/20/21 09:25	08/20/21 18:31	1
Beryllium	**0.00197**	**J**	0.00400	0.000490	mg/L		08/20/21 09:25	08/20/21 18:31	1

Client Sample ID: EP-38

Lab Sample ID: 860-10239-8

Date Collected: 08/18/21 12:00

Matrix: Water

Date Received: 08/19/21 10:50

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**2.40**	**B**	0.0500	0.00343	mg/L		08/20/21 09:25	08/20/21 18:31	1
Cadmium	0.00243	U	0.00500	0.00243	mg/L		08/20/21 09:25	08/20/21 18:31	1
Calcium	**556**		10.0	1.47	mg/L		08/20/21 09:25	08/20/21 18:53	50
Chromium	0.000811	U	0.0100	0.000811	mg/L		08/20/21 09:25	08/20/21 18:31	1
Cobalt	**0.00699**	**J**	0.0100	0.000673	mg/L		08/20/21 09:25	08/20/21 18:31	1
Magnesium	**57.8**		0.200	0.0500	mg/L		08/20/21 09:25	08/20/21 18:31	1
Lead	0.00237	U	0.0100	0.00237	mg/L		08/20/21 09:25	08/20/21 18:31	1
Molybdenum	**0.00527**	**J**	0.0100	0.00123	mg/L		08/20/21 09:25	08/20/21 18:31	1
Potassium	**42.4**		0.500	0.107	mg/L		08/20/21 09:25	08/20/21 18:31	1
Sodium	**1320**		25.0	3.33	mg/L		08/20/21 09:25	08/24/21 23:24	50
Selenium	0.00439	U	0.0300	0.00439	mg/L		08/20/21 09:25	08/20/21 18:31	1
Thallium	0.00621	U	0.0200	0.00621	mg/L		08/20/21 09:25	08/20/21 18:31	1
Lithium	**0.693**		0.0200	0.00448	mg/L		08/20/21 09:25	08/20/21 18:31	1
SiO2	**128**		1.07	0.0781	mg/L		08/20/21 09:25	08/20/21 18:31	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000263	U	0.000200	0.0000263	mg/L		08/24/21 09:00	08/24/21 13:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	**59.1**		4.00	4.00	mg/L			08/24/21 11:38	1
Bicarbonate Alkalinity as CaCO3	**59.1**		4.00	4.00	mg/L			08/24/21 11:38	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/24/21 11:38	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/24/21 11:38	1
Total Dissolved Solids	**5120**		40.0	40.0	mg/L			08/25/21 22:00	1

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**31.5**		18.2	18.6	50.0	20.5	pCi/L	08/24/21 15:34	09/15/21 15:56	1
Radium-228	14.1	U	23.5	23.5	50.0	37.2	pCi/L	08/24/21 15:34	09/15/21 15:56	1

Client Sample ID: MW-004

Lab Sample ID: 860-10239-9

Date Collected: 08/18/21 12:55

Matrix: Water

Date Received: 08/19/21 10:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1690**		10.0	4.00	mg/L			08/25/21 16:22	20
Fluoride	**0.122**	**J**	0.500	0.100	mg/L			08/25/21 13:22	1
Sulfate	**2400**		10.0	2.18	mg/L			08/25/21 16:22	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00589	U	0.0200	0.00589	mg/L		08/20/21 09:25	08/20/21 18:35	1
Arsenic	0.00550	U	0.0100	0.00550	mg/L		08/20/21 09:25	08/20/21 18:35	1
Barium	**0.0170**		0.0100	0.00135	mg/L		08/20/21 09:25	08/20/21 18:35	1
Beryllium	**0.00138**	**J**	0.00400	0.000490	mg/L		08/20/21 09:25	08/20/21 18:35	1
Boron	**8.62**	**B**	0.0500	0.00343	mg/L		08/20/21 09:25	08/20/21 18:35	1

Client Sample ID: MW-004

Lab Sample ID: 860-10239-9

Date Collected: 08/18/21 12:55

Matrix: Water

Date Received: 08/19/21 10:50

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.00243	U	0.00500	0.00243	mg/L		08/20/21 09:25	08/20/21 18:35	1
Calcium	**445**		10.0	1.47	mg/L		08/20/21 09:25	08/20/21 18:56	50
Chromium	0.000811	U	0.0100	0.000811	mg/L		08/20/21 09:25	08/20/21 18:35	1
Cobalt	**0.00357**	**J**	0.0100	0.000673	mg/L		08/20/21 09:25	08/20/21 18:35	1
Magnesium	**60.2**		0.200	0.0500	mg/L		08/20/21 09:25	08/20/21 18:35	1
Lead	0.00237	U	0.0100	0.00237	mg/L		08/20/21 09:25	08/20/21 18:35	1
Molybdenum	**0.00337**	**J**	0.0100	0.00123	mg/L		08/20/21 09:25	08/20/21 18:35	1
Potassium	**47.3**		0.500	0.107	mg/L		08/20/21 09:25	08/20/21 18:35	1
Sodium	**1820**		25.0	3.33	mg/L		08/20/21 09:25	08/24/21 23:28	50
Selenium	0.00439	U	0.0300	0.00439	mg/L		08/20/21 09:25	08/20/21 18:35	1
Thallium	0.00621	U	0.0200	0.00621	mg/L		08/20/21 09:25	08/20/21 18:35	1
Lithium	**0.789**		0.0200	0.00448	mg/L		08/20/21 09:25	08/20/21 18:35	1
SiO2	**97.8**		1.07	0.0781	mg/L		08/20/21 09:25	08/20/21 18:35	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000263	U	0.000200	0.0000263	mg/L		08/24/21 09:00	08/24/21 13:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	**136**		4.00	4.00	mg/L			08/24/21 11:43	1
Bicarbonate Alkalinity as CaCO3	**136**		4.00	4.00	mg/L			08/24/21 11:43	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/24/21 11:43	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/24/21 11:43	1
Total Dissolved Solids	**6220**		40.0	40.0	mg/L			08/25/21 22:00	1

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**36.0**		18.8	19.3	50.0	20.7	pCi/L	08/24/21 15:34	09/15/21 18:36	1
Radium-228	17.5	U	28.3	28.3	50.0	30.1	pCi/L	08/24/21 15:34	09/15/21 18:36	1

Client Sample ID: DUP-03

Lab Sample ID: 860-10239-10

Date Collected: 08/18/21 13:00

Matrix: Water

Date Received: 08/19/21 10:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2920**		10.0	4.00	mg/L			08/25/21 16:33	20
Fluoride	**0.231**	**J**	0.500	0.100	mg/L			08/25/21 13:34	1
Sulfate	**3270**		10.0	2.18	mg/L			08/25/21 16:33	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00589	U	0.0200	0.00589	mg/L		08/20/21 09:25	08/20/21 18:38	1
Arsenic	**0.00618**	**J**	0.0100	0.00550	mg/L		08/20/21 09:25	08/20/21 18:38	1
Barium	**0.00980**	**J**	0.0100	0.00135	mg/L		08/20/21 09:25	08/20/21 18:38	1
Beryllium	**0.00145**	**J**	0.00400	0.000490	mg/L		08/20/21 09:25	08/20/21 18:38	1
Boron	**95.7**	**B**	2.50	0.171	mg/L		08/20/21 09:25	08/20/21 19:00	50
Cadmium	0.00243	U	0.00500	0.00243	mg/L		08/20/21 09:25	08/20/21 18:38	1

Client Sample ID: DUP-03

Lab Sample ID: 860-10239-10

Date Collected: 08/18/21 13:00

Matrix: Water

Date Received: 08/19/21 10:50

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**788**		10.0	1.47	mg/L		08/20/21 09:25	08/20/21 19:00	50
Chromium	0.000811	U	0.0100	0.000811	mg/L		08/20/21 09:25	08/20/21 18:38	1
Cobalt	**0.00683**	**J**	0.0100	0.000673	mg/L		08/20/21 09:25	08/20/21 18:38	1
Magnesium	**47.4**		0.200	0.0500	mg/L		08/20/21 09:25	08/20/21 18:38	1
Lead	0.00237	U	0.0100	0.00237	mg/L		08/20/21 09:25	08/20/21 18:38	1
Molybdenum	**0.0299**		0.0100	0.00123	mg/L		08/20/21 09:25	08/20/21 18:38	1
Potassium	**53.1**		0.500	0.107	mg/L		08/20/21 09:25	08/20/21 18:38	1
Sodium	**2700**		25.0	3.33	mg/L		08/20/21 09:25	08/24/21 23:31	50
Selenium	0.00439	U	0.0300	0.00439	mg/L		08/20/21 09:25	08/20/21 18:38	1
Thallium	0.00621	U	0.0200	0.00621	mg/L		08/20/21 09:25	08/20/21 18:38	1
Lithium	**0.707**		0.0200	0.00448	mg/L		08/20/21 09:25	08/20/21 18:38	1
SiO2	**96.1**		1.07	0.0781	mg/L		08/20/21 09:25	08/20/21 18:38	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000263	U	0.000200	0.0000263	mg/L		08/24/21 09:00	08/24/21 13:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	**273**		4.00	4.00	mg/L			08/24/21 11:51	1
Bicarbonate Alkalinity as CaCO3	**273**		4.00	4.00	mg/L			08/24/21 11:51	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/24/21 11:51	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/24/21 11:51	1
Total Dissolved Solids	**9110**		100	100	mg/L			08/25/21 22:00	1

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	11.5	U	18.4	18.4	50.0	20.7	pCi/L	08/24/21 15:34	09/15/21 20:51	1
Radium-228	8.82	U	24.2	24.2	50.0	35.0	pCi/L	08/24/21 15:34	09/15/21 20:51	1

Client Sample ID: FB-03

Lab Sample ID: 860-10239-11

Date Collected: 08/18/21 15:55

Matrix: Water

Date Received: 08/19/21 10:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**0.871**		0.500	0.200	mg/L			08/25/21 13:45	1
Fluoride	0.100	U	0.500	0.100	mg/L			08/25/21 13:45	1
Sulfate	**0.357**	**J**	0.500	0.109	mg/L			08/25/21 13:45	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00589	U	0.0200	0.00589	mg/L		08/20/21 09:25	08/20/21 18:42	1
Arsenic	0.00550	U	0.0100	0.00550	mg/L		08/20/21 09:25	08/20/21 18:42	1
Barium	0.00135	U	0.0100	0.00135	mg/L		08/20/21 09:25	08/20/21 18:42	1
Beryllium	0.000490	U	0.00400	0.000490	mg/L		08/20/21 09:25	08/20/21 18:42	1
Boron	**0.0787**	**B**	0.0500	0.00343	mg/L		08/20/21 09:25	08/20/21 18:42	1
Cadmium	0.00243	U	0.00500	0.00243	mg/L		08/20/21 09:25	08/20/21 18:42	1
Calcium	0.0293	U	0.200	0.0293	mg/L		08/20/21 09:25	08/20/21 18:42	1

Client Sample ID: FB-03

Lab Sample ID: 860-10239-11

Date Collected: 08/18/21 15:55

Matrix: Water

Date Received: 08/19/21 10:50

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.000811	U	0.0100	0.000811	mg/L		08/20/21 09:25	08/20/21 18:42	1
Cobalt	**0.000802**	**J**	0.0100	0.000673	mg/L		08/20/21 09:25	08/20/21 18:42	1
Magnesium	0.0500	U	0.200	0.0500	mg/L		08/20/21 09:25	08/20/21 18:42	1
Lead	0.00237	U	0.0100	0.00237	mg/L		08/20/21 09:25	08/20/21 18:42	1
Molybdenum	0.00123	U	0.0100	0.00123	mg/L		08/20/21 09:25	08/20/21 18:42	1
Potassium	**0.814**		0.500	0.107	mg/L		08/20/21 09:25	08/20/21 18:42	1
Sodium	0.0667	U	0.500	0.0667	mg/L		08/20/21 09:25	08/24/21 23:35	1
Selenium	0.00439	U	0.0300	0.00439	mg/L		08/20/21 09:25	08/20/21 18:42	1
Thallium	0.00621	U	0.0200	0.00621	mg/L		08/20/21 09:25	08/20/21 18:42	1
Lithium	0.00448	U	0.0200	0.00448	mg/L		08/20/21 09:25	08/20/21 18:42	1
SiO2	0.0781	U	1.07	0.0781	mg/L		08/20/21 09:25	08/20/21 18:42	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000263	U	0.000200	0.0000263	mg/L		08/24/21 09:00	08/24/21 13:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**37.5**		5.00	5.00	mg/L			08/24/21 11:00	1

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**61.7**		19.8	21.1	50.0	19.6	pCi/L	08/24/21 15:34	09/16/21 09:08	1
Radium-228	12.7	U	26.5	26.6	50.0	30.1	pCi/L	08/24/21 15:34	09/16/21 09:08	1

Client Sample ID: EB-02

Lab Sample ID: 860-10239-12

Date Collected: 08/18/21 13:10

Matrix: Water

Date Received: 08/19/21 10:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**0.839**		0.500	0.200	mg/L			08/25/21 13:56	1
Fluoride	0.100	U	0.500	0.100	mg/L			08/25/21 13:56	1
Sulfate	**0.344**	**J**	0.500	0.109	mg/L			08/25/21 13:56	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00589	U	0.0200	0.00589	mg/L		08/20/21 09:25	08/20/21 18:46	1
Arsenic	**0.00589**	**J**	0.0100	0.00550	mg/L		08/20/21 09:25	08/20/21 18:46	1
Barium	**0.00455**	**J**	0.0100	0.00135	mg/L		08/20/21 09:25	08/20/21 18:46	1
Beryllium	0.000490	U	0.00400	0.000490	mg/L		08/20/21 09:25	08/20/21 18:46	1
Boron	**0.0384**	**J B**	0.0500	0.00343	mg/L		08/20/21 09:25	08/20/21 18:46	1
Cadmium	0.00243	U	0.00500	0.00243	mg/L		08/20/21 09:25	08/20/21 18:46	1
Calcium	**1.58**		0.200	0.0293	mg/L		08/20/21 09:25	08/20/21 18:46	1
Chromium	**0.00120**	**J B**	0.0100	0.000811	mg/L		08/20/21 09:25	08/20/21 18:46	1
Cobalt	**0.00108**	**J**	0.0100	0.000673	mg/L		08/20/21 09:25	08/20/21 18:46	1
Magnesium	**0.116**	**J**	0.200	0.0500	mg/L		08/20/21 09:25	08/20/21 18:46	1
Lead	0.00237	U	0.0100	0.00237	mg/L		08/20/21 09:25	08/20/21 18:46	1
Molybdenum	0.00123	U	0.0100	0.00123	mg/L		08/20/21 09:25	08/20/21 18:46	1

Client Sample ID: EB-02
Date Collected: 08/18/21 13:10
Date Received: 08/19/21 10:50

Lab Sample ID: 860-10239-12
Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**0.597**		0.500	0.107	mg/L		08/20/21 09:25	08/20/21 18:46	1
Sodium	**3.16**		0.500	0.0667	mg/L		08/20/21 09:25	08/24/21 23:38	1
Selenium	0.00439	U	0.0300	0.00439	mg/L		08/20/21 09:25	08/20/21 18:46	1
Thallium	0.00621	U	0.0200	0.00621	mg/L		08/20/21 09:25	08/20/21 18:46	1
Lithium	0.00448	U	0.0200	0.00448	mg/L		08/20/21 09:25	08/20/21 18:46	1
SiO2	**16.1**		1.07	0.0781	mg/L		08/20/21 09:25	08/20/21 18:46	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000263	U	0.000200	0.0000263	mg/L		08/24/21 09:00	08/24/21 13:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	4.00	U	4.00	4.00	mg/L			08/24/21 11:57	1
Bicarbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/24/21 11:57	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/24/21 11:57	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/24/21 11:57	1
Total Dissolved Solids	**16.5**		5.00	5.00	mg/L			08/25/21 22:00	1

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**79.6**		18.5	20.7	50.0	18.3	pCi/L	08/24/21 15:34	09/16/21 08:04	1
Radium-228	**22.7**		19.3	19.5	50.0	22.3	pCi/L	08/24/21 15:34	09/16/21 08:04	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-20163/3
Matrix: Water
Analysis Batch: 20163

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.200	U	0.500	0.200	mg/L			08/25/21 08:53	1
Fluoride	0.100	U	0.500	0.100	mg/L			08/25/21 08:53	1
Sulfate	0.109	U	0.500	0.109	mg/L			08/25/21 08:53	1

Lab Sample ID: LCS 860-20163/4
Matrix: Water
Analysis Batch: 20163

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.821		mg/L		98	90 - 110
Fluoride	10.0	10.11		mg/L		101	90 - 110
Sulfate	10.0	9.502		mg/L		95	90 - 110

Lab Sample ID: LCSD 860-20163/5
Matrix: Water
Analysis Batch: 20163

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	10.0	9.811		mg/L		98	90 - 110	0	20
Fluoride	10.0	10.12		mg/L		101	90 - 110	0	20
Sulfate	10.0	9.500		mg/L		95	90 - 110	0	20

Lab Sample ID: 860-10239-1 MS
Matrix: Water
Analysis Batch: 20163

Client Sample ID: EP-31
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	217		10.0	226.4	4	mg/L		89	90 - 110
Fluoride	2.01		10.0	12.24		mg/L		102	90 - 110

Lab Sample ID: 860-10239-1 MS
Matrix: Water
Analysis Batch: 20163

Client Sample ID: EP-31
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	3190		200	3349	4	mg/L		78	90 - 110

Lab Sample ID: 860-10239-1 MSD
Matrix: Water
Analysis Batch: 20163

Client Sample ID: EP-31
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	217		10.0	226.5	4	mg/L		90	90 - 110	0	20
Fluoride	2.01		10.0	12.24		mg/L		102	90 - 110	0	20

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 860-10239-1 MSD
Matrix: Water
Analysis Batch: 20163

Client Sample ID: EP-31
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	3190		200	3353	4	mg/L		80	90 - 110	0	20

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 860-19660/1-A
Matrix: Water
Analysis Batch: 19883

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19660

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.006637	J	0.0200	0.00589	mg/L		08/20/21 09:25	08/20/21 16:59	1
Arsenic	0.00550	U	0.0100	0.00550	mg/L		08/20/21 09:25	08/20/21 16:59	1
Barium	0.00135	U	0.0100	0.00135	mg/L		08/20/21 09:25	08/20/21 16:59	1
Beryllium	0.000490	U	0.00400	0.000490	mg/L		08/20/21 09:25	08/20/21 16:59	1
Boron	0.006639	J	0.0500	0.00343	mg/L		08/20/21 09:25	08/20/21 16:59	1
Cadmium	0.00243	U	0.00500	0.00243	mg/L		08/20/21 09:25	08/20/21 16:59	1
Calcium	0.0293	U	0.200	0.0293	mg/L		08/20/21 09:25	08/20/21 16:59	1
Chromium	0.001779	J	0.0100	0.000811	mg/L		08/20/21 09:25	08/20/21 16:59	1
Cobalt	0.000673	U	0.0100	0.000673	mg/L		08/20/21 09:25	08/20/21 16:59	1
Magnesium	0.0500	U	0.200	0.0500	mg/L		08/20/21 09:25	08/20/21 16:59	1
Lead	0.00237	U	0.0100	0.00237	mg/L		08/20/21 09:25	08/20/21 16:59	1
Molybdenum	0.00123	U	0.0100	0.00123	mg/L		08/20/21 09:25	08/20/21 16:59	1
Potassium	0.107	U	0.500	0.107	mg/L		08/20/21 09:25	08/20/21 16:59	1
Sodium	0.0667	U	0.500	0.0667	mg/L		08/20/21 09:25	08/20/21 16:59	1
Selenium	0.005023	J	0.0300	0.00439	mg/L		08/20/21 09:25	08/20/21 16:59	1
Thallium	0.00621	U	0.0200	0.00621	mg/L		08/20/21 09:25	08/20/21 16:59	1
Lithium	0.00448	U	0.0200	0.00448	mg/L		08/20/21 09:25	08/20/21 16:59	1
SiO2	0.0781	U	1.07	0.0781	mg/L		08/20/21 09:25	08/20/21 16:59	1

Lab Sample ID: LCS 860-19660/2-A
Matrix: Water
Analysis Batch: 19883

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19660

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.00	1.101		mg/L		110	80 - 120
Arsenic	1.00	1.089		mg/L		109	80 - 120
Barium	1.00	1.096		mg/L		110	80 - 120
Beryllium	1.00	1.089		mg/L		109	80 - 120
Boron	1.00	1.099		mg/L		110	80 - 120
Cadmium	1.00	1.085		mg/L		108	80 - 120
Calcium	25.0	28.08		mg/L		112	80 - 120
Chromium	1.00	1.122		mg/L		112	80 - 120
Cobalt	1.00	1.089		mg/L		109	80 - 120
Magnesium	25.0	27.75		mg/L		111	80 - 120
Lead	1.00	1.108		mg/L		111	80 - 120
Molybdenum	1.00	1.121		mg/L		112	80 - 120
Potassium	10.0	11.16		mg/L		112	80 - 120
Silicon	10.0	11.26		mg/L		113	80 - 120
Sodium	25.0	27.98		mg/L		112	80 - 120
Selenium	1.00	1.085		mg/L		108	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 860-19660/2-A
Matrix: Water
Analysis Batch: 19883

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19660

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	1.00	1.132		mg/L		113	80 - 120
Lithium	1.00	1.086		mg/L		109	80 - 120

Lab Sample ID: LCSD 860-19660/3-A
Matrix: Water
Analysis Batch: 19883

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 19660

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	1.00	1.085		mg/L		109	80 - 120	1	20
Arsenic	1.00	1.087		mg/L		109	80 - 120	0	20
Barium	1.00	1.095		mg/L		110	80 - 120	0	20
Beryllium	1.00	1.093		mg/L		109	80 - 120	0	20
Boron	1.00	1.099		mg/L		110	80 - 120	0	20
Cadmium	1.00	1.079		mg/L		108	80 - 120	1	20
Calcium	25.0	28.10		mg/L		112	80 - 120	0	20
Chromium	1.00	1.116		mg/L		112	80 - 120	1	20
Cobalt	1.00	1.086		mg/L		109	80 - 120	0	20
Magnesium	25.0	27.77		mg/L		111	80 - 120	0	20
Lead	1.00	1.110		mg/L		111	80 - 120	0	20
Molybdenum	1.00	1.123		mg/L		112	80 - 120	0	20
Potassium	10.0	11.14		mg/L		111	80 - 120	0	20
Silicon	10.0	11.26		mg/L		113	80 - 120	0	20
Sodium	25.0	27.97		mg/L		112	80 - 120	0	20
Selenium	1.00	1.080		mg/L		108	80 - 120	0	20
Thallium	1.00	1.146		mg/L		115	80 - 120	1	20
Lithium	1.00	1.079		mg/L		108	80 - 120	1	20

Lab Sample ID: 860-10239-1 MS
Matrix: Water
Analysis Batch: 19883

Client Sample ID: EP-31
Prep Type: Total/NA
Prep Batch: 19660

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.00589	U	1.00	1.077		mg/L		108	75 - 125
Arsenic	0.0465		1.00	1.098		mg/L		105	75 - 125
Barium	0.00175	J	1.00	1.029		mg/L		103	75 - 125
Beryllium	0.0700		1.00	1.125		mg/L		105	75 - 125
Boron	5.40	B	1.00	6.409	4	mg/L		101	75 - 125
Cadmium	0.0182		1.00	1.086		mg/L		107	75 - 125
Calcium	451	E	25.0	453.1	E 4	mg/L		7	75 - 125
Chromium	0.000811	U	1.00	1.033		mg/L		103	75 - 125
Cobalt	0.114		1.00	1.165		mg/L		105	75 - 125
Magnesium	44.5		25.0	69.81		mg/L		101	75 - 125
Lead	0.00427	J	1.00	1.031		mg/L		103	75 - 125
Molybdenum	0.0102		1.00	1.084		mg/L		107	75 - 125
Potassium	42.9		10.0	53.92	4	mg/L		110	75 - 125
Silicon	54.1		10.0	64.22	4	mg/L		101	75 - 125
Sodium	917	E	25.0	928.4	E 4	mg/L		45	75 - 125
Selenium	0.00439	U	1.00	1.046		mg/L		105	75 - 125
Thallium	0.00621	U	1.00	0.9968		mg/L		100	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 860-10239-1 MS
Matrix: Water
Analysis Batch: 19883

Client Sample ID: EP-31
Prep Type: Total/NA
Prep Batch: 19660

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.664		1.00	1.727		mg/L		106	

Lab Sample ID: 860-10239-1 MSD
Matrix: Water
Analysis Batch: 19883

Client Sample ID: EP-31
Prep Type: Total/NA
Prep Batch: 19660

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.00589	U	1.00	1.051		mg/L		105	75 - 125	2	20
Arsenic	0.0465		1.00	1.093		mg/L		105	75 - 125	1	20
Barium	0.00175	J	1.00	1.014		mg/L		101	75 - 125	1	20
Beryllium	0.0700		1.00	1.115		mg/L		104	75 - 125	1	20
Boron	5.40	B	1.00	6.303	4	mg/L		91	75 - 125	2	20
Cadmium	0.0182		1.00	1.062		mg/L		104	75 - 125	2	20
Calcium	451	E	25.0	458.9	E 4	mg/L		31	75 - 125	1	20
Chromium	0.000811	U	1.00	1.000		mg/L		100	75 - 125	3	20
Cobalt	0.114		1.00	1.127		mg/L		101	75 - 125	3	20
Magnesium	44.5		25.0	69.00		mg/L		98	75 - 125	1	20
Lead	0.00427	J	1.00	1.012		mg/L		101	75 - 125	2	20
Molybdenum	0.0102		1.00	1.065		mg/L		105	75 - 125	2	20
Potassium	42.9		10.0	53.32	4	mg/L		104	75 - 125	1	20
Silicon	54.1		10.0	63.21	4	mg/L		91	75 - 125	2	20
Sodium	917	E	25.0	923.5	E 4	mg/L		25	75 - 125	1	20
Selenium	0.00439	U	1.00	1.026		mg/L		103	75 - 125	2	20
Thallium	0.00621	U	1.00	0.9762		mg/L		98	75 - 125	2	20
Lithium	0.664		1.00	1.652		mg/L		99		4	

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 860-19979/10-A
Matrix: Water
Analysis Batch: 20090

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19979

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000263	U	0.000200	0.0000263	mg/L		08/24/21 09:00	08/24/21 13:11	1

Lab Sample ID: LCS 860-19979/11-A
Matrix: Water
Analysis Batch: 20090

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19979

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.001995		mg/L		100	80 - 120

Lab Sample ID: LCSD 860-19979/12-A
Matrix: Water
Analysis Batch: 20090

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 19979

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00200	0.001978		mg/L		99	80 - 120	1	20

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 860-10239-1 MS
Matrix: Water
Analysis Batch: 20090

Client Sample ID: EP-31
Prep Type: Total/NA
Prep Batch: 19979

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0000526	U	0.00400	0.004066		mg/L		102	75 - 125

Lab Sample ID: 860-10239-1 MSD
Matrix: Water
Analysis Batch: 20090

Client Sample ID: EP-31
Prep Type: Total/NA
Prep Batch: 19979

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.0000526	U	0.00400	0.004064		mg/L		102	75 - 125	0	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-20093/4
Matrix: Water
Analysis Batch: 20093

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	4.00	U	4.00	4.00	mg/L			08/24/21 10:22	1
Bicarbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/24/21 10:22	1
Carbonate Alkalinity as CaCO3	4.00	U	4.00	4.00	mg/L			08/24/21 10:22	1
Hydroxide Alkalinity	4.00	U	4.00	4.00	mg/L			08/24/21 10:22	1

Lab Sample ID: LCS 860-20093/5
Matrix: Water
Analysis Batch: 20093

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity	250	266.0		mg/L		106	85 - 115

Lab Sample ID: LCSD 860-20093/6
Matrix: Water
Analysis Batch: 20093

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Alkalinity	250	270.1		mg/L		108	85 - 115	2	20

Lab Sample ID: 860-10239-1 DU
Matrix: Water
Analysis Batch: 20093

Client Sample ID: EP-31
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	4.00	U	4.00	U	mg/L		NC	20
Bicarbonate Alkalinity as CaCO3	4.00	U	4.00	U	mg/L		NC	20
Carbonate Alkalinity as CaCO3	4.00	U	4.00	U	mg/L		NC	20
Hydroxide Alkalinity	4.00	U	4.00	U	mg/L		NC	20

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 860-10239-12 DU
Matrix: Water
Analysis Batch: 20093

Client Sample ID: EB-02
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	4.00	U	4.00	U	mg/L		NC	20
Bicarbonate Alkalinity as CaCO3	4.00	U	4.00	U	mg/L		NC	20
Carbonate Alkalinity as CaCO3	4.00	U	4.00	U	mg/L		NC	20
Hydroxide Alkalinity	4.00	U	4.00	U	mg/L		NC	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 860-20062/1
Matrix: Water
Analysis Batch: 20062

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	5.00	U	5.00	5.00	mg/L			08/24/21 11:00	1

Lab Sample ID: LCS 860-20062/2
Matrix: Water
Analysis Batch: 20062

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	1000	1025		mg/L		103	80 - 120

Lab Sample ID: LCSD 860-20062/3
Matrix: Water
Analysis Batch: 20062

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Dissolved Solids	1000	1004		mg/L		100	80 - 120	2	10

Lab Sample ID: MB 860-20326/1
Matrix: Water
Analysis Batch: 20326

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	5.00	U	5.00	5.00	mg/L			08/25/21 22:00	1

Lab Sample ID: LCS 860-20326/2
Matrix: Water
Analysis Batch: 20326

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	1000	1029		mg/L		103	80 - 120

Lab Sample ID: LCSD 860-20326/3
Matrix: Water
Analysis Batch: 20326

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Dissolved Solids	1000	1017		mg/L		102	80 - 120	1	10

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: MB 860-20328/1
Matrix: Water
Analysis Batch: 20328

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	5.00	U	5.00	5.00	mg/L			08/25/21 22:00	1

Lab Sample ID: LCS 860-20328/2
Matrix: Water
Analysis Batch: 20328

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	1000	1018		mg/L		102	80 - 120

Lab Sample ID: LCSD 860-20328/3
Matrix: Water
Analysis Batch: 20328

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Dissolved Solids	1000	1043		mg/L		104	80 - 120	2	10

Lab Sample ID: MB 860-20330/1
Matrix: Water
Analysis Batch: 20330

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	5.00	U	5.00	5.00	mg/L			08/24/21 22:30	1

Lab Sample ID: LCS 860-20330/2
Matrix: Water
Analysis Batch: 20330

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	1000	1070		mg/L		107	80 - 120

Lab Sample ID: LCSD 860-20330/3
Matrix: Water
Analysis Batch: 20330

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Dissolved Solids	1000	1020		mg/L		102	80 - 120	5	10

Lab Sample ID: 860-10239-7 DU
Matrix: Water
Analysis Batch: 20330

Client Sample ID: EP-37
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	9110		8920		mg/L		2	10

Client: GSI Environmental, Inc
Project/Site: Equalization Pond

Job ID: 860-10239-1

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Lab Sample ID: MB 160-523927/1-A
Matrix: Water
Analysis Batch: 527649

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 523927

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-26.56	U	18.3	18.6	50.0	48.9	pCi/L	08/24/21 15:34	09/20/21 18:12	1
Radium-228	7.659	U	21.2	21.2	50.0	33.8	pCi/L	08/24/21 15:34	09/20/21 18:12	1

Lab Sample ID: LCS 160-523927/2-A
Matrix: Water
Analysis Batch: 527496

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 523927

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Americium-241	135000	131400		15500		422	pCi/L	97	86 - 111
Cesium-137	42300	38650		4550		206	pCi/L	91	90 - 110
Cobalt-60	21800	21660		2560		116	pCi/L	100	89 - 110

HPLC/IC

Analysis Batch: 20163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10239-1	EP-31	Total/NA	Water	300.0	
860-10239-1	EP-31	Total/NA	Water	300.0	
860-10239-2	EP-32	Total/NA	Water	300.0	
860-10239-2	EP-32	Total/NA	Water	300.0	
860-10239-3	EP-33	Total/NA	Water	300.0	
860-10239-3	EP-33	Total/NA	Water	300.0	
860-10239-4	EP-34	Total/NA	Water	300.0	
860-10239-4	EP-34	Total/NA	Water	300.0	
860-10239-5	EP-35	Total/NA	Water	300.0	
860-10239-5	EP-35	Total/NA	Water	300.0	
860-10239-6	EP-36	Total/NA	Water	300.0	
860-10239-6	EP-36	Total/NA	Water	300.0	
860-10239-7	EP-37	Total/NA	Water	300.0	
860-10239-7	EP-37	Total/NA	Water	300.0	
860-10239-8	EP-38	Total/NA	Water	300.0	
860-10239-8	EP-38	Total/NA	Water	300.0	
860-10239-9	MW-004	Total/NA	Water	300.0	
860-10239-9	MW-004	Total/NA	Water	300.0	
860-10239-10	DUP-03	Total/NA	Water	300.0	
860-10239-10	DUP-03	Total/NA	Water	300.0	
860-10239-11	FB-03	Total/NA	Water	300.0	
860-10239-12	EB-02	Total/NA	Water	300.0	
MB 860-20163/3	Method Blank	Total/NA	Water	300.0	
LCS 860-20163/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-20163/5	Lab Control Sample Dup	Total/NA	Water	300.0	
860-10239-1 MS	EP-31	Total/NA	Water	300.0	
860-10239-1 MS	EP-31	Total/NA	Water	300.0	
860-10239-1 MSD	EP-31	Total/NA	Water	300.0	
860-10239-1 MSD	EP-31	Total/NA	Water	300.0	

Metals

Prep Batch: 19660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10239-1	EP-31	Total/NA	Water	3010A	
860-10239-2	EP-32	Total/NA	Water	3010A	
860-10239-3	EP-33	Total/NA	Water	3010A	
860-10239-4	EP-34	Total/NA	Water	3010A	
860-10239-5	EP-35	Total/NA	Water	3010A	
860-10239-6	EP-36	Total/NA	Water	3010A	
860-10239-7	EP-37	Total/NA	Water	3010A	
860-10239-8	EP-38	Total/NA	Water	3010A	
860-10239-9	MW-004	Total/NA	Water	3010A	
860-10239-10	DUP-03	Total/NA	Water	3010A	
860-10239-11	FB-03	Total/NA	Water	3010A	
860-10239-12	EB-02	Total/NA	Water	3010A	
MB 860-19660/1-A	Method Blank	Total/NA	Water	3010A	
LCS 860-19660/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 860-19660/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	
860-10239-1 MS	EP-31	Total/NA	Water	3010A	
860-10239-1 MSD	EP-31	Total/NA	Water	3010A	

Metals

Analysis Batch: 19883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10239-1	EP-31	Total/NA	Water	6010C	19660
860-10239-1	EP-31	Total/NA	Water	6010C	19660
860-10239-2	EP-32	Total/NA	Water	6010C	19660
860-10239-2	EP-32	Total/NA	Water	6010C	19660
860-10239-3	EP-33	Total/NA	Water	6010C	19660
860-10239-3	EP-33	Total/NA	Water	6010C	19660
860-10239-4	EP-34	Total/NA	Water	6010C	19660
860-10239-4	EP-34	Total/NA	Water	6010C	19660
860-10239-5	EP-35	Total/NA	Water	6010C	19660
860-10239-5	EP-35	Total/NA	Water	6010C	19660
860-10239-6	EP-36	Total/NA	Water	6010C	19660
860-10239-6	EP-36	Total/NA	Water	6010C	19660
860-10239-7	EP-37	Total/NA	Water	6010C	19660
860-10239-7	EP-37	Total/NA	Water	6010C	19660
860-10239-8	EP-38	Total/NA	Water	6010C	19660
860-10239-8	EP-38	Total/NA	Water	6010C	19660
860-10239-9	MW-004	Total/NA	Water	6010C	19660
860-10239-9	MW-004	Total/NA	Water	6010C	19660
860-10239-10	DUP-03	Total/NA	Water	6010C	19660
860-10239-10	DUP-03	Total/NA	Water	6010C	19660
860-10239-11	FB-03	Total/NA	Water	6010C	19660
860-10239-12	EB-02	Total/NA	Water	6010C	19660
MB 860-19660/1-A	Method Blank	Total/NA	Water	6010C	19660
LCS 860-19660/2-A	Lab Control Sample	Total/NA	Water	6010C	19660
LCSD 860-19660/3-A	Lab Control Sample Dup	Total/NA	Water	6010C	19660
860-10239-1 MS	EP-31	Total/NA	Water	6010C	19660
860-10239-1 MSD	EP-31	Total/NA	Water	6010C	19660

Prep Batch: 19979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10239-1	EP-31	Total/NA	Water	7470A	
860-10239-2	EP-32	Total/NA	Water	7470A	
860-10239-3	EP-33	Total/NA	Water	7470A	
860-10239-4	EP-34	Total/NA	Water	7470A	
860-10239-5	EP-35	Total/NA	Water	7470A	
860-10239-6	EP-36	Total/NA	Water	7470A	
860-10239-7	EP-37	Total/NA	Water	7470A	
860-10239-8	EP-38	Total/NA	Water	7470A	
860-10239-9	MW-004	Total/NA	Water	7470A	
860-10239-10	DUP-03	Total/NA	Water	7470A	
860-10239-11	FB-03	Total/NA	Water	7470A	
860-10239-12	EB-02	Total/NA	Water	7470A	
MB 860-19979/10-A	Method Blank	Total/NA	Water	7470A	
LCS 860-19979/11-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 860-19979/12-A	Lab Control Sample Dup	Total/NA	Water	7470A	
860-10239-1 MS	EP-31	Total/NA	Water	7470A	
860-10239-1 MSD	EP-31	Total/NA	Water	7470A	

Analysis Batch: 20090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10239-1	EP-31	Total/NA	Water	7470A	19979

Metals (Continued)

Analysis Batch: 20090 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10239-2	EP-32	Total/NA	Water	7470A	19979
860-10239-3	EP-33	Total/NA	Water	7470A	19979
860-10239-4	EP-34	Total/NA	Water	7470A	19979
860-10239-5	EP-35	Total/NA	Water	7470A	19979
860-10239-6	EP-36	Total/NA	Water	7470A	19979
860-10239-7	EP-37	Total/NA	Water	7470A	19979
860-10239-8	EP-38	Total/NA	Water	7470A	19979
860-10239-9	MW-004	Total/NA	Water	7470A	19979
860-10239-10	DUP-03	Total/NA	Water	7470A	19979
860-10239-11	FB-03	Total/NA	Water	7470A	19979
860-10239-12	EB-02	Total/NA	Water	7470A	19979
MB 860-19979/10-A	Method Blank	Total/NA	Water	7470A	19979
LCS 860-19979/11-A	Lab Control Sample	Total/NA	Water	7470A	19979
LCSD 860-19979/12-A	Lab Control Sample Dup	Total/NA	Water	7470A	19979
860-10239-1 MS	EP-31	Total/NA	Water	7470A	19979
860-10239-1 MSD	EP-31	Total/NA	Water	7470A	19979

Analysis Batch: 20222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10239-2	EP-32	Total/NA	Water	6010C	19660
860-10239-3	EP-33	Total/NA	Water	6010C	19660
860-10239-4	EP-34	Total/NA	Water	6010C	19660
860-10239-5	EP-35	Total/NA	Water	6010C	19660
860-10239-6	EP-36	Total/NA	Water	6010C	19660
860-10239-7	EP-37	Total/NA	Water	6010C	19660
860-10239-8	EP-38	Total/NA	Water	6010C	19660
860-10239-9	MW-004	Total/NA	Water	6010C	19660
860-10239-10	DUP-03	Total/NA	Water	6010C	19660
860-10239-11	FB-03	Total/NA	Water	6010C	19660
860-10239-12	EB-02	Total/NA	Water	6010C	19660

General Chemistry

Analysis Batch: 20062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10239-11	FB-03	Total/NA	Water	SM 2540C	
MB 860-20062/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 860-20062/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 860-20062/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	

Analysis Batch: 20093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10239-1	EP-31	Total/NA	Water	SM 2320B	
860-10239-2	EP-32	Total/NA	Water	SM 2320B	
860-10239-3	EP-33	Total/NA	Water	SM 2320B	
860-10239-4	EP-34	Total/NA	Water	SM 2320B	
860-10239-5	EP-35	Total/NA	Water	SM 2320B	
860-10239-6	EP-36	Total/NA	Water	SM 2320B	
860-10239-7	EP-37	Total/NA	Water	SM 2320B	
860-10239-8	EP-38	Total/NA	Water	SM 2320B	
860-10239-9	MW-004	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 20093 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10239-10	DUP-03	Total/NA	Water	SM 2320B	
860-10239-12	EB-02	Total/NA	Water	SM 2320B	
MB 860-20093/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-20093/5	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-20093/6	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
860-10239-1 DU	EP-31	Total/NA	Water	SM 2320B	
860-10239-12 DU	EB-02	Total/NA	Water	SM 2320B	

Analysis Batch: 20326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10239-1	EP-31	Total/NA	Water	SM 2540C	
860-10239-2	EP-32	Total/NA	Water	SM 2540C	
860-10239-3	EP-33	Total/NA	Water	SM 2540C	
860-10239-4	EP-34	Total/NA	Water	SM 2540C	
MB 860-20326/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 860-20326/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 860-20326/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	

Analysis Batch: 20328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10239-8	EP-38	Total/NA	Water	SM 2540C	
860-10239-9	MW-004	Total/NA	Water	SM 2540C	
860-10239-10	DUP-03	Total/NA	Water	SM 2540C	
860-10239-12	EB-02	Total/NA	Water	SM 2540C	
MB 860-20328/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 860-20328/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 860-20328/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	

Analysis Batch: 20330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10239-5	EP-35	Total/NA	Water	SM 2540C	
860-10239-6	EP-36	Total/NA	Water	SM 2540C	
860-10239-7	EP-37	Total/NA	Water	SM 2540C	
MB 860-20330/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 860-20330/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 860-20330/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
860-10239-7 DU	EP-37	Total/NA	Water	SM 2540C	

Rad

Prep Batch: 523927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10239-1	EP-31	Total/NA	Water	Fill_Geo-21	
860-10239-2	EP-32	Total/NA	Water	Fill_Geo-21	
860-10239-3	EP-33	Total/NA	Water	Fill_Geo-21	
860-10239-4	EP-34	Total/NA	Water	Fill_Geo-21	
860-10239-5	EP-35	Total/NA	Water	Fill_Geo-21	
860-10239-6	EP-36	Total/NA	Water	Fill_Geo-21	
860-10239-7	EP-37	Total/NA	Water	Fill_Geo-21	
860-10239-8	EP-38	Total/NA	Water	Fill_Geo-21	
860-10239-9	MW-004	Total/NA	Water	Fill_Geo-21	

Rad (Continued)

Prep Batch: 523927 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10239-10	DUP-03	Total/NA	Water	Fill_Geo-21	
860-10239-11	FB-03	Total/NA	Water	Fill_Geo-21	
860-10239-12	EB-02	Total/NA	Water	Fill_Geo-21	
MB 160-523927/1-A	Method Blank	Total/NA	Water	Fill_Geo-21	
LCS 160-523927/2-A	Lab Control Sample	Total/NA	Water	Fill_Geo-21	

Client Sample ID: EP-31

Lab Sample ID: 860-10239-1

Date Collected: 08/18/21 13:35

Matrix: Water

Date Received: 08/19/21 10:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			20163	08/25/21 11:07	JM	XEN STF
Total/NA	Analysis	300.0		20			20163	08/25/21 14:07	JM	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		1			19883	08/20/21 17:10	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		50			19883	08/20/21 17:33	DP	XEN STF
Total/NA	Prep	7470A			25 mL	50 mL	19979	08/24/21 09:00	AGR	XEN STF
Total/NA	Analysis	7470A		1			20090	08/24/21 13:15	AV	XEN STF
Total/NA	Analysis	SM 2320B		1			20093	08/24/21 10:39	ANP	XEN STF
Total/NA	Analysis	SM 2540C		1	25 mL	200 mL	20326	08/25/21 22:00	YGG	XEN STF
Total/NA	Prep	Fill_Geo-21			1000 mL	1.0 g	523927	08/24/21 15:34	SRE	TAL SL
Total/NA	Analysis	901.1		1			526853	09/14/21 17:27	RMJ	TAL SL

Client Sample ID: EP-32

Lab Sample ID: 860-10239-2

Date Collected: 08/18/21 11:45

Matrix: Water

Date Received: 08/19/21 10:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			20163	08/25/21 11:41	JM	XEN STF
Total/NA	Analysis	300.0		20			20163	08/25/21 14:41	JM	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		1			19883	08/20/21 17:44	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		50			19883	08/20/21 18:02	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		50			20222	08/24/21 22:51	DP	XEN STF
Total/NA	Prep	7470A			50 mL	50 mL	19979	08/24/21 09:00	AGR	XEN STF
Total/NA	Analysis	7470A		1			20090	08/24/21 13:25	AV	XEN STF
Total/NA	Analysis	SM 2320B		1			20093	08/24/21 10:50	ANP	XEN STF
Total/NA	Analysis	SM 2540C		1	10 mL	200 mL	20326	08/25/21 22:00	YGG	XEN STF
Total/NA	Prep	Fill_Geo-21			1000 mL	1.0 g	523927	08/24/21 15:34	SRE	TAL SL
Total/NA	Analysis	901.1		1			526853	09/14/21 19:38	RMJ	TAL SL

Client Sample ID: EP-33

Lab Sample ID: 860-10239-3

Date Collected: 08/18/21 14:05

Matrix: Water

Date Received: 08/19/21 10:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			20163	08/25/21 11:53	JM	XEN STF
Total/NA	Analysis	300.0		20			20163	08/25/21 14:52	JM	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		1			19883	08/20/21 17:48	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		50			19883	08/20/21 18:06	DP	XEN STF

Client Sample ID: EP-33

Lab Sample ID: 860-10239-3

Date Collected: 08/18/21 14:05

Matrix: Water

Date Received: 08/19/21 10:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		50			20222	08/24/21 22:55	DP	XEN STF
Total/NA	Prep	7470A			50 mL	50 mL	19979	08/24/21 09:00	AGR	XEN STF
Total/NA	Analysis	7470A		1			20090	08/24/21 13:27	AV	XEN STF
Total/NA	Analysis	SM 2320B		1			20093	08/24/21 10:56	ANP	XEN STF
Total/NA	Analysis	SM 2540C		1	10 mL	200 mL	20326	08/25/21 22:00	YGG	XEN STF
Total/NA	Prep	Fill_Geo-21			1000 mL	1.0 g	523927	08/24/21 15:34	SRE	TAL SL
Total/NA	Analysis	901.1		1			526853	09/14/21 21:42	RMJ	TAL SL

Client Sample ID: EP-34

Lab Sample ID: 860-10239-4

Date Collected: 08/18/21 14:00

Matrix: Water

Date Received: 08/19/21 10:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			20163	08/25/21 12:04	JM	XEN STF
Total/NA	Analysis	300.0		20			20163	08/25/21 15:03	JM	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		1			19883	08/20/21 17:51	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		50			19883	08/20/21 18:09	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		50			20222	08/24/21 22:58	DP	XEN STF
Total/NA	Prep	7470A			50 mL	50 mL	19979	08/24/21 09:00	AGR	XEN STF
Total/NA	Analysis	7470A		1			20090	08/24/21 13:28	AV	XEN STF
Total/NA	Analysis	SM 2320B		1			20093	08/24/21 11:03	ANP	XEN STF
Total/NA	Analysis	SM 2540C		1	10 mL	200 mL	20326	08/25/21 22:00	YGG	XEN STF
Total/NA	Prep	Fill_Geo-21			1000 mL	1.0 g	523927	08/24/21 15:34	SRE	TAL SL
Total/NA	Analysis	901.1		1			526853	09/14/21 23:52	RMJ	TAL SL

Client Sample ID: EP-35

Lab Sample ID: 860-10239-5

Date Collected: 08/18/21 14:50

Matrix: Water

Date Received: 08/19/21 10:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			20163	08/25/21 12:15	JM	XEN STF
Total/NA	Analysis	300.0		20			20163	08/25/21 15:37	JM	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		1			19883	08/20/21 17:55	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		50			19883	08/20/21 18:13	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		50			20222	08/24/21 23:13	DP	XEN STF
Total/NA	Prep	7470A			50 mL	50 mL	19979	08/24/21 09:00	AGR	XEN STF
Total/NA	Analysis	7470A		1			20090	08/24/21 13:29	AV	XEN STF

Client Sample ID: EP-35

Lab Sample ID: 860-10239-5

Date Collected: 08/18/21 14:50

Matrix: Water

Date Received: 08/19/21 10:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2320B		1			20093	08/24/21 11:09	ANP	XEN STF
Total/NA	Analysis	SM 2540C		1	10 mL	200 mL	20330	08/24/21 01:37	YGG	XEN STF
Total/NA	Prep	Fill_Geo-21			1000 mL	1.0 g	523927	08/24/21 15:34	SRE	TAL SL
Total/NA	Analysis	901.1		1			527213	09/15/21 06:53	RMJ	TAL SL

Client Sample ID: EP-36

Lab Sample ID: 860-10239-6

Date Collected: 08/18/21 15:40

Matrix: Water

Date Received: 08/19/21 10:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			20163	08/25/21 12:26	JM	XEN STF
Total/NA	Analysis	300.0		20			20163	08/25/21 15:48	JM	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		1			19883	08/20/21 17:58	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		50			19883	08/20/21 18:17	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		50			20222	08/24/21 23:17	DP	XEN STF
Total/NA	Prep	7470A			50 mL	50 mL	19979	08/24/21 09:00	AGR	XEN STF
Total/NA	Analysis	7470A		1			20090	08/24/21 13:31	AV	XEN STF
Total/NA	Analysis	SM 2320B		1			20093	08/24/21 11:15	ANP	XEN STF
Total/NA	Analysis	SM 2540C		1	10 mL	200 mL	20330	08/24/21 22:30	YGG	XEN STF
Total/NA	Prep	Fill_Geo-21			1000 mL	1.0 g	523927	08/24/21 15:34	SRE	TAL SL
Total/NA	Analysis	901.1		1			527213	09/15/21 09:00	RMJ	TAL SL

Client Sample ID: EP-37

Lab Sample ID: 860-10239-7

Date Collected: 08/18/21 16:35

Matrix: Water

Date Received: 08/19/21 10:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			20163	08/25/21 12:37	JM	XEN STF
Total/NA	Analysis	300.0		20			20163	08/25/21 16:00	JM	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		1			19883	08/20/21 18:27	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		50			19883	08/20/21 18:49	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		50			20222	08/24/21 23:20	DP	XEN STF
Total/NA	Prep	7470A			50 mL	50 mL	19979	08/24/21 09:00	AGR	XEN STF
Total/NA	Analysis	7470A		1			20090	08/24/21 13:32	AV	XEN STF
Total/NA	Analysis	SM 2320B		1			20093	08/24/21 11:33	ANP	XEN STF
Total/NA	Analysis	SM 2540C		1	10 mL	200 mL	20330	08/24/21 22:30	YGG	XEN STF
Total/NA	Prep	Fill_Geo-21			1000 mL	1.0 g	523927	08/24/21 15:34	SRE	TAL SL
Total/NA	Analysis	901.1		1			527213	09/15/21 13:33	RMJ	TAL SL

Client Sample ID: EP-38

Lab Sample ID: 860-10239-8

Date Collected: 08/18/21 12:00

Matrix: Water

Date Received: 08/19/21 10:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			20163	08/25/21 12:49	JM	XEN STF
Total/NA	Analysis	300.0		20			20163	08/25/21 16:11	JM	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		1			19883	08/20/21 18:31	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		50			19883	08/20/21 18:53	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		50			20222	08/24/21 23:24	DP	XEN STF
Total/NA	Prep	7470A			50 mL	50 mL	19979	08/24/21 09:00	AGR	XEN STF
Total/NA	Analysis	7470A		1			20090	08/24/21 13:34	AV	XEN STF
Total/NA	Analysis	SM 2320B		1			20093	08/24/21 11:38	ANP	XEN STF
Total/NA	Analysis	SM 2540C		1	25 mL	200 mL	20328	08/25/21 22:00	YGG	XEN STF
Total/NA	Prep	Fill_Geo-21			1000 mL	1.0 g	523927	08/24/21 15:34	SRE	TAL SL
Total/NA	Analysis	901.1		1			527213	09/15/21 15:56	RMJ	TAL SL

Client Sample ID: MW-004

Lab Sample ID: 860-10239-9

Date Collected: 08/18/21 12:55

Matrix: Water

Date Received: 08/19/21 10:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			20163	08/25/21 13:22	JM	XEN STF
Total/NA	Analysis	300.0		20			20163	08/25/21 16:22	JM	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		1			19883	08/20/21 18:35	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		50			19883	08/20/21 18:56	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		50			20222	08/24/21 23:28	DP	XEN STF
Total/NA	Prep	7470A			50 mL	50 mL	19979	08/24/21 09:00	AGR	XEN STF
Total/NA	Analysis	7470A		1			20090	08/24/21 13:35	AV	XEN STF
Total/NA	Analysis	SM 2320B		1			20093	08/24/21 11:43	ANP	XEN STF
Total/NA	Analysis	SM 2540C		1	25 mL	200 mL	20328	08/25/21 22:00	YGG	XEN STF
Total/NA	Prep	Fill_Geo-21			1000 mL	1.0 g	523927	08/24/21 15:34	SRE	TAL SL
Total/NA	Analysis	901.1		1			527213	09/15/21 18:36	RMJ	TAL SL

Client Sample ID: DUP-03

Lab Sample ID: 860-10239-10

Date Collected: 08/18/21 13:00

Matrix: Water

Date Received: 08/19/21 10:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			20163	08/25/21 13:34	JM	XEN STF
Total/NA	Analysis	300.0		20			20163	08/25/21 16:33	JM	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		1			19883	08/20/21 18:38	DP	XEN STF

Client Sample ID: DUP-03

Lab Sample ID: 860-10239-10

Date Collected: 08/18/21 13:00

Matrix: Water

Date Received: 08/19/21 10:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		50			19883	08/20/21 19:00	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		50			20222	08/24/21 23:31	DP	XEN STF
Total/NA	Prep	7470A			50 mL	50 mL	19979	08/24/21 09:00	AGR	XEN STF
Total/NA	Analysis	7470A		1			20090	08/24/21 13:36	AV	XEN STF
Total/NA	Analysis	SM 2320B		1			20093	08/24/21 11:51	ANP	XEN STF
Total/NA	Analysis	SM 2540C		1	10 mL	200 mL	20328	08/25/21 22:00	YGG	XEN STF
Total/NA	Prep	Fill_Geo-21			1000 mL	1.0 g	523927	08/24/21 15:34	SRE	TAL SL
Total/NA	Analysis	901.1		1			527213	09/15/21 20:51	RMJ	TAL SL

Client Sample ID: FB-03

Lab Sample ID: 860-10239-11

Date Collected: 08/18/21 15:55

Matrix: Water

Date Received: 08/19/21 10:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			20163	08/25/21 13:45	JM	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		1			19883	08/20/21 18:42	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		1			20222	08/24/21 23:35	DP	XEN STF
Total/NA	Prep	7470A			50 mL	50 mL	19979	08/24/21 09:00	AGR	XEN STF
Total/NA	Analysis	7470A		1			20090	08/24/21 13:40	AV	XEN STF
Total/NA	Analysis	SM 2540C		1	200 mL	200 mL	20062	08/24/21 11:00	YGG	XEN STF
Total/NA	Prep	Fill_Geo-21			1000 mL	1.0 g	523927	08/24/21 15:34	SRE	TAL SL
Total/NA	Analysis	901.1		1			527253	09/16/21 09:08	JCB	TAL SL

Client Sample ID: EB-02

Lab Sample ID: 860-10239-12

Date Collected: 08/18/21 13:10

Matrix: Water

Date Received: 08/19/21 10:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			20163	08/25/21 13:56	JM	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		1			19883	08/20/21 18:46	DP	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	19660	08/20/21 09:25	MD	XEN STF
Total/NA	Analysis	6010C		1			20222	08/24/21 23:38	DP	XEN STF
Total/NA	Prep	7470A			50 mL	50 mL	19979	08/24/21 09:00	AGR	XEN STF
Total/NA	Analysis	7470A		1			20090	08/24/21 13:42	AV	XEN STF
Total/NA	Analysis	SM 2320B		1			20093	08/24/21 11:57	ANP	XEN STF
Total/NA	Analysis	SM 2540C		1	200 mL	200 mL	20328	08/25/21 22:00	YGG	XEN STF
Total/NA	Prep	Fill_Geo-21			1000 mL	1.0 g	523927	08/24/21 15:34	SRE	TAL SL
Total/NA	Analysis	901.1		1			527255	09/16/21 08:04	RMJ	TAL SL

Lab Chronicle

Client: GSI Environmental, Inc
Project/Site: Equalization Pond

Job ID: 860-10239-1

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

XEN STF = Eurofins Xenco, Stafford, 4147 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: GSI Environmental, Inc
Project/Site: Equalization Pond

Job ID: 860-10239-1

Laboratory: Eurofins Xenco, Stafford

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-21-44	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6010C	3010A	Water	SiO2
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3
SM 2320B		Water	Carbonate Alkalinity as CaCO3
SM 2320B		Water	Hydroxide Alkalinity

Laboratory: Eurofins TestAmerica, St. Louis

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704193	07-31-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
901.1	Fill_Geo-21	Water	Radium-226
901.1	Fill_Geo-21	Water	Radium-228

Method Summary

Client: GSI Environmental, Inc
Project/Site: Equalization Pond

Job ID: 860-10239-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	XEN STF
6010C	Metals (ICP)	SW846	XEN STF
7470A	Mercury (CVAA)	SW846	XEN STF
SM 2320B	Alkalinity	SM	XEN STF
SM 2540C	Solids, Total Dissolved (TDS)	SM	XEN STF
901.1	Radium-226 & Other Gamma Emitters (GS)	EPA	TAL SL
3010A	Preparation, Total Metals	SW846	XEN STF
7470A	Preparation, Mercury	SW846	XEN STF
Fill_Geo-21	Fill Geometry, 21-Day In-Growth	None	TAL SL

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

None = None

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 SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

XEN STF = Eurofins Xenco, Stafford, 4147 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: GSI Environmental, Inc
Project/Site: Equalization Pond

Job ID: 860-10239-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
860-10239-1	EP-31	Water	08/18/21 13:35	08/19/21 10:50
860-10239-2	EP-32	Water	08/18/21 11:45	08/19/21 10:50
860-10239-3	EP-33	Water	08/18/21 14:05	08/19/21 10:50
860-10239-4	EP-34	Water	08/18/21 14:00	08/19/21 10:50
860-10239-5	EP-35	Water	08/18/21 14:50	08/19/21 10:50
860-10239-6	EP-36	Water	08/18/21 15:40	08/19/21 10:50
860-10239-7	EP-37	Water	08/18/21 16:35	08/19/21 10:50
860-10239-8	EP-38	Water	08/18/21 12:00	08/19/21 10:50
860-10239-9	MW-004	Water	08/18/21 12:55	08/19/21 10:50
860-10239-10	DUP-03	Water	08/18/21 13:00	08/19/21 10:50
860-10239-11	FB-03	Water	08/18/21 15:55	08/19/21 10:50
860-10239-12	EB-02	Water	08/18/21 13:10	08/19/21 10:50

Eurofins Xenco, Stafford
4147 Greenbriar Dr
Stafford TX 77477
Phone (281) 240-4200

Chain of Custod

860-10239 Chain of Custody

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9/21/2021

Client Information	Sampler: Scott Ude + HMI Team	ing No(s):	COC No: 860-3614-1220.1
Client Contact: Mike Schofield	Phone: 832-347-4521	in: TX	Page: Page 1 of 2
Company: GSI Environmental, Inc	PWSID:		Job #:
Address: 9600 Great Hills Trail Suite 350E	Due Date Requested:		
City: Austin	TAT Requested (days):		
State, Zip: TX, 78759	Compliance Project: Δ Yes Δ No		
Phone: 512-346-4474(Tel) 512-346-4476(Fax)	PO #:		
Email: mlschofield@gsi-net.com	WO #:		
Project Name: San Miguel Electrical Co-Op 2H21 GW	Project #: 86001746		
Site: Equalization Pond	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	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)	2320B, Alkalinity	6010C - 7471 - B, Ca, Sb, As, Ba, Be, Cd, Cr Co, Pb, Li, Mo, Se, Tl, Hg	2540C_TDS	300- Cl, F, SO4	901.1_Ra- Rad 226/ 228 Eurofins St Louis	O = MS/MSD Volume Provided	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	N	N				
EP-31	8/18/21	1335	G	Water	N	Y	✓	✓	✓	✓	✓			
EP-32		1145		Water		N	✓	✓	✓	✓	✓			
EP-33		1405		Water		N	✓	✓	✓	✓	✓			
EP-34		1400		Water		N	✓	✓	✓	✓	✓			
EP-35		1450		Water		N	✓	✓	✓	✓	✓			
EP-36		1540		Water		N	✓	✓	✓	✓	✓			
EP-37		1635		Water		N	✓	✓	✓	✓	✓			
EP-38		1200		Water		N	✓	✓	✓	✓	✓			
MW-04		1255		Water		N	✓	✓	✓	✓	✓			
Dup-03		1300		Water		N	✓	✓	✓	✓	✓			
FB-03		1555		Water		N		✓	✓	✓	✓			

Temp: 3.1 IR ID HOU-272
C/F +0.2
Corrected Temp: 3.3

Temp: 3.4 IR ID HOU-272
C/F +0.2
Corrected Temp: 3.6

Temp: 3.0 IR ID: HOU-272
C/F +0.2
Corrected Temp: 3.2

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: Cons. Delivery		
Relinquished by:	Date/Time: 8-19-21 949	Company: HMI	Received by:	Date/Time: 8/19/21 949	Company: Xenco
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.	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins Xenco, Stafford
4147 Greenbriar Dr
Stafford TX 77477
Phone (281) 240-4200

Chain of Custody Record

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9/21/2021

Client Information	Sampler: Scott Wade + HMI Team	Lab PM: Kudchadkar Sachin G	Carrier Tracking No(s):	COC No: 860-3614-1220.1
Client Contact: Mike Schofield	Phone: 832-347-4521	E-Mail: Sachin.Kudchadkar@Eurofinset.com	State of Origin: TX	Page: Page 2 of 2
Company: GSI Environmental, Inc	PWSID:			Job #:
Address: 9600 Great Hills Trail Suite 350E	Due Date Requested:			
City: Austin	TAT Requested (days):			
State, Zip: TX, 78759	Compliance Project: Δ Yes Δ No			
Phone: 512-346-4474(Tel) 512-346-4476(Fax)	PO #:			
Email: mlschofield@gsi-net.com	WO #:			
Project Name: San Miguel Electrical Co-Op 2H21 GW	Project #: 86001746			
Site: Equalization Pond	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	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)	2320B, Alkalinity	6010C -7471- B, Ca,Sb, As, Ba, Be, Cd, Cr Co, Pb, Li, Mo, Se, Ti;Hg	2540C_TDS	300- Cl, F, SO4	901.1_Ra- Rad 226/ 228 Eurofins St Louis	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	D	N	N		X	
EB-02	8/18/21	1310	G	Water	N	N		✓	✓	✓	✓		
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: Cons Delivery

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Mcal	8-19-21 949	HMI	Sarah Jones	8/19/21 949	Xenco
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.	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins Xenco, Stafford
4147 Greenbriar Dr
Stafford, TX 77477
Phone: 281-240-4200

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 860-4691.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sachin.Kudchadkar@Eurofinset.com	State of Origin: Texas	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 860-10239-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 9/17/2021			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045	PO #:			
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	WO #:			
Email:	Project #: 86001746			
Project Name: San Miguel Electrical Co-Op 2H21 GW	SSOW#:			
Site:				

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)	901.1_Ra/Fil_Geo_21 Radium-226/228	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
EP-31 (860-10239-1)	8/18/21	13:35 Central		Water			X	1	
EP-31 (860-10239-1MS)	8/18/21	13:35 Central	MS	Water			X	1	
EP-31 (860-10239-1MSD)	8/18/21	13:35 Central	MSD	Water			X	1	
EP-32 (860-10239-2)	8/18/21	11:45 Central		Water			X	1	
EP-33 (860-10239-3)	8/18/21	14:05 Central		Water			X	1	
EP-34 (860-10239-4)	8/18/21	14:00 Central		Water			X	1	
EP-35 (860-10239-5)	8/18/21	14:50 Central		Water			X	1	
EP-36 (860-10239-6)	8/18/21	15:40 Central		Water			X	1	
EP-37 (860-10239-7)	8/18/21	16:35 Central		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC 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 Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.

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] FED EX	Date/Time: 8/19/21	Company	Received by: FED EX	Date/Time:	Company
Relinquished by: FED EX	Date/Time:	Company	Received by: [signature]	Date/Time: 8/20/21 0846	Company EFA 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 Xenco, Stafford
4147 Greenbriar Dr
Stafford, TX 77477
Phone: 281-240-4200

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 860-4691.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sachin.Kudchadkar@Eurofinset.com	State of Origin: Texas	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Texas		Job #: 860-10239-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 9/17/2021			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045	PO #:			
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	WO #:			
Email:				
Project Name: San Miguel Electrical Co-Op 2H21 GW	Project #: 86001746			
Site:	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)	901.1_Ra/Fill_Geo_21 Radium-226/228	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
EP-38 (860-10239-8)	8/18/21	12:00 Central		Water			X	1	
MW-004 (860-10239-9)	8/18/21	12:55 Central		Water			X	1	
DUP-03 (860-10239-10)	8/18/21	13:00 Central		Water			X	1	
FB-03 (860-10239-11)	8/18/21	15:55 Central		Water			X	1	
EB-02 (860-10239-12)	8/18/21	13:10 Central		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC 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 Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.

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:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Lisa da FED EX	8/19/21		FED EX		
2	Relinquished by: FED EX	Date/Time:	Company	Received by:	Date/Time: 8/20/20 0846	Company ETAST L
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: GSI Environmental, Inc

Job Number: 860-10239-1

Login Number: 10239

List Source: Eurofins Xenco, Stafford

List Number: 1

Creator: Torrez, Lisandra

Question	Answer	Comment
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	

Login Sample Receipt Checklist

Client: GSI Environmental, Inc

Job Number: 860-10239-1

Login Number: 10239
List Number: 2
Creator: Mazariegos, Leonel A

List Source: Eurofins TestAmerica, St. Louis
List Creation: 08/20/21 05:32 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.	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	

Job No. 5076
Issued: 31 January 2022

2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

San Miguel Electric Cooperative, Inc.
Christine, Atascosa County, Texas

Appendix B.3 Laboratory NELAP Accreditation

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 22, 2021

Mr. John DuPont
DHL Analytical, Inc.
2300 Double Creek Drive
Round Rock, TX 78664-3801

Subject: Accreditation renewal

Dear Mr. DuPont:

I am pleased to advise you the Texas Commission on Environmental Quality is renewing your laboratory's NELAP accreditation. The accreditation is valid until the expiration date on the certificate and scope, contingent on continued compliance with the standards for accreditation and requirements of the state of Texas.

I am enclosing an accreditation certificate and listing of your laboratory's fields of accreditation. Please review the enclosures for accuracy and completeness.

Please contact me by electronic-mail at frank.jamison@tceq.texas.gov if I can provide any additional information or assistance.

Sincerely,

Frank Jamison
Data and Records Specialist

Enclosures

Texas Commission on Environmental Quality

NELAP-Recognized Laboratory Accreditation is hereby awarded to

DHL Analytical, Inc.

2300 Double Creek Drive
Round Rock, TX 78664-3801

in accordance with Texas Water Code Chapter 5, Subchapter R, Title 30 Texas Administrative Code Chapter 25, and the National Environmental Laboratory Accreditation Program.

The laboratory's scope of accreditation includes the fields of accreditation that accompany this certificate. Continued accreditation depends upon successful ongoing participation in the program. The Texas Commission on Environmental Quality urges customers to verify the laboratory's current location(s) and accreditation status for particular methods and analyses (www.tceq.texas.gov/goto/lab). Accreditation does not imply that a product, process, system or person is approved by the Texas Commission on Environmental Quality.

Certificate Number: T104704211-21-27
Effective Date: 5/1/2021
Expiration Date: 4/30/2022

Executive Director Texas Commission on Environmental Quality

Texas Commission on Environmental Quality

NELAP - Recognized Laboratory Fields of Accreditation

Certificate: T104704211-21-27
Expiration Date: 4/30/2022
Issue Date: 5/1/2021

DHL Analytical, Inc.

2300 Double Creek Drive
Round Rock, TX 78664-3801

These fields of accreditation supercede all previous fields. The Texas Commission on Environmental Quality urges customers to verify the laboratory's current accreditation status for particular methods and analyses.

Matrix: ***Non-Potable Water***

Method EPA 1010

Analyte	AB	Analyte ID	Method ID
Ignitability	TX	1780	10116606

Method EPA 120.1

Analyte	AB	Analyte ID	Method ID
Conductivity	TX	1610	10006403

Method EPA 1311

Analyte	AB	Analyte ID	Method ID
TCLP	TX	849	10118806

Method EPA 1312

Analyte	AB	Analyte ID	Method ID
SPLP	TX	850	10119003

Method EPA 150.1

Analyte	AB	Analyte ID	Method ID
pH	TX	1900	10008409

Method EPA 160.1

Analyte	AB	Analyte ID	Method ID
Residue-filterable (TDS)	TX	1955	10009208

Method EPA 160.2

Analyte	AB	Analyte ID	Method ID
Residue-nonfilterable (TSS)	TX	1960	10009606

Method EPA 1664

Analyte	AB	Analyte ID	Method ID
n-Hexane Extractable Material (HEM) (O&G)	TX	1803	10127807

Method EPA 180.1

Analyte	AB	Analyte ID	Method ID
Turbidity	TX	2055	10011606

Method EPA 200.8

Analyte	AB	Analyte ID	Method ID
Aluminum	TX	1000	10014605
Antimony	TX	1005	10014605
Arsenic	TX	1010	10014605

Texas Commission on Environmental Quality

NELAP - Recognized Laboratory Fields of Accreditation

Certificate: T104704211-21-27
Expiration Date: 4/30/2022
Issue Date: 5/1/2021

DHL Analytical, Inc.

2300 Double Creek Drive
Round Rock, TX 78664-3801

These fields of accreditation supercede all previous fields. The Texas Commission on Environmental Quality urges customers to verify the laboratory's current accreditation status for particular methods and analyses.

Matrix: ***Non-Potable Water***

Barium	TX	1015	10014605
Beryllium	TX	1020	10014605
Boron	TX	1025	10014605
Cadmium	TX	1030	10014605
Calcium	TX	1035	10014605
Chromium	TX	1040	10014605
Cobalt	TX	1050	10014605
Copper	TX	1055	10014605
Iron	TX	1070	10014605
Lead	TX	1075	10014605
Magnesium	TX	1085	10014605
Manganese	TX	1090	10014605
Molybdenum	TX	1100	10014605
Nickel	TX	1105	10014605
Potassium	TX	1125	10014605
Selenium	TX	1140	10014605
Silver	TX	1150	10014605
Sodium	TX	1155	10014605
Strontium	TX	1160	10014605
Thallium	TX	1165	10014605
Tin	TX	1175	10014605
Titanium	TX	1180	10014605
Vanadium	TX	1185	10014605
Zinc	TX	1190	10014605

Method EPA 245.1

Analyte	**AB**	**Analyte ID**	**Method ID**
Mercury	TX	1095	10036609

Method EPA 300.0

Analyte	**AB**	**Analyte ID**	**Method ID**
Bromide	TX	1540	10053200
Chloride	TX	1575	10053200

Texas Commission on Environmental Quality

NELAP - Recognized Laboratory Fields of Accreditation

Certificate: T104704211-21-27
Expiration Date: 4/30/2022
Issue Date: 5/1/2021

DHL Analytical, Inc.

2300 Double Creek Drive
Round Rock, TX 78664-3801

These fields of accreditation supercede all previous fields. The Texas Commission on Environmental Quality urges customers to verify the laboratory's current accreditation status for particular methods and analyses.

Matrix: ***Non-Potable Water***

Fluoride	TX	1730	10053200
Nitrate as N	TX	1810	10053200
Nitrate-nitrite	TX	1820	10053200
Nitrite as N	TX	1840	10053200
Sulfate	TX	2000	10053200

Method EPA 305.1

Analyte	**AB**	**Analyte ID**	**Method ID**
Acidity, as CaCO3	TX	1500	10054203

Method EPA 310.1

Analyte	**AB**	**Analyte ID**	**Method ID**
Alkalinity as CaCO3	TX	1505	10054805

Method EPA 335.1

Analyte	**AB**	**Analyte ID**	**Method ID**
Amenable cyanide	TX	1510	10060001

Method EPA 335.2

Analyte	**AB**	**Analyte ID**	**Method ID**
Total cyanide	TX	1645	10278203

Method EPA 365.2

Analyte	**AB**	**Analyte ID**	**Method ID**
Orthophosphate as P	TX	1870	10070403
Phosphorus	TX	1910	10070403

Method EPA 376.2

Analyte	**AB**	**Analyte ID**	**Method ID**
Sulfide	TX	2005	10074609

Method EPA 415.1

Analyte	**AB**	**Analyte ID**	**Method ID**
Total Organic Carbon (TOC)	TX	2040	10078407

Method EPA 6020

Analyte	**AB**	**Analyte ID**	**Method ID**
Aluminum	TX	1000	10156204
Antimony	TX	1005	10156204

Texas Commission on Environmental Quality

NELAP - Recognized Laboratory Fields of Accreditation

Certificate: T104704211-21-27
Expiration Date: 4/30/2022
Issue Date: 5/1/2021

DHL Analytical, Inc.

2300 Double Creek Drive
Round Rock, TX 78664-3801

These fields of accreditation supercede all previous fields. The Texas Commission on Environmental Quality urges customers to verify the laboratory's current accreditation status for particular methods and analyses.

Matrix: ***Non-Potable Water***

Arsenic	TX	1010	10156204
Barium	TX	1015	10156204
Beryllium	TX	1020	10156204
Boron	TX	1025	10156204
Cadmium	TX	1030	10156204
Calcium	TX	1035	10156204
Chromium	TX	1040	10156204
Cobalt	TX	1050	10156204
Copper	TX	1055	10156204
Iron	TX	1070	10156204
Lead	TX	1075	10156204
Lithium	TX	1080	10156204
Magnesium	TX	1085	10156204
Manganese	TX	1090	10156204
Molybdenum	TX	1100	10156204
Nickel	TX	1105	10156204
Potassium	TX	1125	10156204
Selenium	TX	1140	10156204
Silver	TX	1150	10156204
Sodium	TX	1155	10156204
Strontium	TX	1160	10156204
Thallium	TX	1165	10156204
Tin	TX	1175	10156204
Titanium	TX	1180	10156204
Vanadium	TX	1185	10156204
Zinc	TX	1190	10156204

Method EPA 608.3

Analyte	AB	Analyte ID	Method ID
Aroclor-1016 (PCB-1016)	TX	8880	10296625
Aroclor-1221 (PCB-1221)	TX	8885	10296625

Texas Commission on Environmental Quality

NELAP - Recognized Laboratory Fields of Accreditation

Certificate: T104704211-21-27
Expiration Date: 4/30/2022
Issue Date: 5/1/2021

DHL Analytical, Inc.

2300 Double Creek Drive
Round Rock, TX 78664-3801

These fields of accreditation supercede all previous fields. The Texas Commission on Environmental Quality urges customers to verify the laboratory's current accreditation status for particular methods and analyses.

Matrix: ***Non-Potable Water***

Aroclor-1232 (PCB-1232)	TX	8890	10296625
Aroclor-1242 (PCB-1242)	TX	8895	10296625
Aroclor-1248 (PCB-1248)	TX	8900	10296625
Aroclor-1254 (PCB-1254)	TX	8905	10296625
Aroclor-1260 (PCB-1260)	TX	8910	10296625

Method EPA 624.1

Analyte	**AB**	**Analyte ID**	**Method ID**
1,1,1-Trichloroethane	TX	5160	10298121
1,1,2,2-Tetrachloroethane	TX	5110	10298121
1,1,2-Trichloroethane	TX	5165	10298121
1,1-Dichloroethane	TX	4630	10298121
1,1-Dichloroethylene	TX	4640	10298121
1,2-Dibromoethane (EDB, Ethylene dibromide)	TX	4585	10298121
1,2-Dichlorobenzene	TX	4610	10298121
1,2-Dichloroethane (Ethylene dichloride)	TX	4635	10298121
1,2-Dichloropropane	TX	4655	10298121
1,3-Dichlorobenzene	TX	4615	10298121
1,4-Dichlorobenzene	TX	4620	10298121
2-Butanone (Methyl ethyl ketone, MEK)	TX	4410	10298121
2-Chloroethyl vinyl ether	TX	4500	10298121
Acetone (2-Propanone)	TX	4315	10298121
Acrolein (Propenal)	TX	4325	10298121
Acrylonitrile	TX	4340	10298121
Benzene	TX	4375	10298121
Bromodichloromethane	TX	4395	10298121
Bromoform	TX	4400	10298121
Carbon tetrachloride	TX	4455	10298121
Chlorobenzene	TX	4475	10298121
Chlorodibromomethane	TX	4575	10298121
Chloroethane (Ethyl chloride)	TX	4485	10298121

Texas Commission on Environmental Quality

NELAP - Recognized Laboratory Fields of Accreditation

Certificate: T104704211-21-27
Expiration Date: 4/30/2022
Issue Date: 5/1/2021

DHL Analytical, Inc.

2300 Double Creek Drive
Round Rock, TX 78664-3801

These fields of accreditation supercede all previous fields. The Texas Commission on Environmental Quality urges customers to verify the laboratory's current accreditation status for particular methods and analyses.

Matrix: ***Non-Potable Water***

Chloroform	TX	4505	10298121
cis-1,2-Dichloroethylene	TX	4645	10298121
cis-1,3-Dichloropropene	TX	4680	10298121
Ethylbenzene	TX	4765	10298121
m+p-xylene	TX	5240	10298121
Methyl bromide (Bromomethane)	TX	4950	10298121
Methyl chloride (Chloromethane)	TX	4960	10298121
Methyl tert-butyl ether (MTBE)	TX	5000	10298121
Methylene chloride (Dichloromethane)	TX	4975	10298121
Naphthalene	TX	5005	10298121
o-Xylene	TX	5250	10298121
Tetrachloroethylene (Perchloroethylene)	TX	5115	10298121
Toluene	TX	5140	10298121
Total trihalomethanes	TX	5205	10298121
trans-1,2-Dichloroethylene	TX	4700	10298121
trans-1,3-Dichloropropylene	TX	4685	10298121
Trichloroethene (Trichloroethylene)	TX	5170	10298121
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	TX	5175	10298121
Vinyl chloride	TX	5235	10298121
Xylene (total)	TX	5260	10298121

Method EPA 625.1

Analyte	**AB**	**Analyte ID**	**Method ID**
1,2,4,5-Tetrachlorobenzene	TX	6715	10300024
1,2,4-Trichlorobenzene	TX	5155	10300024
1,2-Dichlorobenzene	TX	4610	10300024
1,2-Diphenylhydrazine	TX	6221	10300024
1,3-Dichlorobenzene	TX	4615	10300024
1,4-Dichlorobenzene	TX	4620	10300024
2,2'-Oxybis(1-chloropropane) (bis(2-Chloro-1-methylethyl)ether)	TX	4659	10300024
2,3,4,6-Tetrachlorophenol	TX	6735	10300024

Texas Commission on Environmental Quality

NELAP - Recognized Laboratory Fields of Accreditation

Certificate: T104704211-21-27

DHL Analytical, Inc.

Expiration Date: 4/30/2022

2300 Double Creek Drive
Round Rock, TX 78664-3801

Issue Date: 5/1/2021

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Matrix: ***Non-Potable Water***

2,4,5-Trichlorophenol	TX	6835	10300024
2,4,6-Trichlorophenol	TX	6840	10300024
2,4-Dichlorophenol	TX	6000	10300024
2,4-Dimethylphenol	TX	6130	10300024
2,4-Dinitrophenol	TX	6175	10300024
2,4-Dinitrotoluene (2,4-DNT)	TX	6185	10300024
2,6-Dinitrotoluene (2,6-DNT)	TX	6190	10300024
2-Chloronaphthalene	TX	5795	10300024
2-Chlorophenol	TX	5800	10300024
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	TX	6360	10300024
2-Methylphenol (o-Cresol)	TX	6400	10300024
2-Nitrophenol	TX	6490	10300024
3,3'-Dichlorobenzidine	TX	5945	10300024
4,4'-DDD	TX	7355	10300024
4,4'-DDE	TX	7360	10300024
4,4'-DDT	TX	7365	10300024
4-Bromophenyl phenyl ether (BDE-3)	TX	5660	10300024
4-Chloro-3-methylphenol	TX	5700	10300024
4-Chlorophenyl phenylether	TX	5825	10300024
4-Methylphenol (p-Cresol)	TX	6410	10300024
4-Nitrophenol	TX	6500	10300024
Acenaphthene	TX	5500	10300024
Acenaphthylene	TX	5505	10300024
Aldrin	TX	7025	10300024
alpha-BHC (alpha-Hexachlorocyclohexane)	TX	7110	10300024
alpha-Chlordane	TX	7240	10300024
Anthracene	TX	5555	10300024
Aroclor-1016 (PCB-1016)	TX	8880	10300024
Aroclor-1221 (PCB-1221)	TX	8885	10300024
Aroclor-1232 (PCB-1232)	TX	8890	10300024

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Matrix: ***Non-Potable Water***

Aroclor-1242 (PCB-1242)	TX	8895	10300024
Aroclor-1248 (PCB-1248)	TX	8900	10300024
Aroclor-1254 (PCB-1254)	TX	8905	10300024
Aroclor-1260 (PCB-1260)	TX	8910	10300024
Benzidine	TX	5595	10300024
Benzo(a)anthracene	TX	5575	10300024
Benzo(a)pyrene	TX	5580	10300024
Benzo(b)fluoranthene	TX	5585	10300024
Benzo(g,h,i)perylene	TX	5590	10300024
Benzo(k)fluoranthene	TX	5600	10300024
beta-BHC (beta-Hexachlorocyclohexane)	TX	7115	10300024
bis(2-Chloroethoxy)methane	TX	5760	10300024
bis(2-Chloroethyl) ether	TX	5765	10300024
bis(2-Ethylhexyl) phthalate (Di(2-Ethylhexyl) phthalate, DEHP)	TX	6065	10300024
Butyl benzyl phthalate	TX	5670	10300024
Chrysene	TX	5855	10300024
delta-BHC (delta-Hexachlorocyclohexane)	TX	7105	10300024
Dibenz(a,h) anthracene	TX	5895	10300024
Dieldrin	TX	7470	10300024
Diethyl phthalate	TX	6070	10300024
Dimethyl phthalate	TX	6135	10300024
Di-n-butyl phthalate	TX	5925	10300024
Di-n-octyl phthalate	TX	6200	10300024
Endosulfan I	TX	7510	10300024
Endosulfan II	TX	7515	10300024
Endosulfan sulfate	TX	7520	10300024
Endrin	TX	7540	10300024
Endrin aldehyde	TX	7530	10300024
Fluoranthene	TX	6265	10300024
Fluorene	TX	6270	10300024

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Matrix: ***Non-Potable Water***

gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	TX	7120	10300024
gamma-Chlordane	TX	7245	10300024
Heptachlor	TX	7685	10300024
Heptachlor epoxide	TX	7690	10300024
Hexachlorobenzene	TX	6275	10300024
Hexachlorobutadiene	TX	4835	10300024
Hexachlorocyclopentadiene	TX	6285	10300024
Hexachloroethane	TX	4840	10300024
Indeno(1,2,3-cd) pyrene	TX	6315	10300024
Isophorone	TX	6320	10300024
Naphthalene	TX	5005	10300024
Nitrobenzene	TX	5015	10300024
n-Nitrosodiethylamine	TX	6525	10300024
n-Nitrosodimethylamine	TX	6530	10300024
n-Nitrosodi-n-butylamine	TX	5025	10300024
n-Nitrosodi-n-propylamine	TX	6545	10300024
n-Nitrosodiphenylamine	TX	6535	10300024
Pentachlorobenzene	TX	6590	10300024
Pentachlorophenol	TX	6605	10300024
Phenanthrene	TX	6615	10300024
Phenol	TX	6625	10300024
Pyrene	TX	6665	10300024
Pyridine	TX	5095	10300024
Toxaphene (Chlorinated camphene)	TX	8250	10300024

Method EPA 7196

Analyte	**AB**	**Analyte ID**	**Method ID**
Chromium (VI)	TX	1045	10162400

Method EPA 7470

Analyte	**AB**	**Analyte ID**	**Method ID**
Mercury	TX	1095	10165807

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Matrix: ***Non-Potable Water***

Method EPA 8015

Analyte	AB	Analyte ID	Method ID
Diesel range organics (DRO)	TX	9369	10173203
Ethylene glycol	TX	4785	10173203
Gasoline range organics (GRO)	TX	9408	10173203
Propylene Glycol	TX	6657	10173203

Method EPA 8082

Analyte	AB	Analyte ID	Method ID
Aroclor-1016 (PCB-1016)	TX	8880	10179007
Aroclor-1221 (PCB-1221)	TX	8885	10179007
Aroclor-1232 (PCB-1232)	TX	8890	10179007
Aroclor-1242 (PCB-1242)	TX	8895	10179007
Aroclor-1248 (PCB-1248)	TX	8900	10179007
Aroclor-1254 (PCB-1254)	TX	8905	10179007
Aroclor-1260 (PCB-1260)	TX	8910	10179007
PCBs (total)	TX	8870	10179007

Method EPA 8260

Analyte	AB	Analyte ID	Method ID
1,1,1,2-Tetrachloroethane	TX	5105	10184802
1,1,1-Trichloroethane	TX	5160	10184802
1,1,2,2-Tetrachloroethane	TX	5110	10184802
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	TX	5195	10184802
1,1,2-Trichloroethane	TX	5165	10184802
1,1-Dichloroethane	TX	4630	10184802
1,1-Dichloroethylene	TX	4640	10184802
1,1-Dichloropropene	TX	4670	10184802
1,2,3-Trichlorobenzene	TX	5150	10184802
1,2,3-Trichloropropane	TX	5180	10184802
1,2,4-Trichlorobenzene	TX	5155	10184802
1,2,4-Trimethylbenzene	TX	5210	10184802
1,2-Dibromo-3-chloropropane (DBCP)	TX	4570	10184802

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Matrix: ***Non-Potable Water***

1,2-Dibromoethane (EDB, Ethylene dibromide)	TX	4585	10184802
1,2-Dichlorobenzene	TX	4610	10184802
1,2-Dichloroethane (Ethylene dichloride)	TX	4635	10184802
1,2-Dichloropropane	TX	4655	10184802
1,3,5-Trimethylbenzene	TX	5215	10184802
1,3-Dichlorobenzene	TX	4615	10184802
1,3-Dichloropropane	TX	4660	10184802
1,4-Dichlorobenzene	TX	4620	10184802
1-Chlorohexane	TX	4510	10184802
2,2-Dichloropropane	TX	4665	10184802
2-Butanone (Methyl ethyl ketone, MEK)	TX	4410	10184802
2-Chloroethyl vinyl ether	TX	4500	10184802
2-Chlorotoluene	TX	4535	10184802
2-Hexanone (MBK)	TX	4860	10184802
4-Chlorotoluene	TX	4540	10184802
4-Isopropyltoluene (p-Cymene)	TX	4915	10184802
4-Methyl-2-pentanone (MIBK)	TX	4995	10184802
Acetone (2-Propanone)	TX	4315	10184802
Acrolein (Propenal)	TX	4325	10184802
Acrylonitrile	TX	4340	10184802
Benzene	TX	4375	10184802
Bromobenzene	TX	4385	10184802
Bromochloromethane	TX	4390	10184802
Bromodichloromethane	TX	4395	10184802
Bromoform	TX	4400	10184802
Carbon disulfide	TX	4450	10184802
Carbon tetrachloride	TX	4455	10184802
Chlorobenzene	TX	4475	10184802
Chlorodibromomethane	TX	4575	10184802
Chloroethane (Ethyl chloride)	TX	4485	10184802

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Matrix: ***Non-Potable Water***

Chloroform	TX	4505	10184802
cis-1,2-Dichloroethylene	TX	4645	10184802
cis-1,3-Dichloropropene	TX	4680	10184802
Dibromomethane (Methylene bromide)	TX	4595	10184802
Dichlorodifluoromethane (Freon-12)	TX	4625	10184802
Di-isopropylether (DIPE)	TX	9375	10184802
Ethylbenzene	TX	4765	10184802
Ethyl-t-butylether (ETBE) (2-Ethoxy-2-methylpropane)	TX	4770	10184802
Hexachlorobutadiene	TX	4835	10184802
Iodomethane (Methyl iodide)	TX	4870	10184802
Isopropylbenzene (Cumene)	TX	4900	10184802
m+p-xylene	TX	5240	10184802
Methyl acetate	TX	4940	10184802
Methyl bromide (Bromomethane)	TX	4950	10184802
Methyl chloride (Chloromethane)	TX	4960	10184802
Methyl tert-butyl ether (MTBE)	TX	5000	10184802
Methylcyclohexane	TX	4965	10184802
Methylene chloride (Dichloromethane)	TX	4975	10184802
Naphthalene	TX	5005	10184802
n-Butylbenzene	TX	4435	10184802
n-Propylbenzene	TX	5090	10184802
o-Xylene	TX	5250	10184802
sec-Butylbenzene	TX	4440	10184802
Styrene	TX	5100	10184802
T-amylmethylether (TAME)	TX	4370	10184802
tert-Butyl alcohol	TX	4420	10184802
tert-Butylbenzene	TX	4445	10184802
Tetrachloroethylene (Perchloroethylene)	TX	5115	10184802
Toluene	TX	5140	10184802
Total trihalomethanes	TX	5205	10184802

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Matrix: ***Non-Potable Water***

trans-1,2-Dichloroethylene	TX	4700	10184802
trans-1,3-Dichloropropylene	TX	4685	10184802
trans-1,4-Dichloro-2-butene	TX	4605	10184802
Trichloroethene (Trichloroethylene)	TX	5170	10184802
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	TX	5175	10184802
Vinyl acetate	TX	5225	10184802
Vinyl chloride	TX	5235	10184802
Xylene (total)	TX	5260	10184802

Method EPA 8270

Analyte	**AB**	**Analyte ID**	**Method ID**
1,2,4,5-Tetrachlorobenzene	TX	6715	10185805
1,2,4-Trichlorobenzene	TX	5155	10185805
1,2-Dichlorobenzene	TX	4610	10185805
1,2-Diphenylhydrazine	TX	6220	10185805
1,3-Dichlorobenzene	TX	4615	10185805
1,4-Dichlorobenzene	TX	4620	10185805
1-Naphthylamine	TX	6425	10185805
2,2'-Oxybis(1-chloropropane) (bis(2-Chloro-1-methylethyl)ether)	TX	4659	10185805
2,3,4,6-Tetrachlorophenol	TX	6735	10185805
2,4,5-Trichlorophenol	TX	6835	10185805
2,4,6-Trichlorophenol	TX	6840	10185805
2,4-Dichlorophenol	TX	6000	10185805
2,4-Dimethylphenol	TX	6130	10185805
2,4-Dinitrophenol	TX	6175	10185805
2,4-Dinitrotoluene (2,4-DNT)	TX	6185	10185805
2,6-Dichlorophenol	TX	6005	10185805
2,6-Dinitrotoluene (2,6-DNT)	TX	6190	10185805
2-Chloronaphthalene	TX	5795	10185805
2-Chlorophenol	TX	5800	10185805
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	TX	6360	10185805

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Matrix: ***Non-Potable Water***

2-Methylnaphthalene	TX	6385	10185805
2-Methylphenol (o-Cresol)	TX	6400	10185805
2-Naphthylamine	TX	6430	10185805
2-Nitroaniline	TX	6460	10185805
2-Nitrophenol	TX	6490	10185805
2-Picoline (2-Methylpyridine)	TX	5050	10185805
3,3'-Dichlorobenzidine	TX	5945	10185805
3-Methylcholanthrene	TX	6355	10185805
3-Nitroaniline	TX	6465	10185805
4,4'-DDD	TX	7355	10185805
4,4'-DDE	TX	7360	10186002
4,4'-DDT	TX	7365	10185805
4-Aminobiphenyl	TX	5540	10185805
4-Bromophenyl phenyl ether (BDE-3)	TX	5660	10185805
4-Chloro-3-methylphenol	TX	5700	10185805
4-Chloroaniline	TX	5745	10185805
4-Chlorophenyl phenylether	TX	5825	10185805
4-Dimethyl aminoazobenzene	TX	6105	10185805
4-Methylphenol (p-Cresol)	TX	6410	10185805
4-Nitroaniline	TX	6470	10185805
4-Nitrophenol	TX	6500	10185805
7,12-Dimethylbenz(a) anthracene	TX	6115	10185805
a-a-Dimethylphenethylamine	TX	6125	10185805
Acenaphthene	TX	5500	10185805
Acenaphthylene	TX	5505	10185805
Acetophenone	TX	5510	10185805
Aldrin	TX	7025	10186002
alpha-BHC (alpha-Hexachlorocyclohexane)	TX	7110	10186002
alpha-Chlordane	TX	7240	10185601
Aniline	TX	5545	10185805

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Matrix: ***Non-Potable Water***

Anthracene	TX	5555	10185805
Aroclor-1016 (PCB-1016)	TX	8880	10186002
Aroclor-1221 (PCB-1221)	TX	8885	10185203
Aroclor-1232 (PCB-1232)	TX	8890	10185407
Aroclor-1242 (PCB-1242)	TX	8895	10185203
Aroclor-1248 (PCB-1248)	TX	8900	10186002
Aroclor-1254 (PCB-1254)	TX	8905	10185601
Aroclor-1260 (PCB-1260)	TX	8910	10185203
Atrazine	TX	7065	10185805
Azinphos-methyl (Guthion)	TX	7075	10185805
Benzidine	TX	5595	10185805
Benzo(a)anthracene	TX	5575	10185805
Benzo(a)pyrene	TX	5580	10185805
Benzo(b)fluoranthene	TX	5585	10185805
Benzo(e)pyrene	TX	5605	10185805
Benzo(g,h,i)perylene	TX	5590	10185805
Benzo(k)fluoranthene	TX	5600	10185805
Benzoic acid	TX	5610	10185805
Benzyl alcohol	TX	5630	10185805
beta-BHC (beta-Hexachlorocyclohexane)	TX	7115	10185203
Biphenyl	TX	5640	10185805
bis(2-Chloroethoxy)methane	TX	5760	10185805
bis(2-Chloroethyl) ether	TX	5765	10185805
bis(2-Ethylhexyl) phthalate (Di(2-Ethylhexyl) phthalate, DEHP)	TX	6065	10185805
Butyl benzyl phthalate	TX	5670	10185805
Caprolactam	TX	7180	10185805
Carbaryl (Sevin)	TX	7195	10185407
Carbazole	TX	5680	10185805
Carbophenothion	TX	7220	10185407
Chlordane (tech.)	TX	7250	10185203

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Matrix: ***Non-Potable Water***

Chlorfenvinphos	TX	7255	10185805
Chrysene	TX	5855	10185805
Coumaphos	TX	7315	10186002
Crotoxyphos	TX	7330	10185407
delta-BHC (delta-Hexachlorocyclohexane)	TX	7105	10185805
Demeton	TX	7390	10185407
Demeton-o	TX	7395	10185203
Demeton-s	TX	7385	10185601
Dibenz(a,h) anthracene	TX	5895	10185805
Dibenzofuran	TX	5905	10185805
Dichlorovos (DDVP, Dichlorvos)	TX	8610	10186002
Dicrotophos	TX	7465	10185407
Dieldrin	TX	7470	10186002
Diethyl phthalate	TX	6070	10185805
Dimethoate	TX	7475	10185805
Dimethyl phthalate	TX	6135	10185805
Di-n-butyl phthalate	TX	5925	10185805
Di-n-octyl phthalate	TX	6200	10185805
Dioxathion	TX	7495	10185203
Diphenylamine	TX	6205	10185805
Disulfoton	TX	8625	10185601
Endosulfan I	TX	7510	10185805
Endosulfan II	TX	7515	10185203
Endosulfan sulfate	TX	7520	10185601
Endrin	TX	7540	10185203
Endrin aldehyde	TX	7530	10185805
Endrin ketone	TX	7535	10186002
EPN (Phosphonothioic acid, phenyl-, O-ethyl O-(p-nitrophenyl) ester)	TX	7550	10186002
Ethion	TX	7565	10185805
Ethyl methanesulfonate	TX	6260	10185805

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Matrix: ***Non-Potable Water***

Famphur	TX	7580	10185407
Fensulfothion	TX	7600	10185203
Fenthion	TX	7605	10186002
Fluoranthene	TX	6265	10185805
Fluorene	TX	6270	10185805
gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	TX	7120	10185203
gamma-Chlordane	TX	7245	10185203
Heptachlor	TX	7685	10185601
Heptachlor epoxide	TX	7690	10185805
Hexachlorobenzene	TX	6275	10185805
Hexachlorobutadiene	TX	4835	10185805
Hexachlorocyclopentadiene	TX	6285	10185805
Hexachloroethane	TX	4840	10185805
Hexachlorophene	TX	6290	10185805
Indeno(1,2,3-cd) pyrene	TX	6315	10185805
Isodrin	TX	7725	10185407
Isophorone	TX	6320	10185805
Leptophos	TX	7755	10186002
Malathion	TX	7770	10186002
Methoxychlor	TX	7810	10185601
Methyl methanesulfonate	TX	6375	10185805
Methyl parathion (Parathion, methyl)	TX	7825	10185203
Mevinphos	TX	7850	10186002
Monocrotophos	TX	7880	10185203
Naled	TX	7905	10185203
Naphthalene	TX	5005	10185805
Nitrobenzene	TX	5015	10185805
n-Nitrosodiethylamine	TX	6525	10185805
n-Nitrosodimethylamine	TX	6530	10185805
n-Nitrosodi-n-butylamine	TX	5025	10185805

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Matrix: ***Non-Potable Water***

n-Nitrosodi-n-propylamine	TX	6545	10185805
n-Nitrosodiphenylamine	TX	6535	10185805
n-Nitrosopiperidine	TX	6560	10185805
Parathion, ethyl	TX	7955	10185805
Pentachlorobenzene	TX	6590	10185805
Pentachloronitrobenzene (PCNB)	TX	6600	10185805
Pentachlorophenol	TX	6605	10185805
Phenacetin	TX	6610	10185805
Phenanthrene	TX	6615	10185805
Phenol	TX	6625	10185805
Phorate	TX	7985	10186002
Phosmet (Imidan)	TX	8000	10186002
Phosphamidon	TX	8005	10185805
Pronamide (Kerb)	TX	6650	10185805
Pyrene	TX	6665	10185805
Pyridine	TX	5095	10185805
Quinoline	TX	6670	10185805
Sulfotepp	TX	8155	10186002
Terbufos	TX	8185	10185805
Tetrachlorvinphos (Stirophos, Gardona)	TX	8197	10186002
Tetraethyl pyrophosphate (TEPP)	TX	8210	10185407
Toxaphene (Chlorinated camphene)	TX	8250	10185203

Method EPA 8321

Analyte	**AB**	**Analyte ID**	**Method ID**
2,4,5-T	TX	8655	10188804
2,4-D	TX	8545	10188804
2,4-DB	TX	8560	10188804
Dalapon	TX	8555	10188804
Dicamba	TX	8595	10188804
Dichloroprop (Dichlorprop, Weedone)	TX	8605	10188804

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DHL Analytical, Inc.

2300 Double Creek Drive
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Matrix: ***Non-Potable Water***

Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	TX	8620	10188804
MCPA	TX	7775	10188804
MCPP	TX	7780	10188804
Silvex (2,4,5-TP)	TX	8650	10188804

Method EPA 9014

Analyte	**AB**	**Analyte ID**	**Method ID**
Amenable cyanide	TX	1510	10193803
Total cyanide	TX	1645	10193803

Method EPA 9040

Analyte	**AB**	**Analyte ID**	**Method ID**
pH	TX	1900	10197203

Method EPA 9056

Analyte	**AB**	**Analyte ID**	**Method ID**
Bromide	TX	1540	10199209
Chloride	TX	1575	10199209
Fluoride	TX	1730	10199209
Nitrate as N	TX	1810	10199209
Nitrate-nitrite	TX	1820	10199209
Nitrite as N	TX	1840	10199209
Sulfate	TX	2000	10199209

Method EPA 9060

Analyte	**AB**	**Analyte ID**	**Method ID**
Total Organic Carbon (TOC)	TX	2040	10200201

Method EPA 9070

Analyte	**AB**	**Analyte ID**	**Method ID**
n-Hexane Extractable Material (HEM) (O&G)	TX	1803	10201000

Method EPA RSK 175

Analyte	**AB**	**Analyte ID**	**Method ID**
Carbon dioxide	TX	3755	10212905
Ethane	TX	4747	10212905
Ethene	TX	4752	10212905

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Matrix: ***Non-Potable Water***

Methane	TX	4926	10212905
n-Butane	TX	5007	10212905
n-Propane	TX	5029	10212905

Method HACH 8000

Analyte	**AB**	**Analyte ID**	**Method ID**
Chemical oxygen demand (COD)	TX	1565	60003001

Method SM 2130 B

Analyte	**AB**	**Analyte ID**	**Method ID**
Turbidity	TX	2055	20048220

Method SM 2310 B (4a)

Analyte	**AB**	**Analyte ID**	**Method ID**
Acidity, as CaCO3	TX	1500	20044615

Method SM 2320 B

Analyte	**AB**	**Analyte ID**	**Method ID**
Alkalinity as CaCO3	TX	1505	20045618

Method SM 2340 B

Analyte	**AB**	**Analyte ID**	**Method ID**
Total hardness as CaCO3	TX	1755	20046611

Method SM 2510 B

Analyte	**AB**	**Analyte ID**	**Method ID**
Conductivity	TX	1610	20048617

Method SM 2540 C

Analyte	**AB**	**Analyte ID**	**Method ID**
Residue-filterable (TDS)	TX	1955	20050413

Method SM 2540 D

Analyte	**AB**	**Analyte ID**	**Method ID**
Residue-nonfilterable (TSS)	TX	1960	20051212

Method SM 2540 F

Analyte	**AB**	**Analyte ID**	**Method ID**
Residue-settleable	TX	1965	20005009

Method SM 3500-Cr B

Analyte	**AB**	**Analyte ID**	**Method ID**

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Matrix: ***Non-Potable Water***

Chromium (VI)	TX	1045	20066017

Method SM 4500-CN¯ E

Analyte	AB	Analyte ID	Method ID
Total cyanide	TX	1645	20096428

Method SM 4500-CN¯ G

Analyte	AB	Analyte ID	Method ID
Amenable cyanide	TX	1510	20097227

Method SM 4500-H+ B

Analyte	AB	Analyte ID	Method ID
pH	TX	1900	20105220

Method SM 4500-NH3 D

Analyte	AB	Analyte ID	Method ID
Ammonia as N	TX	1515	20109415

Method SM 4500-P E

Analyte	AB	Analyte ID	Method ID
Orthophosphate as P	TX	1870	20124225
Phosphorus	TX	1910	20124225

Method SM 4500-S2¯ D

Analyte	AB	Analyte ID	Method ID
Sulfide	TX	2005	20125864

Method SM 5220 D

Analyte	AB	Analyte ID	Method ID
Chemical oxygen demand (COD)	TX	1565	20136816

Method SM 5310 C

Analyte	AB	Analyte ID	Method ID
Total Organic Carbon (TOC)	TX	2040	20138823

Method TCEQ 1005

Analyte	AB	Analyte ID	Method ID
Total Petroleum Hydrocarbons (TPH)	TX	2050	90019208

Method USGS O-2060-01

Analyte	AB	Analyte ID	Method ID
2,4-D	TX	8545	40019689

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Matrix: ***Non-Potable Water***

Dicamba	TX	8595	40019689

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Matrix: ***Solid & Chemical Materials***

Method ASTM D2216

Analyte	AB	Analyte ID	Method ID
Moisture	TX	10337	ASTM D2216-05

Method EPA 1010

Analyte	AB	Analyte ID	Method ID
Ignitability	TX	1780	10116606

Method EPA 1311

Analyte	AB	Analyte ID	Method ID
TCLP	TX	849	10118806

Method EPA 1312

Analyte	AB	Analyte ID	Method ID
SPLP	TX	850	10119003

Method EPA 200.8

Analyte	AB	Analyte ID	Method ID
Aluminum	TX	1000	10014605
Antimony	TX	1005	10014605
Arsenic	TX	1010	10014605
Barium	TX	1015	10014605
Beryllium	TX	1020	10014605
Cadmium	TX	1030	10014605
Calcium	TX	1035	10014605
Chromium	TX	1040	10014605
Cobalt	TX	1050	10014605
Copper	TX	1055	10014605
Iron	TX	1070	10014605
Lead	TX	1075	10014605
Magnesium	TX	1085	10014605
Manganese	TX	1090	10014605
Molybdenum	TX	1100	10014605
Nickel	TX	1105	10014605
Potassium	TX	1125	10014605

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Matrix: ***Solid & Chemical Materials***

Selenium	TX	1140	10014605
Silver	TX	1150	10014605
Sodium	TX	1155	10014605
Strontium	TX	1160	10014605
Thallium	TX	1165	10014605
Tin	TX	1175	10014605
Titanium	TX	1180	10014605
Vanadium	TX	1185	10014605
Zinc	TX	1190	10014605

Method EPA 300.0

Analyte	**AB**	**Analyte ID**	**Method ID**
Bromide	TX	1540	10053200
Chloride	TX	1575	10053200
Fluoride	TX	1730	10053200
Nitrate as N	TX	1810	10053200
Nitrate-nitrite	TX	1820	10053200
Nitrite as N	TX	1840	10053200
Sulfate	TX	2000	10053200

Method EPA 310.1

Analyte	**AB**	**Analyte ID**	**Method ID**
Alkalinity as CaCO3	TX	1505	10054805

Method EPA 350.3

Analyte	**AB**	**Analyte ID**	**Method ID**
Ammonia as N	TX	1515	10064401

Method EPA 365.2

Analyte	**AB**	**Analyte ID**	**Method ID**
Orthophosphate as P	TX	1870	10070403

Method EPA 6020

Analyte	**AB**	**Analyte ID**	**Method ID**
Aluminum	TX	1000	10156204
Antimony	TX	1005	10156204

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Matrix: ***Solid & Chemical Materials***

Arsenic	TX	1010	10156204
Barium	TX	1015	10156204
Beryllium	TX	1020	10156204
Boron	TX	1025	10156204
Cadmium	TX	1030	10156204
Calcium	TX	1035	10156204
Chromium	TX	1040	10156204
Cobalt	TX	1050	10156204
Copper	TX	1055	10156204
Iron	TX	1070	10156204
Lead	TX	1075	10156204
Lithium	TX	1080	10156204
Magnesium	TX	1085	10156204
Manganese	TX	1090	10156204
Molybdenum	TX	1100	10156204
Nickel	TX	1105	10156204
Potassium	TX	1125	10156204
Selenium	TX	1140	10156204
Silver	TX	1150	10156204
Sodium	TX	1155	10156204
Strontium	TX	1160	10156204
Thallium	TX	1165	10156204
Tin	TX	1175	10156204
Titanium	TX	1180	10156204
Vanadium	TX	1185	10156204
Zinc	TX	1190	10156204

Method EPA 7196

Analyte	**AB**	**Analyte ID**	**Method ID**
Chromium (VI)	TX	1045	10162400

Method EPA 7470

Analyte	**AB**	**Analyte ID**	**Method ID**

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Matrix: ***Solid & Chemical Materials***

Mercury	TX	1095	10165807

Method EPA 7471

Analyte	**AB**	**Analyte ID**	**Method ID**
Mercury	TX	1095	10166208

Method EPA 8015

Analyte	**AB**	**Analyte ID**	**Method ID**
Diesel range organics (DRO)	TX	9369	10173203
Ethylene glycol	TX	4785	10173203
Gasoline range organics (GRO)	TX	9408	10173203
Propylene Glycol	TX	6657	10173203

Method EPA 8082

Analyte	**AB**	**Analyte ID**	**Method ID**
Aroclor-1016 (PCB-1016)	TX	8880	10179007
Aroclor-1221 (PCB-1221)	TX	8885	10179007
Aroclor-1232 (PCB-1232)	TX	8890	10179007
Aroclor-1242 (PCB-1242)	TX	8895	10179007
Aroclor-1248 (PCB-1248)	TX	8900	10179007
Aroclor-1254 (PCB-1254)	TX	8905	10179007
Aroclor-1260 (PCB-1260)	TX	8910	10179007
PCBs (total)	TX	8870	10179007

Method EPA 8260

Analyte	**AB**	**Analyte ID**	**Method ID**
1,1,1,2-Tetrachloroethane	TX	5105	10184802
1,1,1-Trichloroethane	TX	5160	10184802
1,1,2,2-Tetrachloroethane	TX	5110	10184802
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	TX	5195	10184802
1,1,2-Trichloroethane	TX	5165	10184802
1,1-Dichloroethane	TX	4630	10184802
1,1-Dichloroethylene	TX	4640	10184802
1,1-Dichloropropene	TX	4670	10184802
1,2,3-Trichlorobenzene	TX	5150	10184802

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Matrix: ***Solid & Chemical Materials***

1,2,3-Trichloropropane	TX	5180	10184802
1,2,4-Trichlorobenzene	TX	5155	10184802
1,2,4-Trimethylbenzene	TX	5210	10184802
1,2-Dibromo-3-chloropropane (DBCP)	TX	4570	10184802
1,2-Dibromoethane (EDB, Ethylene dibromide)	TX	4585	10184802
1,2-Dichlorobenzene	TX	4610	10184802
1,2-Dichloroethane (Ethylene dichloride)	TX	4635	10184802
1,2-Dichloropropane	TX	4655	10184802
1,3,5-Trimethylbenzene	TX	5215	10184802
1,3-Dichlorobenzene	TX	4615	10184802
1,3-Dichloropropane	TX	4660	10184802
1,4-Dichlorobenzene	TX	4620	10184802
1-Chlorohexane	TX	4510	10184802
2,2-Dichloropropane	TX	4665	10184802
2-Butanone (Methyl ethyl ketone, MEK)	TX	4410	10184802
2-Chloroethyl vinyl ether	TX	4500	10184802
2-Chlorotoluene	TX	4535	10184802
2-Hexanone (MBK)	TX	4860	10184802
4-Chlorotoluene	TX	4540	10184802
4-Isopropyltoluene (p-Cymene)	TX	4915	10184802
4-Methyl-2-pentanone (MIBK)	TX	4995	10184802
Acetone (2-Propanone)	TX	4315	10184802
Acrolein (Propenal)	TX	4325	10184802
Acrylonitrile	TX	4340	10184802
Benzene	TX	4375	10184802
Bromobenzene	TX	4385	10184802
Bromochloromethane	TX	4390	10184802
Bromodichloromethane	TX	4395	10184802
Bromoform	TX	4400	10184802
Carbon disulfide	TX	4450	10184802

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Matrix: ***Solid & Chemical Materials***

Carbon tetrachloride	TX	4455	10184802
Chlorobenzene	TX	4475	10184802
Chlorodibromomethane	TX	4575	10184802
Chloroethane (Ethyl chloride)	TX	4485	10184802
Chloroform	TX	4505	10184802
cis-1,2-Dichloroethylene	TX	4645	10184802
cis-1,3-Dichloropropene	TX	4680	10184802
Dibromomethane (Methylene bromide)	TX	4595	10184802
Dichlorodifluoromethane (Freon-12)	TX	4625	10184802
Ethylbenzene	TX	4765	10184802
Hexachlorobutadiene	TX	4835	10184802
Iodomethane (Methyl iodide)	TX	4870	10184802
Isopropyl alcohol (2-Propanol, Isopropanol)	TX	4895	10184802
Isopropylbenzene (Cumene)	TX	4900	10184802
m+p-xylene	TX	5240	10184802
Methyl acetate	TX	4940	10184802
Methyl bromide (Bromomethane)	TX	4950	10184802
Methyl chloride (Chloromethane)	TX	4960	10184802
Methyl tert-butyl ether (MTBE)	TX	5000	10184802
Methylcyclohexane	TX	4965	10184802
Methylene chloride (Dichloromethane)	TX	4975	10184802
Naphthalene	TX	5005	10184802
n-Butylbenzene	TX	4435	10184802
n-Propylbenzene	TX	5090	10184802
o-Xylene	TX	5250	10184802
sec-Butylbenzene	TX	4440	10184802
Styrene	TX	5100	10184802
tert-Butylbenzene	TX	4445	10184802
Tetrachloroethylene (Perchloroethylene)	TX	5115	10184802
Toluene	TX	5140	10184802

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Matrix: ***Solid & Chemical Materials***

trans-1,2-Dichloroethylene	TX	4700	10184802
trans-1,3-Dichloropropylene	TX	4685	10184802
trans-1,4-Dichloro-2-butene	TX	4605	10184802
Trichloroethene (Trichloroethylene)	TX	5170	10184802
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	TX	5175	10184802
Vinyl acetate	TX	5225	10184802
Vinyl chloride	TX	5235	10184802
Xylene (total)	TX	5260	10184802

Method EPA 8270

Analyte	**AB**	**Analyte ID**	**Method ID**
1,2,4,5-Tetrachlorobenzene	TX	6715	10185805
1,2,4-Trichlorobenzene	TX	5155	10185805
1,2-Dichlorobenzene	TX	4610	10185805
1,2-Diphenylhydrazine	TX	6220	10185805
1,3-Dichlorobenzene	TX	4615	10185805
1,4-Dichlorobenzene	TX	4620	10185805
1-Naphthylamine	TX	6425	10185805
2,2'-Oxybis(1-chloropropane) (bis(2-Chloro-1-methylethyl)ether)	TX	4659	10185805
2,3,4,6-Tetrachlorophenol	TX	6735	10185805
2,4,5-Trichlorophenol	TX	6835	10185805
2,4,6-Trichlorophenol	TX	6840	10185805
2,4-Dichlorophenol	TX	6000	10185805
2,4-Dimethylphenol	TX	6130	10185805
2,4-Dinitrophenol	TX	6175	10185805
2,4-Dinitrotoluene (2,4-DNT)	TX	6185	10185805
2,6-Dichlorophenol	TX	6005	10185805
2,6-Dinitrotoluene (2,6-DNT)	TX	6190	10185805
2-Chloronaphthalene	TX	5795	10185805
2-Chlorophenol	TX	5800	10185805
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	TX	6360	10185805

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Matrix: ***Solid & Chemical Materials***

2-Methylnaphthalene	TX	6385	10185805
2-Methylphenol (o-Cresol)	TX	6400	10185805
2-Naphthylamine	TX	6430	10185805
2-Nitroaniline	TX	6460	10185805
2-Nitrophenol	TX	6490	10185805
2-Picoline (2-Methylpyridine)	TX	5050	10185805
3,3'-Dichlorobenzidine	TX	5945	10185805
3-Methylcholanthrene	TX	6355	10185805
3-Nitroaniline	TX	6465	10185805
4,4'-DDD	TX	7355	10185203
4,4'-DDE	TX	7360	10186002
4,4'-DDT	TX	7365	10185407
4-Aminobiphenyl	TX	5540	10185805
4-Bromophenyl phenyl ether (BDE-3)	TX	5660	10185805
4-Chloro-3-methylphenol	TX	5700	10185805
4-Chloroaniline	TX	5745	10185805
4-Chlorophenyl phenylether	TX	5825	10185805
4-Dimethyl aminoazobenzene	TX	6105	10185805
4-Methylphenol (p-Cresol)	TX	6410	10185805
4-Nitroaniline	TX	6470	10185805
4-Nitrophenol	TX	6500	10185805
7,12-Dimethylbenz(a) anthracene	TX	6115	10185805
a-a-Dimethylphenethylamine	TX	6125	10185805
Acenaphthene	TX	5500	10185805
Acenaphthylene	TX	5505	10185805
Acetophenone	TX	5510	10185805
Aldrin	TX	7025	10186002
alpha-BHC (alpha-Hexachlorocyclohexane)	TX	7110	10185407
alpha-Chlordane	TX	7240	10185805
Aniline	TX	5545	10185805

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Matrix: ***Solid & Chemical Materials***

Anthracene	TX	5555	10185805
Aroclor-1016 (PCB-1016)	TX	8880	10186002
Aroclor-1221 (PCB-1221)	TX	8885	10185805
Aroclor-1232 (PCB-1232)	TX	8890	10185407
Aroclor-1242 (PCB-1242)	TX	8895	10185407
Aroclor-1248 (PCB-1248)	TX	8900	10185805
Aroclor-1254 (PCB-1254)	TX	8905	10185805
Aroclor-1260 (PCB-1260)	TX	8910	10185407
Atrazine	TX	7065	10185805
Azinphos-methyl (Guthion)	TX	7075	10185203
Benzidine	TX	5595	10185805
Benzo(a)anthracene	TX	5575	10185805
Benzo(a)pyrene	TX	5580	10185805
Benzo(b)fluoranthene	TX	5585	10185805
Benzo(e)pyrene	TX	5605	10185805
Benzo(g,h,i)perylene	TX	5590	10185805
Benzo(k)fluoranthene	TX	5600	10185805
Benzoic acid	TX	5610	10185805
Benzyl alcohol	TX	5630	10185805
beta-BHC (beta-Hexachlorocyclohexane)	TX	7115	10185601
Biphenyl	TX	5640	10185805
bis(2-Chloroethoxy)methane	TX	5760	10185805
bis(2-Chloroethyl) ether	TX	5765	10185805
bis(2-Ethylhexyl) phthalate (Di(2-Ethylhexyl) phthalate, DEHP)	TX	6065	10185805
Butyl benzyl phthalate	TX	5670	10185805
Caprolactam	TX	7180	10185805
Carbaryl (Sevin)	TX	7195	10185601
Carbazole	TX	5680	10185805
Carbophenothion	TX	7220	10185805
Chlordane (tech.)	TX	7250	10185805

Texas Commission on Environmental Quality

NELAP - Recognized Laboratory Fields of Accreditation

Certificate: T104704211-21-27
Expiration Date: 4/30/2022
Issue Date: 5/1/2021

DHL Analytical, Inc.

2300 Double Creek Drive
Round Rock, TX 78664-3801

These fields of accreditation supercede all previous fields. The Texas Commission on Environmental Quality urges customers to verify the laboratory's current accreditation status for particular methods and analyses.

Matrix: ***Solid & Chemical Materials***

Chlorfenvinphos	TX	7255	10185203
Chrysene	TX	5855	10185805
Coumaphos	TX	7315	10185805
Crotoxyphos	TX	7330	10185203
delta-BHC (delta-Hexachlorocyclohexane)	TX	7105	10186002
Demeton	TX	7390	10185805
Demeton-o	TX	7395	10185805
Demeton-s	TX	7385	10185601
Dibenz(a,h) anthracene	TX	5895	10185805
Dibenzofuran	TX	5905	10185805
Dichlorovos (DDVP, Dichlorvos)	TX	8610	10185805
Dicrotophos	TX	7465	10185805
Dieldrin	TX	7470	10185407
Diethyl phthalate	TX	6070	10185805
Dimethoate	TX	7475	10185805
Dimethyl phthalate	TX	6135	10185805
Di-n-butyl phthalate	TX	5925	10185805
Di-n-octyl phthalate	TX	6200	10185805
Dioxathion	TX	7495	10185601
Diphenylamine	TX	6205	10185805
Disulfoton	TX	8625	10185407
Endosulfan I	TX	7510	10185601
Endosulfan II	TX	7515	10185805
Endosulfan sulfate	TX	7520	10186002
Endrin	TX	7540	10185601
Endrin aldehyde	TX	7530	10186002
Endrin ketone	TX	7535	10186002
EPN (Phosphonothioic acid, phenyl-, O-ethyl O-(p-nitrophenyl) ester)	TX	7550	10186002
Ethion	TX	7565	10185203
Ethyl methanesulfonate	TX	6260	10185805

Texas Commission on Environmental Quality

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Matrix: ***Solid & Chemical Materials***

Famphur	TX	7580	10186002
Fensulfothion	TX	7600	10185805
Fenthion	TX	7605	10186002
Fluoranthene	TX	6265	10185805
Fluorene	TX	6270	10185805
gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	TX	7120	10185407
gamma-Chlordane	TX	7245	10185601
Heptachlor	TX	7685	10185601
Heptachlor epoxide	TX	7690	10185203
Hexachlorobenzene	TX	6275	10185805
Hexachlorobutadiene	TX	4835	10185805
Hexachlorocyclopentadiene	TX	6285	10185805
Hexachloroethane	TX	4840	10185805
Hexachlorophene	TX	6290	10185601
Indeno(1,2,3-cd) pyrene	TX	6315	10185805
Isodrin	TX	7725	10185203
Isophorone	TX	6320	10185805
Leptophos	TX	7755	10185407
Malathion	TX	7770	10185601
Methoxychlor	TX	7810	10185203
Methyl methanesulfonate	TX	6375	10185805
Methyl parathion (Parathion, methyl)	TX	7825	10185203
Mevinphos	TX	7850	10185805
Monocrotophos	TX	7880	10185805
Naled	TX	7905	10185805
Naphthalene	TX	5005	10185805
Nitrobenzene	TX	5015	10185805
n-Nitrosodiethylamine	TX	6525	10185805
n-Nitrosodimethylamine	TX	6530	10185805
n-Nitrosodi-n-butylamine	TX	5025	10185805

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Matrix: ***Solid & Chemical Materials***

n-Nitrosodi-n-propylamine	TX	6545	10185805
n-Nitrosodiphenylamine	TX	6535	10185805
n-Nitrosopiperidine	TX	6560	10185805
Parathion, ethyl	TX	7955	10185805
Pentachlorobenzene	TX	6590	10185805
Pentachloronitrobenzene (PCNB)	TX	6600	10185805
Pentachlorophenol	TX	6605	10185805
Phenacetin	TX	6610	10185805
Phenanthrene	TX	6615	10185805
Phenol	TX	6625	10185805
Phorate	TX	7985	10185407
Phosmet (Imidan)	TX	8000	10185203
Phosphamidon	TX	8005	10186002
Pronamide (Kerb)	TX	6650	10185805
Pyrene	TX	6665	10185805
Pyridine	TX	5095	10185805
Quinoline	TX	6670	10185805
Sulfotepp	TX	8155	10185203
Terbufos	TX	8185	10185805
Tetrachlorvinphos (Stirophos, Gardona)	TX	8197	10186002
Tetraethyl pyrophosphate (TEPP)	TX	8210	10185407
Toxaphene (Chlorinated camphene)	TX	8250	10185203

Method EPA 8321

Analyte	**AB**	**Analyte ID**	**Method ID**
2,4,5-T	TX	8655	10188804
2,4-D	TX	8545	10188804
2,4-DB	TX	8560	10188804
Dalapon	TX	8555	10188804
Dicamba	TX	8595	10188804
Dichloroprop (Dichlorprop, Weedone)	TX	8605	10188804

Texas Commission on Environmental Quality

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Matrix: ***Solid & Chemical Materials***

Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	TX	8620	10188804
MCPA	TX	7775	10188804
MCPP	TX	7780	10188804
Silvex (2,4,5-TP)	TX	8650	10188804

Method EPA 9014

Analyte	**AB**	**Analyte ID**	**Method ID**
Amenable cyanide	TX	1510	10193803
Total cyanide	TX	1645	10193803

Method EPA 9040

Analyte	**AB**	**Analyte ID**	**Method ID**
Corrosivity	TX	1615	10197203
pH	TX	1900	10197203

Method EPA 9045

Analyte	**AB**	**Analyte ID**	**Method ID**
pH	TX	1900	10198400

Method EPA 9056

Analyte	**AB**	**Analyte ID**	**Method ID**
Bromide	TX	1540	10199209
Chloride	TX	1575	10199209
Fluoride	TX	1730	10199209
Nitrate as N	TX	1810	10199209
Nitrate-nitrite	TX	1820	10199209
Nitrite as N	TX	1840	10199209
Sulfate	TX	2000	10199209

Method SM 2320 B

Analyte	**AB**	**Analyte ID**	**Method ID**
Alkalinity as CaCO3	TX	1505	20045618

Method SM 2510 B

Analyte	**AB**	**Analyte ID**	**Method ID**
Conductivity	TX	1610	20048617

Texas Commission on Environmental Quality

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Matrix: ***Solid & Chemical Materials***

Method SSA/ASA Part 3:14			
Analyte	**AB**	**Analyte ID**	**Method ID**
Conductivity	TX	1610	60049505

Method TCEQ 1005			
Analyte	**AB**	**Analyte ID**	**Method ID**
Total Petroleum Hydrocarbons (TPH)	TX	2050	90019208

Texas Commission on Environmental Quality

NELAP-Recognized Laboratory Accreditation is hereby awarded to

DHL Analytical, Inc.

2300 Double Creek Drive
Round Rock, TX 78664-3801

in accordance with Texas Water Code Chapter 5, Subchapter R, Title 30 Texas Administrative Code Chapter 25, and the National Environmental Laboratory Accreditation Program.

The laboratory's scope of accreditation includes the fields of accreditation that accompany this certificate. Continued accreditation depends upon successful ongoing participation in the program. The Texas Commission on Environmental Quality urges customers to verify the laboratory's current location(s) and accreditation status for particular methods and analyses (www.tceq.texas.gov/goto/lab). Accreditation does not imply that a product, process, system or person is approved by the Texas Commission on Environmental Quality.

Certificate Number: T104704211-21-27
Effective Date: 5/1/2021
Expiration Date: 4/30/2022

Executive Director Texas Commission on Environmental Quality

Texas Commission on Environmental Quality

NELAP - Recognized Laboratory Fields of Accreditation

Certificate: T104704215-21-44

Eurofins Xenco, LLC - Houston

Expiration Date: 6/30/2022

4147 Greenbriar Drive
Stafford, TX 77477-3907

Issue Date: 7/14/2021

These fields of accreditation supercede all previous fields. The Texas Commission on Environmental Quality urges customers to verify the laboratory's current accreditation status for particular methods and analyses.

Matrix: ***Drinking Water***

Method EPA 200.7

Analyte	AB	Analyte ID	Method ID
Aluminum	TX	1000	10013806
Antimony	TX	1005	10013806
Arsenic	TX	1010	10013806
Barium	TX	1015	10013806
Beryllium	TX	1020	10013806
Boron	TX	1025	10013806
Cadmium	TX	1030	10013806
Chromium	TX	1040	10013806
Cobalt	TX	1050	10013806
Copper	TX	1055	10013806
Iron	TX	1070	10013806
Lead	TX	1075	10013806
Lithium	TX	1080	10013806
Magnesium	TX	1085	10013806
Manganese	TX	1090	10013806
Molybdenum	TX	1100	10013806
Nickel	TX	1105	10013806
Potassium	TX	1125	10013806
Selenium	TX	1140	10013806
Silica as SiO2	TX	1990	10013806
Silver	TX	1150	10013806
Sodium	TX	1155	10013806
Strontium	TX	1160	10013806
Tin	TX	1175	10013806
Titanium	TX	1180	10013806
Vanadium	TX	1185	10013806
Zinc	TX	1190	10013806

Method EPA 200.8

Analyte	AB	Analyte ID	Method ID

Texas Commission on Environmental Quality

NELAP - Recognized Laboratory Fields of Accreditation

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Matrix: ***Drinking Water***

Aluminum	TX	1000	10014605
Antimony	TX	1005	10014605
Arsenic	TX	1010	10014605
Barium	TX	1015	10014605
Beryllium	TX	1020	10014605
Cadmium	TX	1030	10014605
Chromium	TX	1040	10014605
Copper	TX	1055	10014605
Lead	TX	1075	10014605
Manganese	TX	1090	10014605
Nickel	TX	1105	10014605
Selenium	TX	1140	10014605
Silver	TX	1150	10014605
Thallium	TX	1165	10014605
Uranium	TX	3035	10014605
Zinc	TX	1190	10014605

Method EPA 245.1

Analyte	**AB**	**Analyte ID**	**Method ID**
Mercury	TX	1095	10036609

Method EPA 300.0

Analyte	**AB**	**Analyte ID**	**Method ID**
Bromide	TX	1540	10053200
Chloride	TX	1575	10053200
Chlorite	TX	1595	10053200
Fluoride	TX	1730	10053200
Nitrate as N	TX	1810	10053200
Nitrite as N	TX	1840	10053200
Sulfate	TX	2000	10053200

Method EPA 300.0 B

Analyte	**AB**	**Analyte ID**	**Method ID**
Chlorate	TX	1570	10275408

Texas Commission on Environmental Quality

NELAP - Recognized Laboratory Fields of Accreditation

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Stafford, TX 77477-3907

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Matrix: ***Drinking Water***

Method EPA 335.4

Analyte	AB	Analyte ID	Method ID
Total cyanide	TX	1645	10061402

Method EPA 353.2

Analyte	AB	Analyte ID	Method ID
Nitrate as N	TX	1810	10067604
Nitrite as N	TX	1840	10067604

Method Kelada-01

Analyte	AB	Analyte ID	Method ID
Total cyanide	TX	1635	60005303

Method SM 2510 B

Analyte	AB	Analyte ID	Method ID
Conductivity	TX	1610	20048004

Method SM 2540 C

Analyte	AB	Analyte ID	Method ID
Residue-filterable (TDS)	TX	1955	20049803

Texas Commission on Environmental Quality

NELAP - Recognized Laboratory Fields of Accreditation

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Stafford, TX 77477-3907

Issue Date: 7/14/2021

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Matrix: ***Non-Potable Water***

Method EPA 1010

Analyte	AB	Analyte ID	Method ID
Ignitability	TX	1780	10116606

Method EPA 1311

Analyte	AB	Analyte ID	Method ID
TCLP	TX	849	10118806

Method EPA 1312

Analyte	AB	Analyte ID	Method ID
SPLP	TX	850	10119003

Method EPA 160.4

Analyte	AB	Analyte ID	Method ID
Residue-volatile	TX	1970	10010409

Method EPA 1664

Analyte	AB	Analyte ID	Method ID
n-Hexane Extractable Material (HEM) (O&G)	TX	1803	10127807
Silica Gel Treated n-Hexane Extractable Material (SGT-HEM)	TX	10220	10127807

Method EPA 180.1

Analyte	AB	Analyte ID	Method ID
Turbidity	TX	2055	10011606

Method EPA 200.7

Analyte	AB	Analyte ID	Method ID
Aluminum	TX	1000	10013806
Antimony	TX	1005	10013806
Arsenic	TX	1010	10013806
Barium	TX	1015	10013806
Beryllium	TX	1020	10013806
Boron	TX	1025	10013806
Cadmium	TX	1030	10013806
Calcium	TX	1035	10013806
Chromium	TX	1040	10013806
Cobalt	TX	1050	10013806

Texas Commission on Environmental Quality

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Matrix: ***Non-Potable Water***

Copper	TX	1055	10013806
Iron	TX	1070	10013806
Lead	TX	1075	10013806
Lithium	TX	1080	10013806
Magnesium	TX	1085	10013806
Manganese	TX	1090	10013806
Molybdenum	TX	1100	10013806
Nickel	TX	1105	10013806
Potassium	TX	1125	10013806
Selenium	TX	1140	10013806
Silica as SiO2	TX	1990	10013806
Silver	TX	1150	10013806
Sodium	TX	1155	10013806
Strontium	TX	1160	10013806
Thallium	TX	1165	10013806
Tin	TX	1175	10013806
Titanium	TX	1180	10013806
Vanadium	TX	1185	10013806
Zinc	TX	1190	10013806

Method EPA 200.8

Analyte	**AB**	**Analyte ID**	**Method ID**
Aluminum	TX	1000	10014605
Antimony	TX	1005	10014605
Arsenic	TX	1010	10014605
Barium	TX	1015	10014605
Beryllium	TX	1020	10014605
Boron	TX	1025	10014605
Cadmium	TX	1030	10014605
Chromium	TX	1040	10014605
Cobalt	TX	1050	10014605

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Matrix: ***Non-Potable Water***

Copper	TX	1055	10014605
Iron	TX	1070	10014605
Lead	TX	1075	10014605
Magnesium	TX	1085	10014605
Manganese	TX	1090	10014605
Molybdenum	TX	1100	10014605
Nickel	TX	1105	10014605
Potassium	TX	1125	10014605
Selenium	TX	1140	10014605
Silver	TX	1150	10014605
Sodium	TX	1155	10014605
Strontium	TX	1160	10014605
Thallium	TX	1165	10014605
Tin	TX	1175	10014605
Titanium	TX	1180	10014605
Uranium	TX	3035	10014605
Vanadium	TX	1185	10014605
Zinc	TX	1190	10014605

Method EPA 245.1

Analyte	**AB**	**Analyte ID**	**Method ID**
Mercury	TX	1095	10036609

Method EPA 300.0

Analyte	**AB**	**Analyte ID**	**Method ID**
Bromide	TX	1540	10053200
Chloride	TX	1575	10053200
Fluoride	TX	1730	10053200
Nitrate as N	TX	1810	10053200
Nitrate-nitrite	TX	1820	10053200
Nitrite as N	TX	1840	10053200
Orthophosphate as P	TX	1870	10053200
Sulfate	TX	2000	10053200

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Matrix: ***Non-Potable Water***

Method EPA 335.4

Analyte	AB	Analyte ID	Method ID
Total cyanide	TX	1645	10061402

Method EPA 350.1

Analyte	AB	Analyte ID	Method ID
Ammonia as N	TX	1515	10063408

Method EPA 351.2

Analyte	AB	Analyte ID	Method ID
Kjeldahl Nitrogen (Total Kjeldahl Nitrogen-TKN)	TX	1790	10065404

Method EPA 353.2

Analyte	AB	Analyte ID	Method ID
Nitrate as N	TX	1810	10067400
Nitrate-nitrite	TX	1820	10067400
Nitrite as N	TX	1840	10067400

Method EPA 360.1

Analyte	AB	Analyte ID	Method ID
Oxygen, dissolved	TX	1880	10069008

Method EPA 365.1

Analyte	AB	Analyte ID	Method ID
Orthophosphate as P	TX	1870	10070005
Phosphorus	TX	1910	10070005

Method EPA 420.4

Analyte	AB	Analyte ID	Method ID
Total phenolics	TX	1905	10080203

Method EPA 6010

Analyte	AB	Analyte ID	Method ID
Aluminum	TX	1000	10155609
Antimony	TX	1005	10155609
Arsenic	TX	1010	10155609
Barium	TX	1015	10155609
Beryllium	TX	1020	10155609

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Matrix: ***Non-Potable Water***

Boron	TX	1025	10155609
Cadmium	TX	1030	10155609
Calcium	TX	1035	10155609
Chromium	TX	1040	10155609
Cobalt	TX	1050	10155609
Copper	TX	1055	10155609
Iron	TX	1070	10155609
Lead	TX	1075	10155609
Lithium	TX	1080	10155609
Magnesium	TX	1085	10155609
Manganese	TX	1090	10155609
Molybdenum	TX	1100	10155609
Nickel	TX	1105	10155609
Phosphorus	TX	1910	10155609
Potassium	TX	1125	10155609
Selenium	TX	1140	10155609
Silica as SiO2	TX	1990	10155609
Silver	TX	1150	10155609
Sodium	TX	1155	10155609
Strontium	TX	1160	10155609
Thallium	TX	1165	10155609
Tin	TX	1175	10155609
Titanium	TX	1180	10155609
Vanadium	TX	1185	10155609
Zinc	TX	1190	10155609

Method EPA 6020

Analyte	**AB**	**Analyte ID**	**Method ID**
Aluminum	TX	1000	10156419
Antimony	TX	1005	10156419
Arsenic	TX	1010	10156419

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Matrix: ***Non-Potable Water***

Barium	TX	1015	10156419
Beryllium	TX	1020	10156419
Boron	TX	1025	10156419
Cadmium	TX	1030	10156419
Chromium	TX	1040	10156419
Cobalt	TX	1050	10156419
Copper	TX	1055	10156419
Iron	TX	1070	10156419
Lead	TX	1075	10156419
Magnesium	TX	1085	10156419
Manganese	TX	1090	10156419
Molybdenum	TX	1100	10156419
Nickel	TX	1105	10156419
Potassium	TX	1125	10156419
Selenium	TX	1140	10156419
Silver	TX	1150	10156419
Sodium	TX	1155	10156419
Strontium	TX	1160	10156419
Thallium	TX	1165	10156419
Tin	TX	1175	10156419
Titanium	TX	1180	10156419
Vanadium	TX	1185	10156419
Zinc	TX	1190	10156419

Method EPA 608.3

Analyte	AB	Analyte ID	Method ID
4,4'-DDD	TX	7355	10296625
4,4'-DDE	TX	7360	10296625
4,4'-DDT	TX	7365	10296625
Aldrin	TX	7025	10296625
alpha-BHC (alpha-Hexachlorocyclohexane)	TX	7110	10296625

Texas Commission on Environmental Quality

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Matrix: ***Non-Potable Water***

alpha-Chlordane	TX	7240	10296625
Aroclor-1016 (PCB-1016)	TX	8880	10296625
Aroclor-1221 (PCB-1221)	TX	8885	10296625
Aroclor-1232 (PCB-1232)	TX	8890	10296625
Aroclor-1242 (PCB-1242)	TX	8895	10296625
Aroclor-1248 (PCB-1248)	TX	8900	10296625
Aroclor-1254 (PCB-1254)	TX	8905	10296625
Aroclor-1260 (PCB-1260)	TX	8910	10296625
beta-BHC (beta-Hexachlorocyclohexane)	TX	7115	10296625
Chlordane (tech.)	TX	7250	10296625
delta-BHC (delta-Hexachlorocyclohexane)	TX	7105	10296625
Dieldrin	TX	7470	10296625
Endosulfan I	TX	7510	10296625
Endosulfan II	TX	7515	10296625
Endosulfan sulfate	TX	7520	10296625
Endrin	TX	7540	10296625
Endrin aldehyde	TX	7530	10296625
gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	TX	7120	10296625
gamma-Chlordane	TX	7245	10296625
Heptachlor	TX	7685	10296625
Heptachlor epoxide	TX	7690	10296625
Methoxychlor	TX	7810	10296625
Toxaphene (Chlorinated camphene)	TX	8250	10296625

Method EPA 615

Analyte	AB	Analyte ID	Method ID
2,4,5-T	TX	8655	10298201
2,4-D	TX	8545	10298201
2,4-DB	TX	8560	10298201
Dalapon	TX	8555	10298201
Dicamba	TX	8595	10298201

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NELAP - Recognized Laboratory Fields of Accreditation

Certificate: T104704215-21-44

Eurofins Xenco, LLC - Houston
Expiration Date: 6/30/2022

4147 Greenbriar Drive
Stafford, TX 77477-3907
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Matrix: ***Non-Potable Water***

Dichloroprop (Dichlorprop, Weedone)	TX	8605	10298201
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	TX	8620	10298201
MCPA	TX	7775	10298201
MCPP	TX	7780	10298201
Silvex (2,4,5-TP)	TX	8650	10298201

Method EPA 624.1

Analyte	**AB**	**Analyte ID**	**Method ID**
1,1,1-Trichloroethane	TX	5160	10298121
1,1,2,2-Tetrachloroethane	TX	5110	10298121
1,1,2-Trichloroethane	TX	5165	10298121
1,1-Dichloroethane	TX	4630	10298121
1,1-Dichloroethylene	TX	4640	10298121
1,2-Dibromoethane (EDB, Ethylene dibromide)	TX	4585	10298121
1,2-Dichlorobenzene	TX	4610	10298121
1,2-Dichloroethane (Ethylene dichloride)	TX	4635	10298121
1,2-Dichloropropane	TX	4655	10298121
1,3-Dichlorobenzene	TX	4615	10298121
1,4-Dichlorobenzene	TX	4620	10298121
2-Butanone (Methyl ethyl ketone, MEK)	TX	4410	10298121
2-Chloroethyl vinyl ether	TX	4500	10298121
Acetone (2-Propanone)	TX	4315	10298121
Acrolein (Propenal)	TX	4325	10298121
Acrylonitrile	TX	4340	10298121
Benzene	TX	4375	10298121
Bromodichloromethane	TX	4395	10298121
Bromoform	TX	4400	10298121
Carbon tetrachloride	TX	4455	10298121
Chlorobenzene	TX	4475	10298121
Chlorodibromomethane	TX	4575	10298121
Chloroethane (Ethyl chloride)	TX	4485	10298121

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Matrix: ***Non-Potable Water***

Chloroform	TX	4505	10298121
cis-1,2-Dichloroethylene	TX	4645	10298121
cis-1,3-Dichloropropene	TX	4680	10298121
Ethylbenzene	TX	4765	10298121
m+p-xylene	TX	5240	10298121
Methyl bromide (Bromomethane)	TX	4950	10298121
Methyl chloride (Chloromethane)	TX	4960	10298121
Methyl tert-butyl ether (MTBE)	TX	5000	10298121
Methylene chloride (Dichloromethane)	TX	4975	10298121
o-Xylene	TX	5250	10298121
Tetrachloroethylene (Perchloroethylene)	TX	5115	10298121
Toluene	TX	5140	10298121
trans-1,2-Dichloroethylene	TX	4700	10298121
trans-1,3-Dichloropropylene	TX	4685	10298121
Trichloroethene (Trichloroethylene)	TX	5170	10298121
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	TX	5175	10298121
Vinyl chloride	TX	5235	10298121
Xylene (total)	TX	5260	10298121

Method EPA 625.1

Analyte	**AB**	**Analyte ID**	**Method ID**
1,2,4,5-Tetrachlorobenzene	TX	6715	10300024
1,2,4-Trichlorobenzene	TX	5155	10300024
1,2-Dichlorobenzene	TX	4610	10300024
1,2-Diphenylhydrazine	TX	6221	10300024
1,3-Dichlorobenzene	TX	4615	10300024
1,4-Dichlorobenzene	TX	4620	10300024
2,2'-Oxybis(1-chloropropane) (bis(2-Chloro-1-methylethyl)ether)	TX	4659	10300024
2,3,4,6-Tetrachlorophenol	TX	6735	10300024
2,4,5-Trichlorophenol	TX	6835	10300024
2,4,6-Trichlorophenol	TX	6840	10300024

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Matrix: ***Non-Potable Water***

2,4-Dichlorophenol	TX	6000	10300024
2,4-Dimethylphenol	TX	6130	10300024
2,4-Dinitrophenol	TX	6175	10300024
2,4-Dinitrotoluene (2,4-DNT)	TX	6185	10300024
2,6-Dinitrotoluene (2,6-DNT)	TX	6190	10300024
2-Chloronaphthalene	TX	5795	10300024
2-Chlorophenol	TX	5800	10300024
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	TX	6360	10300024
2-Methylphenol (o-Cresol)	TX	6400	10300024
2-Nitrophenol	TX	6490	10300024
3,3'-Dichlorobenzidine	TX	5945	10300024
4-Bromophenyl phenyl ether (BDE-3)	TX	5660	10300024
4-Chloro-3-methylphenol	TX	5700	10300024
4-Chlorophenyl phenylether	TX	5825	10300024
4-Methylphenol (p-Cresol)	TX	6410	10300024
4-Nitrophenol	TX	6500	10300024
Acenaphthene	TX	5500	10300024
Acenaphthylene	TX	5505	10300024
Anthracene	TX	5555	10300024
Benzidine	TX	5595	10300024
Benzo(a)anthracene	TX	5575	10300024
Benzo(a)pyrene	TX	5580	10300024
Benzo(b)fluoranthene	TX	5585	10300024
Benzo(g,h,i)perylene	TX	5590	10300024
Benzo(k)fluoranthene	TX	5600	10300024
bis(2-Chloroethoxy)methane	TX	5760	10300024
bis(2-Chloroethyl) ether	TX	5765	10300024
bis(2-Ethylhexyl) phthalate (Di(2-Ethylhexyl) phthalate, DEHP)	TX	6065	10300024
Butyl benzyl phthalate	TX	5670	10300024
Chrysene	TX	5855	10300024

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Matrix: ***Non-Potable Water***

Dibenz(a,h) anthracene	TX	5895	10300024
Diethyl phthalate	TX	6070	10300024
Dimethyl phthalate	TX	6135	10300024
Di-n-butyl phthalate	TX	5925	10300024
Di-n-octyl phthalate	TX	6200	10300024
Fluoranthene	TX	6265	10300024
Fluorene	TX	6270	10300024
Hexachlorobenzene	TX	6275	10300024
Hexachlorobutadiene	TX	4835	10300024
Hexachlorocyclopentadiene	TX	6285	10300024
Hexachloroethane	TX	4840	10300024
Indeno(1,2,3-cd) pyrene	TX	6315	10300024
Isophorone	TX	6320	10300024
Naphthalene	TX	5005	10300024
Nitrobenzene	TX	5015	10300024
n-Nitrosodiethylamine	TX	6525	10300024
n-Nitrosodimethylamine	TX	6530	10300024
n-Nitrosodi-n-butylamine	TX	5025	10300024
n-Nitrosodi-n-propylamine	TX	6545	10300024
n-Nitrosodiphenylamine	TX	6535	10300024
Pentachlorobenzene	TX	6590	10300024
Pentachlorophenol	TX	6605	10300024
Phenanthrene	TX	6615	10300024
Phenol	TX	6625	10300024
Pyrene	TX	6665	10300024
Pyridine	TX	5095	10300024

Method EPA 632

Analyte	**AB**	**Analyte ID**	**Method ID**
Carbaryl (Sevin)	TX	7195	10108608

Method EPA 7196

Analyte	**AB**	**Analyte ID**	**Method ID**

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Matrix: ***Non-Potable Water***

Chromium (VI)	TX	1045	10162206

Method EPA 7470

Analyte	**AB**	**Analyte ID**	**Method ID**
Mercury	TX	1095	10165603

Method EPA 8011

Analyte	**AB**	**Analyte ID**	**Method ID**
1,2,3-Trichloropropane	TX	5180	10173009
1,2-Dibromo-3-chloropropane (DBCP)	TX	4570	10173009
1,2-Dibromoethane (EDB, Ethylene dibromide)	TX	4585	10173009

Method EPA 8015

Analyte	**AB**	**Analyte ID**	**Method ID**
Allyl alcohol	TX	4350	10173203
Diesel range organics (DRO)	TX	9369	10173203
Ethanol	TX	4750	10173203
Ethylene glycol	TX	4785	10173203
Gasoline range organics (GRO)	TX	9408	10173203
Isobutyl alcohol (2-Methyl-1-propanol)	TX	4875	10173203
Isopropyl alcohol (2-Propanol, Isopropanol)	TX	4895	10173203
Methanol	TX	4930	10173203
n-Butyl alcohol (1-Butanol, n-Butanol)	TX	4425	10173203
n-Propanol (1-Propanol)	TX	5055	10173203
Propylene Glycol	TX	6657	10173203

Method EPA 8081

Analyte	**AB**	**Analyte ID**	**Method ID**
4,4'-DDD	TX	7355	10178800
4,4'-DDE	TX	7360	10178800
4,4'-DDT	TX	7365	10178800
Alachlor	TX	7005	10178800
Aldrin	TX	7025	10178800
alpha-BHC (alpha-Hexachlorocyclohexane)	TX	7110	10178800
alpha-Chlordane	TX	7240	10178800

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Matrix: ***Non-Potable Water***

beta-BHC (beta-Hexachlorocyclohexane)	TX	7115	10178800
Chlordane (tech.)	TX	7250	10178800
delta-BHC (delta-Hexachlorocyclohexane)	TX	7105	10178800
Dicofol (Kelthane)	TX	7460	10178800
Dieldrin	TX	7470	10178800
Endosulfan I	TX	7510	10178800
Endosulfan II	TX	7515	10178800
Endosulfan sulfate	TX	7520	10178800
Endrin	TX	7540	10178800
Endrin aldehyde	TX	7530	10178800
Endrin ketone	TX	7535	10178800
gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	TX	7120	10178800
gamma-Chlordane	TX	7245	10178800
Heptachlor	TX	7685	10178800
Heptachlor epoxide	TX	7690	10178800
Methoxychlor	TX	7810	10178800
Mirex	TX	7870	10178800
Toxaphene (Chlorinated camphene)	TX	8250	10178800

Method EPA 8082

Analyte	**AB**	**Analyte ID**	**Method ID**
2,2',3,4,4',5'-Hexachlorobiphenyl (BZ-138)	TX	9025	10179201
2,2',3,4',5,5',6-Heptachlorobiphenyl (BZ-187)	TX	9080	10179201
2,2',3',4,5-Pentachlorobiphenyl (BZ-97)	TX	9154	10179201
2,2',3,5,5',6-Hexachlorobiphenyl (BZ-151)	TX	9035	10179201
2,2',3,5'-Tetrachlorobiphenyl (BZ-44)	TX	8945	10179201
2,2',4,5,5'-Pentachlorobiphenyl (BZ-101)	TX	8980	10179201
2,2',5,5'-Tetrachlorobiphenyl (BZ-52)	TX	8955	10179201
2,2',5-Trichlorobiphenyl (BZ-18)	TX	8930	10179201
2,3,3',4,5,5'-Hexachlorobiphenyl (BZ-159)	TX	9196	10179201
2,3,3',4',6-Pentachlorobiphenyl (BZ-110)	TX	8990	10179201

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Matrix: ***Non-Potable Water***

2,3',4,4'-Tetrachlorobiphenyl (BZ-66)	TX	8960	10179201
2,3-Dichlorobiphenyl (BZ-5)	TX	8920	10179201
2,4',5-Trichlorobiphenyl (BZ-31)	TX	8940	10179201
2-Chlorobiphenyl (BZ-1)	TX	8915	10179201
Aroclor-1016 (PCB-1016)	TX	8880	10179201
Aroclor-1221 (PCB-1221)	TX	8885	10179201
Aroclor-1232 (PCB-1232)	TX	8890	10179201
Aroclor-1242 (PCB-1242)	TX	8895	10179201
Aroclor-1248 (PCB-1248)	TX	8900	10179201
Aroclor-1254 (PCB-1254)	TX	8905	10179201
Aroclor-1260 (PCB-1260)	TX	8910	10179201
PCBs (total)	TX	8870	10179201

Method EPA 8151

Analyte	**AB**	**Analyte ID**	**Method ID**
2,4,5-T	TX	8655	10183003
2,4-D	TX	8545	10183003
2,4-DB	TX	8560	10183003
Dalapon	TX	8555	10183003
Dicamba	TX	8595	10183003
Dichloroprop (Dichlorprop, Weedone)	TX	8605	10183003
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	TX	8620	10183003
MCPA	TX	7775	10183003
MCPP	TX	7780	10183003
Pentachlorophenol	TX	6605	10183003
Picloram	TX	8645	10183003
Silvex (2,4,5-TP)	TX	8650	10183003

Method EPA 8260

Analyte	**AB**	**Analyte ID**	**Method ID**
1,1,1,2-Tetrachloroethane	TX	5105	10184404
1,1,1-Trichloroethane	TX	5160	10184404
1,1,2,2-Tetrachloroethane	TX	5110	10184404

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Matrix: ***Non-Potable Water***

1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	TX	5195	10184404
1,1,2-Trichloroethane	TX	5165	10184404
1,1-Dichloroethane	TX	4630	10184404
1,1-Dichloroethylene	TX	4640	10184404
1,1-Dichloropropene	TX	4670	10184404
1,2,3-Trichlorobenzene	TX	5150	10184404
1,2,3-Trichloropropane	TX	5180	10184404
1,2,4-Trichlorobenzene	TX	5155	10184404
1,2,4-Trimethylbenzene	TX	5210	10184404
1,2-Dibromo-3-chloropropane (DBCP)	TX	4570	10184404
1,2-Dibromoethane (EDB, Ethylene dibromide)	TX	4585	10184404
1,2-Dichlorobenzene	TX	4610	10184404
1,2-Dichloroethane (Ethylene dichloride)	TX	4635	10184404
1,2-Dichloropropane	TX	4655	10184404
1,3,5-Trimethylbenzene	TX	5215	10184404
1,3-Dichlorobenzene	TX	4615	10184404
1,3-Dichloropropane	TX	4660	10184404
1,4-Dichlorobenzene	TX	4620	10184404
1,4-Dioxane (1,4-Diethyleneoxide)	TX	4735	10184404
1-Chlorohexane	TX	4510	10184404
2,2-Dichloropropane	TX	4665	10184404
2-Butanone (Methyl ethyl ketone, MEK)	TX	4410	10184404
2-Chloroethyl vinyl ether	TX	4500	10184404
2-Chlorotoluene	TX	4535	10184404
2-Hexanone (MBK)	TX	4860	10184404
2-Nitropropane	TX	5020	10184404
4-Chlorotoluene	TX	4540	10184404
4-Isopropyltoluene (p-Cymene)	TX	4915	10184404
4-Methyl-2-pentanone (MIBK)	TX	4995	10184404
Acetone (2-Propanone)	TX	4315	10184404

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Matrix: ***Non-Potable Water***

Acetonitrile	TX	4320	10184404
Acrolein (Propenal)	TX	4325	10184404
Acrylonitrile	TX	4340	10184404
Allyl chloride (3-Chloropropene)	TX	4355	10184404
Benzene	TX	4375	10184404
Benzyl chloride	TX	5635	10184404
Bromobenzene	TX	4385	10184404
Bromochloromethane	TX	4390	10184404
Bromodichloromethane	TX	4395	10184404
Bromoform	TX	4400	10184404
Carbon disulfide	TX	4450	10184404
Carbon tetrachloride	TX	4455	10184404
Chlorobenzene	TX	4475	10184404
Chlorodibromomethane	TX	4575	10184404
Chloroethane (Ethyl chloride)	TX	4485	10184404
Chloroform	TX	4505	10184404
Chloroprene (2-Chloro-1,3-butadiene)	TX	4525	10184404
cis-1,2-Dichloroethylene	TX	4645	10184404
cis-1,3-Dichloropropene	TX	4680	10184404
Dibromofluoromethane	TX	4590	10184404
Dibromomethane (Methylene bromide)	TX	4595	10184404
Dichlorodifluoromethane (Freon-12)	TX	4625	10184404
Diethyl ether	TX	4725	10184404
Di-isopropylether (DIPE)	TX	9375	10184404
Ethyl acetate	TX	4755	10184404
Ethyl methacrylate	TX	4810	10184404
Ethylbenzene	TX	4765	10184404
Ethylene oxide	TX	4795	10184404
Ethyl-t-butylether (ETBE) (2-Ethoxy-2-methylpropane)	TX	4770	10184404
Hexachlorobutadiene	TX	4835	10184404

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Matrix: ***Non-Potable Water***

Iodomethane (Methyl iodide)	TX	4870	10184404
Isobutyl alcohol (2-Methyl-1-propanol)	TX	4875	10184404
Isopropyl alcohol (2-Propanol, Isopropanol)	TX	4895	10184404
Isopropylbenzene (Cumene)	TX	4900	10184404
m+p-xylene	TX	5240	10184404
Methacrylonitrile	TX	4925	10184404
Methyl acetate	TX	4940	10184802
Methyl bromide (Bromomethane)	TX	4950	10184404
Methyl chloride (Chloromethane)	TX	4960	10184404
Methyl methacrylate	TX	4990	10184404
Methyl tert-butyl ether (MTBE)	TX	5000	10184404
Methylcyclohexane	TX	4965	10184608
Methylene chloride (Dichloromethane)	TX	4975	10184404
Naphthalene	TX	5005	10184404
n-Butyl alcohol (1-Butanol, n-Butanol)	TX	4425	10184404
n-Butylbenzene	TX	4435	10184404
n-Propylbenzene	TX	5090	10184404
o-Xylene	TX	5250	10184404
Propionitrile (Ethyl cyanide)	TX	5080	10184404
sec-Butylbenzene	TX	4440	10184404
Styrene	TX	5100	10184404
T-amylmethylether (TAME)	TX	4370	10184404
tert-Butyl alcohol	TX	4420	10184404
tert-Butylbenzene	TX	4445	10184404
Tetrachloroethylene (Perchloroethylene)	TX	5115	10184404
Toluene	TX	5140	10184404
Total trihalomethanes	TX	5205	10184404
trans-1,2-Dichloroethylene	TX	4700	10184404
trans-1,3-Dichloropropylene	TX	4685	10184404
trans-1,4-Dichloro-2-butene	TX	4605	10184404

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Matrix: ***Non-Potable Water***

Trichloroethene (Trichloroethylene)	TX	5170	10184404
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	TX	5175	10184404
Vinyl acetate	TX	5225	10184404
Vinyl chloride	TX	5235	10184404
Xylene (total)	TX	5260	10184404

Method EPA 8270

Analyte	AB	Analyte ID	Method ID
1,2,4,5-Tetrachlorobenzene	TX	6715	10185601
1,2,4-Trichlorobenzene	TX	5155	10185805
1,2-Dichlorobenzene	TX	4610	10185805
1,2-Diphenylhydrazine	TX	6220	10185805
1,3,5-Trinitrobenzene (1,3,5-TNB)	TX	6885	10185805
1,3-Dichlorobenzene	TX	4615	10185805
1,3-Dinitrobenzene (1,3-DNB)	TX	6160	10185805
1,4-Dichlorobenzene	TX	4620	10185805
1,4-Naphthoquinone	TX	6420	10185805
1,4-Phenylenediamine	TX	6630	10185805
1-Naphthylamine	TX	6425	10185805
2,2'-Oxybis(1-chloropropane) (bis(2-Chloro-1-methylethyl)ether)	TX	4659	10185805
2,3,4,6-Tetrachlorophenol	TX	6735	10185805
2,4,5-Trichlorophenol	TX	6835	10185805
2,4,6-Trichlorophenol	TX	6840	10185805
2,4-Dichlorophenol	TX	6000	10185805
2,4-Dimethylphenol	TX	6130	10185805
2,4-Dinitrophenol	TX	6175	10185805
2,4-Dinitrotoluene (2,4-DNT)	TX	6185	10185805
2,6-Dichlorophenol	TX	6005	10185805
2,6-Dinitrotoluene (2,6-DNT)	TX	6190	10185805
2-Acetylaminofluorene	TX	5515	10185805
2-Chloronaphthalene	TX	5795	10185805

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Matrix: ***Non-Potable Water***

2-Chlorophenol	TX	5800	10185805
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	TX	6360	10185805
2-Methylaniline (o-Toluidine)	TX	5145	10185805
2-Methylnaphthalene	TX	6385	10185805
2-Methylphenol (o-Cresol)	TX	6400	10185805
2-Naphthylamine	TX	6430	10185805
2-Nitroaniline	TX	6460	10185805
2-Nitrophenol	TX	6490	10185805
2-Picoline (2-Methylpyridine)	TX	5050	10185805
3,3'-Dichlorobenzidine	TX	5945	10185805
3,3'-Dimethylbenzidine	TX	6120	10185805
3-Methylcholanthrene	TX	6355	10185805
3-Methylphenol (m-Cresol)	TX	6405	10185805
3-Nitroaniline	TX	6465	10185805
4-Aminobiphenyl	TX	5540	10185805
4-Bromophenyl phenyl ether (BDE-3)	TX	5660	10185805
4-Chloro-3-methylphenol	TX	5700	10185805
4-Chloroaniline	TX	5745	10185805
4-Chlorophenyl phenylether	TX	5825	10185805
4-Dimethyl aminoazobenzene	TX	6105	10185805
4-Methylphenol (p-Cresol)	TX	6410	10185805
4-Nitroaniline	TX	6470	10185805
4-Nitrophenol	TX	6500	10185805
5-Nitro-o-toluidine	TX	6570	10185805
7,12-Dimethylbenz(a) anthracene	TX	6115	10185805
Acenaphthene	TX	5500	10185805
Acenaphthylene	TX	5505	10185805
Acetophenone	TX	5510	10185805
Aniline	TX	5545	10185805
Anthracene	TX	5555	10185805

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Matrix: ***Non-Potable Water***

Atrazine	TX	7065	10186002
Azobenzene	TX	5562	10185805
Benzidine	TX	5595	10185805
Benzo(a)anthracene	TX	5575	10185805
Benzo(a)pyrene	TX	5580	10185805
Benzo(b)fluoranthene	TX	5585	10185805
Benzo(g,h,i)perylene	TX	5590	10185805
Benzo(k)fluoranthene	TX	5600	10185805
Benzoic acid	TX	5610	10185805
Benzyl alcohol	TX	5630	10185805
Biphenyl	TX	5640	10185601
bis(2-Chloroethoxy)methane	TX	5760	10185805
bis(2-Chloroethyl) ether	TX	5765	10185805
bis(2-Ethylhexyl) phthalate (Di(2-Ethylhexyl) phthalate, DEHP)	TX	6065	10185805
Butyl benzyl phthalate	TX	5670	10185805
Caprolactam	TX	7180	10185805
Carbaryl (Sevin)	TX	7195	10185805
Carbazole	TX	5680	10185805
Chlorobenzilate	TX	7260	10185805
Chrysene	TX	5855	10185805
Diallate	TX	7405	10185805
Dibenz(a,h) anthracene	TX	5895	10185805
Dibenzofuran	TX	5905	10185805
Diethyl phthalate	TX	6070	10185805
Dimethoate	TX	7475	10185805
Dimethyl phthalate	TX	6135	10185805
Di-n-butyl phthalate	TX	5925	10185805
Di-n-octyl phthalate	TX	6200	10185805
Diphenylamine	TX	6205	10185805
Disulfoton	TX	8625	10185805

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Matrix: ***Non-Potable Water***

Ethyl methanesulfonate	TX	6260	10185805
Famphur	TX	7580	10185805
Fluoranthene	TX	6265	10185805
Fluorene	TX	6270	10185805
Hexachlorobenzene	TX	6275	10185805
Hexachlorobutadiene	TX	4835	10185805
Hexachlorocyclopentadiene	TX	6285	10185805
Hexachloroethane	TX	4840	10185805
Hexachlorophene	TX	6290	10185805
Hexachloropropene	TX	6295	10185805
Indeno(1,2,3-cd) pyrene	TX	6315	10185805
Isodrin	TX	7725	10185805
Isophorone	TX	6320	10185805
Isosafrole	TX	6325	10185805
Kepone	TX	7740	10185805
Methapyrilene	TX	6345	10185805
Methyl methanesulfonate	TX	6375	10185805
Methyl parathion (Parathion, methyl)	TX	7825	10185805
Naphthalene	TX	5005	10185805
Nitrobenzene	TX	5015	10185805
n-Nitrosodiethylamine	TX	6525	10185805
n-Nitrosodimethylamine	TX	6530	10185805
n-Nitrosodi-n-butylamine	TX	5025	10185805
n-Nitrosodi-n-propylamine	TX	6545	10185805
n-Nitrosodiphenylamine	TX	6535	10185805
n-Nitrosomethylethylamine	TX	6550	10185805
n-Nitrosomorpholine	TX	6555	10185805
n-Nitrosopiperidine	TX	6560	10185805
n-Nitrosopyrrolidine	TX	6565	10185805
o,o,o-Triethyl phosphorothioate	TX	8290	10185805

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Matrix: ***Non-Potable Water***

Parathion, ethyl	TX	7955	10185805
Pentachlorobenzene	TX	6590	10185805
Pentachloronitrobenzene (PCNB)	TX	6600	10185805
Pentachlorophenol	TX	6605	10185805
Phenacetin	TX	6610	10185805
Phenanthrene	TX	6615	10185805
Phenol	TX	6625	10185805
Phorate	TX	7985	10185805
Pronamide (Kerb)	TX	6650	10185805
Pyrene	TX	6665	10185805
Pyridine	TX	5095	10185805
Quinoline	TX	6670	10185805
Safrole	TX	6685	10185805
Thionazin (Zinophos)	TX	8235	10185805

Method EPA 9012

Analyte	**AB**	**Analyte ID**	**Method ID**
Amenable cyanide	TX	1510	10193405
Total cyanide	TX	1645	10193405

Method EPA 9040

Analyte	**AB**	**Analyte ID**	**Method ID**
pH	TX	1900	10196802

Method EPA 9050

Analyte	**AB**	**Analyte ID**	**Method ID**
Conductivity	TX	1610	10198604

Method EPA 9056

Analyte	**AB**	**Analyte ID**	**Method ID**
Bromide	TX	1540	10199209
Chloride	TX	1575	10199209
Fluoride	TX	1730	10199209
Nitrate as N	TX	1810	10199209
Nitrate-nitrite	TX	1820	10199209

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Matrix: ***Non-Potable Water***

Nitrite as N	TX	1840	10199209
Sulfate	TX	2000	10199209

Method EPA 9060

Analyte	**AB**	**Analyte ID**	**Method ID**
Total Organic Carbon (TOC)	TX	2040	10200201

Method EPA 9066

Analyte	**AB**	**Analyte ID**	**Method ID**
Total phenolics	TX	1905	10200609

Method EPA RSK 175

Analyte	**AB**	**Analyte ID**	**Method ID**
Ethane	TX	4747	10212905
Ethene	TX	4752	10212905
Methane	TX	4926	10212905
n-Butane	TX	5007	10212905
n-Propane	TX	5029	10212905

Method HACH 8000

Analyte	**AB**	**Analyte ID**	**Method ID**
Chemical oxygen demand (COD)	TX	1565	60003001

Method IDNR OA-2; DRO

Analyte	**AB**	**Analyte ID**	**Method ID**
Extractable Petroleum Hydrocarbons (EPH)	TX	10331	90016607

Method Kelada-01

Analyte	**AB**	**Analyte ID**	**Method ID**
Total cyanide	TX	1635	60005303

Method SM 2120 B

Analyte	**AB**	**Analyte ID**	**Method ID**
Color	TX	1605	20223807

Method SM 2120 C

Analyte	**AB**	**Analyte ID**	**Method ID**
Color	TX	1605	20002000

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Matrix: ***Non-Potable Water***

Method	SM 2130 B			
Analyte		**AB**	**Analyte ID**	**Method ID**
Turbidity		TX	2055	20042200

Method	SM 2310 B (4a)			
Analyte		**AB**	**Analyte ID**	**Method ID**
Acidity, as CaCO3		TX	1500	20002806

Method	SM 2320 B			
Analyte		**AB**	**Analyte ID**	**Method ID**
Alkalinity as CaCO3		TX	1505	20045005

Method	SM 2340 B			
Analyte		**AB**	**Analyte ID**	**Method ID**
Total hardness as CaCO3		TX	1755	20046008

Method	SM 2510 B			
Analyte		**AB**	**Analyte ID**	**Method ID**
Conductivity		TX	1610	20048004

Method	SM 2540 B			
Analyte		**AB**	**Analyte ID**	**Method ID**
Residue-total (total solids)		TX	1950	20004608

Method	SM 2540 C			
Analyte		**AB**	**Analyte ID**	**Method ID**
Residue-filterable (TDS)		TX	1955	20049803

Method	SM 2540 D			
Analyte		**AB**	**Analyte ID**	**Method ID**
Residue-nonfilterable (TSS)		TX	1960	20004802

Method	SM 3500-Cr B			
Analyte		**AB**	**Analyte ID**	**Method ID**
Chromium (VI)		TX	1045	20065809

Method	SM 4500-Cl G			
Analyte		**AB**	**Analyte ID**	**Method ID**
Total residual chlorine		TX	1940	20020604

Method	SM 4500-CN^- G			
Analyte		**AB**	**Analyte ID**	**Method ID**

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Matrix: ***Non-Potable Water***

Amenable cyanide	TX	1510	20021607
Method SM 4500-H+ B			
Analyte	**AB**	**Analyte ID**	**Method ID**
pH	TX	1900	20104603
Method SM 4500-$S2^-$ D			
Analyte	**AB**	**Analyte ID**	**Method ID**
Sulfide	TX	2005	20125400
Method SM 4500-$S2^-$ F			
Analyte	**AB**	**Analyte ID**	**Method ID**
Sulfide	TX	2005	20126209
Method SM 4500-$SO3^-$ B			
Analyte	**AB**	**Analyte ID**	**Method ID**
Sulfite	TX	2015	20026806
Method SM 5210 B			
Analyte	**AB**	**Analyte ID**	**Method ID**
Biochemical oxygen demand (BOD)	TX	1530	20027401
Carbonaceous BOD, CBOD	TX	1555	20027401
Method SM 5310 C			
Analyte	**AB**	**Analyte ID**	**Method ID**
Total Organic Carbon (TOC)	TX	2040	20138209
Method SM 5540 C			
Analyte	**AB**	**Analyte ID**	**Method ID**
Surfactants - MBAS	TX	2025	20144405
Method TCEQ 1005			
Analyte	**AB**	**Analyte ID**	**Method ID**
Total Petroleum Hydrocarbons (TPH)	TX	2050	90019208

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Matrix: ***Solid & Chemical Materials***

Method ASTM D2216

Analyte	AB	Analyte ID	Method ID
Moisture	TX	10337	ASTM D2216-05

Method EPA 1010

Analyte	AB	Analyte ID	Method ID
Ignitability	TX	1780	10116606

Method EPA 1030

Analyte	AB	Analyte ID	Method ID
Ignitability	TX	1780	10117201

Method EPA 1311

Analyte	AB	Analyte ID	Method ID
TCLP	TX	849	10118806

Method EPA 1312

Analyte	AB	Analyte ID	Method ID
SPLP	TX	850	10119003

Method EPA 300.0

Analyte	AB	Analyte ID	Method ID
Bromide	TX	1540	10053200
Chloride	TX	1575	10053200
Fluoride	TX	1730	10053200
Nitrate as N	TX	1810	10053200
Nitrate-nitrite	TX	1820	10053200
Nitrite as N	TX	1840	10053200
Orthophosphate as P	TX	1870	10053200
Sulfate	TX	2000	10053200

Method EPA 350.1

Analyte	AB	Analyte ID	Method ID
Ammonia as N	TX	1515	10063408

Method EPA 353.2

Analyte	AB	Analyte ID	Method ID
Nitrate-nitrite	TX	1820	10067604

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Matrix: ***Solid & Chemical Materials***

Nitrite as N	TX	1840	10067604

Method EPA 6010

Analyte	AB	Analyte ID	Method ID
Aluminum	TX	1000	10155609
Antimony	TX	1005	10155609
Arsenic	TX	1010	10155609
Barium	TX	1015	10155609
Beryllium	TX	1020	10155609
Boron	TX	1025	10155609
Cadmium	TX	1030	10155609
Calcium	TX	1035	10155609
Chromium	TX	1040	10155609
Cobalt	TX	1050	10155609
Copper	TX	1055	10155609
Iron	TX	1070	10155609
Lead	TX	1075	10155609
Lithium	TX	1080	10155609
Magnesium	TX	1085	10155609
Manganese	TX	1090	10155609
Molybdenum	TX	1100	10155609
Nickel	TX	1105	10155609
Phosphorus	TX	1910	10155609
Potassium	TX	1125	10155609
Selenium	TX	1140	10155609
Silica as SiO2	TX	1990	10155609
Silver	TX	1150	10155609
Sodium	TX	1155	10155609
Strontium	TX	1160	10155609
Thallium	TX	1165	10155609
Tin	TX	1175	10155609

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Matrix: ***Solid & Chemical Materials***

Titanium	TX	1180	10155609
Vanadium	TX	1185	10155609
Zinc	TX	1190	10155609

Method EPA 6020

Analyte	AB	Analyte ID	Method ID
Aluminum	TX	1000	10156419
Antimony	TX	1005	10156419
Arsenic	TX	1010	10156419
Barium	TX	1015	10156419
Beryllium	TX	1020	10156419
Boron	TX	1025	10156419
Cadmium	TX	1030	10156419
Calcium	TX	1035	10156419
Chromium	TX	1040	10156419
Cobalt	TX	1050	10156419
Copper	TX	1055	10156419
Iron	TX	1070	10156419
Lead	TX	1075	10156419
Magnesium	TX	1085	10156419
Manganese	TX	1090	10156419
Molybdenum	TX	1100	10156419
Nickel	TX	1105	10156419
Potassium	TX	1125	10156419
Selenium	TX	1140	10156419
Silver	TX	1150	10156419
Sodium	TX	1155	10156419
Strontium	TX	1160	10156419
Thallium	TX	1165	10156419
Tin	TX	1175	10156419
Titanium	TX	1180	10156419

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Matrix: ***Solid & Chemical Materials***

Vanadium	TX	1185	10156419
Zinc	TX	1190	10156419

Method EPA 7196

Analyte	**AB**	**Analyte ID**	**Method ID**
Chromium (VI)	TX	1045	10162206

Method EPA 7470

Analyte	**AB**	**Analyte ID**	**Method ID**
Mercury	TX	1095	10165807

Method EPA 7471

Analyte	**AB**	**Analyte ID**	**Method ID**
Mercury	TX	1095	10166457

Method EPA 8011

Analyte	**AB**	**Analyte ID**	**Method ID**
1,2,3-Trichloropropane	TX	5180	10173009
1,2-Dibromo-3-chloropropane (DBCP)	TX	4570	10173009
1,2-Dibromoethane (EDB, Ethylene dibromide)	TX	4585	10173009

Method EPA 8015

Analyte	**AB**	**Analyte ID**	**Method ID**
Allyl alcohol	TX	4350	10173203
Diesel range organics (DRO)	TX	9369	10173203
Ethanol	TX	4750	10173203
Ethylene glycol	TX	4785	10173203
Gasoline range organics (GRO)	TX	9408	10173203
Isobutyl alcohol (2-Methyl-1-propanol)	TX	4875	10173203
Isopropyl alcohol (2-Propanol, Isopropanol)	TX	4895	10173203
Methanol	TX	4930	10173203
n-Butyl alcohol (1-Butanol, n-Butanol)	TX	4425	10173203
n-Propanol (1-Propanol)	TX	5055	10173203
Propylene Glycol	TX	6657	10173203

Method EPA 8081

Analyte	**AB**	**Analyte ID**	**Method ID**

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Matrix: ***Solid & Chemical Materials***

4,4'-DDD	TX	7355	10178800
4,4'-DDE	TX	7360	10178800
4,4'-DDT	TX	7365	10178800
Alachlor	TX	7005	10178800
Aldrin	TX	7025	10178800
alpha-BHC (alpha-Hexachlorocyclohexane)	TX	7110	10178800
alpha-Chlordane	TX	7240	10178800
beta-BHC (beta-Hexachlorocyclohexane)	TX	7115	10178800
Chlordane (tech.)	TX	7250	10178800
DDD,Total	TX	10314	10178800
DDE,Total	TX	10315	10178800
DDT,Total	TX	10316	10178800
delta-BHC (delta-Hexachlorocyclohexane)	TX	7105	10178800
Dieldrin	TX	7470	10178800
Endosulfan I	TX	7510	10178800
Endosulfan II	TX	7515	10178800
Endosulfan sulfate	TX	7520	10178800
Endrin	TX	7540	10178800
Endrin aldehyde	TX	7530	10178800
Endrin ketone	TX	7535	10178800
gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	TX	7120	10178800
gamma-Chlordane	TX	7245	10178800
Heptachlor	TX	7685	10178800
Heptachlor epoxide	TX	7690	10178800
Methoxychlor	TX	7810	10178800
Toxaphene (Chlorinated camphene)	TX	8250	10178800

Method EPA 8082

Analyte	**AB**	**Analyte ID**	**Method ID**
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (BZ-206)	TX	9095	10179007
2,2',3,3',4,4',5-Heptachlorobiphenyl (BZ-170)	TX	9065	10179007

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Matrix: ***Solid & Chemical Materials***

2,2',3,4,4',5,5'-Heptachlorobiphenyl (BZ-180)	TX	9134	10179007
2,2',3,4,4',5',6-Heptachlorobiphenyl (BZ-183)	TX	9075	10179007
2,2',3,4,4',5'-Hexachlorobiphenyl (BZ-138)	TX	9025	10179007
2,2',3,4',5,5',6-Heptachlorobiphenyl (BZ-187)	TX	9080	10179007
2,2',3,4,5,5'-Hexachlorobiphenyl (BZ-141)	TX	9030	10179007
2,2',3,4,5'-Pentachlorobiphenyl (BZ-87)	TX	8975	10179007
2,2',3,5,5',6-Hexachlorobiphenyl (BZ-151)	TX	9035	10179007
2,2',3,5'-Tetrachlorobiphenyl (BZ-44)	TX	8945	10179007
2,2',4,4',5,5'-Hexachlorobiphenyl (BZ-153)	TX	9040	10179007
2,2',4,5,5'-Pentachlorobiphenyl (BZ-101)	TX	8980	10179007
2,2',5,5'-Tetrachlorobiphenyl (BZ-52)	TX	8955	10179007
2,2',5-Trichlorobiphenyl (BZ-18)	TX	8930	10179007
2,3,3',4',6-Pentachlorobiphenyl (BZ-110)	TX	8990	10179007
2,3',4,4'-Tetrachlorobiphenyl (BZ-66)	TX	8960	10179007
2,3-Dichlorobiphenyl (BZ-5)	TX	8920	10179007
2,4',5-Trichlorobiphenyl (BZ-31)	TX	8940	10179007
2-Chlorobiphenyl (BZ-1)	TX	8915	10179007
Aroclor-1016 (PCB-1016)	TX	8880	10179007
Aroclor-1221 (PCB-1221)	TX	8885	10179007
Aroclor-1232 (PCB-1232)	TX	8890	10179007
Aroclor-1242 (PCB-1242)	TX	8895	10179007
Aroclor-1248 (PCB-1248)	TX	8900	10179007
Aroclor-1254 (PCB-1254)	TX	8905	10179007
Aroclor-1260 (PCB-1260)	TX	8910	10179007
PCBs (total)	TX	8870	10179007

Method EPA 8151

Analyte	AB	Analyte ID	Method ID
2,4,5-T	TX	8655	10183003
2,4-D	TX	8545	10183003
2,4-DB	TX	8560	10183003

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Matrix: ***Solid & Chemical Materials***

Dalapon	TX	8555	10183003
Dicamba	TX	8595	10183003
Dichloroprop (Dichlorprop, Weedone)	TX	8605	10183003
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	TX	8620	10183003
MCPA	TX	7775	10183003
MCPP	TX	7780	10183003
Pentachlorophenol	TX	6605	10183003
Silvex (2,4,5-TP)	TX	8650	10183003

Method EPA 8260

Analyte	AB	Analyte ID	Method ID
1,1,1,2-Tetrachloroethane	TX	5105	10184404
1,1,1-Trichloroethane	TX	5160	10184404
1,1,2,2-Tetrachloroethane	TX	5110	10184404
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	TX	5195	10184802
1,1,2-Trichloroethane	TX	5165	10184404
1,1-Dichloroethane	TX	4630	10184404
1,1-Dichloroethylene	TX	4640	10184404
1,1-Dichloropropene	TX	4670	10184404
1,2,3-Trichlorobenzene	TX	5150	10184404
1,2,3-Trichloropropane	TX	5180	10184404
1,2,4-Trichlorobenzene	TX	5155	10184404
1,2,4-Trimethylbenzene	TX	5210	10184404
1,2-Dibromo-3-chloropropane (DBCP)	TX	4570	10184404
1,2-Dibromoethane (EDB, Ethylene dibromide)	TX	4585	10184404
1,2-Dichlorobenzene	TX	4610	10184404
1,2-Dichloroethane (Ethylene dichloride)	TX	4635	10184404
1,2-Dichloropropane	TX	4655	10184404
1,3,5-Trimethylbenzene	TX	5215	10184404
1,3-Dichlorobenzene	TX	4615	10184404
1,3-Dichloropropane	TX	4660	10184404

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Matrix: ***Solid & Chemical Materials***

1,4-Dichlorobenzene	TX	4620	10184404
1,4-Dioxane (1,4-Diethyleneoxide)	TX	4735	10184404
1-Chlorohexane	TX	4510	10184404
2,2-Dichloropropane	TX	4665	10184404
2-Butanone (Methyl ethyl ketone, MEK)	TX	4410	10184404
2-Chloroethyl vinyl ether	TX	4500	10184404
2-Chlorotoluene	TX	4535	10184404
2-Hexanone (MBK)	TX	4860	10184404
4-Chlorotoluene	TX	4540	10184404
4-Isopropyltoluene (p-Cymene)	TX	4915	10184404
4-Methyl-2-pentanone (MIBK)	TX	4995	10184404
Acetone (2-Propanone)	TX	4315	10184404
Acetonitrile	TX	4320	10184404
Acrolein (Propenal)	TX	4325	10184404
Acrylonitrile	TX	4340	10184404
Allyl chloride (3-Chloropropene)	TX	4355	10184404
Benzene	TX	4375	10184404
Bromobenzene	TX	4385	10184404
Bromochloromethane	TX	4390	10184404
Bromodichloromethane	TX	4395	10184404
Bromoform	TX	4400	10184404
Carbon disulfide	TX	4450	10184404
Carbon tetrachloride	TX	4455	10184404
Chlorobenzene	TX	4475	10184404
Chlorodibromomethane	TX	4575	10184404
Chloroethane (Ethyl chloride)	TX	4485	10184404
Chloroform	TX	4505	10184404
Chloroprene (2-Chloro-1,3-butadiene)	TX	4525	10184404
cis-1,2-Dichloroethylene	TX	4645	10184404
cis-1,3-Dichloropropene	TX	4680	10184404

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Matrix: ***Solid & Chemical Materials***

Dibromomethane (Methylene bromide)	TX	4595	10184404
Dichlorodifluoromethane (Freon-12)	TX	4625	10184404
Ethyl methacrylate	TX	4810	10184404
Ethylbenzene	TX	4765	10184404
Hexachlorobutadiene	TX	4835	10184404
Iodomethane (Methyl iodide)	TX	4870	10184404
Isopropylbenzene (Cumene)	TX	4900	10184404
m+p-xylene	TX	5240	10184404
Methacrylonitrile	TX	4925	10184404
Methyl acetate	TX	4940	10184608
Methyl bromide (Bromomethane)	TX	4950	10184404
Methyl chloride (Chloromethane)	TX	4960	10184404
Methyl tert-butyl ether (MTBE)	TX	5000	10184404
Methylcyclohexane	TX	4965	10184608
Methylene chloride (Dichloromethane)	TX	4975	10184404
Naphthalene	TX	5005	10184404
n-Butyl alcohol (1-Butanol, n-Butanol)	TX	4425	10184404
n-Butylbenzene	TX	4435	10184404
n-Propylbenzene	TX	5090	10184404
o-Xylene	TX	5250	10184404
sec-Butylbenzene	TX	4440	10184404
Styrene	TX	5100	10184404
tert-Butyl alcohol	TX	4420	10184404
tert-Butylbenzene	TX	4445	10184404
Tetrachloroethylene (Perchloroethylene)	TX	5115	10184404
Toluene	TX	5140	10184404
trans-1,2-Dichloroethylene	TX	4700	10184404
trans-1,3-Dichloropropylene	TX	4685	10184404
trans-1,4-Dichloro-2-butene	TX	4605	10184404
Trichloroethene (Trichloroethylene)	TX	5170	10184404

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Matrix: ***Solid & Chemical Materials***

Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	TX	5175	10184404
Vinyl acetate	TX	5225	10184404
Vinyl chloride	TX	5235	10184404
Xylene (total)	TX	5260	10184404

Method EPA 8270

Analyte	AB	Analyte ID	Method ID
1,2,4,5-Tetrachlorobenzene	TX	6715	10185407
1,2,4-Trichlorobenzene	TX	5155	10185805
1,2-Dichlorobenzene	TX	4610	10185805
1,2-Diphenylhydrazine	TX	6220	10185805
1,3-Dichlorobenzene	TX	4615	10185805
1,3-Dinitrobenzene (1,3-DNB)	TX	6160	10185805
1,4-Dichlorobenzene	TX	4620	10185805
2,2'-Oxybis(1-chloropropane) (bis(2-Chloro-1-methylethyl)ether)	TX	4659	10185805
2,3,4,6-Tetrachlorophenol	TX	6735	10185805
2,4,5-Trichlorophenol	TX	6835	10185805
2,4,6-Trichlorophenol	TX	6840	10185805
2,4-Dichlorophenol	TX	6000	10185805
2,4-Dimethylphenol	TX	6130	10185805
2,4-Dinitrophenol	TX	6175	10185805
2,4-Dinitrotoluene (2,4-DNT)	TX	6185	10185805
2,6-Dichlorophenol	TX	6005	10185805
2,6-Dinitrotoluene (2,6-DNT)	TX	6190	10185805
2-Acetylaminofluorene	TX	5515	10185805
2-Chloronaphthalene	TX	5795	10185805
2-Chlorophenol	TX	5800	10185805
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	TX	6360	10185805
2-Methylnaphthalene	TX	6385	10185805
2-Methylphenol (o-Cresol)	TX	6400	10185805
2-Nitroaniline	TX	6460	10185805

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Matrix: ***Solid & Chemical Materials***

2-Nitrophenol	TX	6490	10185805
2-Picoline (2-Methylpyridine)	TX	5050	10185805
3,3'-Dichlorobenzidine	TX	5945	10185805
3-Methylphenol (m-Cresol)	TX	6405	10185805
3-Nitroaniline	TX	6465	10185805
4-Bromophenyl phenyl ether (BDE-3)	TX	5660	10185805
4-Chloro-3-methylphenol	TX	5700	10185805
4-Chloroaniline	TX	5745	10185805
4-Chlorophenyl phenylether	TX	5825	10185805
4-Methylphenol (p-Cresol)	TX	6410	10185805
4-Nitroaniline	TX	6470	10185805
4-Nitrophenol	TX	6500	10185805
7,12-Dimethylbenz(a) anthracene	TX	6115	10185805
Acenaphthene	TX	5500	10185805
Acenaphthylene	TX	5505	10185805
Acetophenone	TX	5510	10185805
Aniline	TX	5545	10185805
Anthracene	TX	5555	10185805
Atrazine	TX	7065	10186002
Azobenzene	TX	5562	10185805
Benzidine	TX	5595	10185805
Benzo(a)anthracene	TX	5575	10185805
Benzo(a)pyrene	TX	5580	10185805
Benzo(b)fluoranthene	TX	5585	10185805
Benzo(g,h,i)perylene	TX	5590	10185805
Benzo(k)fluoranthene	TX	5600	10185805
Benzoic acid	TX	5610	10185805
Benzyl alcohol	TX	5630	10185805
Biphenyl	TX	5640	10185601
bis(2-Chloroethoxy)methane	TX	5760	10185805

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Matrix: ***Solid & Chemical Materials***

bis(2-Chloroethyl) ether	TX	5765	10185805
bis(2-Ethylhexyl) phthalate (Di(2-Ethylhexyl) phthalate, DEHP)	TX	6065	10185805
Butyl benzyl phthalate	TX	5670	10185805
Caprolactam	TX	7180	10186002
Carbazole	TX	5680	10185805
Chrysene	TX	5855	10185805
Dibenz(a,h) anthracene	TX	5895	10185805
Dibenzofuran	TX	5905	10185805
Diethyl phthalate	TX	6070	10185601
Dimethoate	TX	7475	10185805
Dimethyl phthalate	TX	6135	10185805
Di-n-butyl phthalate	TX	5925	10185805
Di-n-octyl phthalate	TX	6200	10185805
Diphenylamine	TX	6205	10185805
Ethyl methanesulfonate	TX	6260	10185805
Fluoranthene	TX	6265	10185805
Fluorene	TX	6270	10185805
Hexachlorobenzene	TX	6275	10185805
Hexachlorobutadiene	TX	4835	10185805
Hexachlorocyclopentadiene	TX	6285	10185805
Hexachloroethane	TX	4840	10185805
Hexachlorophene	TX	6290	10185805
Hexachloropropene	TX	6295	10185805
Indeno(1,2,3-cd) pyrene	TX	6315	10185805
Isophorone	TX	6320	10185805
Methapyrilene	TX	6345	10185805
Methyl methanesulfonate	TX	6375	10185805
Naphthalene	TX	5005	10185805
Nitrobenzene	TX	5015	10185805
n-Nitrosodiethylamine	TX	6525	10185805

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Matrix: ***Solid & Chemical Materials***

n-Nitrosodimethylamine	TX	6530	10185805
n-Nitrosodi-n-butylamine	TX	5025	10185805
n-Nitrosodi-n-propylamine	TX	6545	10185805
n-Nitrosodiphenylamine	TX	6535	10185805
n-Nitrosomethylethylamine	TX	6550	10185805
n-Nitrosomorpholine	TX	6555	10185805
n-Nitrosopiperidine	TX	6560	10185805
n-Nitrosopyrrolidine	TX	6565	10185805
Pentachlorobenzene	TX	6590	10185805
Pentachloronitrobenzene (PCNB)	TX	6600	10185805
Pentachlorophenol	TX	6605	10185805
Phenacetin	TX	6610	10185805
Phenanthrene	TX	6615	10185805
Phenol	TX	6625	10185805
Pronamide (Kerb)	TX	6650	10185805
Pyrene	TX	6665	10185805
Pyridine	TX	5095	10185805
Quinoline	TX	6670	10185805

Method EPA 9012

Analyte	**AB**	**Analyte ID**	**Method ID**
Amenable cyanide	TX	1510	10193405
Total cyanide	TX	1645	10193405

Method EPA 9023

Analyte	**AB**	**Analyte ID**	**Method ID**
Extractable organics halides (EOX)	TX	1720	10195003

Method EPA 9034

Analyte	**AB**	**Analyte ID**	**Method ID**
Sulfide	TX	2005	10196006

Method EPA 9040

Analyte	**AB**	**Analyte ID**	**Method ID**
pH	TX	1900	10196802

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Matrix: ***Solid & Chemical Materials***

Method EPA 9045

Analyte	AB	Analyte ID	Method ID
Corrosivity	TX	1615	10197805
pH	TX	1900	10197805

Method EPA 9056

Analyte	AB	Analyte ID	Method ID
Bromide	TX	1540	10199209
Chloride	TX	1575	10199209
Fluoride	TX	1730	10199209
Nitrate as N	TX	1810	10199209
Nitrate-nitrite	TX	1820	10199209
Nitrite as N	TX	1840	10199209
Orthophosphate as P	TX	1870	10199209
Sulfate	TX	2000	10199209

Method EPA 9066

Analyte	AB	Analyte ID	Method ID
Total phenolics	TX	1905	10200609

Method EPA 9071

Analyte	AB	Analyte ID	Method ID
n-Hexane Extractable Material (HEM) (O&G)	TX	1803	10201806
Silica Gel Treated n-Hexane Extractable Material (SGT-HEM)	TX	10220	10201806

Method EPA 9095

Analyte	AB	Analyte ID	Method ID
Paint Filter Liquids Test	TX	10312	10204009

Method IDNR OA-2; DRO

Analyte	AB	Analyte ID	Method ID
Extractable Petroleum Hydrocarbons (EPH)	TX	10331	90016607

Method SM 2320 B

Analyte	AB	Analyte ID	Method ID
Alkalinity as CaCO3	TX	1505	20045005

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Matrix: ***Solid & Chemical Materials***

Method	Analyte	AB	Analyte ID	Method ID
SM 2510 B	Conductivity	TX	1610	20048004
SM 2540 G	Residue-total (total solids)	TX	1950	20005203
SSA/ASA Part 3:34	Carbon, organic (Walkley-Black)	TX	10340	SSA/ASA Pt 3:34
TCEQ 1005	Total Petroleum Hydrocarbons (TPH)	TX	2050	90019208

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NELAP-Recognized Laboratory Accreditation is hereby awarded to

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in accordance with Texas Water Code Chapter 5, Subchapter R, Title 30 Texas Administrative Code Chapter 25, and the National Environmental Laboratory Accreditation Program.

The laboratory's scope of accreditation includes the fields of accreditation that accompany this certificate. Continued accreditation depends upon successful ongoing participation in the program. The Texas Commission on Environmental Quality urges customers to verify the laboratory's current location(s) and accreditation status for particular methods and analyses (www.tceq.texas.gov/goto/lab). Accreditation does not imply that a product, process, system or person is approved by the Texas Commission on Environmental Quality.

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Expiration Date: 6/30/2022

Executive Director Texas Commission on Environmental Quality