

June 25, 2024

Mr. Adrian Breitfeld, MAJCS, MBA  
American Jewish University  
15600 Mulholland Drive  
Los Angeles, California 90077

*Via email: adrian.breitfeld@aju.edu*

**Subject:** **2024 Monitoring Report**  
American Jewish University, Brandeis-Bardin Campus  
1101 Peppertree Lane  
Brandeis, California

Dear Mr. Breitfeld:

GSI Environmental Inc. (GSI) has prepared this letter to document the 2024 surface soil, sediment, spring water, surface water, and fruit sampling conducted on behalf of the American Jewish University (AJU) at the Brandeis-Bardin Campus of AJU located at 1101 Peppertree Lane in Brandeis, California (the Site or Campus; Figures 1 and 2). The purpose of the sampling was to monitor Site media for potential chemical and radiological impacts from the adjacent Santa Susana Field Laboratory (SSFL). This letter provides a summary of the sampling activities conducted by GSI in May 2024, analytical testing results of samples collected, and our evaluation of the analytical data regarding potential environmental impacts at the Site.

The Site consists of the 2,878-acre Brandeis-Bardin campus of AJU situated along the northern edge of the Simi Hills in Brandeis, California. The Site is accessed through the main valley that runs northwest-southeast from the northern portion of the Site. Most development and activities occur within the Main Campus Area, a relatively small portion of the Site that is situated along the floor of the main valley that is approximately 1 to 2 miles north of the Site's southern border (see Figures 2 and 3). The majority of the Site, including the land between the Main Campus Area and the southern border, is undeveloped hillsides and drainage valleys.

The Site is located to the north of the SSFL, a former nuclear and rocket science research and testing facility currently co-owned by the Department of Energy, Boeing, and the National Aeronautics and Space Administration (NASA). The SSFL has been the subject of multiple environmental investigations and remedial actions related to chemical impacts to surface and subsurface environmental media. Because the Site is located hydrologically downgradient from the SSFL, multiple investigations at the Brandeis-Bardin campus have been conducted for potential runoff of chemicals of concern (COCs) onto the Site. In addition, periodic monitoring and sampling of various media at the Site has been conducted since 1991. Analytical results from previous sampling events have not indicated significant, if any, migration of COCs or other impacts to the Site from the SSFL operations.<sup>1</sup>

GSI was retained in 2019 to continue monitoring the Brandeis-Bardin campus for potential migration of COCs from the SSFL and has conducted sampling of soil, sediment, surface water, spring water, and fruit at the Site annually from 2019 through 2023. No evidence of chemical impacts from the SSFL was detected in samples collected from any of these previous monitoring

---

<sup>1</sup> DTSC, 2017, Review of Radiological and Chemical Data from Investigations Conducted at and Near the Santa Susana Field laboratory and the American Jewish University – Brandeis Bardin Campus, 2 May.

events (GSI, 2019, 2020, 2021, 2022 and 2023).<sup>2</sup> This report presents the results of the most recent annual sampling event conducted in May 2024. As in previous years, no evidence of chemical impacts from the SSFL was detected in samples.

## 2024 Sampling Program

Consistent with previous sampling events conducted by GSI, samples were collected from the high-use areas of the Main Campus and the upgradient drainage areas within the southern portion of the Site. In addition, available fruit samples (grapefruit, lemon, and orange) also were collected from the orchards in the Main Campus area. A summary of the 2024 sampling and analysis plan is presented on Table 1. Sampling methodologies and analytical testing methods were consistent with those of previous sampling events, as most recently described in the GSI 2021 Monitoring Report.<sup>3</sup> Sampling locations are shown on Figures 3 through 9.

The 2024 sampling locations were generally consistent with previous locations to enable correlation among the annual monitoring events. However, some previous sampling locations were inaccessible due to dense vegetation and washed-out fire roads leading up the drainages. Therefore, GSI selected alternate sampling locations within the same drainage channels, and as close to the original sampling locations as possible, to allow for a meaningful comparison with sampling data from previous years.

- Previous sample locations BP-SED-1, OS3-W, OS357-W, RRMDF-SED-D, RRMDF-W were replaced with sample locations D-5/6-SED and D-5/6-W. As shown on Figure 5, location D-5/6 is downstream near the convergence of the two drainages where previous samples were collected in this area.
- SRE-SED-1, SRE-SED-2, SRE-SED-3, and SRE-W were replaced with sample location SRE-SED-4. As shown on Figure 6, location SRE-SED-4 is downstream and within the same drainage flow path as the previous samples collected in this area.
- Sample locations OS1-SED-1 and OS1-W were replaced with sample locations OS1-SED and OS1-W. As shown on Figure 6, locations OS1-SED and OS1-W are downstream and within the same drainage flow path as the previous sample collected in this area.
- Sample locations OS8-SED-1 and OS8-W were replaced with sample locations HV-SED and HV-W. As shown on Figure 7, locations HV-SED and HV-W are downstream and within the same drainage flow path as the previous samples collected in this area.

## Analytical Testing Results

Laboratory analytical results are tabulated in Tables 2 through 7 and summarized below by area. The laboratory analytical reports are included in Attachment A.

### Data Validation

The analytical results were reviewed in accordance with USEPA-published guidance and a data validation summary prepared by GSI is presented as Attachment B. Based on the data validation, several data qualifier flags were added to the data set presented in Tables 1 through 7, as follows:

- Analytical results with concentrations detected between the laboratory method detection limit (MDL) and the laboratory reporting limit (RL) are flagged with a "J" to indicate the result is an estimation.

<sup>2</sup> <https://www.aju.edu/about-aju/our-campuses/brandeis-bardin-safety-data>

<sup>3</sup> GSI Environmental Inc., 2021, 2021 Monitoring Report, American Jewish University, Brandeis-Bardin Campus, 1101 Peppertree Lane, Brandeis, California, 24 August.

- Analytical results that are shown with a “B” indicate that the constituent also was detected in the laboratory method blank.
- Analytical results flagged with a “UJ” indicate the analyte was not detected above the MDL shown; however, the reported MDL is approximate and may be inaccurate or imprecise.

All sample results are considered usable, and the data quality is judged to be adequate for the intended purpose.

### ***Screening Criteria***

Analytical results are evaluated by comparison to health-based screening levels. For those constituents that could be naturally occurring, such as metals and radionuclides, regional background concentrations were also used to evaluate the data. Screening levels and background values for each constituent are presented with the analytical results on Tables 2 through 7.

### ***High-Use Area Sample Results***

Soil samples from the high-use areas within the Main Campus were collected at Terry Field, Kids' Cabins, Gan Field, Counselor in Training (CIT) Cabins, Alpine Tower, and Hidden Valley Camp. The sample locations are shown on Figures 3 and 4 and the analytical results are discussed below.

#### **Metals and Perchlorate Results**

Analytical results for metals and perchlorate in soil samples collected from the high-use areas are presented in Table 2. All constituents were either (a) not detected above the MDLs, (b) detected at concentrations below the risk-based screening levels, or (c) detected above risk-based screening levels, but below regional background levels. These results appear consistent with natural conditions and do not indicate migration of contaminants from the SSFL or other anthropogenic sources.

#### **Radionuclide Results**

Analytical results for radionuclides in soil samples collected from the high-use areas are presented in Table 3. Radionuclides were either not detected in the high-use area samples above the respective minimum detectable concentrations (MDCs) or were lower than published background levels and health-based screening levels. These results appear consistent with natural conditions and do not indicate migration from the SSFL or other anthropogenic sources.

### ***Upgradient Drainage Area Sample Results***

Sediment, surface water, and spring water samples were collected from the upgradient drainages near the southern boundary of the Site and adjacent to the buffer zone (designated as the Northern Buffer Zone, or NBZ) between SSFL and the Site. The drainage area sampling locations are shown on Figures 5 through 8.

#### **Metals and Perchlorate Results**

Analytical results for metals and perchlorate in sediment samples collected from the drainage areas are presented in Table 2. Metals and perchlorate were either (a) not detected above their respective MDLs, (b) detected at concentrations below the risk-based screening level, or (c) detected above the risk-based screening level, but below regional background levels. These results are consistent with natural conditions and do not indicate migration from the SSFL or other anthropogenic sources.

Analytical results for metals and perchlorate in the spring water and surface water samples collected from the drainage areas are presented in Table 4. Barium, chromium, and vanadium were detected in one or more water samples at concentrations below their respective health-based screening levels. Perchlorate was not detected above the MDL in any of the water samples. The analytical results for metals in the spring water and surface water samples appear consistent with previous results and do not indicate migration from the SSFL or other anthropogenic sources.

#### Radionuclide Results

Analytical results for radionuclides in the sediment and water samples collected from the upgradient drainage area are presented in Tables 3 and 5, respectively. Radionuclides were not detected above the MDCs in any of the spring water, surface water, or sediment samples, and the MDCs were less than the respective published background levels and health-based screening levels. The radionuclide analytical results for the sediment and water samples are consistent with previous analytical results and do not indicate migration from the SSFL or other anthropogenic sources.

#### **Fruit Sample Results**

Consistent with previous sampling events, fruit samples were obtained from trees with ripe fruit at the time of sampling, to the extent available. For the May 2024 sampling event, GSI collected samples of grapefruit, lemon, and orange from orchards within the Main Campus Area. The approximate sampling locations for the fruit samples are shown on Figure 9. No avocados or apples were available at the Site during the May 2024 sampling event. GSI also purchased grapefruits, lemons, and oranges from a local grocery store to serve as reference fruit samples.

#### Metals and Perchlorate Results

Analytical results for metals and perchlorate for the on-Site and reference fruit samples are presented in Table 6.

Perchlorate was not detected in any of the on-Site or reference fruit samples. Antimony, barium, copper, selenium, and zinc were detected in the on-Site fruit samples at concentrations generally consistent with concentrations detected in the reference fruit samples and well below the screening levels for each on-Site fruit sample (Table 6).<sup>4</sup>

#### Radionuclide Results

Analytical results for radionuclides for the on-Site fruit samples and reference fruit samples are presented in Table 7. Radionuclides were not detected in any of the fruit samples above their respective MDCs. The MDCs for each radionuclide were below their respective risk-based screening levels.

The analytical results for metals, perchlorate, and radionuclides for the fruit samples appear consistent with natural conditions and do not indicate the presence of on-Site chemical impacts from the SSFL or other anthropogenic sources.

#### **Conclusions**

Results from the 2024 sampling event are consistent with analytical testing of media that has occurred at the Brandeis-Bardin campus since 1991. Analytical results of (a) soil samples

<sup>4</sup> The derived screening level (PRG) for arsenic in produce is several orders of magnitude lower than the analytical detection limit. The detection limit, however, is adequate to identify potential impacts to fruit from the SSFL or other anthropogenic sources by accounting for (a) background concentrations of arsenic in soil, and (b) the expected arsenic level in fruit based on soil nutrient uptake rates.

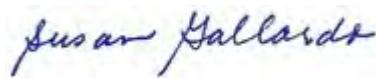
collected at the high-use Main Campus areas; (b) sediment, surface water, and spring water samples collected from the drainage areas located between the campus and the NBZ; and (c) samples of three kinds of fruit grown on Site all appear consistent with natural conditions and do not indicate impacts from the SSFL or other anthropogenic sources.

Should you have any questions regarding the information presented herein, please contact either of the undersigned.

Sincerely,  
GSI Environmental, Inc.



Matthew Goerz  
Senior Scientist



Susan Gallardo  
Principal Engineer

Attachments:

Table 1 Sampling and Analysis Summary  
Table 2 Soil and Sediment Analytical Results – Metals and Perchlorate  
Table 3 Soil and Sediment Analytical Results – Radionuclides  
Table 4 Spring and Surface Water Analytical Results – Metals and Perchlorate  
Table 5 Spring and Surface Water Analytical Results – Radionuclides  
Table 6 Fruit Analytical Results – Metals and Perchlorate  
Table 7 Fruit Analytical Results - Radionuclides

Figure 1 Site Location Map  
Figure 2 Site Map and Features  
Figure 3 Main Campus Area Map and Sampling Locations  
Figure 4 Hidden Valley Camp Sampling Locations  
Figure 5 Drainage Area Sampling Locations D-5/6-SED and D-5/6-W  
Figure 6 Drainage Area Sampling Location SRE-SED-4 and OS1-SED/OS1-W  
Figure 7 Drainage Area Sampling Locations HV-SED-1 and HV-W  
Figure 8 Drainage Area Sampling Locations OW-SED-1 and OW-W  
Figure 9 Fruit Orchard Sampling Locations

Attachment A. Analytical Laboratory Reports  
Attachment B. Data Validation Summary

**2024 MONITORING REPORT**  
**AJU Brandeis-Bardin Campus**  
Brandeis, CA

**TABLES**

- Table 1 Sampling and Analysis Summary
- Table 2 Soil and Sediment Analytical Results – Metals and Perchlorate
- Table 3 Soil and Sediment Analytical Results – Radionuclides
- Table 4 Spring and Surface Water Analytical Results – Metals and Perchlorate
- Table 5 Spring and Surface Water Analytical Results – Radionuclides
- Table 6 Fruit Analytical Results – Metals and Perchlorate
- Table 7 Fruit Analytical Results - Radionuclides

**TABLE 1: SAMPLING AND ANALYSIS SUMMARY**  
**AJU Brandeis-Bardin Campus**  
**Brandeis, California**

Sample Location	Campus Area	Sample Type	Analyses <sup>1</sup>				
			Metals <sup>2</sup>	Perchlorate <sup>2</sup>	Strontium-90 <sup>3</sup>	Tritium <sup>3</sup>	Cesium-137 <sup>3</sup>
			6010B and 7471A	314.0	905.0	906.0	901.1 (water), DOE HASL 300, 4.5.2.3/Ga-01-R (soil and sediment)
<b>High Use Area Samples</b>							
HV-1		Soil	X	X	X	X	X
HV-2	Hidden Valley Camp	Soil	X	X	X	X	X
HV-SED-1		Sediment	X	X	X	X	X
TF-1	Terry Field	Soil	X	X	X	X	X
KC-1	Kids' Cabins	Soil	X	X	X	X	X
GF-1	Gan Field	Soil	X	X	X	X	X
CIT-1	Counselor-in-Training Cabins	Soil	X	X	X	X	X
AT-1	Alpine Tower	Soil	X	X	X	X	X
<b>Drainage Samples</b>							
OS1-SED-1	Downstream from OS1 and SSFL	Sediment	Not Sampled - Inaccessible				
OS1-W		Water	Not Sampled - Inaccessible				
<b>OS1-SED</b>	Downstream from OS1 and SSFL and previous sample locations	Sediment	X	X	X	X	X
<b>OS1-W</b>	OS1-W and OS1-SED-1	Water	X	X	X	X	X
OS3-W	Spring OS3	Water	Not Sampled - Inaccessible				
OS357-W	Springs OS3, OS5, and OS7	Water	Not Sampled - Inaccessible				
BP-SED-1	Downstream from the burn pit portion of the SSFL	Sediment	Not Sampled - Inaccessible				
RRMDF-SED-D	Downstream from the reactor and Radioactive Materials Disposal Facility (RMDF) portions of the SSFL	Sediment	Not Sampled - Inaccessible				
RRMDF-W		Water	Not Sampled - Inaccessible				
<b>D-5/6-SED</b>	Downstream from spring OS3, OS5, and OS7, the burn pit, reactor, and RMDF areas of SSFL	Sediment	X	X	X	X	X
<b>D-5/6-W</b>		Water	X	X	X	X	X
SRE-SED-1		Sediment	Not Sampled - Inaccessible				
SRE-SED-2	Downstream from the Sodium Reactor Experiment (SRE) portion of the SSFL	Sediment	Not Sampled - Inaccessible				
SRE-SED-3		Sediment	Not Sampled - Inaccessible				
SRE-W		Water	Not Sampled - Inaccessible				
<b>SRE-SED-4</b>	Downstream from the SRE portion of the SSFL and previous sample locations SRE-SED-1 through -3 and SRE-W	Sediment	X	X	X	X	X
OS8-SED-1	Downstream of Spring OS8	Sediment	Not Sampled - Inaccessible				
OS8-W		Water	Not Sampled - Inaccessible				
<b>HV-SED</b>	Downstream of Spring OS8	Sediment	X	X	X	X	X
<b>HV-W</b>	(between Hidden Valley Camp and Spring OS8)	Water	X	X	X	X	X
OW-SED-1	Old Well Camp area	Sediment	X	X	X	X	X
OW-W		Water	X	X	X	X	X
<b>Fruit Samples</b>							
AV-1	Avocado Grove	Avocado	Not Sampled - No Fruit Present				
A-1	Fruit Orchard	Apple	Not Sampled - No Fruit Present				
G-1		Grapefruit	X	X	X	X	X
L-1	Fruit Orchard	Lemon	X	X	X	X	X
O-1		Orange	X	X	X	X	X
AV-2	Grocery Store	Avocado	Not Sampled - No Corresponding On-Site Sample				
A-2		Apple	Not Sampled - No Corresponding On-Site Sample				
G-2	Grocery Store	Grapefruit	X	X	X	X	X
L-2		Lemon	X	X	X	X	X
O-2		Orange	X	X	X	X	X

Notes:

1. Methods shown are U.S. Environmental Protection Agency methods, except as noted.
2. Samples analyzed by Eurofins Calscience of Irvine, California, except for fruit samples, which were analyzed by GEL Laboratories of Charleston, SC
3. Samples analyzed by GEL Laboratories of Charleston, SC.
4. Sample locations highlighted gray were not sampled.

Abbreviations:

X = analysis performed on sample indicated

SSFL = Santa Susana Field Laboratory

**bold** = new sample location

**TABLE 2: SOIL AND SEDIMENT ANALYTICAL RESULTS - METALS AND PERCHLORATE**  
**AJU Brandeis-Bardin Campus**  
Brandeis, California

Sample Location	Sample Name	Matrix	Date Collected	Title 22 Metals <sup>1</sup>																Per-chlorate <sup>3</sup>	NDMA <sup>4</sup>				
				Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury <sup>2</sup>	Molyb-denum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc					
mg/kg																									
<b>High Use Area Samples</b>																									
HV-1	HV-1-190422	Soil	4/22/2019	<1.8 UJ	6.9	100	0.54	<0.44	15	5.9	<5.3	5.0	<0.014	<1.8	9.4	<3.5	<0.88	<1.8	29	62	<0.039	-			
	HV-1-200603		6/3/2020	<10 UJ	5.4	62	<0.50	<0.50	11	3.5	7.4	4.0	<0.020	<2.0	6.5	<3.0	<1.5	<10	20	47	<0.040	-			
	HV-1-210526		5/26/2021	19	5.0	66	0.86	<0.20	12	3.6	6.6	4.5	<0.039	<2.0	6.4	<2.0	<0.49	<2.0	20	46	<0.040	-			
	HV-1-220511 <sup>5</sup>		5/11/2022	<0.93	4.8	68	0.11 J	0.12 J	11	3.6	6.6	4.5	<0.0077	<0.74	6.5	<1.4	<0.089	<0.83	19	45	<0.020	-			
	HV-1-230517 <sup>5</sup>		5/17/2023	<0.68	4.6	54	0.36	0.11 J	9.0	3.1	5.3 B	3.8	<0.0081	<0.54	5.7	<1.00	<0.065	<0.60	17	39	<0.020	-			
	HV-1-240508 <sup>5</sup>		5/8/2024	<2.8 UJ	5.6	68 B	0.41 J	<0.16	10	3.8	6.8	3.6	<0.022	<0.51	6.9	<1.2	<0.14	<2.1	20 B	41 B	<0.0021	-			
HV-2	HV-2-190422	Soil	4/22/2019	<1.9 UJ	5.5	77	0.37	<0.47	18	5.7	<5.6	12	0.017	<1.9	11	<3.7	1.8	<1.9	30	64	<0.040	-			
	HV-2-200603		6/3/2020	<10 UJ	3.3	48	0.56	<0.51	13	3.8	8.1	8.4	<0.020	<2.0	8.5	<3.0	<1.5	<10	21	43	<0.040	-			
	HV-2-210526		5/26/2021	21	4.5	58	0.90	0.20	15	4.2	10	14	<0.039	<2.0	9.2	<2.0	1.4	<2.0	23	50	<0.200	-			
	HV-2-220511 <sup>5</sup>		5/11/2022	<0.93	4.5	54	0.84	0.094 J	14	4.0	7.1	9.5	0.0089 J	<0.76	8.8	<1.4	1.1	0.92 J	21	48	<0.100	-			
	HV-2-230517 <sup>5</sup>		5/17/2023	<0.95	3.1	46	0.30	0.16 J	12	3.5	10 B	7.9	0.012 J	<0.76	7.4	<1.4	0.74	<0.85	18	40	<0.020	-			
	HV-2-240508 <sup>5</sup>		5/8/2024	<2.9 UJ	3.2	56 B	0.37 J	<0.17	22	4.7	11	12	<0.022	<0.53	13	<1.3	1.6	<2.2	22 B	48 B	<0.0022	-			
HV-SED-1	HV-SED-1-190422	Sediment	4/22/2019	<1.4 UJ	3.8	53	<0.29	<0.36	11	3.8	<4.3	7.5	<0.016	<1.4	6.7	<2.9	<0.71	<1.4	21	42	<0.040	-			
	HV-SED-1-200603		6/3/2020	<10 UJ	3.1	53	<0.50	<0.50	11	3.7	8.5	9.3	0.024	<2.0	7.1	<3.0	<1.5	<10	22	44	<0.040	-			
	HV-SED-1-210526		5/26/2021	17	3.9	47	0.75	<0.20	11	3.2	7.1	8.9	<0.039	<2.0	6.7	<2.0	<0.50	<2.0	19	43	<0.039	-			
	HV-SED-1-220511 <sup>5</sup>		5/11/2022	<0.91	3.1	42	0.055 J	0.15 J	9.0	3.2	6.4	6.9	<0.0075	<0.73	6.1	<1.4	0.19 J	<0.82	17	39	<0.020	-			
	HV-SED-1-230517 <sup>5</sup>		5/17/2023	<0.91	2.1	34	0.25	0.12 J	7.4	2.5	6.3 B	5.0	<0.0079	<0.73	4.9	<1.4	0.095 J	<0.82	14	31	<0.020	-			
	HV-SED-1-240508 <sup>5</sup>		5/8/2024	<2.8 UJ	3.7	52 B	0.36 J	<0.16	12	3.5	9.1	9.5	<0.022	<0.51	7.8	<1.2	0.74 J	<2.1	20 B	45 B	<0.0022	-			
TF-1	TF-1-190422	Soil	4/22/2019	<1.1 UJ	4.6	110	0.34	<0.27	16	7.1	13	9.7	<0.015	<1.1	10	<2.1	<0.53	<1.1	35	50	<0.040	-			
	TF-1-200603		6/3/2020	<10 UJ	5.3	88	<0.50	<0.50	16	6.3	19	8.5	<0.020	<2.0	11	<3.0	<1.5	<10	34	52	<0.040	-			
	TF-1-210526		5/26/2021	17	5.6	84	1.0	0.20	20	7.6	21	11	<0.039	<2.0	13	<2.0	<0.5	<2.0	39	55	<0.200	-			
	TF-1-220510 <sup>5</sup>		5/10/2022	<0.90	4.5	89	0.19	0.16 J	13	5.6	15	7.8	<0.0083	<0.72	9.9	<1.3	<0.87	<0.81	29	44	<0.20	-			
	TF-1-230516 <sup>5</sup>		5/16/2023	<0.97	4.4	90	0.39	0.23	13	5.5	17 B	7.3	<0.0080	<0.77	8.4	<1.4	<0.93	<0.87	31	71	<0.020	-			
	TF-1-240507 <sup>5</sup>		5/7/2024	<2.8 UJ	3.4	86 B	0.49 J	<0.16	14	7.0	19	9.7	<0.022	0.70 J	11	<1.2	<0.14	<2.1	33 B	45 B	<0.0022	-			
KC-1	KC-1-190422	Soil	4/22/2019	<1.8 UJ	5.6	75	0.44	<0.45	18	6.8	8.6	9.6	<0.016	<1.8	12	<3.6	<0.89	<1.8	36	64	<0.040	-			
	KC-1-200603		6/3/2020	<10 UJ	5.9	60	<0.50	<0.50	16	4.9	10	8.8	<0.020	2.8	9.6	<3.0	<1.5	<10	32	46	<0.040	-			
	KC-1-210527		5/27/2021	13	4.4	49	0.75	<0.20	14	4.5	8.2	9.6	<0.039	<2.0	8.3	<2.0	<0.49	<2.0	27	49	<0.039	-			
	KC-1-220511 <sup>5</sup>		5/11/2022	<0.94	5.5	61	0.85	0.064 J	17	6.0	10	10	<0.0075	1.0 J	11	2.7	0.44 J	<0.86	34	55	<0.099	-</td			

**TABLE 2: SOIL AND SEDIMENT ANALYTICAL RESULTS - METALS AND PERCHLORATE**  
**AJU Brandeis-Bardin Campus**  
 Brandeis, California

Sample Location	Sample Name	Matrix	Date Collected	Title 22 Metals <sup>1</sup>																Per-chlorate <sup>3</sup>	NDMA <sup>4</sup>	
				Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury <sup>2</sup>	Molyb-denum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc		
SRE-SED-1	SRE-SED-1-190613	Sediment	6/13/2019	<10 UJ	4.3	51	0.51	<0.50	7.9	2.1	3.2	6.8	<0.020	<2.0	4.1	<3.0	<1.5	<10	20	47	<0.040	-
SRE-SED-2	SRE-SED-2-200603	Sediment	6/3/2020	<10 UJ	<3.1	42 J	<0.51	<0.51	7.9	2.9	8.8	5.9	<0.020	<2.0	5.1	<3.1	<1.5	<10	18	36	<0.040	-
	SRE-SED-2-210526		5/26/2021	17	2.3	47	0.82	<0.20	8.8	3.5	8.8	7.4	<0.043	<2.0	5.6	<2.0	<0.49	<2.0	19	43	<0.20	-
	SRE-SED-2-220511 <sup>5</sup>		5/11/2022	<0.91	1.7 J	36	0.042 J	0.082 J	7.4	2.9	5.3	4.8	<0.0076	<0.73	4.6	<1.4	<0.087	<0.82	16	32	<0.020	-
SRE-SED-3	SRE-SED-3-230517 <sup>5</sup>	Sediment	5/17/2023	<0.52	1.4	34	0.20	0.066 J	5.9	2.3	4.1 B	4.8	<0.0081	<0.42	4.1	<0.78	<0.050	<0.47	13	28	<0.020	-
SRE-SED-4	SRE-SED-4-240508	Sediment	5/8/2024	<2.8 UJ	1.8 J	21 B	0.20 J	<0.16	5.0	1.8	2.8	2.7	<0.021	<0.50	3.0	<1.2	<0.14	<2.1	12 B	22 B	<0.0022	
OS1-SED-1	OS1-SED-1-200603	Sediment	6/3/2020	<10 UJ	<3.0	32 J	<0.51	<0.51	6.2	2.5	3.5	3.0	<0.020	<2.0	4.0	<3.0	<1.5	<10	14	34	<0.040	-
	OS1-SED-1-210526		5/26/2021	22	3.0	61	0.98	<0.19	13	4.5	7.3	8.6	<0.021	<2.0	7.9	<1.9	1.0	<1.9	25	54	<0.20	<0.00049
	OS1-SED-1-220511 <sup>5</sup>		5/11/2022	<0.97	1.6 J	28	<0.031	0.066 J	7.1	2.9	3.9	2.7	<0.0079	<0.77	4.6	<1.4	<0.093	<0.87	17	24	<0.020	-
	OS1-SED-1-230517 <sup>5</sup>		5/17/2023	<0.96	2.1	47	0.29	0.12 J	10	3.4	6.5 B	6.2	0.019 J	<0.77	6.7	<1.4	<0.092	<0.86	22	61	<0.020	-
OS1-SED	OS1-SED-240508 <sup>5</sup>	Sediment	5/8/2024	<2.8 UJ	<1.4	25 B	0.21 J	<0.16	4.5	2.3	3.3	2.8	<0.022	<0.51	3.2	<1.2	<0.14	<2.1	12 B	22 B	<0.0021	
OS8-SED-1	OS8-SED-1-190613	Sediment	6/13/2019	<9.9 UJ	3.8	34	<0.49	<0.49	12	1.4	4.8	5.4	<0.020	<2.0	6.1	<3.0	<1.5	<9.9	21	32	<0.040	-
	OS8-SED-1-200603		6/2/2020	<9.9 UJ	<3.0	32 J	<0.50	<0.50	7.5	1.9	5.5	5.3	<0.020	<2.0	5.1	<3.0	<1.5	<9.9	14	25	<0.040	-
	OS8-SED-1-210526		5/26/2021	11	2.1	30	0.48	<0.19	6.8	2.0	4.3	5.3	<0.038	<1.9	4.4	<1.9	<0.48	<1.9	13	24	<0.039	-
	OS8-SED-1-220511 <sup>5</sup>		5/11/2022	<0.90	1.4 J	27	<0.029	0.075 J	6.5	2.2	3.8	4.1	<0.0074	<0.72	4.5	<1.3	<0.087	<0.81	12	26	<0.020	-
	OS8-SED-1-230517 <sup>5</sup>		5/17/2023	<0.98	2.8	47	0.29	0.060 J	11	3.3	5.4 B	3.5	<0.0080	<0.78	7.9	<1.5	<0.094	<0.88	21	33	<0.019	-
HV-SED	HV-SED-240508 <sup>5</sup>	Sediment	5/8/2024	<2.8 UJ	<1.4	27 B	0.18 J	<0.16	5.7	1.9	3.4	4.9	<0.022	<0.50	3.8	<1.2	<0.14	<2.1	12 B	23 B	<0.0021	
OW-SED-1	OW-SED-1-190613	Sediment	6/13/2019	<10 UJ	<3.0	39	<0.50	<0.50	7.3	1.2	2.0	4.0	<0.020	<2.0	3.8	<3.0	<1.5	<10	15	29	<0.040	-
	OW-SED-1-200603		6/3/2020	<10 UJ	<3.0	37 J	<0.51	<0.51	9.1	2.4	4.0	4.1	<0.020	<2.0	4.9	<3.0	<1.5	<10	19	29	<0.040	-
	OW-SED-1-210526		5/26/2021	18	4.9	56	0.76	<0.19	9.9	3.4	5.6	7.1	<0.038	<1.9	6.3	<1.9	<0.49	<1.9	21	36	<0.040	-
	OW-SED-1-220511 <sup>5</sup>		5/11/2022	<0.93	1.9 J	31	<0.030	0.074 J	6.7	2.5	3.5	4.3	<0.0079	<0.74	4.1	<1.4	<0.089	<0.83	15	27	<0.020	-
	OW-SED-1-230517 <sup>5</sup>		5/17/2023	<0.95	1.9 J	42	0.26	0.072 J	8.2	2.8	5.0 B	5.8	0.0087 J	<0.76	5.5	<1.4	<0.091	<0.85	17	32	<0.020	-
	OW-SED-1-240507 <sup>5</sup>		5/7/2024	<2.9 UJ	1.4 J	48 B	0.30 J	<0.164	9.1	3.1	5.5	5.6	<0.021	<0.52	6.1	<1.2	<0.14	<2.1	18 B	33 B	<0.0022	

**Screening Criteria**

Residential Risk-Based Screening Levels <sup>6</sup>	31	0.11	15,000	16	71	120,000	23	3,100	80	1	390	820	390	390	0.78	390	23,000	55	0.002
Regional Background Levels <sup>7</sup>	0.86	39.7	319	1.87	0.58	81	38	102	42	0.13	3.2	113	0.896	0.138	0.991	151	215	0.00163	-

**Notes:**

1. Samples analyzed for metals using U.S. Environmental Protection Agency (USEPA) Method 6010B unless otherwise indicated.
2. Samples analyzed for mercury using USEPA Method 7471A.
3. Samples analyzed for perchlorate using USEPA Method 314.0.
4. Samples analyzed for N-Nitrosodimethylamine (NDMA) by TestAmerica method GCMSMS\_NDMA.
5. Results reported to the Method Detection Limit.
6. Regional screening levels (RSLs) for residential soil endorsed or modified by the California Department of Toxic Substances Control (DTSC, 2020, revised May 2022), or USEPA RSLs for analytes not included in DTSC's document (USEPA, 2022).
7. Background threshold values as calculated by the DTSC for the Santa Susana Field Laboratory (2013).

**Abbreviations:**

**Bold** = analyte detected above the laboratory reporting limit

mg/kg = milligrams per kilogram

< = analyte was not detected above the reporting limit or detection limit shown

B = Constituent was detected in the laboratory method blank above the reporting limit.

J = Analyte was detected below the reporting limit and above the detection limit. Value is estimated.

**TABLE 3: SOIL AND SEDIMENT ANALYTICAL RESULTS - RADIONUCLIDES**  
**AJU Brandeis-Bardin Campus**  
 Brandeis, California

Sample Location	Sample Name	Matrix	Date Collected	Tritium <sup>1</sup>	Strontium-90 <sup>2</sup>	Cesium-137 <sup>3</sup>
				pCi/g		
<b>Main Campus Sampling Locations</b>						
HV-1	HV-1-190422	Soil	4/22/2019	<0.359	<0.273	<0.187
	HV-1-200603		6/3/2020	<2.14	<0.0987	<0.0557
	HV-1-210526		5/26/2021	<2.23	<0.082	<0.0465
	HV-1-220511		5/11/2022	<0.0361	<0.0955	<0.0510
	HV-1-230517		5/17/2023	<0.936	<0.0746	<0.0711
	HV-1-240508		5/8/2024	<1.91	<0.0623	<0.0641
HV-2	HV-2-190422	Soil	4/22/2019	<0.362	<0.242	<0.125
	HV-2-200603		6/3/2020	<2.22	<0.0978	<0.0409
	HV-2-210526		5/26/2021	<2.22	<0.0912	<0.0560
	HV-2-220511		5/11/2022	<0.501	<0.0935	<0.107
	HV-2-230517		5/17/2023	<0.875	<0.0477	<0.0943
	HV-2-240508		5/8/2024	<1.81	<0.0495	<0.0697
HV-SED-1	HV-SED-1-190422	Sediment	4/22/2019	<0.363	<0.284	<0.161
	HV-SED-1-200603		6/3/2020	<2.09	<0.0929	<0.0618
	HV-SED-1-210526		5/26/2021	<2.08	<0.0825	<0.0604
	HV-SED-1-220511		5/11/2022	<0.0571	<0.0736	<0.0747
	HV-SED-1-230517		5/17/2023	<0.850	<0.0412	<0.0767
	HV-SED-1-240508		5/8/2024	<1.80	<0.0882	<b>0.0797</b>
TF-1	TF-1-190422	Soil	4/22/2019	<0.355	<0.495	<0.158
	TF-1-200603		6/3/2020	<2.23	<0.0954	<0.0551
	TF-1-210526		5/26/2021	<2.17	<0.0991	<0.0479
	TF-1-220510		5/10/2022	<0.974	<0.0978	<0.0613
	TF-1-230516		5/16/2023	<0.909	<0.0541	<b>0.0719</b>
	TF-1-240507		5/7/2024	<1.76	<0.0531	<0.0853
KC-1	KC-1-190422	Soil	4/22/2019	<0.332	<0.266	<0.192
	KC-1-200603		6/3/2020	<2.15	<0.0981	<0.0458
	KC-1-210527		5/27/2021	<2.12	<0.0849	<0.0564
	KC-1-220511		5/11/2022	<0.628	<0.0909	<0.0660
	KC-1-230517		5/17/2023	<0.860	<0.0547	<0.0999
	KC-1-240507		5/7/2024	<1.88	<0.0605	<0.103
GF-1	GF-1-190422	Soil	4/22/2019	<0.393	<0.281	<0.165
	GF-1-200603		6/3/2020	<2.08	<0.0981	<b>0.0662</b>
	GF-1-210527		5/27/2021	<2.26	<0.0976	<0.0521
	GF-1-220512		5/12/2022	<0.105	<0.0679	<b>0.0788</b>
	GF-1-230518		5/18/2023	<0.920	<0.0321	<0.0820
	GF-1-240507		5/7/2024	<1.85	<0.0978	<0.0772
CIT-1	CIT-1-190422	Soil	4/22/2019	<0.348	<0.246	<0.162
	CIT-1-200602		6/2/2020	<2.21	<0.0951	<b>0.0789</b>
	CIT-1-210525		5/25/2021	<2.03	<0.0821	<b>0.0900</b>
	CIT-1-220510		5/10/2022	<0.0332	<0.0956	<b>0.115</b>
	CIT-1-230516		5/16/2023	<0.838	<0.0432	<b>0.087</b>
	CIT-1-240507		5/7/2024	<2.02	<0.0717	<b>0.261</b>
AT-1	AT-1-190422	Soil	4/22/2019	<0.356	<0.267	<0.207
	AT-1-200603		6/3/2020	<2.30	<0.0920	<0.0627
	AT-1-210527		5/27/2021	<1.93	<0.0837	<0.0609
	AT-1-220512		5/12/2022	<0.124	<0.0985	<0.0687
	AT-1-230518		5/18/2023	<0.829	<0.0320	<0.0694
	AT-1-240507		5/7/2024	<1.81	<0.0583	<0.102

**TABLE 3: SOIL AND SEDIMENT ANALYTICAL RESULTS - RADIONUCLIDES**  
**AJU Brandeis-Bardin Campus**  
 Brandeis, California

Sample Location	Sample Name	Matrix	Date Collected	Tritium <sup>1</sup>	Strontium-90 <sup>2</sup>	Cesium-137 <sup>3</sup>
				pCi/g		
<b>Drainage Area Samples</b>						
BP-SED-1	BP-SED-1-190613	Sediment	6/13/2019	<0.061	<b>0.32</b>	<b>0.055</b>
	BP-SED-1-190829		8/29/2019	—	<0.0506	—
	BP-SED-1-200602		6/2/2020	<3.14	<0.0994	<b>0.110</b>
	BP-SED-1-210525		5/25/2021	<2.98	<0.0947	<b>0.0985</b>
	BP-SED-1-220510		5/10/2022	<0.0628	<0.0621	<b>0.107</b>
	BP-SED-1-230516		5/16/2023	<b>3.16</b>	<0.0577	<b>0.103</b>
BP-SED-1A	BP-SED-1A-190829	Sediment	8/29/2019	—	<0.0968	—
BP-SED-1B	BP-SED-1B-190829		8/29/2019	—	<0.0474	—
BP-SED-1C	BP-SED-1C-190829		8/29/2019	—	<0.0976	—
RRMDF-SED-1	RRMDF-SED-1-190613	Sediment	6/13/2019	<0.068	<b>0.480</b>	<b>0.111</b>
	RRMDF-SED-1-190829		8/29/2019	—	<0.0667	—
	RRMDF-SED-1-200602		6/2/2020	<3.45	<0.0948	<b>0.198</b>
	RRMDF-SED-1-21025		5/25/2021	<2.23	<0.0802	<b>0.0795</b>
	RRMDF-SED-1-220510		5/10/2022	<1.7	<0.0955	<b>0.206</b>
RRMDF-SED-D	RRMDF-SED-D-230516	Sediment	5/16/2023	<b>0.984</b>	<0.0415	<0.0892
RRMDF-SED-1A	RRMDF-SED-1A-190829	Sediment	8/29/2019	—	<0.0984	—
RRMDF-SED-1B	RRMDF-SED-1B-190829		8/29/2019	—	<0.0661	—
RRMDF-SED-1C	RRMDF-SED-1C-190829		8/29/2019	—	<0.0582	—
D-5/6-SED	D-5/6-SED-240509	Sediment	5/9/2024	<1.74	<0.0624	<0.0645
SRE-SED-1	SRE-SED-1-190613	Sediment	6/13/2019	<0.066	<b>0.232</b>	<0.037
	SRE-SED-1-190829		8/29/2019	—	<0.0982	—
SRE-SED-1A	SRE-SED-1A-190829	Sediment	8/29/2019	—	<0.053	—
SRE-SED-1B	SRE-SED-1B-190829		8/29/2019	—	<0.0977	—
SRE-SED-1C	SRE-SED-1C-190829		8/29/2019	—	<0.0435	—
SRE-SED-2	SRE-SED-2-190829	Sediment	8/29/2019	—	<0.0443	—
	SRE-SED-2-200603		6/3/2020	<3.11	<0.0931	0.0567
	SRE-SED-2-210526		5/26/2021	<2.15	<0.0822	<b>0.0729</b>
	SRE-SED-2-220511		5/11/2022	<0.128	<0.0959	<0.0809
SRE-SED-3	SRE-SED-3-230517	Sediment	5/17/2023	<0.0965	<0.0558	<0.0962
SRE-SED-4	SRE-SED-4-240508	Sediment	5/8/2024	<1.79	<0.0546	<0.0819
OS1-SED-1	OS1-SED-1-200603	Sediment	6/3/2020	<3.13	<0.0637	<0.0528
	OS1-SED-1-210526		5/26/2021	<2.04	<0.0812	<b>0.0669</b>
	OS1-SED-1-220511		5/11/2022	<0.814	<0.0965	<0.0875
	OS1-SED-1-230517		5/17/2023	<1.18	<0.0574	<b>0.141</b>
	OS1-SED-240508		5/8/2024	<1.76	<0.0788	<0.0791
OS8-SED-1	OS8-SED-1-190613	Sediment	6/13/2019	<0.161	<b>0.36</b>	<b>0.036</b>
	OS8-SED-1-190830		8/30/2019	—	<0.0644	—
	058-SED-1-200603		6/3/2020	<3.21	<0.0962	<0.0989
	OS8-SED-1-210526		5/26/2021	<2.11	<0.0792	<b>0.109</b>
	OS8-SED-1-220511		5/11/2022	<0.0891	<0.0972	<0.0647
	OS8-SED-1-230517		5/17/2023	<0.847	<0.0324	<b>0.0759</b>
OS8-SED-1A	OS8-SED-1A-190830	Sediment	8/30/2019	—	<0.0821	—
OS8-SED-1B	OS8-SED-1B-190830		8/30/2019	—	<0.0991	—
OS8-SED-1C	OS8-SED-1C-190830		8/30/2019	—	<0.0462	—
HV-SED	HV-SED-240508	Sediment	5/8/2024	<1.84	<0.0726	<0.0887
OW-SED-1	OW-SED-1-190613	Sediment	6/13/2019	<0.101	<0.128	<b>0.030</b>
	OW-SED-1-200603		6/3/2020	<3.28	<0.0989	<b>0.0720</b>
	OW-SED-1-210526		5/26/2021	<2.22	<0.0925	<b>0.147</b>
	OW-SED-1-220511		5/11/2022	<0.0700	<0.0940	<0.0557
	OW-SED-1-230517		5/17/2023	<b>1.02</b>	<0.0594	<b>0.129</b>
	OW-SED-1-240507		5/7/2024	<1.80	<0.0551	<0.0861

**TABLE 3: SOIL AND SEDIMENT ANALYTICAL RESULTS - RADIONUCLIDES**

AJU Brandeis-Bardin Campus  
Brandeis, California

Sample Location	Sample Name	Matrix	Date Collected	Tritium <sup>1</sup>	Strontium-90 <sup>2</sup>	Cesium-137 <sup>3</sup>
				pCi/g		
<b>Background Levels</b>						
	McLaren/Hart (1993; 1995) <sup>4</sup>		None	0.130	0.275	
	Ogden Environmental and Energy Services Co., Inc. (1998) <sup>4</sup>		0.226	None	0.167	
	HydroGeoLogic, Inc. (2012) <sup>5</sup>		7.38	0.075	0.193	
<b>Health-Based Screening Criteria</b>						
	Preliminary Remediation Goals <sup>6</sup>		0.237	13.4	25.3	

Notes:

1. Samples analyzed for tritium using U.S. Environmental Protection Agency (USEPA) Method 906.0 Modified.
2. Samples analyzed for strontium-90 using USEPA Method 905.0 Modified/DOE RP501 Rev. 1 Modified.
3. Samples analyzed for cesium-137 using Department of Energy (DOE) HASL 300, 4.5.2.3/Ga-01-R.
4. Background values were calculated as the mean plus twice the standard deviation of the data in the reports shown. Process further described in Section 3.2.1 in the 2019 Monitoring Report dated November 25, 2019 by GSI Environmental Inc.
5. Background values are drawn from the look-up tables published by HydroGeoLogic, Inc. (2012) and approved by the USEPA.
6. Preliminary remediation goals were generated using the 2019 USEPA calculator. Further details regarding methodology are available in the 2019 Monitoring Report dated 25 November 2019 by GSI Environmental Inc.
7. Results reported on a dry weight basis.

Abbreviations:

**Bold** = analyte detected above the laboratory reporting limit

pCi/g = picocuries per gram

< = Analyte was not detected above the minimum detectable concentration (MDC) shown.

- = Sample not analyzed for analyte indicated.

References:

- HydroGeoLogic, Inc., 2012, Final Technical Memorandum, Look-Up Table Recommendations, Santa Susana Field Laboratory, Area IV Radiological Study, 27 November.
- McLaren/Hart Environmental Engineering Corporation, 1993, Multi-Media Sampling Report for the Brandeis-Bardin Institute and the Santa Monica Mountains Conservancy, Volume I, 10 March.
- McLaren/Hart Environmental Engineering Corporation, 1995, Additional Soil and Water Sampling, The Brandeis-Bardin Institute and Santa Monica Mountains Conservancy, 19 January.
- Ogden Environmental and Energy Services Co., Inc., 1998, Bell Canyon Area, Soil Sampling Report, Ventura County, California, Volume I, October.
- U.S. Environmental Protection Agency (USEPA), 2019, Preliminary Remediation Goals for Radionuclides (PRG), January.

TABLE 4 : SPRING AND SURFACE WATER ANALYTICAL RESULTS - METALS AND PERCHLORATE  
AJU Brandeis-Bardin Campus  
Brandeis, California

Sample Location	Sample Name	Date Collected	Title 22 Metals <sup>1</sup>															Per-chlorate <sup>3</sup>	VOCs <sup>4</sup>			
			Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury <sup>2</sup>	Molyb-denum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Naphthalene	Other VOCs	
																			µg/L			
<b>Spring/Seep Samples</b>																						
OS1-W	OS1-W-190613	6/13/2019	<0.010	<0.010	<b>0.040</b>	<0.0020	<0.0050	<0.010	<b>0.047</b>	<b>0.0063</b>	<0.00020	<0.020	<b>0.0078 J</b>	<0.010	<0.010	<0.010	<0.010	<b>0.63</b>	<0.0040	–	–	
	OS1-W-220511 <sup>5</sup>	5/11/2022	<0.0098	<0.012	<b>0.037</b>	<0.00030	<0.00050	<0.0012	<0.0030	<b>0.016</b>	<b>0.0031 J</b>	<0.000100	<0.0027	<0.0024	<0.013	<0.00084	<0.0090	<0.0019	<b>0.19</b>	<b>0.0020 J</b>	–	–
	OS1-W-230517 <sup>5</sup>	5/17/2023	<0.0098	<0.012	<b>0.048</b>	<0.00030	<0.00050	<0.0012	<0.0030	<b>0.016</b>	<0.0025	<0.000100	<0.0027	<0.0024	<0.013	<b>0.00091 J</b>	<0.0090	<0.0019	<b>1.0</b>	<0.0020 UJ	–	–
OS3-W	OS3-W-190613	6/13/2019	<0.010	<0.010	<b>0.039</b>	<0.0020	<0.0050	<0.010	<b>0.0083 J</b>	<0.0050	<0.00020	<0.020	<b>0.0055 J</b>	<0.010	<0.010	<0.010	<0.010	<0.020	<0.0040	–	–	
	OS3-W-200602	6/2/2020	<0.010	<0.010	<b>0.038</b>	<0.0020	<0.0050	<0.010	<0.0050	<0.010	<0.0050	<0.020	<0.010	<0.010	<0.010	<0.010	<0.010	<0.020	<0.0040	<1.0	None	
OS357-W	OS357-W-200602	6/2/2020	<0.010	<0.010	<b>0.034</b>	<0.0020	<0.0050	<0.010	<0.0050	<0.010	<0.0050	<0.020	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.048	<1.0	None	
	OS357-W-210525 <sup>5</sup>	5/25/2021	<0.0098	<0.012	<b>0.039</b>	<b>0.00055 J</b>	<0.00050	<0.0012	<0.0030	<0.0021	<0.0025	<0.00010	<0.0027	<0.0024	<0.013	<0.00084	<0.0090	<0.0019	<0.0030	<0.0020	<0.48	None
	OS357-W-220510 <sup>5</sup>	5/10/2022	<0.0098	<0.012	<b>0.036</b>	<0.00030	<0.00050	<0.0012	<0.0030	<0.0021	<0.0025	<0.000100	<0.0027	<0.0024	<0.013	<0.00084	<0.0090	<0.0019	<0.0030	<0.0020 UJ	–	–
	OS357-W-230516 <sup>5</sup>	5/16/2023	<0.0098	<0.012	<b>0.043</b>	<b>0.0013 J</b>	<0.00050	<b>0.0018 J</b>	<0.0030	<0.0021	<0.0025	<0.000100	<0.0027	<0.0024	<0.013	<b>0.0011 J</b>	<0.0090	<0.0019	<b>0.0055 J</b>	<0.0040 UJ	–	–
OS8-W	OS8-W-200603	6/3/2020	<0.010	<0.010	<b>0.046</b>	<0.0020	<0.0050	<0.010	<0.0050	<0.010	<0.0050	<0.020	<0.010	<0.010	<0.010	<0.010	<0.010	<0.020	<0.0040	<b>3.0 J</b>	None	
	OS8-W-210526 <sup>5</sup>	5/26/2021	<0.0098	<0.012	<b>0.11</b>	<0.00030	<0.00050	<b>0.0027 J</b>	<0.0030	<b>0.0042 J</b>	<b>0.0028 J</b>	<0.00010	<0.0027	<0.0024	<0.013	<b>0.0016 J</b>	<0.0090	<b>0.010</b>	<b>0.027</b>	<0.0020	<0.48	None
	OS8-W-220511 <sup>5</sup>	5/11/2022	<0.0098	<0.012	<b>0.056</b>	<0.00030	<0.00050	<0.0012	<0.0030	<0.0021	<0.0025	<0.000100	<0.0027	<0.0024	<0.013	<0.00084	<0.0090	<0.0019	<0.0030	<0.0020 UJ	–	–
	OS8-W-230517 <sup>5</sup>	5/17/2023	<0.0098	<0.012	<b>0.046</b>	<b>0.00041 J</b>	<0.00050	<b>0.0016 J</b>	<0.0030	<0.0021	<0.0025	<0.000100	<0.0027	<0.0024	<0.013	<0.00084	<0.0090	<0.0019	<0.0030	<0.0020 UJ	–	–
OW-W	OW-W-230517 <sup>5</sup>	5/17/2023	<0.0098	<b>0.022</b>	<b>0.31</b>	<0.00030	<0.00050	<0.0012	<0.0030	<b>0.0053 J</b>	<b>0.0026 J</b>	<0.000100	<0.0027	<0.0024	<0.013	<0.00084	<0.0090	<b>0.015</b>	<b>0.013</b>	<0.0020 UJ	–	–
	OW-W-240508 <sup>5</sup>	5/8/2024	<0.025	<0.020	<b>0.040</b>	<0.0013	<0.00062	<0.0030	<0.00088	<0.0027	<0.0053	<0.00012	<0.0039	<0.0031	<0.016	<0.0026	<0.010	<0.0024	<0.013	<0.00091	–	–
<b>Surface Water Samples</b>																						
SRE-W	SRE-W-200603	6/3/2020	<0.010	<0.010	<b>0.13</b>	<0.0020	<0.0050	<b>0.015</b>	<0.010	<b>0.019</b>	<b>0.012</b>	<0.00020	<0.020	<0.010	<0.010	<0.010	<b>0.031</b>	<b>0.086</b>	<0.004	<1.0	None	
	SRE-W-220511 <sup>5</sup>	5/11/2022	<0.0098	<0.012	<b>0.056</b>	<0.00030	<0.00050	<b>0.0027 J</b>	<0.0030	<b>0.0025 J</b>	<0.0025	<0.000100	<0.0027	<0.0024	<0.013	<0.00084	<0.0090	<b>0.0061</b>	<b>0.0099 J</b>	<0.0020 UJ	–	–
	SRE-W-230517 <sup>5</sup>	5/17/2023	<0.0098	<0.012	<b>0.055</b>	<0.00030	<0.00050	<0.0012	<0.0030	<b>0.0041 J</b>	<0.0025	<0.000100	<b>0.0029 J</b>	<0.0024	<0.013	<0.00084	<0.0090	<b>0.0028 J</b>	<b>0.0044 J</b>	<0.0040 UJ	–	–
RRMDF-W	RRMDF-W-D-230516 <sup>5</sup>	5/16/2023	<0.0098	<0.012	<b>0.061</b>	<b>0.00030 J</b>	<0.00050	<b>0.0013 J</b>	<0.0030	<0.0021	<0.0025	<0.000100	<0.0027	<0.0024	<0.013	<0.00084	<0.0090	<0.0019	<0.0030	<0.0010 UJ	–	–
D-5/6-W	D-5/6-W-240509 <sup>5</sup>	5/9/2024	<0.025	<0.020	<b>0.058</b>	<0.0013	<0.00062	<0.0030	<0.00088	<0.0027	<0.0053	<0.00012	<0.0039	<0.0031	<0.016	<0.0026	<0.010	<0.0024	<0.013	<0.00091	–	–
HV-W	HV-W-2402508 <sup>5</sup>	5/8/2024	<0.025	<0.020	<b>0.047</b>	<0.0013	<0.00062	<0.0030	<0.00088	<0.												

**TABLE 5: SPRING AND SURFACE WATER ANALYTICAL RESULTS - RADIONUCLIDES**  
**AJU Brandeis-Bardin Campus**  
Brandeis, California

Sample Location	Sample Name	Date Collected	Tritium <sup>1</sup>	Strontium-90 <sup>2</sup>	Cesium-137 <sup>3</sup>
			pCi/L		
<b>Spring/Seep Samples</b>					
OS1-W	OS1-W-190613	6/13/2019	<310	<0.66	<7.1
	OS1-W-220511	5/11/2022	<625	<1.90	<7.48
	OS1-W-230517	5/17/2023	<554	<1.82	<6.13
OS3-W	OS3-W-190613	6/13/2019	<310	<0.65	<5.1
	OS3-W-200602	6/2/2020	<368	<1.28	<8.15
OS357-W	OS357-W-200602	6/2/2020	<362	<1.32	<6.86
	OS357-W-210525	5/25/2021	<401	<0.976	<8.58
	OS357-W-220510	5/10/2022	<633	<1.87	<8.55
	OS357-W-230516	5/16/2023	<532	<1.85	<6.08
OS8-W	OS8-W-200603	6/3/2020	<360	<1.37	<8.20
	OS8-W-210526	5/26/2021	<410	<1.17	<5.69
	OS8-W-220511	5/11/2022	<632	<1.82	<10.1
	OS8-W-230517	5/17/2023	<545	<1.89	<545
OW-W	OW-W-230517	5/17/2023	<551	<1.84	<7.72
	OW-W-240508	5/8/2024	<338	<1.39	<6.92
<b>Surface Water Samples</b>					
SRE-W	SRE-W-200603	6/3/2020	<360	<1.54	<6.76
	SRE-W-220511	5/11/2022	<622	<1.88	<6.17
	SRE-W-230517	5/17/2023	<549	<1.86	<5.64
RRMDF-W-D	RRMDF-W-D-230516	5/16/2023	<559	<1.91	<6.34
D-5/6-W	D-5/6-W-240509	5/9/2024	<346	<1.37	<6.82
HV-W	HV-W-240508	5/8/2024	<344	<1.70	<7.89
OS1-W <sup>4</sup>	OS1-W-240508	5/8/2024	<340	<1.26	<8.23
<b>Screening Criteria</b>					
Maximum Contaminant Level <sup>4</sup>			20,000	8.0	None
SSFL Groundwater Comparison Concentrations <sup>5</sup>			20,000	8.0	200

Notes:

1. Samples analyzed for total tritium using U.S. Environmental Protection Agency (USEPA) Method 906.0 Modified.
2. Samples analyzed for total strontium-90 using USEPA Method 905.0 Modified/Department of Energy (DOE) RP501 Rev. 1 Modified.
3. Samples analyzed for total cesium-137 using USEPA Method 901.1.
4. California maximum contaminant levels as established in Title 22 of the California Code of Regulations.
5. Concentrations are based on the maximum contaminant level or are based on the effective dose equivalent of 4 millirems per year (see Stantec, 2019).

Abbreviations:

pCi/L = picocuries per liter

< = Analyte was not detected above the minimum detectable concentration (MDC) shown.  
detectable concentration is displayed.

References:

Stantec Consulting Services, 2019, Boeing Report on Annual Groundwater Monitoring, 2018, Santa Susana Field Laboratory, Ventura County, California, Stantec PN: 185865105, 22 February.

**TABLE 6: FRUIT ANALYTICAL RESULTS - METALS AND PERCHLORATE**  
**AJU Brandeis-Bardin Campus**  
Brandeis, California

Sample Location	Sample Name	Matrix	Date Collected	Antimony		Arsenic		Barium		Beryllium		Cadmium		Chromium		Cobalt		Copper		Lead		Mercury <sup>2</sup>	
				PRG <sup>4</sup>	Conc.	PRG	Conc.	PRG	Conc.	PRG	Conc.	PRG	Conc.	PRG	Conc.	PRG	Conc.	PRG	Conc.	PRG	Conc.	PRG	Conc.
				$\mu\text{g/kg}$																			
<b>On-Site Samples</b>																							
AV-1	AV-1-200604	Avocado	6/4/2020	11,000	<b>1,450</b>	0.77	<475	540,000	<b>214</b>	540	<95.1	2,700	<95.1	4,100,000	<143	810	<143	110,000	<b>4,500</b>	Note 5	<314	430	<6.81
A-1	A-1-200604	Apple	6/4/2020	15,000	<330	1.10	<500	740,000	<b>225</b>	740	<100	3,700	<100	5,600,000	<150	1,100	<150	150,000	<b>563</b>	Note 5	<b>397</b>	590	<7.73
G-1	G-1-200604	Grapefruit	6/4/2020	890	<b>343</b>	0.06	<453	45,000	<b>602</b>	44.5	<90.6	220	<90.6	330,000	<136	66.8	<136	8,900	<b>435</b>	Note 5	<299	35.6	<7.20
	G-1-230518		5/18/2023		<b>643 J</b>		<b>521 J</b>		<b>518</b>		<89.9		<89.9		<135		<b>288 J</b>		Note 5	<297	35.6	<7.36 hH	
	G-1-240507		5/7/2024		<299		<453		<b>407 J</b>		<90.6		<90.6		<136		<b>418 J</b>			<299		<6.88	
O-1	O-1-200604	Orange	6/4/2020	890	<303	0.06	<459	45,000	<b>883</b>	44.5	<91.7	220	<91.7	330,000	<138	66.8	<138	8,900	<b>454</b>	Note 5	<303	35.6	<7.08
	O-1-220512		5/12/2022		<b>646 B</b>		<b>457 J</b>		<b>1,230</b>		<95.2		<95.2		<143		<b>735 J</b>		<314	<7.31 UJ			
	O-1-230518		5/18/2023		<b>520 J</b>		<b>823 J</b>		<b>338 J</b>		<93.5		<93.5		<140		<b>595 J</b>		<308	<7.47 hH			
	O-1-240507		5/7/2024		<b>671 J B</b>		<b>338 J</b>		<b>338 J</b>		<98.8		<98.8		<148		<b>459 J</b>		<326	<7.08			
L-1	L-1-200604	Lemon	6/4/2020	890	<304	0.06	<461	45,000	<b>437</b>	44.5	<92.3	220	<92.3	330,000	<138	66.8	<138	8,900	<b>367</b>	Note 5	<304	35.6	<7.67
	L-1-210527		5/27/2021		<b>496 J</b>		<b>423 J</b>		<b>513</b>		<91.1		<91.1		<137		<b>521 J</b>		<301	<7.64			
	L-1-220512		5/12/2022		<b>814 B</b>		<b>451</b>		<b>1,690</b>		<90.3		<90.3		<135		<b>579 J</b>		<298	<7.42 UJ			
	L-1-230518		5/18/2023		<b>819 J</b>		<b>376 J</b>		<b>376 J</b>		<92.8		<92.8		<139		<b>330 J</b>		<306	<7.05 hH			
	L-1-240507		5/7/2024		<293		<443		<443		<88.7		<88.7		<133		<133		<293	<6.88			
<b>Off-Site Reference Samples</b>																							
AV-2	AV-2-200604	Avocado	6/4/2020	11,000	<315	0.77	<477	540,000	<95.4	540	<95.4	2,700	<95.4	4,100,000	<143	810	<143	110,000	<b>3,240</b>	Note 5	<b>446</b>	430	<7.50
A-2	A-2-200604	Apple	6/4/2020	15,000	<b>460</b>	1.10	<480	740,000	<b>343</b>	740	<96.0	3,700	<96.0	5,600,000	<144	1,100	<144	150,000	<b>426</b>	Note 5	<317	590	<7.31
G-2	G-2-200604	Grapefruit	6/4/2020	890	<b>516</b>	0.06	<481	45,000	<b>149</b>	44.5	<96.2	220	<96.2	330,000	<144	66.8	<144	8,900	<b>3,360</b>	Note 5	<b>431</b>	35.6	<7.50
	G-2-230518		5/18/2023		<b>397 J</b>		<b>516 J</b>		<b>252 J</b>		<94.7		<94.7		<142		<b>458 J</b>		<313	<7.3 hH			
	G-2-240507		5/7/2024		<b>355 J B</b>		<b>441 J</b>		<b>695</b>		<90.6		<90.6		<136		<b>306 J</b>		<299	<6.86			
O-2	O-2-200604	Orange	6/4/2020	890	<307	0.06	<466	45,000	<b>313</b>	44.5	<93.1	220	<93.1	330,000	<140	66.8	<140	8,900	<b>636</b>	Note 5	<307	35.6	<8.01
	O-2-220512		5/12/2022		<b>737 B</b>		<b>346 J</b>		<b>914</b>		<94.7		<94.7		<142		<b>1,060 J</b>		<313	<7.85 UJ			
	O-2-230518		5/18/2023		<b>625 J</b>		<b>914</b>		<b>695</b>		<97.8		<97.8		<147		<b>828 J</b>		<323	<6			

**TABLE 6: FRUIT ANALYTICAL RESULTS - METALS AND PERCHLORATE**  
**AJU Brandeis-Bardin Campus**  
Brandeis, California

Sample Location	Sample Name	Matrix	Date Collected	Molybdenum		Nickel		Selenium		Silver		Thallium		Vanadium		Zinc		Perchlorate	
				PRG	Conc.	PRG	Conc.	PRG	Conc.	PRG	Conc.	PRG	Conc.	PRG	Conc.	PRG	Conc.	PRG	Conc.
				$\mu\text{g/kg}$															
<b>On-Site Samples</b>																			
AV-1	AV-1-200604	Avocado	6/4/2020	14,000	<190	30,000	<143	14,000	<475	14,000	<95.1	27.0	<475	14,000	<95.1	810,000	<b>5,610</b>	1,900	<0.437
A-1	A-1-200604	Apple	6/4/2020	19,000	<200	41,000	<150	19,000	<500	19,000	<100	37.0	<500	19,000	<100	1,100,000	<b>1,480 J</b>	2,600	<0.455
G-1	G-1-200604	Grapefruit	6/4/2020	1,100	<181	2,400	<136	1,100	<453	1,100	<90.6	2.23	<453	1,100	<90.6	67,000	<b>2,400</b>	160	<4.05
	G-1-230518		5/18/2023		<180		<135		<b>971 J</b>		<89.9		<450		<89.9		<b>1,350 J</b>		<2.53 UJ
	G-1-240507		5/7/2024		<181		<136		<b>707 J</b>		<90.6		<453		<90.6		<b>687 J</b>		<2.36 UJ
O-1	O-1-200604	Orange	6/4/2020	1,100	<183	2,400	<b>315 J</b>	1,100	<459	1,100	<91.7	2.23	<459	1,100	<91.7	67,000	<b>3,230</b>	160	<10.2
	O-1-220512		5/12/2022		<190		<b>738 B</b>		<95.2		<95.2		<476		<95.2		<b>1,750 J</b>		<b>0.440 J</b>
	O-1-230518		5/18/2023		<187		<b>206 J</b>		<93.5		<93.5		<467		<93.5		<b>2,160</b>		<b>0.595 hJ</b>
	O-1-240507		5/7/2024		<198		<148		<494		<98.8		<494		<98.8		<b>813 J</b>		<2.36 UJ
L-1	L-1-200604	Lemon	6/4/2020	1,100	<185	2,400	<138	1,100	<461	1,100	<92.3	2.23	<461	1,100	<92.3	67,000	<b>3,450</b>	160	<10.6
	L-1-210527		5/27/2021		<182		<137		<455		<91.1		<455		<91.1		<b>5,770 J</b>		<0.403
	L-1-220512		5/12/2022		<181		<135		<b>1,340 B</b>		<90.3		<451		<90.3		<b>4,390</b>		<0.431 UJ
	L-1-230518		5/18/2023		<186		<b>145 J</b>		<b>891 J</b>		<92.8		<464		<92.8		<b>2,920</b>		<0.495 h
	L-1-240507		5/7/2024		<177		<133		<b>733 J</b>		<88.7		<443		<88.7		<b>844 J</b>		<1.97 UJ
<b>Off-Site Reference Samples</b>																			
AV-2	AV-2-200604	Avocado	6/4/2020	14,000	<191	30,000	<b>245 J</b>	14,000	<477	14,000	<95.4	27.0	<477	14,000	<95.4	810,000	<b>4,970</b>	1,900	<0.840
A-2	A-2-200604	Apple	6/4/2020	19,000	<192	11,000	<b>151 J</b>	19,000	<480	19,000	<96.0	37.0	<480	19,000	<96.0	1,100,000	<b>2,270</b>	2,600	<0.459
G-2	G-2-200604	Grapefruit	6/4/2020	1,100	<192	2,450	<144	1,100	<481	1,100	<96.2	2.23	<481	1,100	<96.2	67,000	<b>4,370</b>	160	<4.29
	G-2-230518		5/18/2023		<189		<142		<b>604 J</b>		<94.7		<473		<94.7		<b>1,690 J</b>		<0.500 h
	G-2-240507		5/7/2024		<181		<136		<b>1,010 J</b>		<90.6		<453		<90.6		<b>473 J</b>		<2.06 UJ
O-2	O-2-200604	Orange	6/4/2020	1,100	<186	2,450	<b>143 J</b>	1,100	<466	1,100	<93.1	2.23	<466	1,100	<93.1	67,000	<b>4,050</b>	160	<10.7
	O-2-220512		5/12/2022		<189		<b>1,280 B</b>		<94.7		<94.7		<473		<94.7		<b>2,140</b>		<b>1.23 J</b>
	O-2-230512		5/18/2023		<196		<b>1,070 J</b>		<97.8		<97.8		<489		<97.8		<b>2,430</b>		<0.483 h
	O-2-240507		5/7/2024		<195		<b>1,320 J</b>		<97.3		<97.3		<486		<97.3		<b>527 J</b>		<2.28 UJ
L-2	L-2-200604	Lemon	6/4/2020	1,100	<198	2,450	<148	1,100	<494	1,100	<98.8	2.23	<494	1,100	<98.8	67,000	<b>1,700 J</b>	160	<10.0
	L-2-210527		5/27/2021		<195		<146		<486		<97.3		<486		<97.3		<b>5,240 J</b>		<0.426
	L-2-220512		5/12/2022		<174		<131		<b>695 B</b>		<87.1		<436		<87.1		<b>3,020</b>		

**TABLE 7: FRUIT ANALYTICAL RESULTS - RADIONUCLIDES**  
**AJU Brandeis-Bardin Campus**  
 Brandeis, California

Sample Location	Sample Name	Sample Type	Date Collected	Tritium <sup>1</sup>		Strontium-90 <sup>2</sup>		Cesium-137 <sup>3</sup>	
				PRG <sup>4</sup>	Concentration	PRG <sup>4</sup>	Concentration	PRG <sup>4</sup>	Concentration
				<i>pCi/g<sup>5</sup></i>					
<b>On-Site Samples</b>									
AV-1	AV-1-190830	Avocado	8/30/2019	7.76	—	3.21	<0.227	16.8	—
	AV-1-200604		6/4/2020		<3.28		<0.237		<0.0288
A-1	A-1-190830	Apple	8/30/2019	9.5	—	3.9	<0.187	20.5	—
	A-1-200604		6/4/2020		<4.90		<0.0447		<0.0115
G-1	G-1-190830	Grapefruit	8/30/2019	2.04	—	0.843	<0.212	4.41	—
	G-1-200604		6/4/2020		<4.78		<0.0714		<0.0134
	G-1-230518		5/18/2023		<1.75		<0.00830		<0.0109
	G-1-240507		5/7/2024		<1.27		<0.0749		<0.0227
O-1	O-1-200604	Orange	6/4/2020	2.04	<4.98	0.843	<0.0488	4.41	<0.0113
	O-1-220512		5/12/2022		<1.33		<0.0346		<0.0101
	O-1-230518		5/18/2023		<1.68		<0.00748		<0.00928
	O-1-240507		5/7/2024		<1.27		<0.0759		<0.0130
L-1	L-1-190830	Lemon	8/30/2019	2.04	—	0.843	<0.117	4.41	—
	L-1-200604		6/4/2020		<4.57		<0.0419		<0.00739
	L-1-210527		5/27/2021		<1.13 UJ		<0.119		<0.0120
	L-1-220512		5/12/2022		<1.27		<0.0356		<0.00605
	L-1-230518		5/18/2023		<1.87		<0.00570		<0.0102
	L-240507		5/7/2024		<1.28		<0.102		<0.0180
<b>Off-Site Reference Samples</b>									
AV-2	AV-2-190830	Avocado	8/30/2019	7.76	—	3.21	<0.225	16.8	—
	AV-2-200604		6/4/2020		<4.64		<0.140		<0.0145
A-2	A-2-190830	Apple	8/30/2019	9.5	—	3.9	<0.151	20.5	—
	A-2-200604		6/4/2020		<3.28		<0.0634		<0.0123
G-2	G-2-190830	Grapefruit	8/30/2019	2.04	—	0.843	<0.150	4.41	—
	G-2-200604		6/4/2020		<3.38		<0.0425		<0.00968
	G-2-230518		5/18/2023		<1.55		<0.00798		<0.00985
	G-2-2402507		5/7/2024		<1.29		<0.0589		<0.0102
O-2	O-2-200604	Orange	6/4/2020	2.04	<4.63	0.843	<0.0467	4.41	<0.0308
	O-2-220512		5/12/2022		<1.30		<0.0342		<0.0111
	O-2-230518		5/18/2023		<1.48		<0.00821		<0.0113
	O-2-240507		5/7/2024		<1.29		<0.128		<0.0130
L-2	L-2-190830	Lemon	8/30/2019	2.04	—	0.843	<0.126	4.41	—
	L-2-1200604		6/4/2020		<3.25		<0.0440		<0.0114
	L-2-210527		5/27/2021		<0.960 UJ		<0.0332		<0.0119
	L-2-220512		5/12/2022		<1.34		<0.0301		<0.0114
	L-2-230518		5/12/2023		<1.71		<0.00495		<0.00888
	L-2-240507		5/7/2024		<1.28		<0.151		<0.0115

Notes:

1. Samples analyzed for tritium using U.S. Environmental Protection Agency (USEPA) Method 906.0 or equivalent.
2. Samples analyzed for strontium-90 using USEPA Method 905.0 Modified/Department of Energy (DOE) RP501 Rev. 1 Modified.
3. Samples analyzed for cesium-137 using DOE HASL 300, 4.5.2.3/Ga-01-R.
4. Preliminary remediation goals assuming a residential exposure scenario for each produce type were calculated using the 2019 USEPA calculator.
5. Where an analyte is reported by the laboratory at an estimated concentration that is less than the minimum detectable concentration (MDC), the result is shown as less than the MDC.

Abbreviations:

pCi/g = picocuries per gram

PRG = preliminary remediation goal

UJ = The analyte was analyzed for, but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

- = not analyzed

< = analyte was not detected above the MDC shown

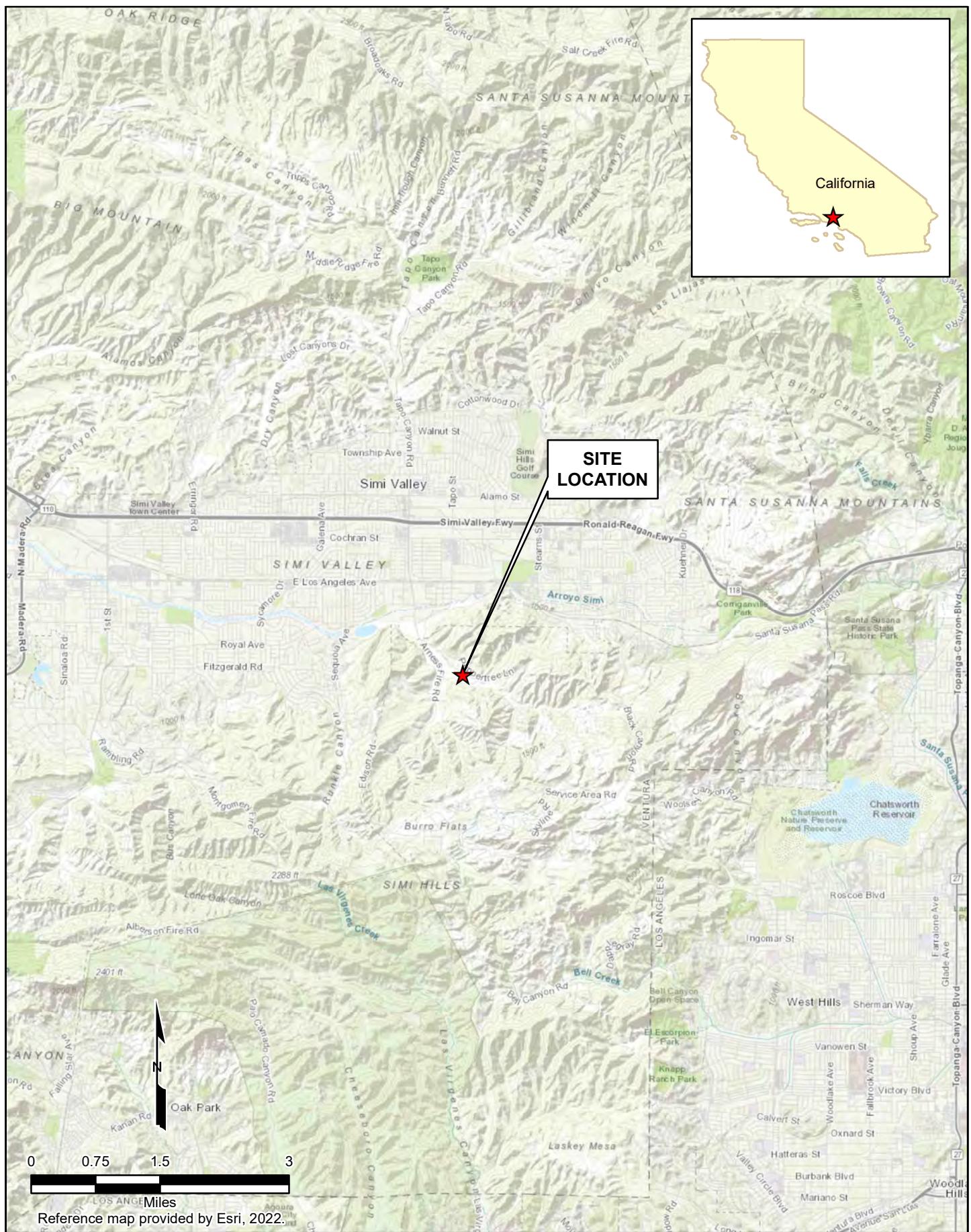
References:

U.S. Environmental Protection Agency (USEPA), 2019, Preliminary Remediation Goals for Radionuclides (PRG), January.

**2024 MONITORING REPORT  
AJU Brandeis-Bardin Campus  
Brandeis, CA**

**FIGURES**

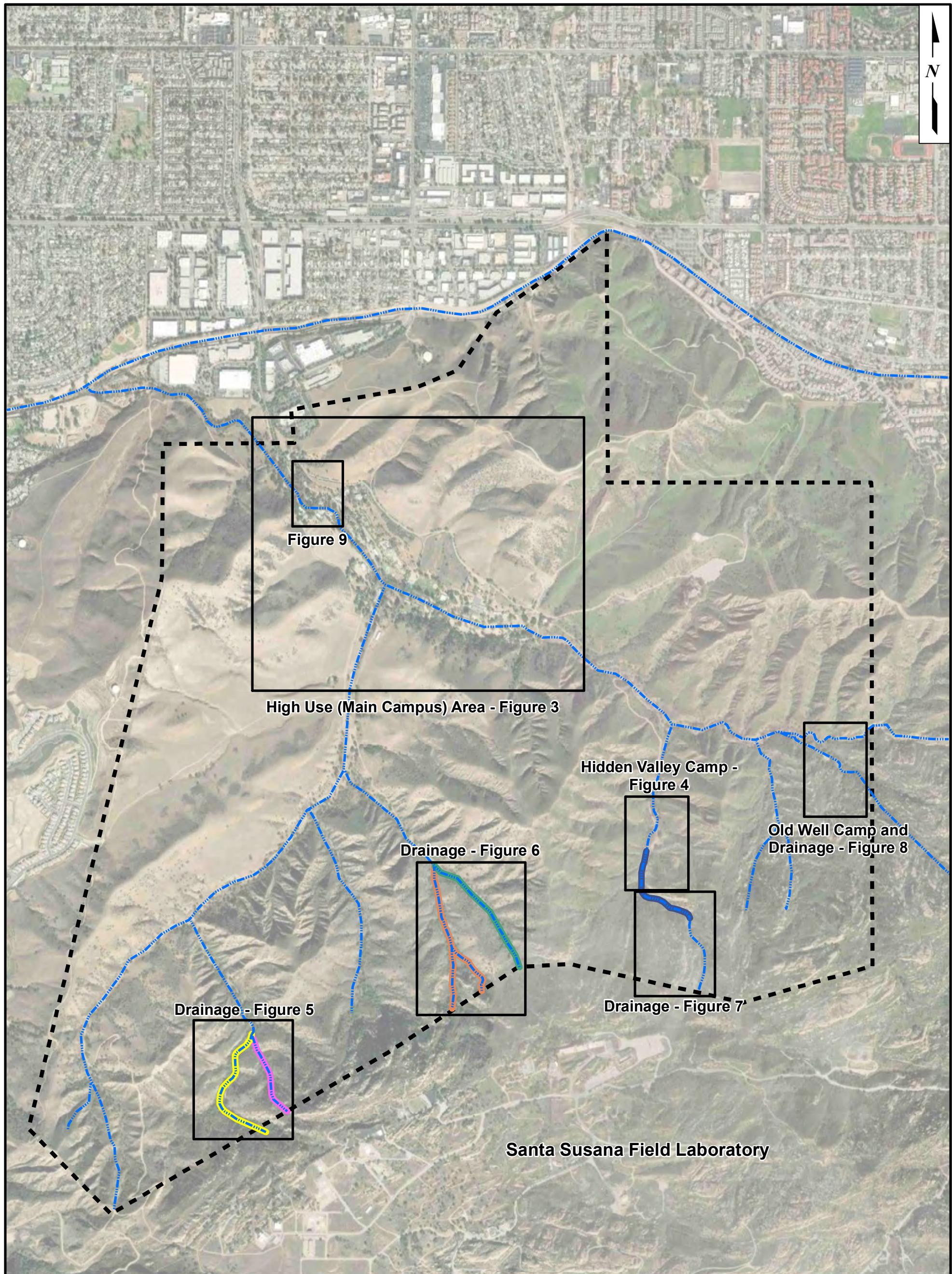
- Figure 1 Site Location Map
- Figure 2 Site Map and Features
- Figure 3 Main Campus Area Map and Sampling Locations
- Figure 4 Hidden Valley Camp Sampling Locations
- Figure 5 Drainage Area Sampling Locations D-5/6-SED and D-5/6-W
- Figure 6 Drainage Area Sampling Location SRE-SED-4 and OS1-SED/OS1-W
- Figure 7 Drainage Area Sampling Locations HV-SED-1 and HV-W
- Figure 8 Drainage Area Sampling Locations OW-SED-1 and OW-W
- Figure 9 Fruit Orchard Sampling Locations



GSI Job No.	5182	Drawn by:	AV
Issued:	25-Jun-2024	Chk'd by:	MPG
Revised:		Aprv'd by:	SMG
Map ID:	AJU_SiteLocMap	<b>FIGURE 1</b>	

## SITE LOCATION MAP

American Jewish University, Brandeis-Bardin Campus  
1101 Peppertree Lane, Brandeis, California

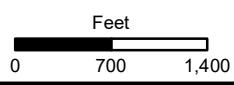


Note:

Imagery downloaded from Esri ArcGIS Online,  
November 2022.

LEGEND

- |  |                 |  |                         |
|--|-----------------|--|-------------------------|
|  | SiteBoundary    |  | OS8 Drainage            |
|  | Drainages       |  | Reactor and RMDF Runoff |
|  | Burn Pit Runoff |  | SRE Runoff              |
|  | OS1 Runoff      |  |                         |





#### LEGEND

- Soil Sampling Location
- Approximate Site Boundary
- Site Feature
- Intermittent Stream

#### Note

Imagery downloaded from Esri ArcGIS Online, November 2022.

Scale (Feet)  
0 200 400

Projected Coordinate System  
Datum: NAD 1983  
State Plane California Zone V  
Units: Feet

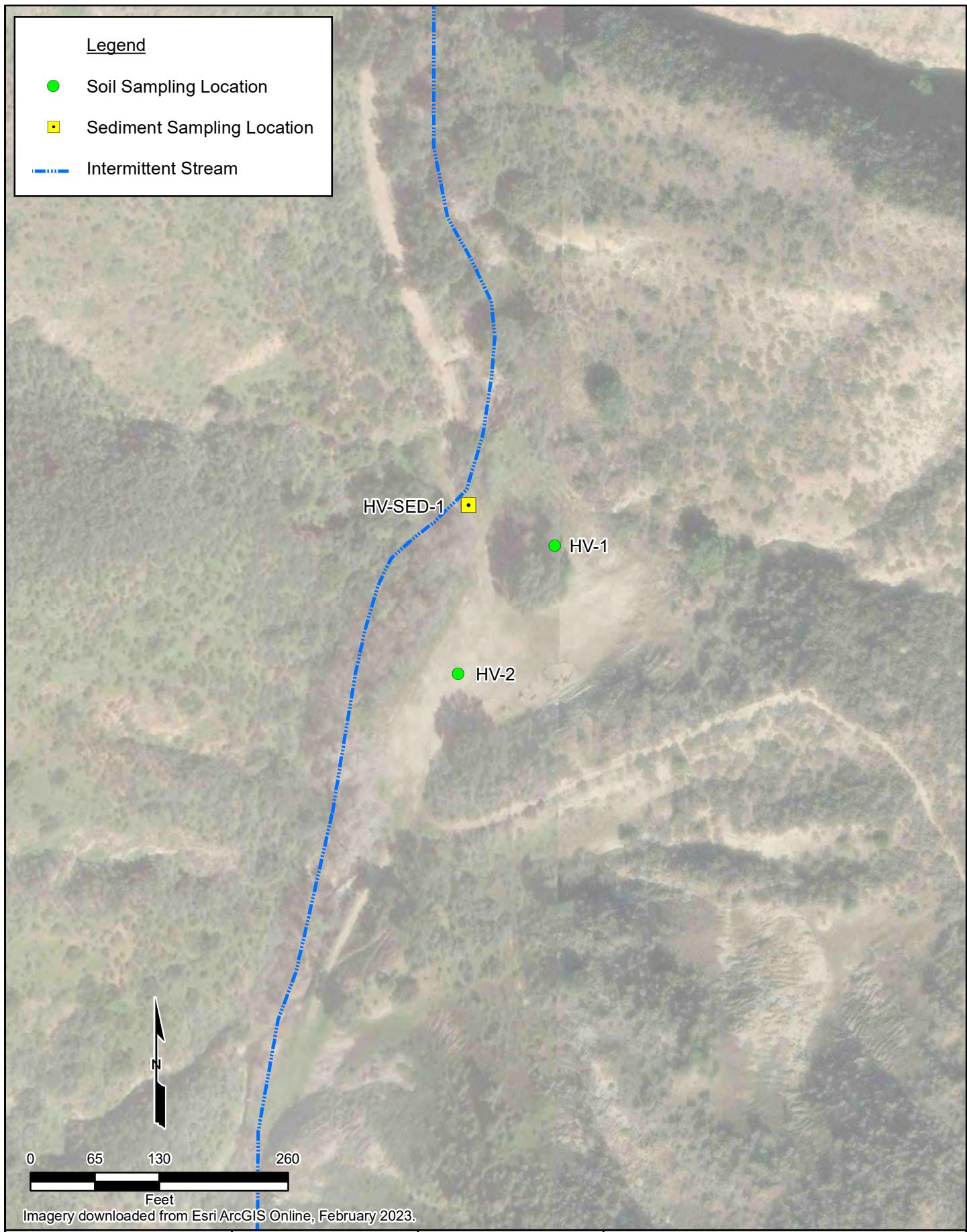


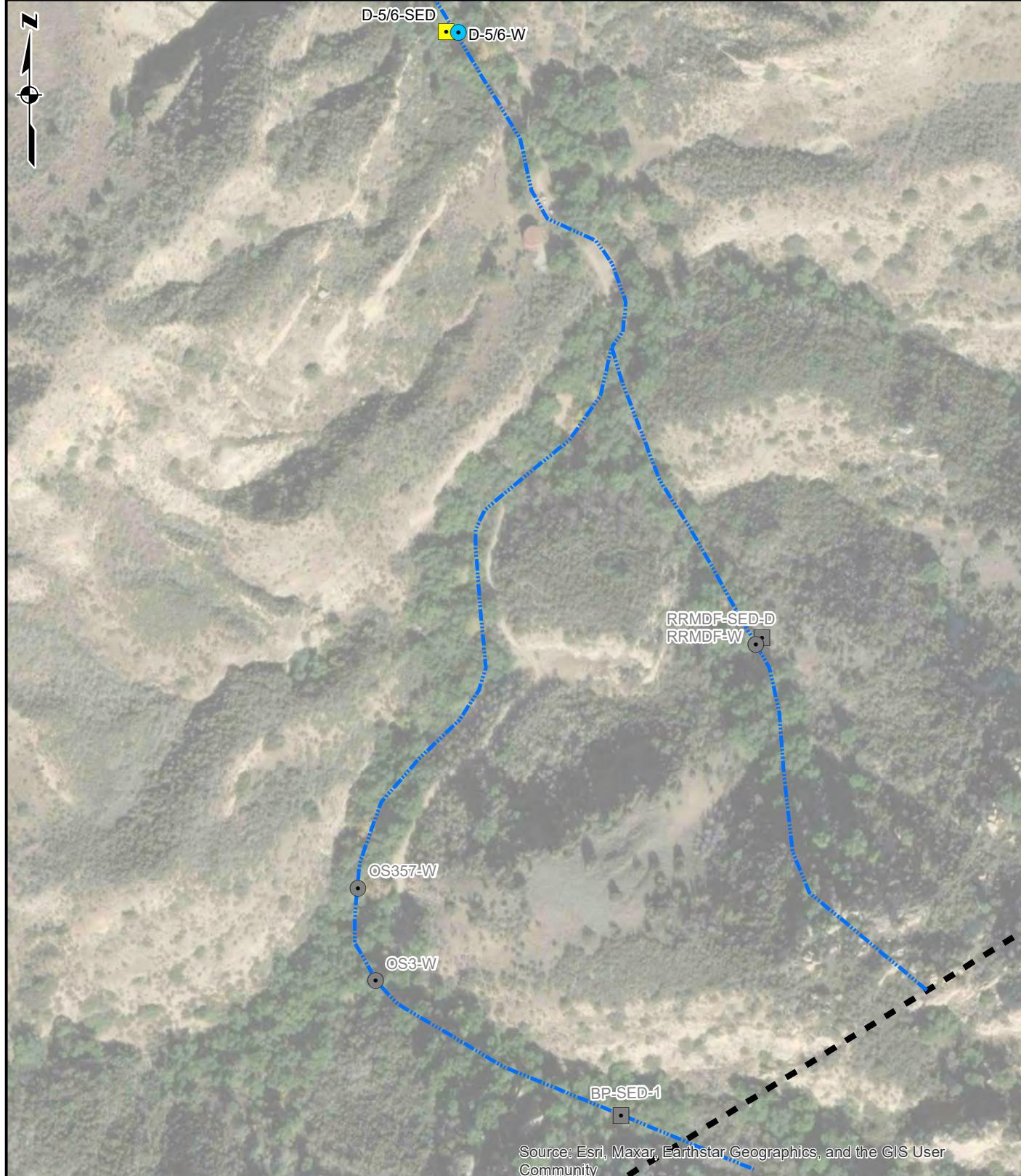
#### MAIN CAMPUS AREA MAP AND SAMPLING LOCATIONS

American Jewish University, Brandeis-Bardin Campus  
1101 Peppertree Lane, Brandeis, California

GSI Job No.	5182	Drawn By:	AV
Issued:	25-Jun-2024	Chk'd By:	MPG
Map ID:	AJU_MainCampusLand	Appv'd By:	SMG

FIGURE 3





#### LEGEND

- Sediment Sampling Location
- Water Sampling Location
- Former Sampling Location
- Intermittent Stream
- Approximate Site Boundary

#### DRAINAGE AREA SAMPLING LOCATIONS D-5/6-SED AND D-5/6-W

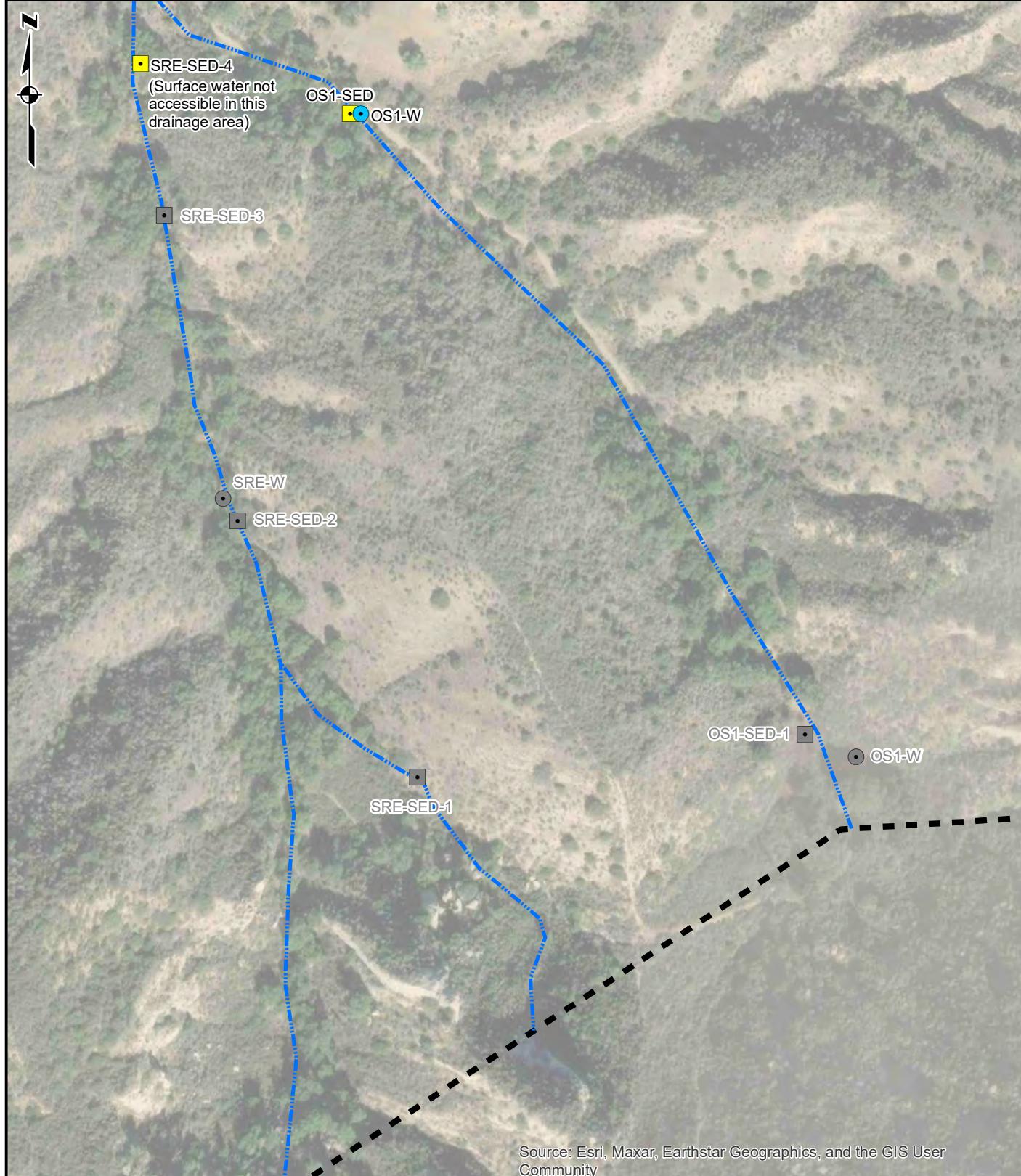
American Jewish University, Brandeis-Bardin Campus  
1101 Peppertree Lane, Brandeis, California



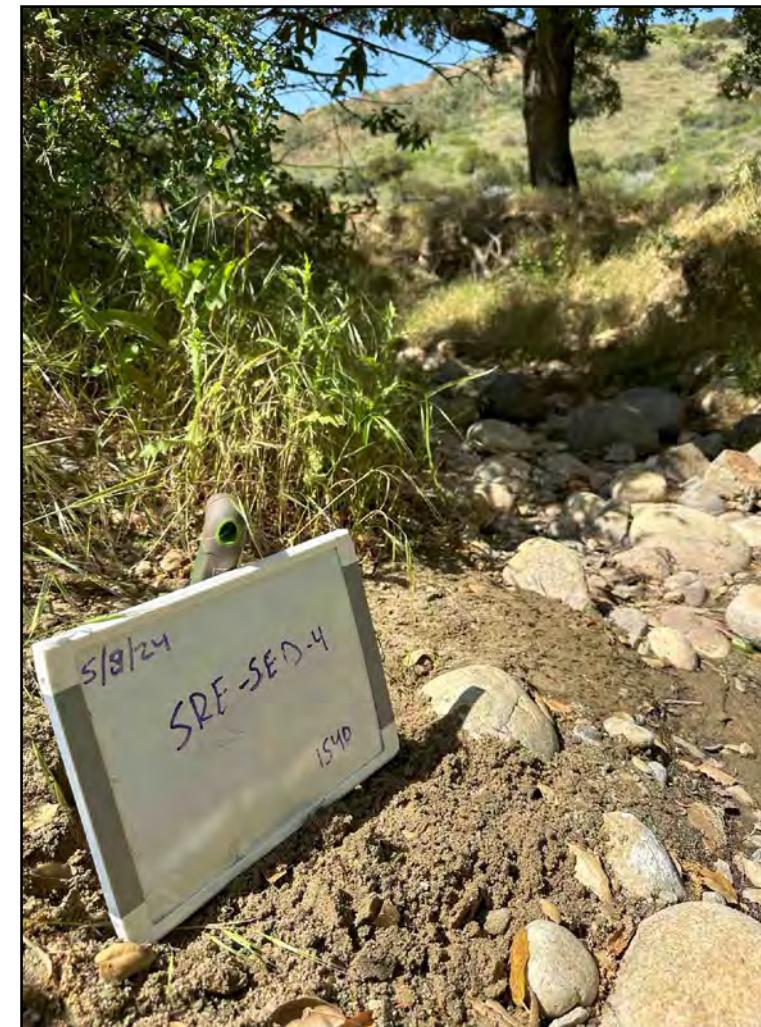
GSI Job No.	5182	Drawn By:	AV
Issued:	25-Jun-2024	Chk'd By:	MPG
Map ID:	AJU_BurnPit_0524	Appv'd By:	SMG

Scale in Feet  
0 125 250  
State Plane  
California Zone V  
Datum: NAD 83

**FIGURE 5**



**SRE-SED-4**



**DRAINAGE AREA SAMPLING LOCATIONS  
SRE-SED-4 AND OS1-SED/OS1-W**

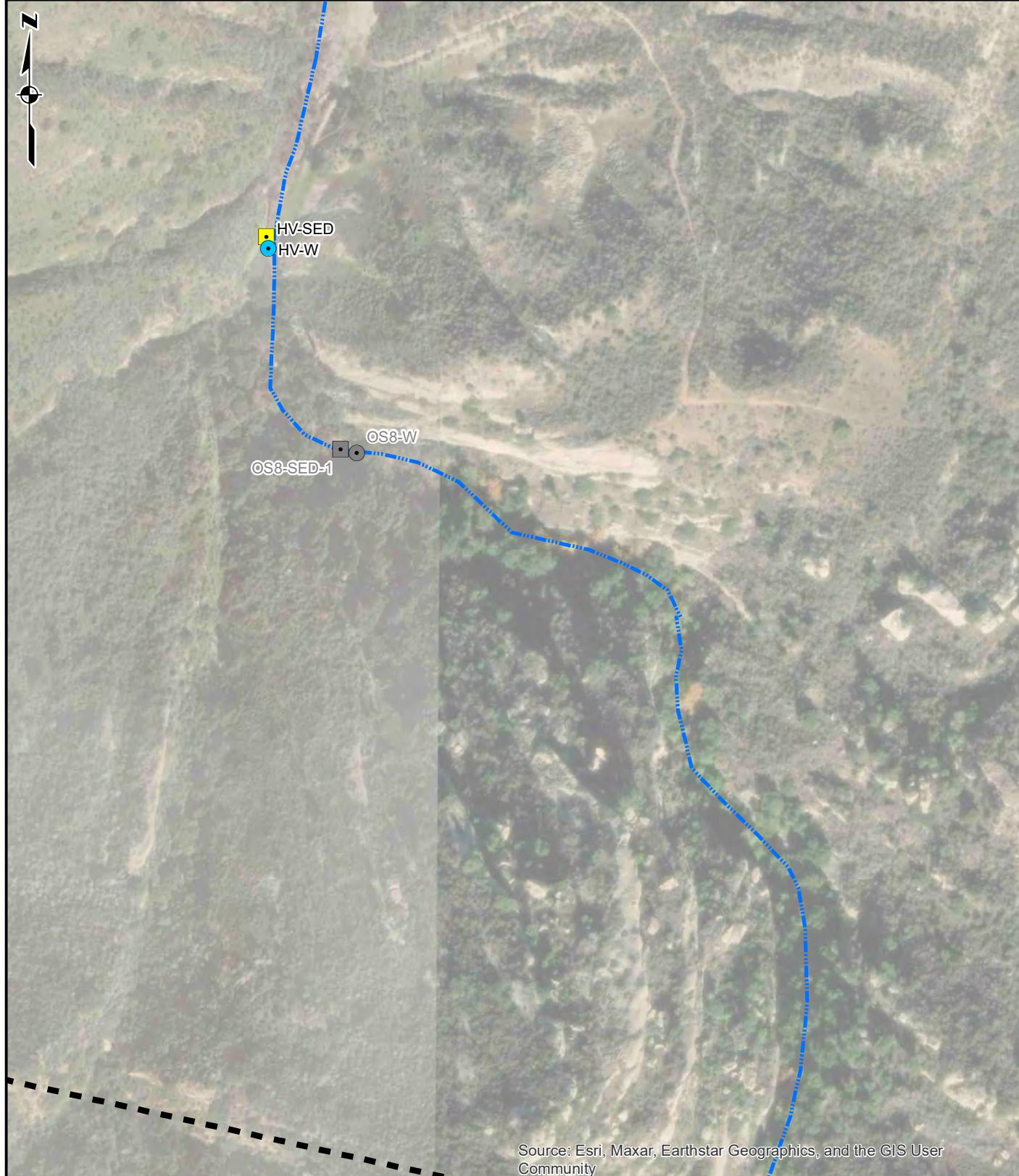
American Jewish University, Brandeis-Bardin Campus  
1101 Peppertree Lane, Brandeis, California



GSI Job No.	5182	Drawn By:	AV
Issued:	25-Jun-2024	Chk'd By:	MPG
Map ID:	AJU_SREOS1_0524	App'd By:	SMG

Scale in Feet  
0 125 250  
State Plane  
California Zone V  
Datum: NAD 83

**FIGURE 6**



#### LEGEND

- Sediment Sampling Location
- Water Sampling Location
- Former Sampling Location

- Intermittent Stream
- Approximate Site Boundary

#### DRAINAGE AREA SAMPLING LOCATIONS HV-SED AND HV-W

American Jewish University, Brandeis-Bardin Campus  
1101 Peppertree Lane, Brandeis, California



GSI Job No.	5182	Drawn By:	AV
Issued:	25-Jun-2024	Chk'd By:	MPG
Map ID:	AJU_HV_0524	Appv'd By:	SMG

Scale in Feet  
0 125 250  
State Plane  
California Zone V  
Datum: NAD 83

**FIGURE 7**



#### LEGEND

● Water Sampling Location

— Intermittent Stream

■ Sediment Sampling Location

■ Approximate Site Boundary

#### DRAINAGE AREA SAMPLING LOCATIONS OW-SED-1 AND OW-W

American Jewish University, Brandeis-Bardin Campus  
1101 Peppertree Lane, Brandeis, California



GSI Job No.	5182	Drawn By:	AV
Issued:	25-Jun-2024	Chk'd By:	MPG
Map ID:	AJU_OWC_0524	App'd By:	SMG

Scale in Feet  
0 32 64

State Plane  
California Zone V  
Datum: NAD 83

**FIGURE 8**

### Legend

-  Fruit Sampling Location
-  Fruit Sampling Location - Not Sampled in 2024
-  Intermittent Stream



**2024 MONITORING REPORT**  
**AJU Brandeis-Bardin Campus**  
Brandeis, CA

**ATTACHMENTS**

Attachment A. Analytical Laboratory Reports

Attachment B. Data Validation Summary

**2024 MONITORING REPORT**  
**AJU Brandeis-Bardin Campus**  
Brandeis, CA

**ATTACHMENT A**

Analytical Laboratory Reports

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Skyler J Bowersmith  
GSI Environmental Inc  
2000 Powell Street  
Suite 820  
Emeryville, California 94608

Generated 6/10/2024 3:40:26 PM Revision 2

## JOB DESCRIPTION

5182 - AJU-BB

## JOB NUMBER

570-183691-1

# Eurofins Calscience

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Calscience Project Manager.

## Authorization



Authorized for release by  
Janice Hsu, Project Manager I  
[Janice.Hsu@et.eurofinsus.com](mailto:Janice.Hsu@et.eurofinsus.com)  
(657)210-6359

Generated  
6/10/2024 3:40:26 PM  
Revision 2

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions/Glossary . . . . .	4
Case Narrative . . . . .	5
Detection Summary . . . . .	6
Client Sample Results . . . . .	10
QC Sample Results . . . . .	20
QC Association Summary . . . . .	24
Lab Chronicle . . . . .	27
Certification Summary . . . . .	32
Method Summary . . . . .	33
Sample Summary . . . . .	34
Chain of Custody . . . . .	35
Receipt Checklists . . . . .	37

# Definitions/Glossary

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183691-1

## Qualifiers

### Metals

Qualifier	Qualifier Description
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.

## 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

# Case Narrative

Client: GSI Environmental Inc  
Project: 5182 - AJU-BB

Job ID: 570-183691-1

**Job ID: 570-183691-1**

**Eurofins Calscience**

## Job Narrative 570-183691-1

### REVISION

The report being provided is a revision of the original report sent on 5/22/2024. The report (revision 2) is being revised to correct sample ID per revision COC.

The report being provided is a revision of the original report sent on 5/22/2024. The report (revision 1) is being revised to change reporting formatter and correct sample ID per client's request.

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

### **Receipt**

The samples were received on 5/9/2024 1:22 PM. 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 3.1°C.

### **HPLC/IC**

Method 314.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 570-442840 and analytical batch 570-443162 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 314.0: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 570-442840 and analytical batch 570-443162 was outside control limits. Sample matrix interference is suspected.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

### **Metals**

Method 6010B: The method blank for preparation batch 570-440890 and analytical batch 570-441947 contained Barium, Vanadium and Zinc above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Method 6010B: The serial dilution performed for the following sample associated with batch 570-441947 was outside control limit of Vanadium: (570-183691-A-1-B SD ^25)

Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 570-440890 and analytical batch 570-441947 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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: 5182 - AJU-BB

Job ID: 570-183691-1

## Client Sample ID: OW-SED-1-240507

## Lab Sample ID: 570-183691-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.4	J	3.0	1.4	mg/Kg	5		6010B	Total/NA
Barium	48	B	3.0	0.14	mg/Kg	5		6010B	Total/NA
Beryllium	0.30	J	0.50	0.069	mg/Kg	5		6010B	Total/NA
Chromium	9.1		1.0	0.19	mg/Kg	5		6010B	Total/NA
Cobalt	3.1		1.0	0.21	mg/Kg	5		6010B	Total/NA
Copper	5.5		2.0	0.96	mg/Kg	5		6010B	Total/NA
Lead	5.6		2.0	0.41	mg/Kg	5		6010B	Total/NA
Nickel	6.1		2.0	0.36	mg/Kg	5		6010B	Total/NA
Vanadium	18	B	1.0	0.17	mg/Kg	5		6010B	Total/NA
Zinc	33	B	5.0	1.2	mg/Kg	5		6010B	Total/NA

## Client Sample ID: AT-1-240507

## Lab Sample ID: 570-183691-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.8	J	3.1	1.4	mg/Kg	5		6010B	Total/NA
Barium	23	B	3.1	0.14	mg/Kg	5		6010B	Total/NA
Beryllium	0.18	J	0.51	0.070	mg/Kg	5		6010B	Total/NA
Cadmium	0.17	J	0.51	0.17	mg/Kg	5		6010B	Total/NA
Chromium	8.3		1.0	0.19	mg/Kg	5		6010B	Total/NA
Cobalt	1.7		1.0	0.21	mg/Kg	5		6010B	Total/NA
Copper	9.7		2.0	0.98	mg/Kg	5		6010B	Total/NA
Lead	2.7		2.0	0.42	mg/Kg	5		6010B	Total/NA
Molybdenum	0.64	J	2.0	0.53	mg/Kg	5		6010B	Total/NA
Nickel	3.6		2.0	0.37	mg/Kg	5		6010B	Total/NA
Vanadium	9.8	B	1.0	0.17	mg/Kg	5		6010B	Total/NA
Zinc	24	B	5.1	1.2	mg/Kg	5		6010B	Total/NA

## Client Sample ID: KC-1-240507

## Lab Sample ID: 570-183691-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.9		2.9	1.4	mg/Kg	5		6010B	Total/NA
Barium	50	B	2.9	0.14	mg/Kg	5		6010B	Total/NA
Beryllium	0.39	J	0.49	0.068	mg/Kg	5		6010B	Total/NA
Chromium	12		0.98	0.18	mg/Kg	5		6010B	Total/NA
Cobalt	4.9		0.98	0.20	mg/Kg	5		6010B	Total/NA
Copper	8.5		2.0	0.94	mg/Kg	5		6010B	Total/NA
Lead	10		2.0	0.40	mg/Kg	5		6010B	Total/NA
Molybdenum	0.91	J	2.0	0.50	mg/Kg	5		6010B	Total/NA
Nickel	8.7		2.0	0.35	mg/Kg	5		6010B	Total/NA
Vanadium	25	B	0.98	0.16	mg/Kg	5		6010B	Total/NA
Zinc	48	B	4.9	1.1	mg/Kg	5		6010B	Total/NA

## Client Sample ID: GF-1-240507

## Lab Sample ID: 570-183691-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.5	J	3.0	1.4	mg/Kg	5		6010B	Total/NA
Barium	44	B	3.0	0.14	mg/Kg	5		6010B	Total/NA
Beryllium	0.36	J	0.50	0.068	mg/Kg	5		6010B	Total/NA
Cadmium	0.16	J	0.50	0.16	mg/Kg	5		6010B	Total/NA
Chromium	10		0.99	0.18	mg/Kg	5		6010B	Total/NA
Cobalt	3.7		0.99	0.20	mg/Kg	5		6010B	Total/NA
Copper	9.1		2.0	0.95	mg/Kg	5		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience

# Detection Summary

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183691-1

## **Client Sample ID: GF-1-240507 (Continued)**

## **Lab Sample ID: 570-183691-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	7.7		2.0	0.40	mg/Kg	5		6010B	Total/NA
Molybdenum	0.68	J	2.0	0.51	mg/Kg	5		6010B	Total/NA
Nickel	7.3		2.0	0.36	mg/Kg	5		6010B	Total/NA
Vanadium	21	B	0.99	0.17	mg/Kg	5		6010B	Total/NA
Zinc	110	B	5.0	1.1	mg/Kg	5		6010B	Total/NA

## **Client Sample ID: CIT-1-240507**

## **Lab Sample ID: 570-183691-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.3		3.0	1.4	mg/Kg	5		6010B	Total/NA
Barium	53	B	3.0	0.14	mg/Kg	5		6010B	Total/NA
Beryllium	0.44	J	0.50	0.069	mg/Kg	5		6010B	Total/NA
Chromium	11		1.0	0.19	mg/Kg	5		6010B	Total/NA
Cobalt	4.5		1.0	0.21	mg/Kg	5		6010B	Total/NA
Copper	8.5		2.0	0.96	mg/Kg	5		6010B	Total/NA
Lead	16		2.0	0.41	mg/Kg	5		6010B	Total/NA
Nickel	7.1		2.0	0.36	mg/Kg	5		6010B	Total/NA
Vanadium	23	B	1.0	0.17	mg/Kg	5		6010B	Total/NA
Zinc	71	B	5.0	1.2	mg/Kg	5		6010B	Total/NA

## **Client Sample ID: TF-1-240507**

## **Lab Sample ID: 570-183691-6**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.4		3.0	1.4	mg/Kg	5		6010B	Total/NA
Barium	86	B	3.0	0.14	mg/Kg	5		6010B	Total/NA
Beryllium	0.49	J	0.50	0.069	mg/Kg	5		6010B	Total/NA
Chromium	14		1.0	0.19	mg/Kg	5		6010B	Total/NA
Cobalt	7.0		1.0	0.20	mg/Kg	5		6010B	Total/NA
Copper	19		2.0	0.95	mg/Kg	5		6010B	Total/NA
Lead	9.7		2.0	0.41	mg/Kg	5		6010B	Total/NA
Molybdenum	0.70	J	2.0	0.51	mg/Kg	5		6010B	Total/NA
Nickel	11		2.0	0.36	mg/Kg	5		6010B	Total/NA
Vanadium	33	B	1.0	0.17	mg/Kg	5		6010B	Total/NA
Zinc	45	B	5.0	1.2	mg/Kg	5		6010B	Total/NA

## **Client Sample ID: HV-1-240508**

## **Lab Sample ID: 570-183691-7**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.6		3.0	1.4	mg/Kg	5		6010B	Total/NA
Barium	68	B	3.0	0.14	mg/Kg	5		6010B	Total/NA
Beryllium	0.41	J	0.50	0.069	mg/Kg	5		6010B	Total/NA
Chromium	10		1.0	0.19	mg/Kg	5		6010B	Total/NA
Cobalt	3.8		1.0	0.20	mg/Kg	5		6010B	Total/NA
Copper	6.8		2.0	0.95	mg/Kg	5		6010B	Total/NA
Lead	3.6		2.0	0.41	mg/Kg	5		6010B	Total/NA
Nickel	6.9		2.0	0.36	mg/Kg	5		6010B	Total/NA
Vanadium	20	B	1.0	0.17	mg/Kg	5		6010B	Total/NA
Zinc	41	B	5.0	1.2	mg/Kg	5		6010B	Total/NA

## **Client Sample ID: HV-2-240508**

## **Lab Sample ID: 570-183691-8**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.2		3.1	1.4	mg/Kg	5		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience

# Detection Summary

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183691-1

## **Client Sample ID: HV-2-240508 (Continued)**

## **Lab Sample ID: 570-183691-8**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	56	B	3.1	0.15	mg/Kg	5	6010B	Total/NA	
Beryllium	0.37	J	0.51	0.071	mg/Kg	5	6010B	Total/NA	
Chromium	22		1.0	0.19	mg/Kg	5	6010B	Total/NA	
Cobalt	4.7		1.0	0.21	mg/Kg	5	6010B	Total/NA	
Copper	11		2.1	0.98	mg/Kg	5	6010B	Total/NA	
Lead	12		2.1	0.42	mg/Kg	5	6010B	Total/NA	
Nickel	13		2.1	0.37	mg/Kg	5	6010B	Total/NA	
Silver	1.6		1.5	0.15	mg/Kg	5	6010B	Total/NA	
Vanadium	22	B	1.0	0.17	mg/Kg	5	6010B	Total/NA	
Zinc	48	B	5.1	1.2	mg/Kg	5	6010B	Total/NA	

## **Client Sample ID: HV-SED-240508**

## **Lab Sample ID: 570-183691-9**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	27	B	2.9	0.14	mg/Kg	5	6010B	Total/NA	
Beryllium	0.18	J	0.49	0.067	mg/Kg	5	6010B	Total/NA	
Chromium	5.7		0.98	0.18	mg/Kg	5	6010B	Total/NA	
Cobalt	1.9		0.98	0.20	mg/Kg	5	6010B	Total/NA	
Copper	3.4		2.0	0.93	mg/Kg	5	6010B	Total/NA	
Lead	4.9		2.0	0.40	mg/Kg	5	6010B	Total/NA	
Nickel	3.8		2.0	0.35	mg/Kg	5	6010B	Total/NA	
Vanadium	12	B	0.98	0.16	mg/Kg	5	6010B	Total/NA	
Zinc	23	B	4.9	1.1	mg/Kg	5	6010B	Total/NA	

## **Client Sample ID: HV-SED-1-240508**

## **Lab Sample ID: 570-183691-10**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.7		3.0	1.4	mg/Kg	5	6010B	Total/NA	
Barium	52	B	3.0	0.14	mg/Kg	5	6010B	Total/NA	
Beryllium	0.36	J	0.50	0.068	mg/Kg	5	6010B	Total/NA	
Chromium	12		0.99	0.18	mg/Kg	5	6010B	Total/NA	
Cobalt	3.5		0.99	0.20	mg/Kg	5	6010B	Total/NA	
Copper	9.1		2.0	0.95	mg/Kg	5	6010B	Total/NA	
Lead	9.5		2.0	0.40	mg/Kg	5	6010B	Total/NA	
Nickel	7.8		2.0	0.36	mg/Kg	5	6010B	Total/NA	
Silver	0.74	J	1.5	0.14	mg/Kg	5	6010B	Total/NA	
Vanadium	20	B	0.99	0.17	mg/Kg	5	6010B	Total/NA	
Zinc	45	B	5.0	1.1	mg/Kg	5	6010B	Total/NA	

## **Client Sample ID: OS1-SED-240508**

## **Lab Sample ID: 570-183691-11**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	25	B	3.0	0.14	mg/Kg	5	6010B	Total/NA	
Beryllium	0.21	J	0.49	0.068	mg/Kg	5	6010B	Total/NA	
Chromium	4.4		0.99	0.18	mg/Kg	5	6010B	Total/NA	
Cobalt	2.3		0.99	0.20	mg/Kg	5	6010B	Total/NA	
Copper	3.3		2.0	0.94	mg/Kg	5	6010B	Total/NA	
Lead	2.8		2.0	0.40	mg/Kg	5	6010B	Total/NA	
Nickel	3.2		2.0	0.36	mg/Kg	5	6010B	Total/NA	
Vanadium	12	B	0.99	0.17	mg/Kg	5	6010B	Total/NA	
Zinc	22	B	4.9	1.1	mg/Kg	5	6010B	Total/NA	

This Detection Summary does not include radiochemical test results.

Eurofins Calscience

# Detection Summary

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183691-1

**Client Sample ID: SRE-SED-4-240508**

**Lab Sample ID: 570-183691-12**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.8	J	2.9	1.4	mg/Kg	5		6010B	Total/NA
Barium	21	B	2.9	0.14	mg/Kg	5		6010B	Total/NA
Beryllium	0.20	J	0.49	0.067	mg/Kg	5		6010B	Total/NA
Chromium	5.0		0.98	0.18	mg/Kg	5		6010B	Total/NA
Cobalt	1.8		0.98	0.20	mg/Kg	5		6010B	Total/NA
Copper	2.8		2.0	0.93	mg/Kg	5		6010B	Total/NA
Lead	2.7		2.0	0.40	mg/Kg	5		6010B	Total/NA
Nickel	3.0		2.0	0.35	mg/Kg	5		6010B	Total/NA
Vanadium	12	B	0.98	0.16	mg/Kg	5		6010B	Total/NA
Zinc	22	B	4.9	1.1	mg/Kg	5		6010B	Total/NA

**Client Sample ID: D-5/6-SED-240509**

**Lab Sample ID: 570-183691-13**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	4.1		3.0	1.4	mg/Kg	5		6010B	Total/NA
Barium	44	B	3.0	0.14	mg/Kg	5		6010B	Total/NA
Beryllium	0.40	J	0.50	0.069	mg/Kg	5		6010B	Total/NA
Chromium	11		1.0	0.19	mg/Kg	5		6010B	Total/NA
Cobalt	4.8		1.0	0.21	mg/Kg	5		6010B	Total/NA
Copper	7.7		2.0	0.96	mg/Kg	5		6010B	Total/NA
Lead	5.2		2.0	0.41	mg/Kg	5		6010B	Total/NA
Nickel	9.0		2.0	0.36	mg/Kg	5		6010B	Total/NA
Vanadium	24	B	1.0	0.17	mg/Kg	5		6010B	Total/NA
Zinc	39	B	5.0	1.2	mg/Kg	5		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience

# Client Sample Results

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183691-1

## Method: EPA 314.0 - Perchlorate (IC)

Client Sample ID: OW-SED-1-240507 Date Collected: 05/07/24 10:10 Date Received: 05/09/24 13:22							Lab Sample ID: 570-183691-1 Matrix: Solid			
Analyte Perchlorate	Result ND	Qualifier	RL 20	MDL 2.2	Unit ug/Kg	D	Prepared	Analyzed 05/22/24 14:34	Dil Fac 1	
Client Sample ID: AT-1-240507 Date Collected: 05/07/24 11:45 Date Received: 05/09/24 13:22							Lab Sample ID: 570-183691-2 Matrix: Solid			
Analyte Perchlorate	Result ND	Qualifier	RL 20	MDL 2.1	Unit ug/Kg	D	Prepared	Analyzed 05/22/24 14:55	Dil Fac 1	
Client Sample ID: KC-1-240507 Date Collected: 05/07/24 12:20 Date Received: 05/09/24 13:22							Lab Sample ID: 570-183691-3 Matrix: Solid			
Analyte Perchlorate	Result ND	Qualifier	RL 20	MDL 2.2	Unit ug/Kg	D	Prepared	Analyzed 05/22/24 15:16	Dil Fac 1	
Client Sample ID: GF-1-240507 Date Collected: 05/07/24 12:50 Date Received: 05/09/24 13:22							Lab Sample ID: 570-183691-4 Matrix: Solid			
Analyte Perchlorate	Result ND	Qualifier	RL 20	MDL 2.1	Unit ug/Kg	D	Prepared	Analyzed 05/22/24 15:37	Dil Fac 1	
Client Sample ID: CIT-1-240507 Date Collected: 05/07/24 13:10 Date Received: 05/09/24 13:22							Lab Sample ID: 570-183691-5 Matrix: Solid			
Analyte Perchlorate	Result ND	Qualifier	RL 20	MDL 2.1	Unit ug/Kg	D	Prepared	Analyzed 05/22/24 15:58	Dil Fac 1	
Client Sample ID: TF-1-240507 Date Collected: 05/07/24 13:30 Date Received: 05/09/24 13:22							Lab Sample ID: 570-183691-6 Matrix: Solid			
Analyte Perchlorate	Result ND	Qualifier	RL 20	MDL 2.2	Unit ug/Kg	D	Prepared	Analyzed 05/22/24 17:01	Dil Fac 1	
Client Sample ID: HV-1-240508 Date Collected: 05/08/24 13:20 Date Received: 05/09/24 13:22							Lab Sample ID: 570-183691-7 Matrix: Solid			
Analyte Perchlorate	Result ND	Qualifier	RL 20	MDL 2.1	Unit ug/Kg	D	Prepared	Analyzed 05/22/24 17:21	Dil Fac 1	
Client Sample ID: HV-2-240508 Date Collected: 05/08/24 13:25 Date Received: 05/09/24 13:22							Lab Sample ID: 570-183691-8 Matrix: Solid			
Analyte Perchlorate	Result ND	Qualifier	RL 20	MDL 2.2	Unit ug/Kg	D	Prepared	Analyzed 05/22/24 17:42	Dil Fac 1	
Client Sample ID: HV-SED-240508 Date Collected: 05/08/24 13:30 Date Received: 05/09/24 13:22							Lab Sample ID: 570-183691-9 Matrix: Solid			
Analyte Perchlorate	Result ND	Qualifier	RL 20	MDL 2.1	Unit ug/Kg	D	Prepared	Analyzed 05/22/24 18:03	Dil Fac 1	

# Client Sample Results

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183691-1

## Method: EPA 314.0 - Perchlorate (IC)

**Client Sample ID: HV-SED-1-240508**

**Date Collected: 05/08/24 13:40**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183691-10**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		20	2.2	ug/Kg			05/22/24 18:24	1

**Client Sample ID: OS1-SED-240508**

**Date Collected: 05/08/24 14:45**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183691-11**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		20	2.1	ug/Kg			05/22/24 18:45	1

**Client Sample ID: SRE-SED-4-240508**

**Date Collected: 05/08/24 15:40**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183691-12**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		20	2.2	ug/Kg			05/22/24 19:06	1

**Client Sample ID: D-5/6-SED-240509**

**Date Collected: 05/09/24 09:05**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183691-13**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		20	2.1	ug/Kg			05/22/24 19:26	1

# Client Sample Results

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183691-1

## Method: SW846 6010B - Metals (ICP)

**Client Sample ID: OW-SED-1-240507**

**Date Collected: 05/07/24 10:10**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183691-1**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND	F1	10	2.9	mg/Kg	05/15/24 11:15	05/17/24 20:21	5	
<b>Arsenic</b>	<b>1.4</b>	<b>J</b>	3.0	1.4	mg/Kg	05/15/24 11:15	05/17/24 20:21	5	
<b>Barium</b>	<b>48</b>	<b>B</b>	3.0	0.14	mg/Kg	05/15/24 11:15	05/17/24 20:21	5	
<b>Beryllium</b>	<b>0.30</b>	<b>J</b>	0.50	0.069	mg/Kg	05/15/24 11:15	05/17/24 20:21	5	
Cadmium	ND		0.50	0.16	mg/Kg	05/15/24 11:15	05/17/24 20:21	5	
<b>Chromium</b>	<b>9.1</b>		1.0	0.19	mg/Kg	05/15/24 11:15	05/17/24 20:21	5	
<b>Cobalt</b>	<b>3.1</b>		1.0	0.21	mg/Kg	05/15/24 11:15	05/17/24 20:21	5	
<b>Copper</b>	<b>5.5</b>		2.0	0.96	mg/Kg	05/15/24 11:15	05/17/24 20:21	5	
<b>Lead</b>	<b>5.6</b>		2.0	0.41	mg/Kg	05/15/24 11:15	05/17/24 20:21	5	
Molybdenum	ND		2.0	0.52	mg/Kg	05/15/24 11:15	05/17/24 20:21	5	
<b>Nickel</b>	<b>6.1</b>		2.0	0.36	mg/Kg	05/15/24 11:15	05/17/24 20:21	5	
Selenium	ND		3.0	1.2	mg/Kg	05/15/24 11:15	05/17/24 20:21	5	
Silver	ND		1.5	0.14	mg/Kg	05/15/24 11:15	05/17/24 20:21	5	
Thallium	ND		10	2.1	mg/Kg	05/15/24 11:15	05/17/24 20:21	5	
<b>Vanadium</b>	<b>18</b>	<b>B</b>	1.0	0.17	mg/Kg	05/15/24 11:15	05/17/24 20:21	5	
<b>Zinc</b>	<b>33</b>	<b>B</b>	5.0	1.2	mg/Kg	05/15/24 11:15	05/17/24 20:21	5	

**Client Sample ID: AT-1-240507**

**Date Collected: 05/07/24 11:45**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183691-2**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10	2.9	mg/Kg	05/15/24 11:15	05/17/24 20:35	5	
<b>Arsenic</b>	<b>2.8</b>	<b>J</b>	3.1	1.4	mg/Kg	05/15/24 11:15	05/17/24 20:35	5	
<b>Barium</b>	<b>23</b>	<b>B</b>	3.1	0.14	mg/Kg	05/15/24 11:15	05/17/24 20:35	5	
<b>Beryllium</b>	<b>0.18</b>	<b>J</b>	0.51	0.070	mg/Kg	05/15/24 11:15	05/17/24 20:35	5	
<b>Cadmium</b>	<b>0.17</b>	<b>J</b>	0.51	0.17	mg/Kg	05/15/24 11:15	05/17/24 20:35	5	
<b>Chromium</b>	<b>8.3</b>		1.0	0.19	mg/Kg	05/15/24 11:15	05/17/24 20:35	5	
<b>Cobalt</b>	<b>1.7</b>		1.0	0.21	mg/Kg	05/15/24 11:15	05/17/24 20:35	5	
<b>Copper</b>	<b>9.7</b>		2.0	0.98	mg/Kg	05/15/24 11:15	05/17/24 20:35	5	
<b>Lead</b>	<b>2.7</b>		2.0	0.42	mg/Kg	05/15/24 11:15	05/17/24 20:35	5	
Molybdenum	ND		2.0	0.53	mg/Kg	05/15/24 11:15	05/17/24 20:35	5	
<b>Nickel</b>	<b>3.6</b>		2.0	0.37	mg/Kg	05/15/24 11:15	05/17/24 20:35	5	
Selenium	ND		3.1	1.2	mg/Kg	05/15/24 11:15	05/17/24 20:35	5	
Silver	ND		1.5	0.15	mg/Kg	05/15/24 11:15	05/17/24 20:35	5	
Thallium	ND		10	2.1	mg/Kg	05/15/24 11:15	05/17/24 20:35	5	
<b>Vanadium</b>	<b>9.8</b>	<b>B</b>	1.0	0.17	mg/Kg	05/15/24 11:15	05/17/24 20:35	5	
<b>Zinc</b>	<b>24</b>	<b>B</b>	5.1	1.2	mg/Kg	05/15/24 11:15	05/17/24 20:35	5	

**Client Sample ID: KC-1-240507**

**Date Collected: 05/07/24 12:20**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183691-3**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		9.8	2.8	mg/Kg	05/15/24 11:15	05/17/24 20:38	5	
<b>Arsenic</b>	<b>3.9</b>		2.9	1.4	mg/Kg	05/15/24 11:15	05/17/24 20:38	5	
<b>Barium</b>	<b>50</b>	<b>B</b>	2.9	0.14	mg/Kg	05/15/24 11:15	05/17/24 20:38	5	
<b>Beryllium</b>	<b>0.39</b>	<b>J</b>	0.49	0.068	mg/Kg	05/15/24 11:15	05/17/24 20:38	5	
Cadmium	ND		0.49	0.16	mg/Kg	05/15/24 11:15	05/17/24 20:38	5	
<b>Chromium</b>	<b>12</b>		0.98	0.18	mg/Kg	05/15/24 11:15	05/17/24 20:38	5	
<b>Cobalt</b>	<b>4.9</b>		0.98	0.20	mg/Kg	05/15/24 11:15	05/17/24 20:38	5	
<b>Copper</b>	<b>8.5</b>		2.0	0.94	mg/Kg	05/15/24 11:15	05/17/24 20:38	5	

Eurofins Calscience

# Client Sample Results

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183691-1

## Method: SW846 6010B - Metals (ICP) (Continued)

**Client Sample ID: KC-1-240507**

**Date Collected: 05/07/24 12:20**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183691-3**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	10		2.0	0.40	mg/Kg	05/15/24 11:15	05/17/24 20:38	5	
Molybdenum	0.91 J		2.0	0.50	mg/Kg	05/15/24 11:15	05/17/24 20:38	5	
Nickel	8.7		2.0	0.35	mg/Kg	05/15/24 11:15	05/17/24 20:38	5	
Selenium	ND		2.9	1.2	mg/Kg	05/15/24 11:15	05/17/24 20:38	5	
Silver	ND		1.5	0.14	mg/Kg	05/15/24 11:15	05/17/24 20:38	5	
Thallium	ND		9.8	2.1	mg/Kg	05/15/24 11:15	05/17/24 20:38	5	
Vanadium	25 B		0.98	0.16	mg/Kg	05/15/24 11:15	05/17/24 20:38	5	
Zinc	48 B		4.9	1.1	mg/Kg	05/15/24 11:15	05/17/24 20:38	5	

**Client Sample ID: GF-1-240507**

**Date Collected: 05/07/24 12:50**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183691-4**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		9.9	2.8	mg/Kg	05/15/24 11:15	05/17/24 20:40	5	
Arsenic	2.5 J		3.0	1.4	mg/Kg	05/15/24 11:15	05/17/24 20:40	5	
Barium	44 B		3.0	0.14	mg/Kg	05/15/24 11:15	05/17/24 20:40	5	
Beryllium	0.36 J		0.50	0.068	mg/Kg	05/15/24 11:15	05/17/24 20:40	5	
Cadmium	0.16 J		0.50	0.16	mg/Kg	05/15/24 11:15	05/17/24 20:40	5	
Chromium	10		0.99	0.18	mg/Kg	05/15/24 11:15	05/17/24 20:40	5	
Cobalt	3.7		0.99	0.20	mg/Kg	05/15/24 11:15	05/17/24 20:40	5	
Copper	9.1		2.0	0.95	mg/Kg	05/15/24 11:15	05/17/24 20:40	5	
Lead	7.7		2.0	0.40	mg/Kg	05/15/24 11:15	05/17/24 20:40	5	
Molybdenum	0.68 J		2.0	0.51	mg/Kg	05/15/24 11:15	05/17/24 20:40	5	
Nickel	7.3		2.0	0.36	mg/Kg	05/15/24 11:15	05/17/24 20:40	5	
Selenium	ND		3.0	1.2	mg/Kg	05/15/24 11:15	05/17/24 20:40	5	
Silver	ND		1.5	0.14	mg/Kg	05/15/24 11:15	05/17/24 20:40	5	
Thallium	ND		9.9	2.1	mg/Kg	05/15/24 11:15	05/17/24 20:40	5	
Vanadium	21 B		0.99	0.17	mg/Kg	05/15/24 11:15	05/17/24 20:40	5	
Zinc	110 B		5.0	1.1	mg/Kg	05/15/24 11:15	05/17/24 20:40	5	

**Client Sample ID: CIT-1-240507**

**Date Collected: 05/07/24 13:10**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183691-5**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10	2.9	mg/Kg	05/15/24 11:15	05/17/24 20:42	5	
Arsenic	3.3		3.0	1.4	mg/Kg	05/15/24 11:15	05/17/24 20:42	5	
Barium	53 B		3.0	0.14	mg/Kg	05/15/24 11:15	05/17/24 20:42	5	
Beryllium	0.44 J		0.50	0.069	mg/Kg	05/15/24 11:15	05/17/24 20:42	5	
Cadmium	ND		0.50	0.16	mg/Kg	05/15/24 11:15	05/17/24 20:42	5	
Chromium	11		1.0	0.19	mg/Kg	05/15/24 11:15	05/17/24 20:42	5	
Cobalt	4.5		1.0	0.21	mg/Kg	05/15/24 11:15	05/17/24 20:42	5	
Copper	8.5		2.0	0.96	mg/Kg	05/15/24 11:15	05/17/24 20:42	5	
Lead	16		2.0	0.41	mg/Kg	05/15/24 11:15	05/17/24 20:42	5	
Molybdenum	ND		2.0	0.52	mg/Kg	05/15/24 11:15	05/17/24 20:42	5	
Nickel	7.1		2.0	0.36	mg/Kg	05/15/24 11:15	05/17/24 20:42	5	
Selenium	ND		3.0	1.2	mg/Kg	05/15/24 11:15	05/17/24 20:42	5	
Silver	ND		1.5	0.14	mg/Kg	05/15/24 11:15	05/17/24 20:42	5	
Thallium	ND		10	2.1	mg/Kg	05/15/24 11:15	05/17/24 20:42	5	
Vanadium	23 B		1.0	0.17	mg/Kg	05/15/24 11:15	05/17/24 20:42	5	
Zinc	71 B		5.0	1.2	mg/Kg	05/15/24 11:15	05/17/24 20:42	5	

Eurofins Calscience

# Client Sample Results

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183691-1

## Method: SW846 6010B - Metals (ICP)

**Client Sample ID: TF-1-240507**

**Date Collected: 05/07/24 13:30**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183691-6**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10	2.8	mg/Kg	05/15/24 11:15	05/17/24 20:45	5	5
<b>Arsenic</b>	<b>3.4</b>		3.0	1.4	mg/Kg	05/15/24 11:15	05/17/24 20:45	5	6
<b>Barium</b>	<b>86 B</b>		3.0	0.14	mg/Kg	05/15/24 11:15	05/17/24 20:45	5	7
<b>Beryllium</b>	<b>0.49 J</b>		0.50	0.069	mg/Kg	05/15/24 11:15	05/17/24 20:45	5	8
Cadmium	ND		0.50	0.16	mg/Kg	05/15/24 11:15	05/17/24 20:45	5	9
<b>Chromium</b>	<b>14</b>		1.0	0.19	mg/Kg	05/15/24 11:15	05/17/24 20:45	5	10
<b>Cobalt</b>	<b>7.0</b>		1.0	0.20	mg/Kg	05/15/24 11:15	05/17/24 20:45	5	11
<b>Copper</b>	<b>19</b>		2.0	0.95	mg/Kg	05/15/24 11:15	05/17/24 20:45	5	12
<b>Lead</b>	<b>9.7</b>		2.0	0.41	mg/Kg	05/15/24 11:15	05/17/24 20:45	5	13
<b>Molybdenum</b>	<b>0.70 J</b>		2.0	0.51	mg/Kg	05/15/24 11:15	05/17/24 20:45	5	14
<b>Nickel</b>	<b>11</b>		2.0	0.36	mg/Kg	05/15/24 11:15	05/17/24 20:45	5	15
Selenium	ND		3.0	1.2	mg/Kg	05/15/24 11:15	05/17/24 20:45	5	16
Silver	ND		1.5	0.14	mg/Kg	05/15/24 11:15	05/17/24 20:45	5	17
Thallium	ND		10	2.1	mg/Kg	05/15/24 11:15	05/17/24 20:45	5	18
<b>Vanadium</b>	<b>33 B</b>		1.0	0.17	mg/Kg	05/15/24 11:15	05/17/24 20:45	5	19
<b>Zinc</b>	<b>45 B</b>		5.0	1.2	mg/Kg	05/15/24 11:15	05/17/24 20:45	5	20

**Client Sample ID: HV-1-240508**

**Date Collected: 05/08/24 13:20**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183691-7**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10	2.8	mg/Kg	05/15/24 11:15	05/17/24 20:47	5	5
<b>Arsenic</b>	<b>5.6</b>		3.0	1.4	mg/Kg	05/15/24 11:15	05/17/24 20:47	5	6
<b>Barium</b>	<b>68 B</b>		3.0	0.14	mg/Kg	05/15/24 11:15	05/17/24 20:47	5	7
<b>Beryllium</b>	<b>0.41 J</b>		0.50	0.069	mg/Kg	05/15/24 11:15	05/17/24 20:47	5	8
Cadmium	ND		0.50	0.16	mg/Kg	05/15/24 11:15	05/17/24 20:47	5	9
<b>Chromium</b>	<b>10</b>		1.0	0.19	mg/Kg	05/15/24 11:15	05/17/24 20:47	5	10
<b>Cobalt</b>	<b>3.8</b>		1.0	0.20	mg/Kg	05/15/24 11:15	05/17/24 20:47	5	11
<b>Copper</b>	<b>6.8</b>		2.0	0.95	mg/Kg	05/15/24 11:15	05/17/24 20:47	5	12
<b>Lead</b>	<b>3.6</b>		2.0	0.41	mg/Kg	05/15/24 11:15	05/17/24 20:47	5	13
Molybdenum	ND		2.0	0.51	mg/Kg	05/15/24 11:15	05/17/24 20:47	5	14
<b>Nickel</b>	<b>6.9</b>		2.0	0.36	mg/Kg	05/15/24 11:15	05/17/24 20:47	5	15
Selenium	ND		3.0	1.2	mg/Kg	05/15/24 11:15	05/17/24 20:47	5	16
Silver	ND		1.5	0.14	mg/Kg	05/15/24 11:15	05/17/24 20:47	5	17
Thallium	ND		10	2.1	mg/Kg	05/15/24 11:15	05/17/24 20:47	5	18
<b>Vanadium</b>	<b>20 B</b>		1.0	0.17	mg/Kg	05/15/24 11:15	05/17/24 20:47	5	19
<b>Zinc</b>	<b>41 B</b>		5.0	1.2	mg/Kg	05/15/24 11:15	05/17/24 20:47	5	20

**Client Sample ID: HV-2-240508**

**Date Collected: 05/08/24 13:25**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183691-8**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10	2.9	mg/Kg	05/15/24 11:15	05/17/24 20:50	5	5
<b>Arsenic</b>	<b>3.2</b>		3.1	1.4	mg/Kg	05/15/24 11:15	05/17/24 20:50	5	6
<b>Barium</b>	<b>56 B</b>		3.1	0.15	mg/Kg	05/15/24 11:15	05/17/24 20:50	5	7
<b>Beryllium</b>	<b>0.37 J</b>		0.51	0.071	mg/Kg	05/15/24 11:15	05/17/24 20:50	5	8
Cadmium	ND		0.51	0.17	mg/Kg	05/15/24 11:15	05/17/24 20:50	5	9
<b>Chromium</b>	<b>22</b>		1.0	0.19	mg/Kg	05/15/24 11:15	05/17/24 20:50	5	10
<b>Cobalt</b>	<b>4.7</b>		1.0	0.21	mg/Kg	05/15/24 11:15	05/17/24 20:50	5	11
<b>Copper</b>	<b>11</b>		2.1	0.98	mg/Kg	05/15/24 11:15	05/17/24 20:50	5	12

Eurofins Calscience

# Client Sample Results

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183691-1

## Method: SW846 6010B - Metals (ICP) (Continued)

**Client Sample ID: HV-2-240508**

**Date Collected: 05/08/24 13:25**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183691-8**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	12		2.1	0.42	mg/Kg	05/15/24 11:15	05/17/24 20:50		5
Molybdenum	ND		2.1	0.53	mg/Kg	05/15/24 11:15	05/17/24 20:50		5
Nickel	13		2.1	0.37	mg/Kg	05/15/24 11:15	05/17/24 20:50		5
Selenium	ND		3.1	1.3	mg/Kg	05/15/24 11:15	05/17/24 20:50		5
Silver	1.6		1.5	0.15	mg/Kg	05/15/24 11:15	05/17/24 20:50		5
Thallium	ND		10	2.2	mg/Kg	05/15/24 11:15	05/17/24 20:50		5
Vanadium	22 B		1.0	0.17	mg/Kg	05/15/24 11:15	05/17/24 20:50		5
Zinc	48 B		5.1	1.2	mg/Kg	05/15/24 11:15	05/17/24 20:50		5

**Client Sample ID: HV-SED-240508**

**Date Collected: 05/08/24 13:30**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183691-9**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		9.8	2.8	mg/Kg	05/15/24 11:15	05/17/24 20:52		5
Arsenic	ND		2.9	1.4	mg/Kg	05/15/24 11:15	05/17/24 20:52		5
Barium	27 B		2.9	0.14	mg/Kg	05/15/24 11:15	05/17/24 20:52		5
Beryllium	0.18 J		0.49	0.067	mg/Kg	05/15/24 11:15	05/17/24 20:52		5
Cadmium	ND		0.49	0.16	mg/Kg	05/15/24 11:15	05/17/24 20:52		5
Chromium	5.7		0.98	0.18	mg/Kg	05/15/24 11:15	05/17/24 20:52		5
Cobalt	1.9		0.98	0.20	mg/Kg	05/15/24 11:15	05/17/24 20:52		5
Copper	3.4		2.0	0.93	mg/Kg	05/15/24 11:15	05/17/24 20:52		5
Lead	4.9		2.0	0.40	mg/Kg	05/15/24 11:15	05/17/24 20:52		5
Molybdenum	ND		2.0	0.50	mg/Kg	05/15/24 11:15	05/17/24 20:52		5
Nickel	3.8		2.0	0.35	mg/Kg	05/15/24 11:15	05/17/24 20:52		5
Selenium	ND		2.9	1.2	mg/Kg	05/15/24 11:15	05/17/24 20:52		5
Silver	ND		1.5	0.14	mg/Kg	05/15/24 11:15	05/17/24 20:52		5
Thallium	ND		9.8	2.1	mg/Kg	05/15/24 11:15	05/17/24 20:52		5
Vanadium	12 B		0.98	0.16	mg/Kg	05/15/24 11:15	05/17/24 20:52		5
Zinc	23 B		4.9	1.1	mg/Kg	05/15/24 11:15	05/17/24 20:52		5

**Client Sample ID: HV-SED-1-240508**

**Date Collected: 05/08/24 13:40**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183691-10**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		9.9	2.8	mg/Kg	05/15/24 11:15	05/17/24 20:59		5
Arsenic	3.7		3.0	1.4	mg/Kg	05/15/24 11:15	05/17/24 20:59		5
Barium	52 B		3.0	0.14	mg/Kg	05/15/24 11:15	05/17/24 20:59		5
Beryllium	0.36 J		0.50	0.068	mg/Kg	05/15/24 11:15	05/17/24 20:59		5
Cadmium	ND		0.50	0.16	mg/Kg	05/15/24 11:15	05/17/24 20:59		5
Chromium	12		0.99	0.18	mg/Kg	05/15/24 11:15	05/17/24 20:59		5
Cobalt	3.5		0.99	0.20	mg/Kg	05/15/24 11:15	05/17/24 20:59		5
Copper	9.1		2.0	0.95	mg/Kg	05/15/24 11:15	05/17/24 20:59		5
Lead	9.5		2.0	0.40	mg/Kg	05/15/24 11:15	05/17/24 20:59		5
Molybdenum	ND		2.0	0.51	mg/Kg	05/15/24 11:15	05/17/24 20:59		5
Nickel	7.8		2.0	0.36	mg/Kg	05/15/24 11:15	05/17/24 20:59		5
Selenium	ND		3.0	1.2	mg/Kg	05/15/24 11:15	05/17/24 20:59		5
Silver	0.74 J		1.5	0.14	mg/Kg	05/15/24 11:15	05/17/24 20:59		5
Thallium	ND		9.9	2.1	mg/Kg	05/15/24 11:15	05/17/24 20:59		5
Vanadium	20 B		0.99	0.17	mg/Kg	05/15/24 11:15	05/17/24 20:59		5
Zinc	45 B		5.0	1.1	mg/Kg	05/15/24 11:15	05/17/24 20:59		5

Eurofins Calscience

# Client Sample Results

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183691-1

## Method: SW846 6010B - Metals (ICP)

**Client Sample ID: OS1-SED-240508**

**Date Collected: 05/08/24 14:45**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183691-11**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		9.9	2.8	mg/Kg	05/15/24 11:15	05/17/24 21:02	5	
Arsenic	ND		3.0	1.4	mg/Kg	05/15/24 11:15	05/17/24 21:02	5	
<b>Barium</b>	<b>25 B</b>		3.0	0.14	mg/Kg	05/15/24 11:15	05/17/24 21:02	5	
<b>Beryllium</b>	<b>0.21 J</b>		0.49	0.068	mg/Kg	05/15/24 11:15	05/17/24 21:02	5	
Cadmium	ND		0.49	0.16	mg/Kg	05/15/24 11:15	05/17/24 21:02	5	
<b>Chromium</b>	<b>4.4</b>		0.99	0.18	mg/Kg	05/15/24 11:15	05/17/24 21:02	5	
<b>Cobalt</b>	<b>2.3</b>		0.99	0.20	mg/Kg	05/15/24 11:15	05/17/24 21:02	5	
<b>Copper</b>	<b>3.3</b>		2.0	0.94	mg/Kg	05/15/24 11:15	05/17/24 21:02	5	
<b>Lead</b>	<b>2.8</b>		2.0	0.40	mg/Kg	05/15/24 11:15	05/17/24 21:02	5	
Molybdenum	ND		2.0	0.51	mg/Kg	05/15/24 11:15	05/17/24 21:02	5	
<b>Nickel</b>	<b>3.2</b>		2.0	0.36	mg/Kg	05/15/24 11:15	05/17/24 21:02	5	
Selenium	ND		3.0	1.2	mg/Kg	05/15/24 11:15	05/17/24 21:02	5	
Silver	ND		1.5	0.14	mg/Kg	05/15/24 11:15	05/17/24 21:02	5	
Thallium	ND		9.9	2.1	mg/Kg	05/15/24 11:15	05/17/24 21:02	5	
<b>Vanadium</b>	<b>12 B</b>		0.99	0.17	mg/Kg	05/15/24 11:15	05/17/24 21:02	5	
<b>Zinc</b>	<b>22 B</b>		4.9	1.1	mg/Kg	05/15/24 11:15	05/17/24 21:02	5	

**Client Sample ID: SRE-SED-4-240508**

**Date Collected: 05/08/24 15:40**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183691-12**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		9.8	2.8	mg/Kg	05/15/24 11:15	05/17/24 21:04	5	
<b>Arsenic</b>	<b>1.8 J</b>		2.9	1.4	mg/Kg	05/15/24 11:15	05/17/24 21:04	5	
<b>Barium</b>	<b>21 B</b>		2.9	0.14	mg/Kg	05/15/24 11:15	05/17/24 21:04	5	
<b>Beryllium</b>	<b>0.20 J</b>		0.49	0.067	mg/Kg	05/15/24 11:15	05/17/24 21:04	5	
Cadmium	ND		0.49	0.16	mg/Kg	05/15/24 11:15	05/17/24 21:04	5	
<b>Chromium</b>	<b>5.0</b>		0.98	0.18	mg/Kg	05/15/24 11:15	05/17/24 21:04	5	
<b>Cobalt</b>	<b>1.8</b>		0.98	0.20	mg/Kg	05/15/24 11:15	05/17/24 21:04	5	
<b>Copper</b>	<b>2.8</b>		2.0	0.93	mg/Kg	05/15/24 11:15	05/17/24 21:04	5	
<b>Lead</b>	<b>2.7</b>		2.0	0.40	mg/Kg	05/15/24 11:15	05/17/24 21:04	5	
Molybdenum	ND		2.0	0.50	mg/Kg	05/15/24 11:15	05/17/24 21:04	5	
<b>Nickel</b>	<b>3.0</b>		2.0	0.35	mg/Kg	05/15/24 11:15	05/17/24 21:04	5	
Selenium	ND		2.9	1.2	mg/Kg	05/15/24 11:15	05/17/24 21:04	5	
Silver	ND		1.5	0.14	mg/Kg	05/15/24 11:15	05/17/24 21:04	5	
Thallium	ND		9.8	2.1	mg/Kg	05/15/24 11:15	05/17/24 21:04	5	
<b>Vanadium</b>	<b>12 B</b>		0.98	0.16	mg/Kg	05/15/24 11:15	05/17/24 21:04	5	
<b>Zinc</b>	<b>22 B</b>		4.9	1.1	mg/Kg	05/15/24 11:15	05/17/24 21:04	5	

**Client Sample ID: D-5/6-SED-240509**

**Date Collected: 05/09/24 09:05**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183691-13**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10	2.9	mg/Kg	05/15/24 11:15	05/17/24 21:07	5	
<b>Arsenic</b>	<b>4.1</b>		3.0	1.4	mg/Kg	05/15/24 11:15	05/17/24 21:07	5	
<b>Barium</b>	<b>44 B</b>		3.0	0.14	mg/Kg	05/15/24 11:15	05/17/24 21:07	5	
<b>Beryllium</b>	<b>0.40 J</b>		0.50	0.069	mg/Kg	05/15/24 11:15	05/17/24 21:07	5	
Cadmium	ND		0.50	0.16	mg/Kg	05/15/24 11:15	05/17/24 21:07	5	
<b>Chromium</b>	<b>11</b>		1.0	0.19	mg/Kg	05/15/24 11:15	05/17/24 21:07	5	
<b>Cobalt</b>	<b>4.8</b>		1.0	0.21	mg/Kg	05/15/24 11:15	05/17/24 21:07	5	
<b>Copper</b>	<b>7.7</b>		2.0	0.96	mg/Kg	05/15/24 11:15	05/17/24 21:07	5	

Eurofins Calscience

# Client Sample Results

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183691-1

## Method: SW846 6010B - Metals (ICP) (Continued)

**Client Sample ID: D-5/6-SED-240509**

**Date Collected: 05/09/24 09:05**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183691-13**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.2		2.0	0.41	mg/Kg		05/15/24 11:15	05/17/24 21:07	5
Molybdenum	ND		2.0	0.52	mg/Kg		05/15/24 11:15	05/17/24 21:07	5
Nickel	9.0		2.0	0.36	mg/Kg		05/15/24 11:15	05/17/24 21:07	5
Selenium	ND		3.0	1.2	mg/Kg		05/15/24 11:15	05/17/24 21:07	5
Silver	ND		1.5	0.14	mg/Kg		05/15/24 11:15	05/17/24 21:07	5
Thallium	ND		10	2.1	mg/Kg		05/15/24 11:15	05/17/24 21:07	5
Vanadium	24 B		1.0	0.17	mg/Kg		05/15/24 11:15	05/17/24 21:07	5
Zinc	39 B		5.0	1.2	mg/Kg		05/15/24 11:15	05/17/24 21:07	5

# Client Sample Results

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183691-1

## **Method: SW846 7471A - Mercury (CVAA)**

**Client Sample ID: OW-SED-1-240507**

**Date Collected: 05/07/24 10:10**

**Date Received: 05/09/24 13:22**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.079	0.021	mg/Kg	D	05/10/24 18:19	05/13/24 14:12	1

**Lab Sample ID: 570-183691-1**

**Matrix: Solid**

**Client Sample ID: AT-1-240507**

**Date Collected: 05/07/24 11:45**

**Date Received: 05/09/24 13:22**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.079	0.021	mg/Kg	D	05/10/24 18:19	05/13/24 14:14	1

**Lab Sample ID: 570-183691-2**

**Matrix: Solid**

**Client Sample ID: KC-1-240507**

**Date Collected: 05/07/24 12:20**

**Date Received: 05/09/24 13:22**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.082	0.022	mg/Kg	D	05/10/24 18:19	05/13/24 14:16	1

**Lab Sample ID: 570-183691-3**

**Matrix: Solid**

**Client Sample ID: GF-1-240507**

**Date Collected: 05/07/24 12:50**

**Date Received: 05/09/24 13:22**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.082	0.022	mg/Kg	D	05/10/24 18:19	05/13/24 14:18	1

**Lab Sample ID: 570-183691-4**

**Matrix: Solid**

**Client Sample ID: CIT-1-240507**

**Date Collected: 05/07/24 13:10**

**Date Received: 05/09/24 13:22**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.087	0.023	mg/Kg	D	05/10/24 18:19	05/13/24 14:20	1

**Lab Sample ID: 570-183691-5**

**Matrix: Solid**

**Client Sample ID: TF-1-240507**

**Date Collected: 05/07/24 13:30**

**Date Received: 05/09/24 13:22**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.083	0.022	mg/Kg	D	05/10/24 18:19	05/13/24 14:22	1

**Lab Sample ID: 570-183691-6**

**Matrix: Solid**

**Client Sample ID: HV-1-240508**

**Date Collected: 05/08/24 13:20**

**Date Received: 05/09/24 13:22**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.082	0.022	mg/Kg	D	05/10/24 18:19	05/13/24 14:24	1

**Lab Sample ID: 570-183691-7**

**Matrix: Solid**

**Client Sample ID: HV-2-240508**

**Date Collected: 05/08/24 13:25**

**Date Received: 05/09/24 13:22**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.085	0.022	mg/Kg	D	05/10/24 18:19	05/13/24 14:25	1

**Lab Sample ID: 570-183691-8**

**Matrix: Solid**

**Client Sample ID: HV-SED-240508**

**Date Collected: 05/08/24 13:30**

**Date Received: 05/09/24 13:22**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.082	0.022	mg/Kg	D	05/10/24 18:19	05/13/24 15:37	1

**Lab Sample ID: 570-183691-9**

**Matrix: Solid**

# Client Sample Results

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183691-1

## **Method: SW846 7471A - Mercury (CVAA)**

**Client Sample ID: HV-SED-1-240508**

**Date Collected: 05/08/24 13:40**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183691-10**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.085	0.022	mg/Kg	D	05/10/24 18:19	05/13/24 15:38	1

**Client Sample ID: OS1-SED-240508**

**Date Collected: 05/08/24 14:45**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183691-11**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.083	0.022	mg/Kg	D	05/10/24 18:19	05/13/24 15:40	1

**Client Sample ID: SRE-SED-4-240508**

**Date Collected: 05/08/24 15:40**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183691-12**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.080	0.021	mg/Kg	D	05/10/24 18:19	05/13/24 15:42	1

**Client Sample ID: D-5/6-SED-240509**

**Date Collected: 05/09/24 09:05**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183691-13**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.079	0.021	mg/Kg	D	05/10/24 18:19	05/13/24 15:44	1

# QC Sample Results

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183691-1

## Method: 314.0 - Perchlorate (IC)

**Lab Sample ID: MB 570-442840/1-A**

**Matrix: Solid**

**Analysis Batch: 443162**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		20	2.1	ug/Kg			05/22/24 12:29	1

**Lab Sample ID: LCS 570-442840/2-A**

**Matrix: Solid**

**Analysis Batch: 443162**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perchlorate	252	232		ug/Kg		92	85 - 115

**Lab Sample ID: LCSD 570-442840/3-A**

**Matrix: Solid**

**Analysis Batch: 443162**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	RPD	RPD Limit
Perchlorate	248	236		ug/Kg		95	85 - 115	2 15

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 570-440890/1-A ^5**

**Matrix: Solid**

**Analysis Batch: 441947**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10	2.8	mg/Kg		05/15/24 11:15	05/17/24 20:11	5
Arsenic	ND		3.0	1.4	mg/Kg		05/15/24 11:15	05/17/24 20:11	5
Barium	0.149	J	3.0	0.14	mg/Kg		05/15/24 11:15	05/17/24 20:11	5
Beryllium	ND		0.50	0.069	mg/Kg		05/15/24 11:15	05/17/24 20:11	5
Cadmium	ND		0.50	0.16	mg/Kg		05/15/24 11:15	05/17/24 20:11	5
Chromium	ND		1.0	0.19	mg/Kg		05/15/24 11:15	05/17/24 20:11	5
Cobalt	ND		1.0	0.20	mg/Kg		05/15/24 11:15	05/17/24 20:11	5
Copper	ND		2.0	0.95	mg/Kg		05/15/24 11:15	05/17/24 20:11	5
Lead	ND		2.0	0.41	mg/Kg		05/15/24 11:15	05/17/24 20:11	5
Molybdenum	ND		2.0	0.51	mg/Kg		05/15/24 11:15	05/17/24 20:11	5
Nickel	ND		2.0	0.36	mg/Kg		05/15/24 11:15	05/17/24 20:11	5
Selenium	ND		3.0	1.2	mg/Kg		05/15/24 11:15	05/17/24 20:11	5
Silver	ND		1.5	0.14	mg/Kg		05/15/24 11:15	05/17/24 20:11	5
Thallium	ND		10	2.1	mg/Kg		05/15/24 11:15	05/17/24 20:11	5
Vanadium	0.348	J	1.0	0.17	mg/Kg		05/15/24 11:15	05/17/24 20:11	5
Zinc	2.26	J	5.0	1.2	mg/Kg		05/15/24 11:15	05/17/24 20:11	5

**Lab Sample ID: LCS 570-440890/2-A ^5**

**Matrix: Solid**

**Analysis Batch: 441947**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	50.3	53.9		mg/Kg		107	80 - 120
Arsenic	50.3	47.7		mg/Kg		95	80 - 120
Barium	50.3	48.1		mg/Kg		96	80 - 120
Beryllium	50.3	47.8		mg/Kg		95	80 - 120
Cadmium	50.3	47.4		mg/Kg		94	80 - 120

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 440890**

Eurofins Calscience

# QC Sample Results

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183691-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LCS 570-440890/2-A ^5**

**Matrix: Solid**

**Analysis Batch: 441947**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 440890**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium	50.3	48.0		mg/Kg	95	80 - 120	
Cobalt	50.3	48.6		mg/Kg	97	80 - 120	
Copper	50.3	48.5		mg/Kg	97	80 - 120	
Lead	50.3	48.6		mg/Kg	97	80 - 120	
Molybdenum	50.3	51.8		mg/Kg	103	80 - 120	
Nickel	50.3	49.1		mg/Kg	98	80 - 120	
Selenium	50.3	44.1		mg/Kg	88	80 - 120	
Silver	25.1	23.6		mg/Kg	94	80 - 120	
Thallium	50.3	46.8		mg/Kg	93	80 - 120	
Vanadium	50.3	47.6		mg/Kg	95	80 - 120	
Zinc	50.3	47.6		mg/Kg	95	80 - 120	

**Lab Sample ID: LCSD 570-440890/3-A ^5**

**Matrix: Solid**

**Analysis Batch: 441947**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 440890**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	49.0	50.5		mg/Kg	103	80 - 120		6	20
Arsenic	49.0	43.8		mg/Kg	89	80 - 120		8	20
Barium	49.0	44.8		mg/Kg	91	80 - 120		7	20
Beryllium	49.0	44.5		mg/Kg	91	80 - 120		7	20
Cadmium	49.0	44.1		mg/Kg	90	80 - 120		7	20
Chromium	49.0	44.8		mg/Kg	91	80 - 120		7	20
Cobalt	49.0	44.9		mg/Kg	91	80 - 120		8	20
Copper	49.0	45.2		mg/Kg	92	80 - 120		7	20
Lead	49.0	45.2		mg/Kg	92	80 - 120		7	20
Molybdenum	49.0	47.9		mg/Kg	98	80 - 120		8	20
Nickel	49.0	45.6		mg/Kg	93	80 - 120		7	20
Selenium	49.0	40.7		mg/Kg	83	80 - 120		8	20
Silver	24.5	21.9		mg/Kg	89	80 - 120		7	20
Thallium	49.0	43.7		mg/Kg	89	80 - 120		7	20
Vanadium	49.0	44.3		mg/Kg	90	80 - 120		7	20
Zinc	49.0	44.2		mg/Kg	90	80 - 120		7	20

**Lab Sample ID: 570-183691-1 MS**

**Matrix: Solid**

**Analysis Batch: 441947**

**Client Sample ID: OW-SED-1-240507**

**Prep Type: Total/NA**

**Prep Batch: 440890**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND	F1	49.3	23.9	F1	mg/Kg	49	75 - 125	
Arsenic	1.4	J	49.3	46.8		mg/Kg	92	75 - 125	
Barium	48	B	49.3	93.6		mg/Kg	92	75 - 125	
Beryllium	0.30	J	49.3	46.1		mg/Kg	93	75 - 125	
Cadmium	ND		49.3	43.9		mg/Kg	89	75 - 125	
Chromium	9.1		49.3	55.1		mg/Kg	93	75 - 125	
Cobalt	3.1		49.3	47.8		mg/Kg	91	75 - 125	
Copper	5.5		49.3	52.9		mg/Kg	96	75 - 125	
Lead	5.6		49.3	50.9		mg/Kg	92	75 - 125	
Molybdenum	ND		49.3	49.0		mg/Kg	99	75 - 125	

Eurofins Calscience

# QC Sample Results

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183691-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: 570-183691-1 MS**

**Matrix: Solid**

**Analysis Batch: 441947**

**Client Sample ID: OW-SED-1-240507**

**Prep Type: Total/NA**

**Prep Batch: 440890**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits		
Nickel	6.1		49.3	51.7		mg/Kg		93	75 - 125		
Selenium	ND		49.3	42.8		mg/Kg		87	75 - 125		
Silver	ND		24.6	22.4		mg/Kg		91	75 - 125		
Thallium	ND		49.3	43.2		mg/Kg		88	75 - 125		
Vanadium	18	B	49.3	64.7		mg/Kg		95	75 - 125		
Zinc	33	B	49.3	78.7		mg/Kg		92	75 - 125		

**Lab Sample ID: 570-183691-1 MSD**

**Matrix: Solid**

**Analysis Batch: 441947**

**Client Sample ID: OW-SED-1-240507**

**Prep Type: Total/NA**

**Prep Batch: 440890**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	ND	F1	49.8	22.2	F1	mg/Kg		45	75 - 125	8	20
Arsenic	1.4	J	49.8	47.9		mg/Kg		93	75 - 125	2	20
Barium	48	B	49.8	95.4		mg/Kg		95	75 - 125	2	20
Beryllium	0.30	J	49.8	47.0		mg/Kg		94	75 - 125	2	20
Cadmium	ND		49.8	45.1		mg/Kg		91	75 - 125	3	20
Chromium	9.1		49.8	56.3		mg/Kg		95	75 - 125	2	20
Cobalt	3.1		49.8	49.1		mg/Kg		92	75 - 125	3	20
Copper	5.5		49.8	53.8		mg/Kg		97	75 - 125	2	20
Lead	5.6		49.8	51.3		mg/Kg		92	75 - 125	1	20
Molybdenum	ND		49.8	49.6		mg/Kg		100	75 - 125	1	20
Nickel	6.1		49.8	52.5		mg/Kg		93	75 - 125	2	20
Selenium	ND		49.8	43.1		mg/Kg		87	75 - 125	1	20
Silver	ND		24.9	22.8		mg/Kg		92	75 - 125	2	20
Thallium	ND		49.8	44.4		mg/Kg		89	75 - 125	3	20
Vanadium	18	B	49.8	65.8		mg/Kg		96	75 - 125	2	20
Zinc	33	B	49.8	79.6		mg/Kg		93	75 - 125	1	20

## Method: 7471A - Mercury (CVAA)

**Lab Sample ID: MB 570-439583/1-A**

**Matrix: Solid**

**Analysis Batch: 440117**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 439583**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.083	0.022	mg/Kg		05/10/24 18:19	05/13/24 13:56	1

**Lab Sample ID: LCS 570-439583/2-A**

**Matrix: Solid**

**Analysis Batch: 440117**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 439583**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.189	0.185		mg/Kg		98	80 - 120

Eurofins Calscience

# QC Sample Results

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183691-1

## Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: LCSD 570-439583/3-A

Matrix: Solid

Analysis Batch: 440117

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 439583

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.189	0.183		mg/Kg	97	80 - 120	1	10	

# QC Association Summary

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183691-1

## HPLC/IC

### Leach Batch: 442840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-183691-1	OW-SED-1-240507	Total/NA	Solid	DI Leach	
570-183691-2	AT-1-240507	Total/NA	Solid	DI Leach	
570-183691-3	KC-1-240507	Total/NA	Solid	DI Leach	
570-183691-4	GF-1-240507	Total/NA	Solid	DI Leach	
570-183691-5	CIT-1-240507	Total/NA	Solid	DI Leach	
570-183691-6	TF-1-240507	Total/NA	Solid	DI Leach	
570-183691-7	HV-1-240508	Total/NA	Solid	DI Leach	
570-183691-8	HV-2-240508	Total/NA	Solid	DI Leach	
570-183691-9	HV-SED-240508	Total/NA	Solid	DI Leach	
570-183691-10	HV-SED-1-240508	Total/NA	Solid	DI Leach	
570-183691-11	OS1-SED-240508	Total/NA	Solid	DI Leach	
570-183691-12	SRE-SED-4-240508	Total/NA	Solid	DI Leach	
570-183691-13	D-5/6-SED-240509	Total/NA	Solid	DI Leach	
MB 570-442840/1-A	Method Blank	Total/NA	Solid	DI Leach	
LCS 570-442840/2-A	Lab Control Sample	Total/NA	Solid	DI Leach	
LCSD 570-442840/3-A	Lab Control Sample Dup	Total/NA	Solid	DI Leach	

### Analysis Batch: 443162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-183691-1	OW-SED-1-240507	Total/NA	Solid	314.0	442840
570-183691-2	AT-1-240507	Total/NA	Solid	314.0	442840
570-183691-3	KC-1-240507	Total/NA	Solid	314.0	442840
570-183691-4	GF-1-240507	Total/NA	Solid	314.0	442840
570-183691-5	CIT-1-240507	Total/NA	Solid	314.0	442840
570-183691-6	TF-1-240507	Total/NA	Solid	314.0	442840
570-183691-7	HV-1-240508	Total/NA	Solid	314.0	442840
570-183691-8	HV-2-240508	Total/NA	Solid	314.0	442840
570-183691-9	HV-SED-240508	Total/NA	Solid	314.0	442840
570-183691-10	HV-SED-1-240508	Total/NA	Solid	314.0	442840
570-183691-11	OS1-SED-240508	Total/NA	Solid	314.0	442840
570-183691-12	SRE-SED-4-240508	Total/NA	Solid	314.0	442840
570-183691-13	D-5/6-SED-240509	Total/NA	Solid	314.0	442840
MB 570-442840/1-A	Method Blank	Total/NA	Solid	314.0	442840
LCS 570-442840/2-A	Lab Control Sample	Total/NA	Solid	314.0	442840
LCSD 570-442840/3-A	Lab Control Sample Dup	Total/NA	Solid	314.0	442840

## Metals

### Prep Batch: 439583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-183691-1	OW-SED-1-240507	Total/NA	Solid	7471A	
570-183691-2	AT-1-240507	Total/NA	Solid	7471A	
570-183691-3	KC-1-240507	Total/NA	Solid	7471A	
570-183691-4	GF-1-240507	Total/NA	Solid	7471A	
570-183691-5	CIT-1-240507	Total/NA	Solid	7471A	
570-183691-6	TF-1-240507	Total/NA	Solid	7471A	
570-183691-7	HV-1-240508	Total/NA	Solid	7471A	
570-183691-8	HV-2-240508	Total/NA	Solid	7471A	
570-183691-9	HV-SED-240508	Total/NA	Solid	7471A	
570-183691-10	HV-SED-1-240508	Total/NA	Solid	7471A	
570-183691-11	OS1-SED-240508	Total/NA	Solid	7471A	

# QC Association Summary

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183691-1

## Metals (Continued)

### Prep Batch: 439583 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-183691-12	SRE-SED-4-240508	Total/NA	Solid	7471A	
570-183691-13	D-5/6-SED-240509	Total/NA	Solid	7471A	
MB 570-439583/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 570-439583/2-A	Lab Control Sample	Total/NA	Solid	7471A	
LCSD 570-439583/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	

### Analysis Batch: 440117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-183691-1	OW-SED-1-240507	Total/NA	Solid	7471A	439583
570-183691-2	AT-1-240507	Total/NA	Solid	7471A	439583
570-183691-3	KC-1-240507	Total/NA	Solid	7471A	439583
570-183691-4	GF-1-240507	Total/NA	Solid	7471A	439583
570-183691-5	CIT-1-240507	Total/NA	Solid	7471A	439583
570-183691-6	TF-1-240507	Total/NA	Solid	7471A	439583
570-183691-7	HV-1-240508	Total/NA	Solid	7471A	439583
570-183691-8	HV-2-240508	Total/NA	Solid	7471A	439583
MB 570-439583/1-A	Method Blank	Total/NA	Solid	7471A	439583
LCS 570-439583/2-A	Lab Control Sample	Total/NA	Solid	7471A	439583
LCSD 570-439583/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	439583

### Analysis Batch: 440194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-183691-9	HV-SED-240508	Total/NA	Solid	7471A	439583
570-183691-10	HV-SED-1-240508	Total/NA	Solid	7471A	439583
570-183691-11	OS1-SED-240508	Total/NA	Solid	7471A	439583
570-183691-12	SRE-SED-4-240508	Total/NA	Solid	7471A	439583
570-183691-13	D-5/6-SED-240509	Total/NA	Solid	7471A	439583

### Prep Batch: 440890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-183691-1	OW-SED-1-240507	Total/NA	Solid	3050B	
570-183691-2	AT-1-240507	Total/NA	Solid	3050B	
570-183691-3	KC-1-240507	Total/NA	Solid	3050B	
570-183691-4	GF-1-240507	Total/NA	Solid	3050B	
570-183691-5	CIT-1-240507	Total/NA	Solid	3050B	
570-183691-6	TF-1-240507	Total/NA	Solid	3050B	
570-183691-7	HV-1-240508	Total/NA	Solid	3050B	
570-183691-8	HV-2-240508	Total/NA	Solid	3050B	
570-183691-9	HV-SED-240508	Total/NA	Solid	3050B	
570-183691-10	HV-SED-1-240508	Total/NA	Solid	3050B	
570-183691-11	OS1-SED-240508	Total/NA	Solid	3050B	
570-183691-12	SRE-SED-4-240508	Total/NA	Solid	3050B	
570-183691-13	D-5/6-SED-240509	Total/NA	Solid	3050B	
MB 570-440890/1-A ^5	Method Blank	Total/NA	Solid	3050B	
LCS 570-440890/2-A ^5	Lab Control Sample	Total/NA	Solid	3050B	
LCSD 570-440890/3-A ^5	Lab Control Sample Dup	Total/NA	Solid	3050B	
570-183691-1 MS	OW-SED-1-240507	Total/NA	Solid	3050B	
570-183691-1 MSD	OW-SED-1-240507	Total/NA	Solid	3050B	

# QC Association Summary

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183691-1

## Metals

**Analysis Batch: 441947**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-183691-1	OW-SED-1-240507	Total/NA	Solid	6010B	440890
570-183691-2	AT-1-240507	Total/NA	Solid	6010B	440890
570-183691-3	KC-1-240507	Total/NA	Solid	6010B	440890
570-183691-4	GF-1-240507	Total/NA	Solid	6010B	440890
570-183691-5	CIT-1-240507	Total/NA	Solid	6010B	440890
570-183691-6	TF-1-240507	Total/NA	Solid	6010B	440890
570-183691-7	HV-1-240508	Total/NA	Solid	6010B	440890
570-183691-8	HV-2-240508	Total/NA	Solid	6010B	440890
570-183691-9	HV-SED-240508	Total/NA	Solid	6010B	440890
570-183691-10	HV-SED-1-240508	Total/NA	Solid	6010B	440890
570-183691-11	OS1-SED-240508	Total/NA	Solid	6010B	440890
570-183691-12	SRE-SED-4-240508	Total/NA	Solid	6010B	440890
570-183691-13	D-5/6-SED-240509	Total/NA	Solid	6010B	440890
MB 570-440890/1-A ^5	Method Blank	Total/NA	Solid	6010B	440890
LCS 570-440890/2-A ^5	Lab Control Sample	Total/NA	Solid	6010B	440890
LCSD 570-440890/3-A ^5	Lab Control Sample Dup	Total/NA	Solid	6010B	440890
570-183691-1 MS	OW-SED-1-240507	Total/NA	Solid	6010B	440890
570-183691-1 MSD	OW-SED-1-240507	Total/NA	Solid	6010B	440890

# Lab Chronicle

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183691-1

**Client Sample ID: OW-SED-1-240507**

**Lab Sample ID: 570-183691-1**

**Matrix: Solid**

Date Collected: 05/07/24 10:10

Date Received: 05/09/24 13:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	DI Leach			9.98 g	100 mL	442840	05/21/24 14:24	P5UC	EET CAL 1
Total/NA	Analysis	314.0		1	4 mL	4 mL	443162	05/22/24 14:34	M5Z3	EET CAL 4
		Instrument ID: IC13								
Total/NA	Prep	3050B			2.00 g	50 mL	440890	05/15/24 11:15	EV3M	EET CAL 4
Total/NA	Analysis	6010B		5			441947	05/17/24 20:21	P1R	EET CAL 4
		Instrument ID: ICP10								
Total/NA	Prep	7471A			0.53 g	50 mL	439583	05/10/24 18:19	VCN7	EET CAL 4
Total/NA	Analysis	7471A		1			440117	05/13/24 14:12	ECX6	EET CAL 4
		Instrument ID: HG7								

**Client Sample ID: AT-1-240507**

**Lab Sample ID: 570-183691-2**

**Matrix: Solid**

Date Collected: 05/07/24 11:45

Date Received: 05/09/24 13:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	DI Leach			10.13 g	100 mL	442840	05/21/24 14:24	P5UC	EET CAL 1
Total/NA	Analysis	314.0		1	4 mL	4 mL	443162	05/22/24 14:55	M5Z3	EET CAL 4
		Instrument ID: IC13								
Total/NA	Prep	3050B			1.96 g	50 mL	440890	05/15/24 11:15	EV3M	EET CAL 4
Total/NA	Analysis	6010B		5			441947	05/17/24 20:35	P1R	EET CAL 4
		Instrument ID: ICP10								
Total/NA	Prep	7471A			0.53 g	50 mL	439583	05/10/24 18:19	VCN7	EET CAL 4
Total/NA	Analysis	7471A		1			440117	05/13/24 14:14	ECX6	EET CAL 4
		Instrument ID: HG7								

**Client Sample ID: KC-1-240507**

**Lab Sample ID: 570-183691-3**

**Matrix: Solid**

Date Collected: 05/07/24 12:20

Date Received: 05/09/24 13:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	DI Leach			9.96 g	100 mL	442840	05/21/24 14:24	P5UC	EET CAL 1
Total/NA	Analysis	314.0		1	4 mL	4 mL	443162	05/22/24 15:16	M5Z3	EET CAL 4
		Instrument ID: IC13								
Total/NA	Prep	3050B			2.04 g	50 mL	440890	05/15/24 11:15	EV3M	EET CAL 4
Total/NA	Analysis	6010B		5			441947	05/17/24 20:38	P1R	EET CAL 4
		Instrument ID: ICP10								
Total/NA	Prep	7471A			0.51 g	50 mL	439583	05/10/24 18:19	VCN7	EET CAL 4
Total/NA	Analysis	7471A		1			440117	05/13/24 14:16	ECX6	EET CAL 4
		Instrument ID: HG7								

Eurofins Calscience

# Lab Chronicle

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183691-1

**Client Sample ID: GF-1-240507**  
**Date Collected: 05/07/24 12:50**  
**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183691-4**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	DI Leach			10.00 g	100 mL	442840	05/21/24 14:24	P5UC	EET CAL 1
Total/NA	Analysis	314.0 Instrument ID: IC13		1	4 mL	4 mL	443162	05/22/24 15:37	M5Z3	EET CAL 4
Total/NA	Prep	3050B			2.02 g	50 mL	440890	05/15/24 11:15	EV3M	EET CAL 4
Total/NA	Analysis	6010B Instrument ID: ICP10		5			441947	05/17/24 20:40	P1R	EET CAL 4
Total/NA	Prep	7471A			0.51 g	50 mL	439583	05/10/24 18:19	VCN7	EET CAL 4
Total/NA	Analysis	7471A Instrument ID: HG7		1			440117	05/13/24 14:18	ECX6	EET CAL 4

**Client Sample ID: CIT-1-240507**  
**Date Collected: 05/07/24 13:10**  
**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183691-5**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	DI Leach			10.09 g	100 mL	442840	05/21/24 14:24	P5UC	EET CAL 1
Total/NA	Analysis	314.0 Instrument ID: IC13		1	4 mL	4 mL	443162	05/22/24 15:58	M5Z3	EET CAL 4
Total/NA	Prep	3050B			2.00 g	50 mL	440890	05/15/24 11:15	EV3M	EET CAL 4
Total/NA	Analysis	6010B Instrument ID: ICP10		5			441947	05/17/24 20:42	P1R	EET CAL 4
Total/NA	Prep	7471A			0.48 g	50 mL	439583	05/10/24 18:19	VCN7	EET CAL 4
Total/NA	Analysis	7471A Instrument ID: HG7		1			440117	05/13/24 14:20	ECX6	EET CAL 4

**Client Sample ID: TF-1-240507**  
**Date Collected: 05/07/24 13:30**  
**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183691-6**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	DI Leach			9.93 g	100 mL	442840	05/21/24 14:24	P5UC	EET CAL 1
Total/NA	Analysis	314.0 Instrument ID: IC13		1	4 mL	4 mL	443162	05/22/24 17:01	M5Z3	EET CAL 4
Total/NA	Prep	3050B			2.01 g	50 mL	440890	05/15/24 11:15	EV3M	EET CAL 4
Total/NA	Analysis	6010B Instrument ID: ICP10		5			441947	05/17/24 20:45	P1R	EET CAL 4
Total/NA	Prep	7471A			0.50 g	50 mL	439583	05/10/24 18:19	VCN7	EET CAL 4
Total/NA	Analysis	7471A Instrument ID: HG7		1			440117	05/13/24 14:22	ECX6	EET CAL 4

# Lab Chronicle

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183691-1

**Client Sample ID: HV-1-240508**

Date Collected: 05/08/24 13:20

Date Received: 05/09/24 13:22

**Lab Sample ID: 570-183691-7**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	DI Leach			10.13 g	100 mL	442840	05/21/24 14:24	P5UC	EET CAL 1
Total/NA	Analysis	314.0		1	4 mL	4 mL	443162	05/22/24 17:21	M5Z3	EET CAL 4
		Instrument ID: IC13								
Total/NA	Prep	3050B			2.01 g	50 mL	440890	05/15/24 11:15	EV3M	EET CAL 4
Total/NA	Analysis	6010B		5			441947	05/17/24 20:47	P1R	EET CAL 4
		Instrument ID: ICP10								
Total/NA	Prep	7471A			0.51 g	50 mL	439583	05/10/24 18:19	VCN7	EET CAL 4
Total/NA	Analysis	7471A		1			440117	05/13/24 14:24	ECX6	EET CAL 4
		Instrument ID: HG7								

**Client Sample ID: HV-2-240508**

Date Collected: 05/08/24 13:25

Date Received: 05/09/24 13:22

**Lab Sample ID: 570-183691-8**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	DI Leach			9.89 g	100 mL	442840	05/21/24 14:24	P5UC	EET CAL 1
Total/NA	Analysis	314.0		1	4 mL	4 mL	443162	05/22/24 17:42	M5Z3	EET CAL 4
		Instrument ID: IC13								
Total/NA	Prep	3050B			1.95 g	50 mL	440890	05/15/24 11:15	EV3M	EET CAL 4
Total/NA	Analysis	6010B		5			441947	05/17/24 20:50	P1R	EET CAL 4
		Instrument ID: ICP10								
Total/NA	Prep	7471A			0.49 g	50 mL	439583	05/10/24 18:19	VCN7	EET CAL 4
Total/NA	Analysis	7471A		1			440117	05/13/24 14:25	ECX6	EET CAL 4
		Instrument ID: HG7								

**Client Sample ID: HV-SED-240508**

Date Collected: 05/08/24 13:30

Date Received: 05/09/24 13:22

**Lab Sample ID: 570-183691-9**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	DI Leach			10.05 g	100 mL	442840	05/21/24 14:24	P5UC	EET CAL 1
Total/NA	Analysis	314.0		1	4 mL	4 mL	443162	05/22/24 18:03	M5Z3	EET CAL 4
		Instrument ID: IC13								
Total/NA	Prep	3050B			2.05 g	50 mL	440890	05/15/24 11:15	EV3M	EET CAL 4
Total/NA	Analysis	6010B		5			441947	05/17/24 20:52	P1R	EET CAL 4
		Instrument ID: ICP10								
Total/NA	Prep	7471A			0.51 g	50 mL	439583	05/10/24 18:19	VCN7	EET CAL 4
Total/NA	Analysis	7471A		1			440194	05/13/24 15:37	ECX6	EET CAL 4
		Instrument ID: HG7								

Eurofins Calscience

# Lab Chronicle

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183691-1

**Client Sample ID: HV-SED-1-240508**

**Lab Sample ID: 570-183691-10**

**Matrix: Solid**

Date Collected: 05/08/24 13:40

Date Received: 05/09/24 13:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	DI Leach			9.98 g	100 mL	442840	05/21/24 14:24	P5UC	EET CAL 1
Total/NA	Analysis	314.0		1	4 mL	4 mL	443162	05/22/24 18:24	M5Z3	EET CAL 4
		Instrument ID: IC13								
Total/NA	Prep	3050B			2.02 g	50 mL	440890	05/15/24 11:15	EV3M	EET CAL 4
Total/NA	Analysis	6010B		5			441947	05/17/24 20:59	P1R	EET CAL 4
		Instrument ID: ICP10								
Total/NA	Prep	7471A			0.49 g	50 mL	439583	05/10/24 18:19	VCN7	EET CAL 4
Total/NA	Analysis	7471A		1			440194	05/13/24 15:38	ECX6	EET CAL 4
		Instrument ID: HG7								

**Client Sample ID: OS1-SED-240508**

**Lab Sample ID: 570-183691-11**

**Matrix: Solid**

Date Collected: 05/08/24 14:45

Date Received: 05/09/24 13:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	DI Leach			10.08 g	100 mL	442840	05/21/24 14:24	P5UC	EET CAL 1
Total/NA	Analysis	314.0		1	4 mL	4 mL	443162	05/22/24 18:45	M5Z3	EET CAL 4
		Instrument ID: IC13								
Total/NA	Prep	3050B			2.03 g	50 mL	440890	05/15/24 11:15	EV3M	EET CAL 4
Total/NA	Analysis	6010B		5			441947	05/17/24 21:02	P1R	EET CAL 4
		Instrument ID: ICP10								
Total/NA	Prep	7471A			0.50 g	50 mL	439583	05/10/24 18:19	VCN7	EET CAL 4
Total/NA	Analysis	7471A		1			440194	05/13/24 15:40	ECX6	EET CAL 4
		Instrument ID: HG7								

**Client Sample ID: SRE-SED-4-240508**

**Lab Sample ID: 570-183691-12**

**Matrix: Solid**

Date Collected: 05/08/24 15:40

Date Received: 05/09/24 13:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	DI Leach			9.92 g	100 mL	442840	05/21/24 14:24	P5UC	EET CAL 1
Total/NA	Analysis	314.0		1	4 mL	4 mL	443162	05/22/24 19:06	M5Z3	EET CAL 4
		Instrument ID: IC13								
Total/NA	Prep	3050B			2.05 g	50 mL	440890	05/15/24 11:15	EV3M	EET CAL 4
Total/NA	Analysis	6010B		5			441947	05/17/24 21:04	P1R	EET CAL 4
		Instrument ID: ICP10								
Total/NA	Prep	7471A			0.52 g	50 mL	439583	05/10/24 18:19	VCN7	EET CAL 4
Total/NA	Analysis	7471A		1			440194	05/13/24 15:42	ECX6	EET CAL 4
		Instrument ID: HG7								

Eurofins Calscience

# Lab Chronicle

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183691-1

**Client Sample ID: D-5/6-SED-240509**

**Lab Sample ID: 570-183691-13**

**Matrix: Solid**

Date Collected: 05/09/24 09:05

Date Received: 05/09/24 13:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Leach	DI Leach			10.12 g	100 mL	442840	05/21/24 14:24	P5UC	EET CAL 1
Total/NA	Analysis	314.0 Instrument ID: IC13		1	4 mL	4 mL	443162	05/22/24 19:26	M5Z3	EET CAL 4
Total/NA	Prep	3050B			1.99 g	50 mL	440890	05/15/24 11:15	EV3M	EET CAL 4
Total/NA	Analysis	6010B Instrument ID: ICP10		5			441947	05/17/24 21:07	P1R	EET CAL 4
Total/NA	Prep	7471A			0.53 g	50 mL	439583	05/10/24 18:19	VCN7	EET CAL 4
Total/NA	Analysis	7471A Instrument ID: HG7		1			440194	05/13/24 15:44	ECX6	EET CAL 4

**Laboratory References:**

EET CAL 1 = Eurofins Calscience Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

# Accreditation/Certification Summary

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183691-1

## Laboratory: Eurofins Calscience

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	3082	07-31-24
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
314.0		Solid	Perchlorate
Oregon	NELAP	4175	02-03-25

## Method Summary

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183691-1

Method	Method Description	Protocol	Laboratory
314.0	Perchlorate (IC)	EPA	EET CAL 4
6010B	Metals (ICP)	SW846	EET CAL 4
7471A	Mercury (CVAA)	SW846	EET CAL 4
3050B	Preparation, Metals	SW846	EET CAL 4
7471A	Preparation, Mercury	SW846	EET CAL 4
DI Leach	Deionized Water Leaching Procedure	ASTM	EET CAL 1

### Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

EET CAL 1 = Eurofins Calscience Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

# Sample Summary

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183691-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
570-183691-1	OW-SED-1-240507	Solid	05/07/24 10:10	05/09/24 13:22
570-183691-2	AT-1-240507	Solid	05/07/24 11:45	05/09/24 13:22
570-183691-3	KC-1-240507	Solid	05/07/24 12:20	05/09/24 13:22
570-183691-4	GF-1-240507	Solid	05/07/24 12:50	05/09/24 13:22
570-183691-5	CIT-1-240507	Solid	05/07/24 13:10	05/09/24 13:22
570-183691-6	TF-1-240507	Solid	05/07/24 13:30	05/09/24 13:22
570-183691-7	HV-1-240508	Solid	05/08/24 13:20	05/09/24 13:22
570-183691-8	HV-2-240508	Solid	05/08/24 13:25	05/09/24 13:22
570-183691-9	HV-SED-240508	Solid	05/08/24 13:30	05/09/24 13:22
570-183691-10	HV-SED-1-240508	Solid	05/08/24 13:40	05/09/24 13:22
570-183691-11	OS1-SED-240508	Solid	05/08/24 14:45	05/09/24 13:22
570-183691-12	SRE-SED-4-240508	Solid	05/08/24 15:40	05/09/24 13:22
570-183691-13	D-5/6-SED-240509	Solid	05/09/24 09:05	05/09/24 13:22

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14
**ENVIRONMENTAL**

CHAIN-OF-CUSTODY  
 Date: 5/19/24  
 Page 1 of 1  
 Loc: b/v  
 183691

FROM:  GSI Environmental Inc. 2000 Powell Street, Suite 820 Emeryville, CA 94608 (510) 463-8484		PROJECT NAME: AJU-BB		PROJECT NO: 5182																																																																																																																																																		
PROJECT CONTACT: Matt Goetz, Skyler Bowersmith		LAB CONTACT: Alisanah Salimpour (Pleasanton)		SAMPLE(S) (PRINT): SJ3-A CJ3																																																																																																																																																		
TEL: (510) 463-8484	E-MAIL: noelgoetz@gsi.net.com; sbowersmith@gsi-net.com	SPECIAL INSTRUCTIONS:																																																																																																																																																				
LABORATORY: Eurofins Calscience		REQUESTED ANALYSES Please check box or fill in blank as needed																																																																																																																																																				
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 72 HR <input checked="" type="checkbox"/> 5 DAYS		<input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input checked="" type="checkbox"/> STANDARD																																																																																																																																																				
SPECIAL INSTRUCTIONS:  <table border="1"> <thead> <tr> <th>LAB USE ONLY</th> <th>SAMPLE ID</th> <th>SAMPLING DATE</th> <th>TIME</th> <th>MATRIX</th> <th>NO OF CONT</th> <th>Unpreserved</th> <th>Preserved</th> <th>Field Filtered</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>OW-SED-1-240507</td> <td>5/17/24</td> <td>10:00</td> <td>SO</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>2</td> <td>RT-1-240507</td> <td>5/17/24</td> <td>1145</td> <td>SO</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>3</td> <td>EF-T-240507</td> <td>5/17/24</td> <td>1220</td> <td>SO</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>4</td> <td>GF-1-240507</td> <td>5/17/24</td> <td>1250</td> <td>SO</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>5</td> <td>CIT-1-240507</td> <td>5/17/24</td> <td>1310</td> <td>SO</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>6</td> <td>TF-1-240507</td> <td>5/17/24</td> <td>1330</td> <td>SO</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>7</td> <td>HV-1-240509</td> <td>5/18/24</td> <td>1320</td> <td>SO</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>8</td> <td>HV-2-240509</td> <td>5/18/24</td> <td>1325</td> <td>SO</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>9</td> <td>HV-SED-240508</td> <td>5/18/24</td> <td>1330</td> <td>SO</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>10</td> <td>HU-SED-1-240503</td> <td>5/18/24</td> <td>1340</td> <td>SO</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>11</td> <td>OSI-SED-240503</td> <td>5/18/24</td> <td>1445</td> <td>SO</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>12</td> <td>SEF-SED-4-240503</td> <td>5/18/24</td> <td>1540</td> <td>SO</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>13</td> <td>D-9/6-SED-240509</td> <td>5/19/24</td> <td>0905</td> <td>SO</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td colspan="5">   <u>510183691 Chain of Custody</u> </td> </tr> <tr> <td colspan="2">Released by (Signature) <u>JL</u></td> <td colspan="3">Received by (Signature) <u>EC</u> Date <u>5/19/24</u> Time <u>13:22</u></td> </tr> <tr> <td colspan="2">Released by (Signature)</td> <td colspan="3">Received by (Signature)</td> </tr> <tr> <td colspan="2">Released by (Signature)</td> <td colspan="3">Received by (Signature)</td> </tr> </tbody> </table>					LAB USE ONLY	SAMPLE ID	SAMPLING DATE	TIME	MATRIX	NO OF CONT	Unpreserved	Preserved	Field Filtered	1	OW-SED-1-240507	5/17/24	10:00	SO	1	X	X	X	2	RT-1-240507	5/17/24	1145	SO	1	X	X	X	3	EF-T-240507	5/17/24	1220	SO	1	X	X	X	4	GF-1-240507	5/17/24	1250	SO	1	X	X	X	5	CIT-1-240507	5/17/24	1310	SO	1	X	X	X	6	TF-1-240507	5/17/24	1330	SO	1	X	X	X	7	HV-1-240509	5/18/24	1320	SO	1	X	X	X	8	HV-2-240509	5/18/24	1325	SO	1	X	X	X	9	HV-SED-240508	5/18/24	1330	SO	1	X	X	X	10	HU-SED-1-240503	5/18/24	1340	SO	1	X	X	X	11	OSI-SED-240503	5/18/24	1445	SO	1	X	X	X	12	SEF-SED-4-240503	5/18/24	1540	SO	1	X	X	X	13	D-9/6-SED-240509	5/19/24	0905	SO	1	X	X	X	 <u>510183691 Chain of Custody</u>					Released by (Signature) <u>JL</u>		Received by (Signature) <u>EC</u> Date <u>5/19/24</u> Time <u>13:22</u>			Released by (Signature)		Received by (Signature)			Released by (Signature)		Received by (Signature)		
LAB USE ONLY	SAMPLE ID	SAMPLING DATE	TIME	MATRIX	NO OF CONT	Unpreserved	Preserved	Field Filtered																																																																																																																																														
1	OW-SED-1-240507	5/17/24	10:00	SO	1	X	X	X																																																																																																																																														
2	RT-1-240507	5/17/24	1145	SO	1	X	X	X																																																																																																																																														
3	EF-T-240507	5/17/24	1220	SO	1	X	X	X																																																																																																																																														
4	GF-1-240507	5/17/24	1250	SO	1	X	X	X																																																																																																																																														
5	CIT-1-240507	5/17/24	1310	SO	1	X	X	X																																																																																																																																														
6	TF-1-240507	5/17/24	1330	SO	1	X	X	X																																																																																																																																														
7	HV-1-240509	5/18/24	1320	SO	1	X	X	X																																																																																																																																														
8	HV-2-240509	5/18/24	1325	SO	1	X	X	X																																																																																																																																														
9	HV-SED-240508	5/18/24	1330	SO	1	X	X	X																																																																																																																																														
10	HU-SED-1-240503	5/18/24	1340	SO	1	X	X	X																																																																																																																																														
11	OSI-SED-240503	5/18/24	1445	SO	1	X	X	X																																																																																																																																														
12	SEF-SED-4-240503	5/18/24	1540	SO	1	X	X	X																																																																																																																																														
13	D-9/6-SED-240509	5/19/24	0905	SO	1	X	X	X																																																																																																																																														
 <u>510183691 Chain of Custody</u>																																																																																																																																																						
Released by (Signature) <u>JL</u>		Received by (Signature) <u>EC</u> Date <u>5/19/24</u> Time <u>13:22</u>																																																																																																																																																				
Released by (Signature)		Received by (Signature)																																																																																																																																																				
Released by (Signature)		Received by (Signature)																																																																																																																																																				



Loc: 570

CHAIN-OF-CUSTODY RE  
Date: 5/19/24 183691  
Page 1 of

FROM:  GSI Environmental Inc. 2000 Powell Street, Suite 820 Emeryville, CA 94608 (510) 463-8484		PROJECT NAME: AJU-BB				PROJECT NO 5182			
		PROJECT CONTACT: Matt Goerz, Skyler Bowersmith				LAB CONTACT: Afsaneh Salimpour (Pleasanton)			
		GLOBAL ID: -				SAMPLER(S) (PRINT) SB + CSB			
TEL. (510) 463-8484	E-MAIL. mpgoerz@gsi.net.com, sjbowersmith@gsi-net.com	<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed							
LABORATORY: Eurofins Calscience									
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		Unpreserved	Preserved	Field Filtered	Title 22 Metals (6010/7471)		Perchlorate (3140)		
SPECIAL INSTRUCTIONS:									
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO OF CONT				
		DATE	TIME						
1	OW-SED-1-240501	5/7/24	1000	SO	1	X	X	X	
2	AT-1-240507	5/7/24	1145	SO	1	X	X	X	
3	CT-1-240507	5/7/24	1220	SO	1	X	X	X	
4	GF-1-240507	5/7/24	1250	SO	1	X	X	X	
5	CIT-1-240507	5/7/24	1310	SO	1	X	X	X	
6	TF-1-240507	5/7/24	1330	SO	1	X	X	X	
7	HV-1-240508	5/8/24	1320	SO	1	X	X	X	
8	HV-2-240508	5/8/24	1325	SO	1	X	X	X	
9	HU-SED-240508	5/8/24	1330	SO	1	X	X	X	
10	HU-SED-1-240508	5/8/24	1340	SO	1	X	X	X	
11	OSI-SED-240508	5/8/24	1445	SO	1	X	X	X	
12	SDS-SED-4-240508	5/8/24	1540	SO	1	X	X	X	
13	D-96-SED-240509	5/9/24	0905	SO	1	X	X	X	
						 570-183691 Chain of Custody			
Relinquished by: (Signature)				Received by: (Signature)				Date 5/19/24	Time 13:22
Relinquished by: (Signature)				Received by: (Signature)				Date	Time
Relinquished by: (Signature)				Received by: (Signature)				Date	Time

30/3.1 SciF

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14

## Login Sample Receipt Checklist

Client: GSI Environmental Inc

Job Number: 570-183691-1

**Login Number:** 183691

**List Source:** Eurofins Calscience

**List Number:** 1

**Creator:** Yu, Tiffany

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Skyler J Bowersmith  
GSI Environmental Inc  
2000 Powell Street  
Suite 820  
Emeryville, California 94608

Generated 6/7/2024 4:14:20 PM Revision 1

## JOB DESCRIPTION

5182 - AJU-BB

## JOB NUMBER

570-183688-1

# Eurofins Calscience

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Calscience Project Manager.

## Authorization



Authorized for release by  
Janice Hsu, Project Manager I  
[Janice.Hsu@et.eurofinsus.com](mailto:Janice.Hsu@et.eurofinsus.com)  
(657)210-6359

Generated  
6/7/2024 4:14:20 PM  
Revision 1

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions/Glossary . . . . .	4
Case Narrative . . . . .	5
Detection Summary . . . . .	6
Client Sample Results . . . . .	7
QC Sample Results . . . . .	11
QC Association Summary . . . . .	14
Lab Chronicle . . . . .	16
Certification Summary . . . . .	18
Method Summary . . . . .	19
Sample Summary . . . . .	20
Chain of Custody . . . . .	21
Receipt Checklists . . . . .	22

# Definitions/Glossary

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183688-1

## Qualifiers

### Metals

Qualifier	Qualifier Description
^1+	Initial Calibration Verification (ICV) is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
D	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

# Case Narrative

Client: GSI Environmental Inc  
Project: 5182 - AJU-BB

Job ID: 570-183688-1

**Job ID: 570-183688-1**

**Eurofins Calscience**

## Job Narrative 570-183688-1

### REVISION

The report being provided is a revision of the original report sent on 5/17/2024. The report (revision 1) is being revised to change reporting formatter and correct sample ID per client's request.

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

### **Receipt**

The samples were received on 5/9/2024 1:22 PM. 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 3.1°C.

### **HPLC/IC**

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

### **Metals**

Method 6010B - Total Recoverable: The initial calibration verification (ICV) result for batch 570-441532 was above the upper control limit. The affected analytes are: Antimony. Sample results were non-detects, and have been reported as qualified data.

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: 5182 - AJU-BB

Job ID: 570-183688-1

## Client Sample ID: OW-W-240508

## Lab Sample ID: 570-183688-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.040		0.010	0.0011	mg/L	1		6010B	Total Recoverable

## Client Sample ID: HV-W-240508

## Lab Sample ID: 570-183688-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.047		0.010	0.0011	mg/L	1		6010B	Total Recoverable

## Client Sample ID: OS1-W-240508

## Lab Sample ID: 570-183688-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.056		0.010	0.0011	mg/L	1		6010B	Total Recoverable
Vanadium	0.0025	J	0.010	0.0024	mg/L	1		6010B	Total Recoverable

## Client Sample ID: D-5/6-W-240509

## Lab Sample ID: 570-183688-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.058		0.010	0.0011	mg/L	1		6010B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Calscience

# Client Sample Results

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183688-1

## Method: EPA 314.0 - Perchlorate (IC)

**Client Sample ID: OW-W-240508**

**Date Collected: 05/08/24 12:45**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183688-1**

**Matrix: Water**

Analyte

Perchlorate

Result

ND

Qualifier

RL

2.0

MDL

0.91

Unit

ug/L

D

Prepared

Analyzed

Dil Fac

05/14/24 02:32

1

**Client Sample ID: HV-W-240508**

**Date Collected: 05/08/24 13:30**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183688-2**

**Matrix: Water**

Analyte

Perchlorate

Result

ND

Qualifier

RL

2.0

MDL

0.91

Unit

ug/L

D

Prepared

Analyzed

Dil Fac

05/14/24 03:14

1

**Client Sample ID: OS1-W-240508**

**Date Collected: 05/08/24 15:00**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183688-3**

**Matrix: Water**

Analyte

Perchlorate

Result

ND

Qualifier

RL

2.0

MDL

0.91

Unit

ug/L

D

Prepared

Analyzed

Dil Fac

05/14/24 03:55

1

**Client Sample ID: D-5/6-W-240509**

**Date Collected: 05/09/24 09:10**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183688-4**

**Matrix: Water**

Analyte

Perchlorate

Result

ND

Qualifier

RL

2.0

MDL

0.91

Unit

ug/L

D

Prepared

Analyzed

Dil Fac

05/14/24 04:37

1

# Client Sample Results

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183688-1

## Method: SW846 6010B - Metals (ICP) - Total Recoverable

**Client Sample ID: OW-W-240508**

**Date Collected: 05/08/24 12:45**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183688-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND	^1+	0.10	0.025	mg/L		05/10/24 07:22	05/16/24 18:58	1
Arsenic	ND		0.10	0.020	mg/L		05/10/24 07:22	05/16/24 18:58	1
<b>Barium</b>	<b>0.040</b>		0.010	0.0011	mg/L		05/10/24 07:22	05/16/24 18:58	1
Beryllium	ND		0.010	0.0013	mg/L		05/10/24 07:22	05/16/24 18:58	1
Cadmium	ND		0.010	0.00062	mg/L		05/10/24 07:22	05/16/24 18:58	1
Chromium	ND		0.050	0.0030	mg/L		05/10/24 07:22	05/16/24 18:58	1
Cobalt	ND		0.050	0.00088	mg/L		05/10/24 07:22	05/16/24 18:58	1
Copper	ND		0.050	0.0027	mg/L		05/10/24 07:22	05/16/24 18:58	1
Lead	ND		0.050	0.0053	mg/L		05/10/24 07:22	05/16/24 18:58	1
Molybdenum	ND		0.050	0.0039	mg/L		05/10/24 07:22	05/16/24 18:58	1
Nickel	ND		0.050	0.0031	mg/L		05/10/24 07:22	05/16/24 18:58	1
Selenium	ND		0.050	0.016	mg/L		05/10/24 07:22	05/16/24 18:58	1
Silver	ND		0.010	0.0026	mg/L		05/10/24 07:22	05/16/24 18:58	1
Thallium	ND		0.050	0.010	mg/L		05/10/24 07:22	05/16/24 18:58	1
Vanadium	ND		0.010	0.0024	mg/L		05/10/24 07:22	05/16/24 18:58	1
Zinc	ND		0.25	0.013	mg/L		05/10/24 07:22	05/16/24 18:58	1

**Client Sample ID: HV-W-240508**

**Date Collected: 05/08/24 13:30**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183688-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND	^1+	0.10	0.025	mg/L		05/10/24 07:22	05/16/24 19:00	1
Arsenic	ND		0.10	0.020	mg/L		05/10/24 07:22	05/16/24 19:00	1
<b>Barium</b>	<b>0.047</b>		0.010	0.0011	mg/L		05/10/24 07:22	05/16/24 19:00	1
Beryllium	ND		0.010	0.0013	mg/L		05/10/24 07:22	05/16/24 19:00	1
Cadmium	ND		0.010	0.00062	mg/L		05/10/24 07:22	05/16/24 19:00	1
Chromium	ND		0.050	0.0030	mg/L		05/10/24 07:22	05/16/24 19:00	1
Cobalt	ND		0.050	0.00088	mg/L		05/10/24 07:22	05/16/24 19:00	1
Copper	ND		0.050	0.0027	mg/L		05/10/24 07:22	05/16/24 19:00	1
Lead	ND		0.050	0.0053	mg/L		05/10/24 07:22	05/16/24 19:00	1
Molybdenum	ND		0.050	0.0039	mg/L		05/10/24 07:22	05/16/24 19:00	1
Nickel	ND		0.050	0.0031	mg/L		05/10/24 07:22	05/16/24 19:00	1
Selenium	ND		0.050	0.016	mg/L		05/10/24 07:22	05/16/24 19:00	1
Silver	ND		0.010	0.0026	mg/L		05/10/24 07:22	05/16/24 19:00	1
Thallium	ND		0.050	0.010	mg/L		05/10/24 07:22	05/16/24 19:00	1
Vanadium	ND		0.010	0.0024	mg/L		05/10/24 07:22	05/16/24 19:00	1
Zinc	ND		0.25	0.013	mg/L		05/10/24 07:22	05/16/24 19:00	1

**Client Sample ID: OS1-W-240508**

**Date Collected: 05/08/24 15:00**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183688-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND	^1+	0.10	0.025	mg/L		05/10/24 07:22	05/16/24 19:02	1
Arsenic	ND		0.10	0.020	mg/L		05/10/24 07:22	05/16/24 19:02	1
<b>Barium</b>	<b>0.056</b>		0.010	0.0011	mg/L		05/10/24 07:22	05/16/24 19:02	1
Beryllium	ND		0.010	0.0013	mg/L		05/10/24 07:22	05/16/24 19:02	1
Cadmium	ND		0.010	0.00062	mg/L		05/10/24 07:22	05/16/24 19:02	1
Chromium	ND		0.050	0.0030	mg/L		05/10/24 07:22	05/16/24 19:02	1
Cobalt	ND		0.050	0.00088	mg/L		05/10/24 07:22	05/16/24 19:02	1
Copper	ND		0.050	0.0027	mg/L		05/10/24 07:22	05/16/24 19:02	1

Eurofins Calscience

# Client Sample Results

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183688-1

## Method: SW846 6010B - Metals (ICP) - Total Recoverable (Continued)

**Client Sample ID: OS1-W-240508**

**Date Collected: 05/08/24 15:00**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183688-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.050	0.0053	mg/L		05/10/24 07:22	05/16/24 19:02	1
Molybdenum	ND		0.050	0.0039	mg/L		05/10/24 07:22	05/16/24 19:02	1
Nickel	ND		0.050	0.0031	mg/L		05/10/24 07:22	05/16/24 19:02	1
Selenium	ND		0.050	0.016	mg/L		05/10/24 07:22	05/16/24 19:02	1
Silver	ND		0.010	0.0026	mg/L		05/10/24 07:22	05/16/24 19:02	1
Thallium	ND		0.050	0.010	mg/L		05/10/24 07:22	05/16/24 19:02	1
<b>Vanadium</b>	<b>0.0025</b>	<b>J</b>	0.010	0.0024	mg/L		05/10/24 07:22	05/16/24 19:02	1
Zinc	ND		0.25	0.013	mg/L		05/10/24 07:22	05/16/24 19:02	1

**Client Sample ID: D-5/6-W-240509**

**Date Collected: 05/09/24 09:10**

**Date Received: 05/09/24 13:22**

**Lab Sample ID: 570-183688-4**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND	^1+	0.10	0.025	mg/L		05/10/24 07:22	05/16/24 19:04	1
Arsenic	ND		0.10	0.020	mg/L		05/10/24 07:22	05/16/24 19:04	1
<b>Barium</b>	<b>0.058</b>		0.010	0.0011	mg/L		05/10/24 07:22	05/16/24 19:04	1
Beryllium	ND		0.010	0.0013	mg/L		05/10/24 07:22	05/16/24 19:04	1
Cadmium	ND		0.010	0.00062	mg/L		05/10/24 07:22	05/16/24 19:04	1
Chromium	ND		0.050	0.0030	mg/L		05/10/24 07:22	05/16/24 19:04	1
Cobalt	ND		0.050	0.00088	mg/L		05/10/24 07:22	05/16/24 19:04	1
Copper	ND		0.050	0.0027	mg/L		05/10/24 07:22	05/16/24 19:04	1
Lead	ND		0.050	0.0053	mg/L		05/10/24 07:22	05/16/24 19:04	1
Molybdenum	ND		0.050	0.0039	mg/L		05/10/24 07:22	05/16/24 19:04	1
Nickel	ND		0.050	0.0031	mg/L		05/10/24 07:22	05/16/24 19:04	1
Selenium	ND		0.050	0.016	mg/L		05/10/24 07:22	05/16/24 19:04	1
Silver	ND		0.010	0.0026	mg/L		05/10/24 07:22	05/16/24 19:04	1
Thallium	ND		0.050	0.010	mg/L		05/10/24 07:22	05/16/24 19:04	1
Vanadium	ND		0.010	0.0024	mg/L		05/10/24 07:22	05/16/24 19:04	1
Zinc	ND		0.25	0.013	mg/L		05/10/24 07:22	05/16/24 19:04	1

# Client Sample Results

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183688-1

## **Method: SW846 7470A - Mercury (CVAA)**

**Client Sample ID: OW-W-240508**

**Date Collected: 05/08/24 12:45**

**Date Received: 05/09/24 13:22**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L	D	05/10/24 12:13	05/10/24 18:42	1

**Lab Sample ID: 570-183688-1**

**Matrix: Water**

**Client Sample ID: HV-W-240508**

**Date Collected: 05/08/24 13:30**

**Date Received: 05/09/24 13:22**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L	D	05/10/24 12:13	05/10/24 18:44	1

**Lab Sample ID: 570-183688-2**

**Matrix: Water**

**Client Sample ID: OS1-W-240508**

**Date Collected: 05/08/24 15:00**

**Date Received: 05/09/24 13:22**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L	D	05/10/24 12:13	05/10/24 18:46	1

**Lab Sample ID: 570-183688-3**

**Matrix: Water**

**Client Sample ID: D-5/6-W-240509**

**Date Collected: 05/09/24 09:10**

**Date Received: 05/09/24 13:22**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L	D	05/10/24 12:13	05/10/24 18:48	1

**Lab Sample ID: 570-183688-4**

**Matrix: Water**

# QC Sample Results

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183688-1

## Method: 314.0 - Perchlorate (IC)

**Lab Sample ID: MB 570-440013/7**

**Matrix: Water**

**Analysis Batch: 440013**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		2.0	0.91	ug/L			05/13/24 16:51	1

**Lab Sample ID: LCS 570-440013/8**

**Matrix: Water**

**Analysis Batch: 440013**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec Limits	%Rec Limits
Perchlorate	25.0	25.3		ug/L		101	85 - 115

**Lab Sample ID: LCSD 570-440013/9**

**Matrix: Water**

**Analysis Batch: 440013**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec Limits	%Rec Limits	RPD Limit
Perchlorate	25.0	24.9		ug/L		100	85 - 115	2

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 570-439283/1-A**

**Matrix: Water**

**Analysis Batch: 439771**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.10	0.025	mg/L		05/10/24 07:22	05/11/24 10:37	1
Arsenic	ND		0.10	0.020	mg/L		05/10/24 07:22	05/11/24 10:37	1
Barium	ND		0.010	0.0011	mg/L		05/10/24 07:22	05/11/24 10:37	1
Beryllium	ND		0.010	0.0013	mg/L		05/10/24 07:22	05/11/24 10:37	1
Cadmium	ND		0.010	0.00062	mg/L		05/10/24 07:22	05/11/24 10:37	1
Chromium	ND		0.050	0.0030	mg/L		05/10/24 07:22	05/11/24 10:37	1
Cobalt	ND		0.050	0.00088	mg/L		05/10/24 07:22	05/11/24 10:37	1
Copper	ND		0.050	0.0027	mg/L		05/10/24 07:22	05/11/24 10:37	1
Lead	ND		0.050	0.0053	mg/L		05/10/24 07:22	05/11/24 10:37	1
Molybdenum	ND		0.050	0.0039	mg/L		05/10/24 07:22	05/11/24 10:37	1
Nickel	ND		0.050	0.0031	mg/L		05/10/24 07:22	05/11/24 10:37	1
Selenium	ND		0.050	0.016	mg/L		05/10/24 07:22	05/11/24 10:37	1
Silver	ND		0.010	0.0026	mg/L		05/10/24 07:22	05/11/24 10:37	1
Thallium	ND		0.050	0.010	mg/L		05/10/24 07:22	05/11/24 10:37	1
Vanadium	ND		0.010	0.0024	mg/L		05/10/24 07:22	05/11/24 10:37	1
Zinc	ND		0.25	0.013	mg/L		05/10/24 07:22	05/11/24 10:37	1

**Lab Sample ID: LCS 570-439283/2-A**

**Matrix: Water**

**Analysis Batch: 439771**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec Limits
Antimony	0.500	0.556		mg/L	111	80 - 120
Arsenic	0.500	0.502		mg/L	100	80 - 120
Barium	0.500	0.508		mg/L	102	80 - 120
Beryllium	0.500	0.503		mg/L	101	80 - 120
Cadmium	0.500	0.503		mg/L	101	80 - 120

**Client Sample ID: Lab Control Sample**

**Prep Type: Total Recoverable**

**Prep Batch: 439283**

Eurofins Calscience

# QC Sample Results

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183688-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LCS 570-439283/2-A**

**Matrix: Water**

**Analysis Batch: 439771**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total Recoverable**

**Prep Batch: 439283**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium	0.500	0.515		mg/L	103	80 - 120	
Cobalt	0.500	0.507		mg/L	101	80 - 120	
Copper	0.500	0.506		mg/L	101	80 - 120	
Lead	0.500	0.505		mg/L	101	80 - 120	
Molybdenum	0.500	0.514		mg/L	103	80 - 120	
Nickel	0.500	0.508		mg/L	102	80 - 120	
Selenium	0.500	0.484		mg/L	97	80 - 120	
Silver	0.250	0.254		mg/L	102	80 - 120	
Thallium	0.500	0.545		mg/L	109	80 - 120	
Vanadium	0.500	0.506		mg/L	101	80 - 120	
Zinc	0.500	0.501		mg/L	100	80 - 120	

**Lab Sample ID: LCSD 570-439283/3-A**

**Matrix: Water**

**Analysis Batch: 439771**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total Recoverable**

**Prep Batch: 439283**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	0.500	0.561		mg/L	112	80 - 120		1	20
Arsenic	0.500	0.511		mg/L	102	80 - 120		2	20
Barium	0.500	0.518		mg/L	104	80 - 120		2	20
Beryllium	0.500	0.514		mg/L	103	80 - 120		2	20
Cadmium	0.500	0.513		mg/L	103	80 - 120		2	20
Chromium	0.500	0.521		mg/L	104	80 - 120		1	20
Cobalt	0.500	0.522		mg/L	104	80 - 120		3	20
Copper	0.500	0.517		mg/L	103	80 - 120		2	20
Lead	0.500	0.518		mg/L	104	80 - 120		3	20
Molybdenum	0.500	0.531		mg/L	106	80 - 120		3	20
Nickel	0.500	0.522		mg/L	104	80 - 120		3	20
Selenium	0.500	0.495		mg/L	99	80 - 120		2	20
Silver	0.250	0.259		mg/L	104	80 - 120		2	20
Thallium	0.500	0.557		mg/L	111	80 - 120		2	20
Vanadium	0.500	0.518		mg/L	104	80 - 120		2	20
Zinc	0.500	0.508		mg/L	102	80 - 120		1	20

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID: MB 570-439409/1-A**

**Matrix: Water**

**Analysis Batch: 439529**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 439409**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		05/10/24 12:13	05/10/24 18:21	1

**Lab Sample ID: LCS 570-439409/2-A**

**Matrix: Water**

**Analysis Batch: 439529**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 439409**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00800	0.00791		mg/L	99	80 - 120	

Eurofins Calscience

# QC Sample Results

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183688-1

## Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCSD 570-439409/3-A

Matrix: Water

Analysis Batch: 439529

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 439409

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.00800	0.00799		mg/L	100	80 - 120	1	10	

# QC Association Summary

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183688-1

## HPLC/IC

### Analysis Batch: 440013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-183688-1	OW-W-240508	Total/NA	Water	314.0	
570-183688-2	HV-W-240508	Total/NA	Water	314.0	
570-183688-3	OS1-W-240508	Total/NA	Water	314.0	
570-183688-4	D-5/6-W-240509	Total/NA	Water	314.0	
MB 570-440013/7	Method Blank	Total/NA	Water	314.0	
LCS 570-440013/8	Lab Control Sample	Total/NA	Water	314.0	
LCSD 570-440013/9	Lab Control Sample Dup	Total/NA	Water	314.0	

## Metals

### Prep Batch: 439283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-183688-1	OW-W-240508	Total Recoverable	Water	3005A	
570-183688-2	HV-W-240508	Total Recoverable	Water	3005A	
570-183688-3	OS1-W-240508	Total Recoverable	Water	3005A	
570-183688-4	D-5/6-W-240509	Total Recoverable	Water	3005A	
MB 570-439283/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 570-439283/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 570-439283/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	

### Prep Batch: 439409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-183688-1	OW-W-240508	Total/NA	Water	7470A	
570-183688-2	HV-W-240508	Total/NA	Water	7470A	
570-183688-3	OS1-W-240508	Total/NA	Water	7470A	
570-183688-4	D-5/6-W-240509	Total/NA	Water	7470A	
MB 570-439409/1-A	Method Blank	Total/NA	Water	7470A	
LCS 570-439409/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 570-439409/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	

### Analysis Batch: 439529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-183688-1	OW-W-240508	Total/NA	Water	7470A	439409
570-183688-2	HV-W-240508	Total/NA	Water	7470A	439409
570-183688-3	OS1-W-240508	Total/NA	Water	7470A	439409
570-183688-4	D-5/6-W-240509	Total/NA	Water	7470A	439409
MB 570-439409/1-A	Method Blank	Total/NA	Water	7470A	439409
LCS 570-439409/2-A	Lab Control Sample	Total/NA	Water	7470A	439409
LCSD 570-439409/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	439409

### Analysis Batch: 439771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 570-439283/1-A	Method Blank	Total Recoverable	Water	6010B	439283
LCS 570-439283/2-A	Lab Control Sample	Total Recoverable	Water	6010B	439283
LCSD 570-439283/3-A	Lab Control Sample Dup	Total Recoverable	Water	6010B	439283

### Analysis Batch: 441532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-183688-1	OW-W-240508	Total Recoverable	Water	6010B	439283
570-183688-2	HV-W-240508	Total Recoverable	Water	6010B	439283
570-183688-3	OS1-W-240508	Total Recoverable	Water	6010B	439283

# QC Association Summary

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183688-1

## Metals (Continued)

### Analysis Batch: 441532 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-183688-4	D-5/6-W-240509	Total Recoverable	Water	6010B	439283

1

2

3

4

5

6

7

8

9

10

11

12

13

14

# Lab Chronicle

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183688-1

**Client Sample ID: OW-W-240508**  
Date Collected: 05/08/24 12:45  
Date Received: 05/09/24 13:22

**Lab Sample ID: 570-183688-1**  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	314.0		1	4 mL	4 mL	440013	05/14/24 02:32	M5Z3	EET CAL 4
		Instrument ID: IC8								
Total Recoverable	Prep	3005A			50 mL	50 mL	439283	05/10/24 07:22	JP8N	EET CAL 4
Total Recoverable	Analysis	6010B		1			441532	05/16/24 18:58	P1R	EET CAL 4
		Instrument ID: ICP11								
Total/NA	Prep	7470A			25 mL	50 mL	439409	05/10/24 12:13	VCN7	EET CAL 4
Total/NA	Analysis	7470A		1			439529	05/10/24 18:42	ECX6	EET CAL 4
		Instrument ID: HG9								

**Client Sample ID: HV-W-240508**  
Date Collected: 05/08/24 13:30  
Date Received: 05/09/24 13:22

**Lab Sample ID: 570-183688-2**  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	314.0		1	4 mL	4 mL	440013	05/14/24 03:14	M5Z3	EET CAL 4
		Instrument ID: IC8								
Total Recoverable	Prep	3005A			50 mL	50 mL	439283	05/10/24 07:22	JP8N	EET CAL 4
Total Recoverable	Analysis	6010B		1			441532	05/16/24 19:00	P1R	EET CAL 4
		Instrument ID: ICP11								
Total/NA	Prep	7470A			25 mL	50 mL	439409	05/10/24 12:13	VCN7	EET CAL 4
Total/NA	Analysis	7470A		1			439529	05/10/24 18:44	ECX6	EET CAL 4
		Instrument ID: HG9								

**Client Sample ID: OS1-W-240508**  
Date Collected: 05/08/24 15:00  
Date Received: 05/09/24 13:22

**Lab Sample ID: 570-183688-3**  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	314.0		1	4 mL	4 mL	440013	05/14/24 03:55	M5Z3	EET CAL 4
		Instrument ID: IC8								
Total Recoverable	Prep	3005A			50 mL	50 mL	439283	05/10/24 07:22	JP8N	EET CAL 4
Total Recoverable	Analysis	6010B		1			441532	05/16/24 19:02	P1R	EET CAL 4
		Instrument ID: ICP11								
Total/NA	Prep	7470A			25 mL	50 mL	439409	05/10/24 12:13	VCN7	EET CAL 4
Total/NA	Analysis	7470A		1			439529	05/10/24 18:46	ECX6	EET CAL 4
		Instrument ID: HG9								

**Client Sample ID: D-5/6-W-240509**  
Date Collected: 05/09/24 09:10  
Date Received: 05/09/24 13:22

**Lab Sample ID: 570-183688-4**  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	314.0		1	4 mL	4 mL	440013	05/14/24 04:37	M5Z3	EET CAL 4
		Instrument ID: IC8								

# Lab Chronicle

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183688-1

**Client Sample ID: D-5/6-W-240509**

**Lab Sample ID: 570-183688-4**

**Matrix: Water**

Date Collected: 05/09/24 09:10

Date Received: 05/09/24 13:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	439283	05/10/24 07:22	JP8N	EET CAL 4
Total Recoverable	Analysis	6010B		1			441532	05/16/24 19:04	P1R	EET CAL 4
		Instrument ID: ICP11								
Total/NA	Prep	7470A			25 mL	50 mL	439409	05/10/24 12:13	VCN7	EET CAL 4
Total/NA	Analysis	7470A		1			439529	05/10/24 18:48	ECX6	EET CAL 4
		Instrument ID: HG9								

**Laboratory References:**

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

# Accreditation/Certification Summary

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183688-1

## Laboratory: Eurofins Calscience

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	3082	07-31-24
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
314.0		Water	Perchlorate
Oregon	NELAP	4175	02-03-25

## Method Summary

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183688-1

Method	Method Description	Protocol	Laboratory
314.0	Perchlorate (IC)	EPA	EET CAL 4
6010B	Metals (ICP)	SW846	EET CAL 4
7470A	Mercury (CVAA)	SW846	EET CAL 4
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CAL 4
7470A	Preparation, Mercury	SW846	EET CAL 4

### Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

## Sample Summary

Client: GSI Environmental Inc  
Project/Site: 5182 - AJU-BB

Job ID: 570-183688-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
570-183688-1	OW-W-240508	Water	05/08/24 12:45	05/09/24 13:22
570-183688-2	HV-W-240508	Water	05/08/24 13:30	05/09/24 13:22
570-183688-3	OS1-W-240508	Water	05/08/24 15:00	05/09/24 13:22
570-183688-4	D-5/6-W-240509	Water	05/09/24 09:10	05/09/24 13:22



Loc: 570  
CHAIN-OF-CUSTODY RE  
Date: 5/9/24  
183688  
Page 1 of

FROM:  GSI Environmental Inc. 2000 Powell Street, Suite 820 Emeryville, CA 94608 (510) 463-8484		PROJECT NAME: AJU-BB				PROJECT NO 5182										
		PROJECT CONTACT: Matt Goerz, Skyler Bowersmith				LAB CONTACT: Afsaneh Salimpour (Pleasanton)										
		GLOBAL ID: -				SAMPLER(S) (PRINT) SJB / CJB										
TEL. (510) 463-8484	E-MAIL. mpgoerz@gsi-net.com, sjbowersmith@gsi-net.com	REQUESTED ANALYSES Please check box or fill in blank as needed														
LABORATORY: Eurofins Calscience																
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD																
SPECIAL INSTRUCTIONS:																
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO OF CONT	Unpreserved	Preserved	Field Filtered	Title 22 Metals (6010/7471)	Perchlorate (3140)						
		DATE	TIME													
1	OW-W-240508	5/9/24	1245	w	2	X X		X X								
2	Hw-w-240508	5/9/24	1330	w	2	X X		X X								
3	OSI-W-240508	5/9/24	1500	w	2	X X		X X								
4	D-S/b-w-240508	5/9/24	0910	w	2	X X		X X								
570-183688 Chain of Custody																
Relinquished by: (Signature)						Received by: (Signature)						Date 5/9/24	Time 13:22			
Relinquished by: (Signature)						Received by: (Signature)						Date	Time			
Relinquished by: (Signature)						Received by: (Signature)						Date	Time			

3.0 / 3.1 SCF

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14

## Login Sample Receipt Checklist

Client: GSI Environmental Inc

Job Number: 570-183688-1

**Login Number:** 183688

**List Source:** Eurofins Calscience

**List Number:** 1

**Creator:** Yu, Tiffany

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

June 04, 2024

Skyler Bowersmith  
GSI Environmental Inc.  
155 Grand Ave  
Suite 704  
Oakland, California 94612

Re: Near SSFL  
Work Order: 667132

Dear Skyler Bowersmith:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on May 11, 2024. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

Test results for NELAP or ISO 17025 accredited tests are verified to meet the requirements of those standards, with any exceptions noted. The results reported relate only to the items tested and to the sample as received by the laboratory. These results may not be reproduced except as full reports without approval by the laboratory. Copies of GEL's accreditations and certifications can be found on our website at [www.gel.com](http://www.gel.com).

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 1614.

Sincerely,

Delaney Stonesmith  
Project Manager

Purchase Order: 5182  
Enclosures

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

**Certificate of Analysis Report  
for**

GSIE002 GSI Environmental Inc.

Client SDG: 667132 GEL Work Order: 667132

**The Qualifiers in this report are defined as follows:**

- \* A quality control analyte recovery is outside of specified acceptance criteria
- \*\* Analyte is a Tracer compound
- \*\* Analyte is a surrogate compound

U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Delaney Stonesmith.

Reviewed by

*Delaney Stonesmith*

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612  
 Contact: Skyler Bowersmith  
 Project: Near SSFL

Report Date: June 4, 2024

Client Sample ID: OW-SED-1-240507  
 Sample ID: 667132001  
 Matrix: Soil  
 Collect Date: 07-MAY-24  
 Receive Date: 11-MAY-24  
 Collector: Client  
 Moisture: 20%

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
<b>Rad Gamma Spec Analysis</b>														
<i>Gammasp, Gamma, Solid (Standard List) "Dry Weight Corrected"</i>														
Cesium-137	U	0.0450	+/-0.0440	0.0861	+/-0.0486	0.100	pCi/g			MXR1	05/20/24	2157	2611328	1
<b>Rad Gas Flow Proportional Counting</b>														
<i>GFPC, Sr90, Solid "Dry Weight Corrected"</i>														
Strontium-90	U	0.0243	+/-0.0322	0.0551	+/-0.0325	0.100	pCi/g			JE1	05/23/24	0940	2610877	2
<b>Rad Liquid Scintillation Analysis</b>														
<i>LSC, Tritium Distillation, Soil "As Received"</i>														
Tritium	U	-0.215	+/-0.993	1.80	+/-0.993	0.200	pCi/g			HB2	06/02/24	1936	2610987	3

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	GG	05/13/24	1356	2610659

**The following Analytical Methods were performed**

Method	Description
1	DOE HASL 300, 4.5.2.3/Ga-01-R
2	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
3	EPA 906.0 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Strontium Carrier	GFPC, Sr90, Solid "Dry Weight Corrected"	2610877	118	(25%-125%)

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

***Certificate of Analysis***

Company : GSI Environmental Inc.  
Address : 155 Grand Ave  
Suite 704  
Oakland, California 94612  
Contact: Skyler Bowersmith  
Project: Near SSFL  
Client Sample ID: OW-SED-1-240507  
Sample ID: 667132001

Report Date: June 4, 2024

Project: GSIE00119  
Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test										Batch ID	Recovery%	Acceptable Limits	

**Notes:**

The MDC is a sample specific MDC.  
TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

*Column headers are defined as follows:*

DF: Dilution Factor	Mtd.: Method
DL: Detection Limit	PF: Prep Factor
Lc/LC: Critical Level	RL: Reporting Limit
MDA: Minimum Detectable Activity	TPU: Total Propagated Uncertainty
MDC: Minimum Detectable Concentration	

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612  
 Contact: Skyler Bowersmith  
 Project: Near SSFL

Report Date: June 4, 2024

Client Sample ID: AT-1-240507  
 Sample ID: 667132002  
 Matrix: Soil  
 Collect Date: 07-MAY-24  
 Receive Date: 11-MAY-24  
 Collector: Client  
 Moisture: 27.6%

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
<b>Rad Gamma Spec Analysis</b>														
<i>Gammaspec, Gamma, Solid (Standard List) "Dry Weight Corrected"</i>														
Cesium-137	U	0.00155	+/-0.0586	0.102	+/-0.0586	0.100	pCi/g			MXR1	05/20/24	2155	2611328	1
<b>Rad Gas Flow Proportional Counting</b>														
<i>GFPC, Sr90, Solid "Dry Weight Corrected"</i>														
Strontium-90	U	0.0354	+/-0.0357	0.0583	+/-0.0363	0.100	pCi/g			JE1	05/23/24	0940	2610877	2
<b>Rad Liquid Scintillation Analysis</b>														
<i>LSC, Tritium Distillation, Soil "As Received"</i>														
Tritium	U	0.431	+/-1.04	1.81	+/-1.05	0.200	pCi/g			HB2	06/02/24	2008	2610987	3

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	GG	05/13/24	1356	2610659

**The following Analytical Methods were performed**

Method	Description
1	DOE HASL 300, 4.5.2.3/Ga-01-R
2	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
3	EPA 906.0 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Strontium Carrier	GFPC, Sr90, Solid "Dry Weight Corrected"	2610877	104	(25%-125%)

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

***Certificate of Analysis***

Company : GSI Environmental Inc.  
Address : 155 Grand Ave  
Suite 704  
Oakland, California 94612

Contact: Skyler Bowersmith  
Project: Near SSFL

Client Sample ID: AT-1-240507  
Sample ID: 667132002

Report Date: June 4, 2024

Project: GSIE00119  
Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test										Batch ID	Recovery%	Acceptable Limits	

**Notes:**

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

*Column headers are defined as follows:*

DF: Dilution Factor

Mtd.: Method

DL: Detection Limit

PF: Prep Factor

Lc/LC: Critical Level

RL: Reporting Limit

MDA: Minimum Detectable Activity

TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612  
 Contact: Skyler Bowersmith  
 Project: Near SSFL

Report Date: June 4, 2024

Client Sample ID: KC-1-240507  
 Sample ID: 667132003  
 Matrix: Soil  
 Collect Date: 07-MAY-24  
 Receive Date: 11-MAY-24  
 Collector: Client  
 Moisture: 3.68%

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
<b>Rad Gamma Spec Analysis</b>														
<i>Gammaspec, Gamma, Solid (Standard List) "Dry Weight Corrected"</i>														
Cesium-137	U	0.0639	+/-0.0525	0.103	+/-0.0605	0.100	pCi/g			MXR1	05/20/24	2200	2611328	1
<b>Rad Gas Flow Proportional Counting</b>														
<i>GFPC, Sr90, Solid "Dry Weight Corrected"</i>														
Strontium-90	U	0.0590	+/-0.0371	0.0605	+/-0.0385	0.100	pCi/g			JE1	05/22/24	1806	2610877	2
<b>Rad Liquid Scintillation Analysis</b>														
<i>LSC, Tritium Distillation, Soil "As Received"</i>														
Tritium	U	0.0681	+/-1.06	1.88	+/-1.06	0.200	pCi/g			HB2	06/02/24	2040	2610987	3
<b>The following Prep Methods were performed</b>														
<b>Method</b>	<b>Description</b>				<b>Analyst</b>	<b>Date</b>	<b>Time</b>	<b>Prep Batch</b>						
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021				GG	05/13/24	1356	2610659						
<b>The following Analytical Methods were performed</b>														
<b>Method</b>	<b>Description</b>													
1	DOE HASL 300, 4.5.2.3/Ga-01-R													
2	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified													
3	EPA 906.0 Modified													
<b>Surrogate/Tracer Recovery</b>		<b>Test</b>				<b>Batch ID</b>	<b>Recovery%</b>	<b>Acceptable Limits</b>						
Strontium Carrier		GFPC, Sr90, Solid "Dry Weight Corrected"				2610877	60.3	(25%-125%)						

**GEL LABORATORIES LLC**  
 2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612

Contact: Skyler Bowersmith  
 Project: Near SSFL

Client Sample ID: KC-1-240507  
 Sample ID: 667132003

Report Date: June 4, 2024

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test										Batch ID	Recovery%		Acceptable Limits

**Notes:**

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

*Column headers are defined as follows:*

DF: Dilution Factor

Mtd.: Method

DL: Detection Limit

PF: Prep Factor

Lc/LC: Critical Level

RL: Reporting Limit

MDA: Minimum Detectable Activity

TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612  
 Contact: Skyler Bowersmith  
 Project: Near SSFL

Report Date: June 4, 2024

Client Sample ID: GF-1-240507  
 Sample ID: 667132004  
 Matrix: Soil  
 Collect Date: 07-MAY-24  
 Receive Date: 11-MAY-24  
 Collector: Client  
 Moisture: 11%

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
<b>Rad Gamma Spec Analysis</b>														
<i>Gammaspec, Gamma, Solid (Standard List) "Dry Weight Corrected"</i>														
Cesium-137	U	0.0666	+/-0.0730	0.0772	+/-0.0734	0.100	pCi/g			MXR1	05/20/24	2201	2611328	1
<b>Rad Gas Flow Proportional Counting</b>														
<i>GFPC, Sr90, Solid "Dry Weight Corrected"</i>														
Strontium-90	U	0.0331	+/-0.0558	0.0978	+/-0.0561	0.100	pCi/g			JE1	05/23/24	0940	2610877	2
<b>Rad Liquid Scintillation Analysis</b>														
<i>LSC, Tritium Distillation, Soil "As Received"</i>														
Tritium	U	-0.0410	+/-1.04	1.85	+/-1.04	0.200	pCi/g			HB2	06/02/24	2111	2610987	3

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	GG	05/13/24	1356	2610659

**The following Analytical Methods were performed**

Method	Description
1	DOE HASL 300, 4.5.2.3/Ga-01-R
2	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
3	EPA 906.0 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Strontium Carrier	GFPC, Sr90, Solid "Dry Weight Corrected"	2610877	55.6	(25%-125%)

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

***Certificate of Analysis***

Company : GSI Environmental Inc.  
Address : 155 Grand Ave  
Suite 704  
Oakland, California 94612

Contact: Skyler Bowersmith  
Project: Near SSFL

Client Sample ID: GF-1-240507  
Sample ID: 667132004

Report Date: June 4, 2024

Project: GSIE00119  
Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test										Batch ID	Recovery%	Acceptable Limits	

**Notes:**

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

*Column headers are defined as follows:*

DF: Dilution Factor

Mtd.: Method

DL: Detection Limit

PF: Prep Factor

Lc/LC: Critical Level

RL: Reporting Limit

MDA: Minimum Detectable Activity

TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612  
 Contact: Skyler Bowersmith  
 Project: Near SSFL

Report Date: June 4, 2024

Client Sample ID: CIT-1-240507  
 Sample ID: 667132005  
 Matrix: Soil  
 Collect Date: 07-MAY-24  
 Receive Date: 11-MAY-24  
 Collector: Client  
 Moisture: 10.1%

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
<b>Rad Gamma Spec Analysis</b>														
<i>Gammaspec, Gamma, Solid (Standard List) "Dry Weight Corrected"</i>														
Cesium-137		0.261	+/-0.108	0.101		+/-0.111	0.100	pCi/g		MXR1	05/20/24	2202	2611328	1
<b>Rad Gas Flow Proportional Counting</b>														
<i>GFPC, Sr90, Solid "Dry Weight Corrected"</i>														
Strontium-90	U	-0.0130	+/-0.0411	0.0717		+/-0.0411	0.100	pCi/g		JE1	05/22/24	1806	2610877	2
<b>Rad Liquid Scintillation Analysis</b>														
<i>LSC, Tritium Distillation, Soil "As Received"</i>														
Tritium	U	-0.452	+/-1.10	2.02		+/-1.10	0.200	pCi/g		HB2	06/02/24	2143	2610987	3
<b>The following Prep Methods were performed</b>														
<b>Method</b>	<b>Description</b>				<b>Analyst</b>	<b>Date</b>	<b>Time</b>	<b>Prep Batch</b>						
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021				GG	05/13/24	1356	2610659						
<b>The following Analytical Methods were performed</b>														
<b>Method</b>	<b>Description</b>													
1	DOE HASL 300, 4.5.2.3/Ga-01-R													
2	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified													
3	EPA 906.0 Modified													
<b>Surrogate/Tracer Recovery</b>		<b>Test</b>				<b>Batch ID</b>	<b>Recovery%</b>	<b>Acceptable Limits</b>						
Strontium Carrier		GFPC, Sr90, Solid "Dry Weight Corrected"				2610877	67.2	(25%-125%)						

**GEL LABORATORIES LLC**  
 2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612

Contact: Skyler Bowersmith  
 Project: Near SSFL

Client Sample ID: CIT-1-240507  
 Sample ID: 667132005

Report Date: June 4, 2024

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test										Batch ID	Recovery%		Acceptable Limits

**Notes:**

The MDC is a sample specific MDC.  
 TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

*Column headers are defined as follows:*

DF: Dilution Factor

Mtd.: Method

DL: Detection Limit

PF: Prep Factor

Lc/LC: Critical Level

RL: Reporting Limit

MDA: Minimum Detectable Activity

TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612

Contact: Skyler Bowersmith  
 Project: Near SSFL

Report Date: June 4, 2024

Client Sample ID: TF-1-240507  
 Sample ID: 667132006  
 Matrix: Soil  
 Collect Date: 07-MAY-24  
 Receive Date: 11-MAY-24  
 Collector: Client  
 Moisture: 4.96%

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
<b>Rad Gamma Spec Analysis</b>														
<i>Gammaspec, Gamma, Solid (Standard List) "Dry Weight Corrected"</i>														
Cesium-137	U	0.0541	+/-0.0482	0.0853	+/-0.0484	0.100	pCi/g			MXR1	05/20/24	2206	2611328	1
<b>Rad Gas Flow Proportional Counting</b>														
<i>GFPC, Sr90, Solid "Dry Weight Corrected"</i>														
Strontium-90	U	0.0518	+/-0.0326	0.0531	+/-0.0339	0.100	pCi/g			JE1	05/22/24	1806	2610877	2
<b>Rad Liquid Scintillation Analysis</b>														
<i>LSC, Tritium Distillation, Soil "As Received"</i>														
Tritium	U	-0.129	+/-0.975	1.76	+/-0.975	0.200	pCi/g			HB2	06/02/24	2215	2610987	3

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	GG	05/13/24	1356	2610659

**The following Analytical Methods were performed**

Method	Description
1	DOE HASL 300, 4.5.2.3/Ga-01-R
2	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
3	EPA 906.0 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Strontium Carrier	GFPC, Sr90, Solid "Dry Weight Corrected"	2610877	62.6	(25%-125%)

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

***Certificate of Analysis***

Company : GSI Environmental Inc.  
Address : 155 Grand Ave  
Suite 704  
Oakland, California 94612

Contact: Skyler Bowersmith  
Project: Near SSFL

Client Sample ID: TF-1-240507  
Sample ID: 667132006

Report Date: June 4, 2024

Project: GSIE00119  
Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test										Batch ID	Recovery%	Acceptable Limits	

**Notes:**

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

*Column headers are defined as follows:*

DF: Dilution Factor

Mtd.: Method

DL: Detection Limit

PF: Prep Factor

Lc/LC: Critical Level

RL: Reporting Limit

MDA: Minimum Detectable Activity

TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612  
 Contact: Skyler Bowersmith  
 Project: Near SSFL

Report Date: June 4, 2024

Client Sample ID: HV-1-240508  
 Sample ID: 667132007  
 Matrix: Soil  
 Collect Date: 08-MAY-24  
 Receive Date: 11-MAY-24  
 Collector: Client  
 Moisture: 5.41%

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
<b>Rad Gamma Spec Analysis</b>														
<i>Gammaspec, Gamma, Solid (Standard List) "Dry Weight Corrected"</i>														
Cesium-137	U	-0.00376	+/-0.0385	0.0641	+/-0.0385	0.100	pCi/g			MXR1	05/20/24	2207	2611328	1
<b>Rad Gas Flow Proportional Counting</b>														
<i>GFPC, Sr90, Solid "Dry Weight Corrected"</i>														
Strontium-90	U	-0.0216	+/-0.0346	0.0623	+/-0.0346	0.100	pCi/g			JE1	05/22/24	1806	2610877	2
<b>Rad Liquid Scintillation Analysis</b>														
<i>LSC, Tritium Distillation, Soil "As Received"</i>														
Tritium	U	0.294	+/-1.09	1.91	+/-1.09	0.200	pCi/g			HB2	06/02/24	2246	2610987	3
<b>The following Prep Methods were performed</b>														
<b>Method</b>	<b>Description</b>				<b>Analyst</b>	<b>Date</b>	<b>Time</b>	<b>Prep Batch</b>						
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021				GG	05/13/24	1356	2610659						
<b>The following Analytical Methods were performed</b>														
<b>Method</b>	<b>Description</b>													
1	DOE HASL 300, 4.5.2.3/Ga-01-R													
2	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified													
3	EPA 906.0 Modified													
<b>Surrogate/Tracer Recovery</b>		<b>Test</b>				<b>Batch ID</b>	<b>Recovery%</b>	<b>Acceptable Limits</b>						
Strontium Carrier		GFPC, Sr90, Solid "Dry Weight Corrected"				2610877	53.3	(25%-125%)						

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

***Certificate of Analysis***

Company : GSI Environmental Inc.  
Address : 155 Grand Ave  
Suite 704  
Oakland, California 94612

Contact: Skyler Bowersmith  
Project: Near SSFL

Client Sample ID: HV-1-240508  
Sample ID: 667132007

Report Date: June 4, 2024

Project: GSIE00119  
Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test										Batch ID	Recovery%	Acceptable Limits	

**Notes:**

The MDC is a sample specific MDC.  
TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

*Column headers are defined as follows:*

DF: Dilution Factor

Mtd.: Method

DL: Detection Limit

PF: Prep Factor

Lc/LC: Critical Level

RL: Reporting Limit

MDA: Minimum Detectable Activity

TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612

Contact: Skyler Bowersmith  
 Project: Near SSFL

Report Date: June 4, 2024

Client Sample ID: HV-2-240508  
 Sample ID: 667132008  
 Matrix: Soil  
 Collect Date: 08-MAY-24  
 Receive Date: 11-MAY-24  
 Collector: Client  
 Moisture: .841%

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
<b>Rad Gamma Spec Analysis</b>														
<i>Gammaspec, Gamma, Solid (Standard List) "Dry Weight Corrected"</i>														
Cesium-137	U	0.0130	+/-0.0345	0.0697	+/-0.0351	0.100	pCi/g			MXR1	05/20/24	2208	2611328	1
<b>Rad Gas Flow Proportional Counting</b>														
<i>GFPC, Sr90, Solid "Dry Weight Corrected"</i>														
Strontium-90	U	0.0437	+/-0.0304	0.0495	+/-0.0313	0.100	pCi/g			JE1	05/22/24	1806	2610877	2
<b>Rad Liquid Scintillation Analysis</b>														
<i>LSC, Tritium Distillation, Soil "As Received"</i>														
Tritium	U	0.258	+/-1.03	1.81	+/-1.03	0.200	pCi/g			HB2	06/02/24	2318	2610987	3
<b>The following Prep Methods were performed</b>														
<b>Method</b>	<b>Description</b>				<b>Analyst</b>	<b>Date</b>	<b>Time</b>	<b>Prep Batch</b>						
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021				GG	05/13/24	1356	2610659						
<b>The following Analytical Methods were performed</b>														
<b>Method</b>	<b>Description</b>													
1	DOE HASL 300, 4.5.2.3/Ga-01-R													
2	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified													
3	EPA 906.0 Modified													
<b>Surrogate/Tracer Recovery</b>		<b>Test</b>				<b>Batch ID</b>	<b>Recovery%</b>	<b>Acceptable Limits</b>						
Strontium Carrier		GFPC, Sr90, Solid "Dry Weight Corrected"				2610877	55.6	(25%-125%)						

**GEL LABORATORIES LLC**  
 2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612  
 Contact: Skyler Bowersmith  
 Project: Near SSFL  
 Client Sample ID: HV-2-240508  
 Sample ID: 667132008

Report Date: June 4, 2024

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test										Batch ID	Recovery%	Acceptable Limits	

**Notes:**

The MDC is a sample specific MDC.  
 TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

*Column headers are defined as follows:*

DF: Dilution Factor	Mtd.: Method
DL: Detection Limit	PF: Prep Factor
Lc/LC: Critical Level	RL: Reporting Limit
MDA: Minimum Detectable Activity	TPU: Total Propagated Uncertainty
MDC: Minimum Detectable Concentration	

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612

Report Date: June 4, 2024

Contact: Skyler Bowersmith  
 Project: Near SSFL

Client Sample ID: HV-SED-240508  
 Sample ID: 667132009  
 Matrix: Soil  
 Collect Date: 08-MAY-24  
 Receive Date: 11-MAY-24  
 Collector: Client  
 Moisture: 18.7%

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
<b>Rad Gamma Spec Analysis</b>														
<i>Gammaspec, Gamma, Solid (Standard List) "Dry Weight Corrected"</i>														
Cesium-137	U	0.0191	+/-0.0776	0.0887	+/-0.0776	0.100	pCi/g			MXR1	05/20/24	2224	2611328	1
<b>Rad Gas Flow Proportional Counting</b>														
<i>GFPC, Sr90, Solid "Dry Weight Corrected"</i>														
Strontium-90	U	0.0478	+/-0.0435	0.0726	+/-0.0443	0.100	pCi/g			JE1	05/22/24	1807	2610877	2
<b>Rad Liquid Scintillation Analysis</b>														
<i>LSC, Tritium Distillation, Soil "As Received"</i>														
Tritium	U	0.148	+/-1.04	1.84	+/-1.04	0.200	pCi/g			HB2	06/02/24	2350	2610987	3
<b>The following Prep Methods were performed</b>														
<b>Method</b>	<b>Description</b>				<b>Analyst</b>	<b>Date</b>	<b>Time</b>	<b>Prep Batch</b>						
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021				GG	05/13/24	1356	2610659						
<b>The following Analytical Methods were performed</b>														
<b>Method</b>	<b>Description</b>													
1	DOE HASL 300, 4.5.2.3/Ga-01-R													
2	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified													
3	EPA 906.0 Modified													
<b>Surrogate/Tracer Recovery</b>		<b>Test</b>				<b>Batch ID</b>	<b>Recovery%</b>	<b>Acceptable Limits</b>						
Strontium Carrier		GFPC, Sr90, Solid "Dry Weight Corrected"				2610877	64.9	(25%-125%)						

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

***Certificate of Analysis***

Company : GSI Environmental Inc.  
Address : 155 Grand Ave  
Suite 704  
Oakland, California 94612  
Contact: Skyler Bowersmith  
Project: Near SSFL  
Client Sample ID: HV-SED-240508  
Sample ID: 667132009

Report Date: June 4, 2024

Project: GSIE00119  
Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test										Batch ID	Recovery%	Acceptable Limits	

**Notes:**

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

*Column headers are defined as follows:*

DF: Dilution Factor

Mtd.: Method

DL: Detection Limit

PF: Prep Factor

Lc/LC: Critical Level

RL: Reporting Limit

MDA: Minimum Detectable Activity

TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612  
 Contact: Skyler Bowersmith  
 Project: Near SSFL

Report Date: June 4, 2024

Client Sample ID: HV-SED-1-240508  
 Sample ID: 667132010  
 Matrix: Soil  
 Collect Date: 08-MAY-24  
 Receive Date: 11-MAY-24  
 Collector: Client  
 Moisture: 11.1%

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
<b>Rad Gamma Spec Analysis</b>														
<i>Gammaspec, Gamma, Solid (Standard List) "Dry Weight Corrected"</i>														
Cesium-137		0.0797	+/-0.0939	0.0720		+/-0.0942	0.100	pCi/g		MXR1	05/20/24	2228	2611328	1
<b>Rad Gas Flow Proportional Counting</b>														
<i>GFPC, Sr90, Solid "Dry Weight Corrected"</i>														
Strontium-90	U	0.0661	+/-0.0565	0.0882		+/-0.0577	0.100	pCi/g		JE1	05/23/24	0940	2610877	2
<b>Rad Liquid Scintillation Analysis</b>														
<i>LSC, Tritium Distillation, Soil "As Received"</i>														
Tritium	U	-0.431	+/-0.979	1.80		+/-0.979	0.200	pCi/g		HB2	06/03/24	0021	2610987	3
<b>The following Prep Methods were performed</b>														
<b>Method</b>	<b>Description</b>				<b>Analyst</b>	<b>Date</b>	<b>Time</b>	<b>Prep Batch</b>						
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021				GG	05/13/24	1356	2610659						
<b>The following Analytical Methods were performed</b>														
<b>Method</b>	<b>Description</b>													
1	DOE HASL 300, 4.5.2.3/Ga-01-R													
2	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified													
3	EPA 906.0 Modified													
<b>Surrogate/Tracer Recovery</b>		<b>Test</b>				<b>Batch ID</b>	<b>Recovery%</b>	<b>Acceptable Limits</b>						
Strontium Carrier		GFPC, Sr90, Solid "Dry Weight Corrected"				2610877	67.2	(25%-125%)						

**GEL LABORATORIES LLC**  
 2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612  
 Contact: Skyler Bowersmith  
 Project: Near SSFL  
 Client Sample ID: HV-SED-1-240508  
 Sample ID: 667132010

Report Date: June 4, 2024

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test										Batch ID	Recovery%	Acceptable Limits	

**Notes:**

The MDC is a sample specific MDC.  
 TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

*Column headers are defined as follows:*

DF: Dilution Factor	Mtd.: Method
DL: Detection Limit	PF: Prep Factor
Lc/LC: Critical Level	RL: Reporting Limit
MDA: Minimum Detectable Activity	TPU: Total Propagated Uncertainty
MDC: Minimum Detectable Concentration	

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## *Certificate of Analysis*

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612  
 Contact: Skyler Bowersmith  
 Project: Near SSFL

Report Date: June 4, 2024

Client Sample ID: OSI-SED-240508  
 Sample ID: 667132011  
 Matrix: Soil  
 Collect Date: 08-MAY-24  
 Receive Date: 11-MAY-24  
 Collector: Client  
 Moisture: 19%

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
<b>Rad Gamma Spec Analysis</b>														
<i>Gammasp, Gamma, Solid (Standard List) "Dry Weight Corrected"</i>														
Cesium-137	U	0.0234	+/-0.0385	0.0791	+/-0.0400	0.100	pCi/g			MXR1	05/20/24	2230	2611328	1
<b>Rad Gas Flow Proportional Counting</b>														
<i>GFPC, Sr90, Solid "Dry Weight Corrected"</i>														
Strontium-90	U	0.0679	+/-0.0514	0.0788	+/-0.0529	0.100	pCi/g			JE1	05/23/24	0940	2610877	2
<b>Rad Liquid Scintillation Analysis</b>														
<i>LSC, Tritium Distillation, Soil "As Received"</i>														
Tritium	U	0.397	+/-1.01	1.76	+/-1.02	0.200	pCi/g			HB2	06/03/24	0053	2610987	3

### **The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	GG	05/13/24	1356	2610659

### **The following Analytical Methods were performed**

Method	Description
1	DOE HASL 300, 4.5.2.3/Ga-01-R
2	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
3	EPA 906.0 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Strontium Carrier	GFPC, Sr90, Solid "Dry Weight Corrected"	2610877	81.1	(25%-125%)

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

***Certificate of Analysis***

Company : GSI Environmental Inc.  
Address : 155 Grand Ave  
Suite 704  
Oakland, California 94612

Contact: Skyler Bowersmith  
Project: Near SSFL

Client Sample ID: OSI-SED-240508  
Sample ID: 667132011

Report Date: June 4, 2024

Project: GSIE00119  
Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test										Batch ID	Recovery%	Acceptable Limits	

**Notes:**

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

*Column headers are defined as follows:*

DF: Dilution Factor

Mtd.: Method

DL: Detection Limit

PF: Prep Factor

Lc/LC: Critical Level

RL: Reporting Limit

MDA: Minimum Detectable Activity

TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612  
 Contact: Skyler Bowersmith  
 Project: Near SSFL

Report Date: June 4, 2024

Client Sample ID: SRE-SED-4-240508  
 Sample ID: 667132012  
 Matrix: Soil  
 Collect Date: 08-MAY-24  
 Receive Date: 11-MAY-24  
 Collector: Client  
 Moisture: 17%

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
<b>Rad Gamma Spec Analysis</b>														
<i>Gammaspec, Gamma, Solid (Standard List) "Dry Weight Corrected"</i>														
Cesium-137	U	-0.00281	+/-0.0438	0.0819	+/-0.0438	0.100	pCi/g			MXR1	05/20/24	2233	2611328	1
<b>Rad Gas Flow Proportional Counting</b>														
<i>GFPC, Sr90, Solid "Dry Weight Corrected"</i>														
Strontium-90	U	-0.00502	+/-0.0312	0.0546	+/-0.0312	0.100	pCi/g			JE1	05/22/24	1807	2610877	2
<b>Rad Liquid Scintillation Analysis</b>														
<i>LSC, Tritium Distillation, Soil "As Received"</i>														
Tritium	U	0.644	+/-1.05	1.79	+/-1.06	0.200	pCi/g			HB2	06/03/24	0125	2610987	3
<b>The following Prep Methods were performed</b>														
<b>Method</b>	<b>Description</b>				<b>Analyst</b>	<b>Date</b>	<b>Time</b>	<b>Prep Batch</b>						
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021				GG	05/13/24	1356	2610659						
<b>The following Analytical Methods were performed</b>														
<b>Method</b>	<b>Description</b>													
1	DOE HASL 300, 4.5.2.3/Ga-01-R													
2	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified													
3	EPA 906.0 Modified													
<b>Surrogate/Tracer Recovery</b>		<b>Test</b>				<b>Batch ID</b>	<b>Recovery%</b>	<b>Acceptable Limits</b>						
Strontium Carrier		GFPC, Sr90, Solid "Dry Weight Corrected"				2610877	71.8	(25%-125%)						

**GEL LABORATORIES LLC**  
 2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612  
 Contact: Skyler Bowersmith  
 Project: Near SSFL  
 Client Sample ID: SRE-SED-4-240508  
 Sample ID: 667132012

Report Date: June 4, 2024

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test										Batch ID	Recovery%		Acceptable Limits

**Notes:**

The MDC is a sample specific MDC.  
 TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

*Column headers are defined as follows:*

DF: Dilution Factor	Mtd.: Method
DL: Detection Limit	PF: Prep Factor
Lc/LC: Critical Level	RL: Reporting Limit
MDA: Minimum Detectable Activity	TPU: Total Propagated Uncertainty
MDC: Minimum Detectable Concentration	

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612  
 Contact: Skyler Bowersmith  
 Project: Near SSFL

Report Date: June 4, 2024

Client Sample ID: D-5/6-SED-240509  
 Sample ID: 667132013  
 Matrix: Soil  
 Collect Date: 09-MAY-24  
 Receive Date: 11-MAY-24  
 Collector: Client  
 Moisture: 14.9%

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
<b>Rad Gamma Spec Analysis</b>														
<i>Gammaspec, Gamma, Solid (Standard List) "Dry Weight Corrected"</i>														
Cesium-137	U	-0.00706	+/-0.0351	0.0645	+/-0.0352	0.100	pCi/g			MXR1	05/20/24	2237	2611328	1
<b>Rad Gas Flow Proportional Counting</b>														
<i>GFPC, Sr90, Solid "Dry Weight Corrected"</i>														
Strontium-90	U	-0.0149	+/-0.0350	0.0624	+/-0.0350	0.100	pCi/g			JE1	05/22/24	1807	2610877	2
<b>Rad Liquid Scintillation Analysis</b>														
<i>LSC, Tritium Distillation, Soil "As Received"</i>														
Tritium	U	0.188	+/-0.987	1.74	+/-0.988	0.200	pCi/g			HB2	06/03/24	0156	2610987	3
<b>The following Prep Methods were performed</b>														
<b>Method</b>	<b>Description</b>				<b>Analyst</b>	<b>Date</b>	<b>Time</b>	<b>Prep Batch</b>						
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021				GG	05/13/24	1356	2610659						
<b>The following Analytical Methods were performed</b>														
<b>Method</b>	<b>Description</b>													
1	DOE HASL 300, 4.5.2.3/Ga-01-R													
2	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified													
3	EPA 906.0 Modified													
<b>Surrogate/Tracer Recovery</b>		<b>Test</b>				<b>Batch ID</b>	<b>Recovery%</b>	<b>Acceptable Limits</b>						
Strontium Carrier		GFPC, Sr90, Solid "Dry Weight Corrected"				2610877	57.9	(25%-125%)						

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

***Certificate of Analysis***

Company : GSI Environmental Inc.  
Address : 155 Grand Ave  
Suite 704  
Oakland, California 94612  
Contact: Skyler Bowersmith  
Project: Near SSFL  
Client Sample ID: D-5/6-SED-240509  
Sample ID: 667132013

Report Date: June 4, 2024

Project: GSIE00119  
Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test										Batch ID	Recovery%	Acceptable Limits	

**Notes:**

The MDC is a sample specific MDC.  
TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

*Column headers are defined as follows:*

DF: Dilution Factor	Mtd.: Method
DL: Detection Limit	PF: Prep Factor
Lc/LC: Critical Level	RL: Reporting Limit
MDA: Minimum Detectable Activity	TPU: Total Propagated Uncertainty
MDC: Minimum Detectable Concentration	

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612

Report Date: June 4, 2024

Contact: Skyler Bowersmith  
 Project: Near SSFL

Client Sample ID: OW-W-240508  
 Sample ID: 667132014  
 Matrix: Water  
 Collect Date: 08-MAY-24  
 Receive Date: 11-MAY-24  
 Collector: Client

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
<b>Rad Gamma Spec Analysis</b>														
<i>Gammaspex, Gamma, Liquid (Standard List) "As Received"</i>														
Cesium-137	U	1.65	+/-3.68	6.92	+/-3.76	10.0	pCi/L	SF1	05/18/24	1742	2611339	1		
<b>Rad Gas Flow Proportional Counting</b>														
<i>GFPC, Sr90, Liquid "As Received"</i>														
Strontium-90	U	-0.516	+/-0.616	1.39	+/-0.616	2.00	pCi/L	JE1	05/20/24	1249	2610878	2		
<b>Rad Liquid Scintillation Analysis</b>														
<i>LSC, Tritium Distillation, Liquid "As Received"</i>														
Tritium	U	19.1	+/-184	338	+/-185	700	pCi/L	HB2	05/29/24	0930	2610990	3		

**The following Analytical Methods were performed**

Method	Description
1	EPA 901.1
2	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
3	EPA 906.0 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Strontium Carrier	GFPC, Sr90, Liquid "As Received"	2610878	85.7	(25%-125%)

**Notes:**

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

*Column headers are defined as follows:*

DF: Dilution Factor  
 DL: Detection Limit  
 Lc/LC: Critical Level  
 MDA: Minimum Detectable Activity  
 MDC: Minimum Detectable Concentration

Mtd.: Method  
 PF: Prep Factor  
 RL: Reporting Limit  
 TPU: Total Propagated Uncertainty

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612

Report Date: June 4, 2024

Contact: Skyler Bowersmith  
 Project: Near SSFL

Client Sample ID: HV-W-240508  
 Sample ID: 667132015  
 Matrix: Water  
 Collect Date: 08-MAY-24  
 Receive Date: 11-MAY-24  
 Collector: Client

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
<b>Rad Gamma Spec Analysis</b>														
<i>Gammaspex, Gamma, Liquid (Standard List) "As Received"</i>														
Cesium-137	U	0.721	+/-4.14	7.89	+/-4.15	10.0	pCi/L	SF1	05/18/24	2351	2611339	1		
<b>Rad Gas Flow Proportional Counting</b>														
<i>GFPC, Sr90, Liquid "As Received"</i>														
Strontium-90	U	0.388	+/-0.926	1.70	+/-0.929	2.00	pCi/L	JE1	05/20/24	1249	2610878	2		
<b>Rad Liquid Scintillation Analysis</b>														
<i>LSC, Tritium Distillation, Liquid "As Received"</i>														
Tritium	U	-31.3	+/-181	344	+/-181	700	pCi/L	HB2	05/29/24	0946	2610990	3		

**The following Analytical Methods were performed**

Method	Description
1	EPA 901.1
2	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
3	EPA 906.0 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Strontium Carrier	GFPC, Sr90, Liquid "As Received"	2610878	57.9	(25%-125%)

**Notes:**

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

*Column headers are defined as follows:*

DF: Dilution Factor  
 DL: Detection Limit  
 Lc/LC: Critical Level  
 MDA: Minimum Detectable Activity  
 MDC: Minimum Detectable Concentration

Mtd.: Method  
 PF: Prep Factor  
 RL: Reporting Limit  
 TPU: Total Propagated Uncertainty

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612

Report Date: June 4, 2024

Contact: Skyler Bowersmith  
 Project: Near SSFL

Client Sample ID: OSI-W-240508  
 Sample ID: 667132016  
 Matrix: Water  
 Collect Date: 08-MAY-24  
 Receive Date: 11-MAY-24  
 Collector: Client

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
<b>Rad Gamma Spec Analysis</b>														
<i>Gammaspex, Gamma, Liquid (Standard List) "As Received"</i>														
Cesium-137	U	2.24	+/-4.03	8.23	+/-4.16	10.0	pCi/L	SF1	05/18/24	2354	2611339	1		
<b>Rad Gas Flow Proportional Counting</b>														
<i>GFPC, Sr90, Liquid "As Received"</i>														
Strontrium-90	U	-0.326	+/-0.561	1.26	+/-0.561	2.00	pCi/L	JE1	05/20/24	1249	2610878	2		
<b>Rad Liquid Scintillation Analysis</b>														
<i>LSC, Tritium Distillation, Liquid "As Received"</i>														
Tritium	U	-65.1	+/-176	340	+/-176	700	pCi/L	HB2	05/29/24	1003	2610990	3		

**The following Analytical Methods were performed**

Method	Description
1	EPA 901.1
2	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
3	EPA 906.0 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Strontium Carrier	GFPC, Sr90, Liquid "As Received"	2610878	81.1	(25%-125%)

**Notes:**

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

*Column headers are defined as follows:*

DF: Dilution Factor  
 DL: Detection Limit  
 Lc/LC: Critical Level  
 MDA: Minimum Detectable Activity  
 MDC: Minimum Detectable Concentration

Mtd.: Method  
 PF: Prep Factor  
 RL: Reporting Limit  
 TPU: Total Propagated Uncertainty

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612

Report Date: June 4, 2024

Contact: Skyler Bowersmith  
 Project: Near SSFL

Client Sample ID: D-5/6-W-240509  
 Sample ID: 667132017  
 Matrix: Water  
 Collect Date: 09-MAY-24  
 Receive Date: 11-MAY-24  
 Collector: Client

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
<b>Rad Gamma Spec Analysis</b>														
<i>Gammaspex, Gamma, Liquid (Standard List) "As Received"</i>														
Cesium-137	U	2.90	+/-3.25	6.82		+/-3.52	10.0	pCi/L		SF1	05/20/24	2337	2611339	1
<b>Rad Gas Flow Proportional Counting</b>														
<i>GFPC, Sr90, Liquid "As Received"</i>														
Strontium-90	U	-0.570	+/-0.582	1.37		+/-0.582	2.00	pCi/L		JE1	05/20/24	1249	2610878	2
<b>Rad Liquid Scintillation Analysis</b>														
<i>LSC, Tritium Distillation, Liquid "As Received"</i>														
Tritium	U	63.1	+/-193	346		+/-194	700	pCi/L		HB2	05/29/24	1020	2610990	3

**The following Analytical Methods were performed**

Method	Description
1	EPA 901.1
2	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
3	EPA 906.0 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Strontium Carrier	GFPC, Sr90, Liquid "As Received"	2610878	78.8	(25%-125%)

**Notes:**

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

*Column headers are defined as follows:*

DF: Dilution Factor  
 DL: Detection Limit  
 Lc/LC: Critical Level  
 MDA: Minimum Detectable Activity  
 MDC: Minimum Detectable Concentration

Mtd.: Method  
 PF: Prep Factor  
 RL: Reporting Limit  
 TPU: Total Propagated Uncertainty

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

**QC Summary**

Report Date: June 4, 2024  
Page 1 of 4

Client : GSI Environmental Inc.  
155 Grand Ave  
Suite 704  
Oakland, California  
Contact: Skyler Bowersmith  
Workorder: 667132

Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gamma Spec</b>										
Batch	2611328									
QC1205732135	667132001 DUP									
Cesium-137		U	0.0450	0.0910	pCi/g	5.61	(0% - 100%)	MXR1	05/20/2423:56	
		Uncert:	+/-0.0440	+/-0.100						
		TPU:	+/-0.0486	+/-0.101						
QC1205732136	LCS									
Americium-241		483		525	pCi/g		109	(75%-125%)	MXR1	05/20/2423:57
		Uncert:		+/-15.8						
		TPU:		+/-45.9						
Cobalt-60		58.9		55.7	pCi/g		94.6	(75%-125%)		
		Uncert:		+/-2.25						
		TPU:		+/-4.84						
Cesium-137		150		151	pCi/g		100	(75%-125%)		
		Uncert:		+/-3.08						
		TPU:		+/-16.9						
QC1205732134	MB									
Cesium-137			U	0.00260	pCi/g				MXR1	05/20/2423:55
		Uncert:		+/-0.0174						
		TPU:		+/-0.0174						
Batch	2611339									
QC1205732164	667132014 DUP									
Cesium-137		U	1.65	U	0.801	pCi/L	0		N/A SF1	05/18/2423:52
		Uncert:	+/-3.68		+/-3.08					
		TPU:	+/-3.76		+/-3.10					
QC1205732165	LCS									
Americium-241		1.08E+05		1.12E+05	pCi/L		103	(75%-125%)	SF1	05/20/2423:40
		Uncert:		+/-3030						
		TPU:		+/-14200						
Cobalt-60		15300		15700	pCi/L		103	(75%-125%)		
		Uncert:		+/-666						
		TPU:		+/-1640						
Cesium-137		35700		36900	pCi/L		103	(75%-125%)		
		Uncert:		+/-790						
		TPU:		+/-3220						
QC1205732163	MB									
Cesium-137			U	1.27	pCi/L				SF1	05/20/2423:38
		Uncert:		+/-3.03						
		TPU:		+/-3.08						
<b>Rad Gas Flow</b>										
Batch	2610877									
QC1205731228	667132001 DUP									
Strontium-90		U	0.0243	U	-0.00471	pCi/g	0		N/A JE1	05/22/2418:07

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

***QC Summary***

Workorder: 667132

Page 2 of 4

Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time	
<b>Rad Gas Flow</b>										
Batch 2610877										
QC1205731229	LCS	Uncert: TPU:	+/-0.0322 +/-0.0325	+/-0.0261 +/-0.0261						
Strontium-90		5.93		6.66	pCi/g	112	(75%-125%)	JE1	05/22/2414:37	
QC1205731227	MB	Uncert: TPU:	+/-0.354 +/-1.27							
Strontium-90				0.0839	pCi/g			JE1	05/22/2418:07	
Batch	2610878	Uncert: TPU:	+/-0.0320 +/-0.0355							
QC1205731231	667132014 DUP	U	-0.516	U	0.0823	pCi/L	0	N/A JE1	05/20/2412:49	
Strontium-90		Uncert: TPU:	+/-0.616 +/-0.616		+/-0.641 +/-0.641					
QC1205731232	LCS	75.6		91.8	pCi/L	121	(75%-125%)	JE1	05/20/2412:49	
Strontium-90		Uncert: TPU:	+/-5.10 +/-15.3							
QC1205731230	MB			U	0.110	pCi/L		JE1	05/20/2412:48	
Strontium-90		Uncert: TPU:	+/-0.819 +/-0.819							
<b>Rad Liquid Scintillation</b>										
Batch	2610987									
QC1205731452	667132001 DUP	U	-0.215	U	-0.171	pCi/g	0	N/A HB2	06/03/2403:00	
Tritium		Uncert: TPU:	+/-0.993 +/-0.993		+/-1.29 +/-1.29					
QC1205731454	LCS	16.0		13.2	pCi/g	82.8	(75%-125%)	HB2	06/03/2404:03	
Tritium		Uncert: TPU:	+/-1.66 +/-3.43							
QC1205731451	MB			U	-0.533	pCi/g		HB2	06/03/2402:28	
Tritium		Uncert: TPU:	+/-0.927 +/-0.927							
QC1205731453	667132001 MS	16.0 U	-0.215		13.4	pCi/g	83.9	(75%-125%)	HB2	06/03/2403:31
Tritium		Uncert: TPU:	+/-0.993 +/-0.993		+/-1.85 +/-3.56					
Batch	2610990									
QC1205731459	667132014 DUP	U	19.1	U	-94.5	pCi/L	0	N/A HB2	05/29/2410:53	
Tritium		Uncert:	+/-184		+/-174					

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

***QC Summary***

Workorder: 667132

Page 3 of 4

Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
<b>Rad Liquid Scintillation</b>									
Batch 2610990									
QC1205731461	LCS	TPU:	+/-185	+/-174					
Tritium		4800		4160	pCi/L	86.7 (75%-125%)	HB2	05/29/2411:26	
		Uncert:		+/-460					
		TPU:		+/-927					
QC1205731458	MB								
Tritium			U	-58.8	pCi/L		HB2	05/29/2410:36	
		Uncert:		+/-178					
		TPU:		+/-178					
QC1205731460	667132014 MS								
Tritium		9610 U	19.1	8340	pCi/L	86.8 (75%-125%)	HB2	05/29/2411:10	
		Uncert:	+/-184	+/-932					
		TPU:	+/-185	+/-1860					

**Notes:**

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The Qualifiers in this report are defined as follows:

- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- J Value is estimated
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- H Analytical holding time was exceeded
- < Result is less than value reported
- > Result is greater than value reported
- UI Gamma Spectroscopy--Uncertain identification
- BD Results are either below the MDC or tracer recovery is low
- h Preparation or preservation holding time was exceeded
- R Sample results are rejected
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- M M if above MDC and less than LLD
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- FA Failed analysis.
- UJ Gamma Spectroscopy--Uncertain identification
- Q One or more quality control criteria have not been met. Refer to the applicable narrative or DER.
- K Analyte present. Reported value may be biased high. Actual value is expected to be lower.
- UL Not considered detected. The associated number is the reported concentration, which may be inaccurate due to a low bias.
- L Analyte present. Reported value may be biased low. Actual value is expected to be higher.
- N1 See case narrative
- Y Other specific qualifiers were required to properly define the results. Consult case narrative.
- \*\* Analyte is a Tracer compound
- M REMP Result > MDC/CL and < RDL

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

***QC Summary***

Workorder: 667132

Page 4 of 4

Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
----------	-----	-------------	----	-------	------	------	-------	-------	-----------

J See case narrative for an explanation

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

\*\* Indicates analyte is a surrogate/tracer compound.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

~~667137~~ 667132  
AM 5/17

FROM:  GSI Environmental Inc. 2000 Powell Street. Suite 820 Emeryville, CA 94608	PROJECT NAME:  AJU-BB	PROJECT NO.:  5182
	PROJECT CONTACT:  Matt Goerz, Skyler Bowersmith	LAB CONTACT:  Delaney Stone
	GLOBAL ID:  -	SAMPLER(S): (PRINT)  SJB/CJB
TEL: (510) 463-8484	E-MAIL: <a href="mailto:mpgoerz@gsi-net.com">mpgoerz@gsi-net.com</a> ; <a href="mailto:sjbowersmith@gsi-net.com">sjbowersmith@gsi-net.com</a>	
LABORATORY: GEL Laboratories		

### REQUESTED ANALYSES

Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	H-3 (906)	Cs-137 (901.1)	Sr-90 (9050)
		DATE	TIME								
	OW-SED-1-240507	5/7/24	1010	SO	1	X			X XX		
	AT-1-240507	5/7/24	1145	SO	1	X			X XX		
	CT-1-240507	5/7/24	1220	SO	1	X			X XX		
	GF-1-240507	5/7/24	1250	SO	1	X			X XX		
	CIT-1-240507	5/7/24	1310	SO	1	X			X XX		
	TF-1-240507	5/7/24	1330	SO	1	X			X XX		
	HV-1-240508	5/8/24	1320	SO	1	X			X XX		
	HV-2-240508	5/8/24	1325	SO	1	X			X XX		
	HU-SED-240508	5/8/24	1330	SO	1	X			X XX		
	HU-SED-1-240508	5/8/24	1340	SO	1	X			X XX		
	OSI-SED-240508	5/8/24	1445	SO	1	X			X XX		
	SRE-SED-4-240508	5/8/24	1540	SO	1	X			X XX		
	D-5/6-SED-240509	5/9/24	0905	SO	1	X			X XX		

Relinquished by: (Signature)

Received by: (Signature)

Date: 5/11/24

Time: 1100

Relinquished by: (Signature)

Received by: (Signature)

Date:

Time:

Relinquished by: (Signature)

Received by: (Signature)

Date:

Time:



## CHAIN-OF-CUSTODY RECORD

Date: 5/9/22

Page 1 of

FROM:  GSI Environmental Inc. 2000 Powell Street, Suite 820 Emeryville, CA 94608		PROJECT NAME:	AJU-BB			PROJECT NO.:	5182	
		PROJECT CONTACT:	Matt Goerz, Skyler Bowersmith			LAB CONTACT:	Delaney Stone	
		GLOBAL ID:	--			SAMPLER(S): (PRINT)	SJB / CJB	
TEL:	(510) 463-8484	E-MAIL:	<a href="mailto:mpgoerz@gsi-net.com">mpgoerz@gsi-net.com</a> ; <a href="mailto:sibowersmith@gsi-net.com">sibowersmith@gsi-net.com</a>			<b>REQUESTED ANALYSES</b> Please check box or fill in blank as needed.		
LABORATORY:	GEL Laboratories							
TURNAROUND TIME:						<input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		
SPECIAL INSTRUCTIONS:						- Sr-90 MDC of 8 pCi/L    - Cs-137 MDC of 200 pCi/L - H-3 MDC of 20,000 pCi/L		
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered
		DATE	TIME					
	OW-1-W-240508	5/4/24	1245	W	3	X X	X X X	X
	OW-W-240508	5/3/24	1245	W	3	X X	X X X	
	HV-W-240508	5/8/24	1330	W	3	X X	X X X	
	OSI-W-240508	5/8/24	1500	W	3	X X	X X X	
	D-S/63-W-24050	5/9/24	0910	W	3	X X	X X X	
Relinquished by: (Signature)				Received by: (Signature)			Date:	Time:
Relinquished by: (Signature)				Received by: (Signature)			Date:	Time:
Relinquished by: (Signature)				Received by: (Signature)			Date:	Time:

## SAMPLE RECEIPT &amp; REVIEW FORM

Client: GSIE	SDG/AR/COC/Work Order: 1067132			
Received By: JW	Date Received: 5/11/24			
Carrier and Tracking Number		<input type="checkbox"/> FedEx Express <input type="checkbox"/> FedEx Ground <input type="checkbox"/> UPS <input type="checkbox"/> Field Services <input type="checkbox"/> Courier <input type="checkbox"/> Other <b>7763 1356 0939 - 6° (r chem)</b> <b>7763 1356 0938 - 12°</b>		
Suspected Hazard Information		Yes	<input checked="" type="checkbox"/> *If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.  <input checked="" type="checkbox"/> Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> COC notation or radioactive stickers on containers equal client designation. <input checked="" type="checkbox"/> Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <b>00 CPM/mR/Hr</b> Classified as: Rad 1   Rad 2   Rad 3 <input checked="" type="checkbox"/> COC notation or hazard labels on containers equal client designation. <input checked="" type="checkbox"/> If D or E is yes, select Hazards below. PCB's   Flammable   Foreign Soil   RCRA   Asbestos   Beryllium   Other: <input type="checkbox"/>	
Sample Receipt Criteria		Yes	NA	No
1	Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>		Comments/Qualifiers (Required for Non-Conforming Items) Circle Applicable: Seals broken   Damaged container   Leaking container   Other (describe)
2	Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>		Circle Applicable: Client contacted and provided COC   COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>		Preservation Method: <b>Wet Ice</b> Ice Packs   Dry ice   None   Other: *all temperatures are recorded in Celsius   TEMP: <b>12°</b>
4	Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>		Temperature Device Serial #: IR2-23 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	<input checked="" type="checkbox"/>		Circle Applicable: Seals broken   Damaged container   Leaking container   Other (describe)
6	Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>		Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>		If Yes, are Encores or Soil Kits present for solids? Yes <input type="checkbox"/> No <input type="checkbox"/> NA (If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes <input type="checkbox"/> No <input type="checkbox"/> NA (If unknown, select No) Are liquid VOA vials free of headspace? Yes <input type="checkbox"/> No <input type="checkbox"/> NA Sample ID's and containers affected:
8	Samples received within holding time?	<input checked="" type="checkbox"/>		ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>		ID's and containers affected: <b>Sample ID: HW-W-240508 (3 bottles)</b> <i>does not match chain</i>
10	Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>		Circle Applicable: No dates on containers   No times on containers   COC missing info   Other (describe) <b>Sample ID: HW-W-24008 (3 bottles)</b> does not match time on chain.
11	Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>		Circle Applicable: No container count on COC   Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>		
13	COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>		Circle Applicable: Not relinquished   Other (describe)

Comments (Use Continuation Form if needed):  
**11. Received 2 containers for L-1-240507.**

PM (or PMA) review: Initials AM Date 5/16/24 Page 1 of 1



\*REVISED\*

CHAIN-OF-CUSTODY RECORD  
Date: 5/17/24  
Page 1 of 1

FROM:  GSI Environmental Inc. 2000 Powell Street, Suite 820 Emeryville, CA 94608		PROJECT NAME:  AJU-BB	PROJECT NO.:  5182								
		PROJECT CONTACT:  Matt Goerz, Skyler Bowersmith	LAB CONTACT:  Delaney Stone								
		GLOBAL ID:  -	SAMPLER(S): (BRINT)  SSB / CJB								
TEL:  (510) 463-8484	E-MAIL:  mpgoerz@gsl-net.com; sibowersmith@gsl-net.com	LABORATORY:  GEL Laboratories									
TURNAROUND TIME:  <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAY <input checked="" type="checkbox"/> STANDARD											
SPECIAL INSTRUCTIONS:  - Sr-90 MDC of 0.1 pCi/g      - Cs-137 MDC of 0.1 pCi/g - H-3 MDC of 0.2 pCi/g											
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	REQUESTED ANALYSES Please check box or fill in blank as needed.		
		DATE	TIME						Sr-90 (905.0)		
	OW-SED-1-240507	5/7/24	1010	SO	1	X			X	XX	
	AT-1-240507	5/7/24	1145	SO	1	X			X	XX	
	CT-1-240507	5/7/24	1220	SO	1	X			X	XX	
	CF-1-240507	5/7/24	1250	SO	1	X			X	XX	
	CT-1-240507	5/7/24	1310	SO	1	X			X	XX	
	TF-1-240507	5/7/24	1330	SO	1	X			X	XX	
	HV-1-240508	5/8/24	1320	SO	1	X			X	XX	
	HV-2-240508	5/8/24	1325	SO	1	X			X	XX	
	HU-SED-1-240508	5/8/24	1330	SO	1	X			X	XX	
	HU-SED-1-240508	5/8/24	1340	SO	1	X			X	XX	
	OSI-SED-240508	5/8/24	1445	SO	1	X			X	XX	
	SRE-SED-4-240508	5/8/24	1540	SO	1	X			X	XX	
	D-5-6-SED-240509	5/9/24	0905	SO	1	X			X	XX	
Relinquished by: (Signature) <i>[Signature]</i> Relinquished by: (Signature) Relinquished by: (Signature)				Received by: (Signature) Received by: (Signature) Received by: (Signature)			Date: 5/17/24 Time: 10:00 Date: Time: Date: Time:				

**List of current GEL Certifications as of 04 June 2024**

<b>State</b>	<b>Certification</b>
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-00651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	KY90129
Kentucky Wastewater	KY90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2023019
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122024-05
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2023-152
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235
Utah NELAP	SC000122024-41
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

**Radiochemistry**  
**Technical Case Narrative**  
**GSI Environmental Inc.**  
**SDG #: 667132**

**Product:** Dry Weight

**Preparation Method:** Dry Soil Prep

**Preparation Procedure:** GL-RAD-A-021 REV# 25

**Preparation Batch:** 2610659

The following samples were analyzed using the above methods and analytical procedure(s).

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
667132001	OW-SED-1-240507
667132002	AT-1-240507
667132003	KC-1-240507
667132004	GF-1-240507
667132005	CIT-1-240507
667132006	TF-1-240507
667132007	HV-1-240508
667132008	HV-2-240508
667132009	HV-SED-240508
667132010	HV-SED-1-240508
667132011	OSI-SED-240508
667132012	SRE-SED-4-240508
667132013	D-5/6-SED-240509

The samples in this SDG were analyzed on an "as received" basis.

**Data Summary:**

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

**Product:** Gammaspec, Gamma, Solid (Standard List)

**Analytical Method:** DOE HASL 300, 4.5.2.3/Ga-01-R

**Analytical Procedure:** GL-RAD-A-013 REV# 29

**Analytical Batch:** 2611328

**Preparation Method:** Dry Soil Prep

**Preparation Procedure:** GL-RAD-A-021 REV# 25

**Preparation Batch:** 2610659

The following samples were analyzed using the above methods and analytical procedure(s).

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
667132001	OW-SED-1-240507
667132002	AT-1-240507
667132003	KC-1-240507

667132004	GF-1-240507
667132005	CIT-1-240507
667132006	TF-1-240507
667132007	HV-1-240508
667132008	HV-2-240508
667132009	HV-SED-240508
667132010	HV-SED-1-240508
667132011	OSI-SED-240508
667132012	SRE-SED-4-240508
667132013	D-5/6-SED-240509
1205732134	Method Blank (MB)
1205732135	667132001(OW-SED-1-240507) Sample Duplicate (DUP)
1205732136	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

**Data Summary:**

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

**Product: Gammaspec, Gamma, Liquid (Standard List)**

**Analytical Method:** EPA 901.1

**Analytical Procedure:** GL-RAD-A-013 REV# 29

**Analytical Batch:** 2611339

The following samples were analyzed using the above methods and analytical procedure(s).

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
667132014	OW-W-240508
667132015	HV-W-240508
667132016	OSI-W-240508
667132017	D-5/6-W-240509
1205732163	Method Blank (MB)
1205732164	667132014(OW-W-240508) Sample Duplicate (DUP)
1205732165	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

**Data Summary:**

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

**Product: GFPC, Sr90, Solid**

**Analytical Method:** EPA 905.0 Modified/DOE RP501 Rev. 1 Modified

**Analytical Procedure:** GL-RAD-A-004 REV# 22

**Analytical Batch:** 2610877

**Preparation Method:** Dry Soil Prep

**Preparation Procedure:** GL-RAD-A-021 REV# 25

**Preparation Batch:** 2610659

The following samples were analyzed using the above methods and analytical procedure(s).

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
667132001	OW-SED-1-240507
667132002	AT-1-240507
667132003	KC-1-240507
667132004	GF-1-240507
667132005	CIT-1-240507
667132006	TF-1-240507
667132007	HV-1-240508
667132008	HV-2-240508
667132009	HV-SED-240508
667132010	HV-SED-1-240508
667132011	OSI-SED-240508
667132012	SRE-SED-4-240508
667132013	D-5/6-SED-240509
1205731227	Method Blank (MB)
1205731228	667132001(OW-SED-1-240507) Sample Duplicate (DUP)
1205731229	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

#### **Data Summary:**

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

#### **Technical Information**

##### **Recounts**

Samples 667132001 (OW-SED-1-240507) and 667132002 (AT-1-240507) were recounted due to results more negative than the three sigma TPU. The second counts are reported. Samples 667132004 (GF-1-240507), 667132010 (HV-SED-1-240508) and 667132011 (OSI-SED-240508) were recounted due to a suspected false positive. The recounts are reported.

**Product:** GFPC, Sr90, Liquid

**Analytical Method:** EPA 905.0 Modified/DOE RP501 Rev. 1 Modified

**Analytical Procedure:** GL-RAD-A-004 REV# 22

**Analytical Batch:** 2610878

The following samples were analyzed using the above methods and analytical procedure(s).

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
667132014	OW-W-240508
667132015	HV-W-240508

667132016	OSI-W-240508
667132017	D-5/6-W-240509
1205731230	Method Blank (MB)
1205731231	667132014(OW-W-240508) Sample Duplicate (DUP)
1205731232	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

**Data Summary:**

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

**Product: LSC, Tritium Distillation, Soil**

**Analytical Method:** EPA 906.0 Modified

**Analytical Procedure:** GL-RAD-A-002 REV# 24

**Analytical Batch:** 2610987

The following samples were analyzed using the above methods and analytical procedure(s).

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
667132001	OW-SED-1-240507
667132002	AT-1-240507
667132003	KC-1-240507
667132004	GF-1-240507
667132005	CIT-1-240507
667132006	TF-1-240507
667132007	HV-1-240508
667132008	HV-2-240508
667132009	HV-SED-240508
667132010	HV-SED-1-240508
667132011	OSI-SED-240508
667132012	SRE-SED-4-240508
667132013	D-5/6-SED-240509
1205731451	Method Blank (MB)
1205731452	667132001(OW-SED-1-240507) Sample Duplicate (DUP)
1205731453	667132001(OW-SED-1-240507) Matrix Spike (MS)
1205731454	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

**Data Summary:**

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

**Quality Control (QC) Information**

**RDL Met**

Samples (See Below) did not meet the detection limits due to limited sample volume.

<b>Sample</b>	<b>Analyte</b>	<b>Value</b>
1205731451 (MB)	Tritium	Result -0.533 < MDA 1.72 > RDL 0.2 pCi/g
1205731452 (OW-SED-1-240507DUP)	Tritium	Result -0.171 < MDA 2.32 > RDL 0.2 pCi/g
667132001 (OW-SED-1-240507)	Tritium	Result -0.215 < MDA 1.8 > RDL 0.2 pCi/g
667132002 (AT-1-240507)	Tritium	Result 0.431 < MDA 1.81 > RDL 0.2 pCi/g
667132003 (KC-1-240507)	Tritium	Result 0.0681 < MDA 1.88 > RDL 0.2 pCi/g
667132004 (GF-1-240507)	Tritium	Result -0.041 < MDA 1.85 > RDL 0.2 pCi/g
667132005 (CIT-1-240507)	Tritium	Result -0.452 < MDA 2.02 > RDL 0.2 pCi/g
667132006 (TF-1-240507)	Tritium	Result -0.129 < MDA 1.76 > RDL 0.2 pCi/g
667132007 (HV-1-240508)	Tritium	Result 0.294 < MDA 1.91 > RDL 0.2 pCi/g
667132008 (HV-2-240508)	Tritium	Result 0.258 < MDA 1.81 > RDL 0.2 pCi/g
667132009 (HV-SED-240508)	Tritium	Result 0.148 < MDA 1.84 > RDL 0.2 pCi/g
667132010 (HV-SED-1-240508)	Tritium	Result -0.431 < MDA 1.8 > RDL 0.2 pCi/g
667132011 (OSI-SED-240508)	Tritium	Result 0.397 < MDA 1.76 > RDL 0.2 pCi/g
667132012 (SRE-SED-4-240508)	Tritium	Result 0.644 < MDA 1.79 > RDL 0.2 pCi/g
667132013 (D-5/6-SED-240509)	Tritium	Result 0.188 < MDA 1.74 > RDL 0.2 pCi/g

**Product: LSC, Tritium Distillation, Liquid**

**Analytical Method:** EPA 906.0 Modified

**Analytical Procedure:** GL-RAD-A-002 REV# 24

**Analytical Batch:** 2610990

The following samples were analyzed using the above methods and analytical procedure(s).

<b>GEL Sample ID#</b>	<b>Client Sample Identification</b>
667132014	OW-W-240508
667132015	HV-W-240508
667132016	OSI-W-240508
667132017	D-5/6-W-240509
1205731458	Method Blank (MB)
1205731459	667132014(OW-W-240508) Sample Duplicate (DUP)
1205731460	667132014(OW-W-240508) Matrix Spike (MS)
1205731461	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

**Data Summary:**

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

**Miscellaneous Information**

**Additional Comments**

The matrix spike, 1205731460 (OW-W-240508MS), aliquot was reduced to conserve sample volume.

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

June 04, 2024

Skyler Bowersmith  
GSI Environmental Inc.  
155 Grand Ave  
Suite 704  
Oakland, California 94612

Re: Near SSFL  
Work Order: 667131

Dear Skyler Bowersmith:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on May 11, 2024. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. The following additional comments were noted at receipt: (insert text box).. Samples were received out of temperature specifications for analysis at 12 degrees Celsius. Client was informed of the temperature issue on 5/13 and instructed that we proceed with analysis.

Test results for NELAP or ISO 17025 accredited tests are verified to meet the requirements of those standards, with any exceptions noted. The results reported relate only to the items tested and to the sample as received by the laboratory. These results may not be reproduced except as full reports without approval by the laboratory. Copies of GEL's accreditations and certifications can be found on our website at [www.gel.com](http://www.gel.com).

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 1614.

Sincerely,

Delaney Stonesmith  
Project Manager

Purchase Order: 5182  
Enclosures

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

**Certificate of Analysis Report  
for**

GSIE002 GSI Environmental Inc.

Client SDG: 667131 GEL Work Order: 667131

**The Qualifiers in this report are defined as follows:**

- \* A quality control analyte recovery is outside of specified acceptance criteria
- \*\* Analyte is a Tracer compound
- \*\* Analyte is a surrogate compound
- B Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
- J Value is estimated
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Delaney Stonesmith.

Reviewed by

*Delaney Stonesmith*

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

**Certificate of Analysis**

Report Date: June 4, 2024

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612  
 Contact: Skyler Bowersmith  
 Project: Near SSFL

Client Sample ID:	L-1-240507	Project:	GSIE00119
Sample ID:	667131001	Client ID:	GSIE002
Matrix:	Vegetation		
Collect Date:	07-MAY-24 14:00		
Receive Date:	11-MAY-24		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>LC-MS/MS Perchlorate</b>												
<b>Perchlorate by LC-MS/MS "As Received"</b>												
Perchlorate	U	ND	1.97	7.87	ug/kg	7.87	5	EC5	05/21/24	1740	2612071	1
<b>Mercury Analysis-CVAA</b>												
<b>7471 Cold Vapor Mercury, Solid "As Received"</b>												
Mercury	U	ND	6.88	20.5	ug/kg	103	1	JP2	05/16/24	1039	2612006	2
<b>Metals Analysis-ICP</b>												
<b>SW846 3050B/6010D Metals, Solid "As Received"</b>												
Antimony	U	ND	293	1770	ug/kg	88.7	1	LS	05/21/24	1550	2611974	3
Arsenic	U	ND	443	2660	ug/kg	88.7	1					
Barium	J	376	88.7	443	ug/kg	88.7	1					
Beryllium	U	ND	88.7	443	ug/kg	88.7	1					
Cadmium	U	ND	88.7	443	ug/kg	88.7	1					
Chromium	U	ND	133	887	ug/kg	88.7	1					
Cobalt	U	ND	133	443	ug/kg	88.7	1					
Copper	J	330	266	1770	ug/kg	88.7	1					
Lead	U	ND	293	1770	ug/kg	88.7	1					
Molybdenum	U	ND	177	887	ug/kg	88.7	1					
Nickel	U	ND	133	443	ug/kg	88.7	1					
Selenium	J	733	443	2660	ug/kg	88.7	1					
Silver	U	ND	88.7	443	ug/kg	88.7	1					
Thallium	U	ND	443	1770	ug/kg	88.7	1					
Vanadium	U	ND	88.7	443	ug/kg	88.7	1					
Zinc	J	844	355	1770	ug/kg	88.7	1					

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
GEL Prep Method	Laboratory Composite				2611312
SW846 7471B Prep	SW846 7471B Mercury Prep Soil	SD	05/15/24	1440	2612005
SW846 6850 Modified	EPA 6850 Perchlorate Extraction Solids	AZ4	05/20/24	0811	2612069
SW846 3050B	SW846 3050B Prep	AB5	05/16/24	0850	2611973

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 6850 Modified	
2	SW846 7471B	
3	SW846 3050B/6010D	

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

***Certificate of Analysis***

Report Date: June 4, 2024

Company : GSI Environmental Inc.  
Address : 155 Grand Ave  
              Suite 704  
              Oakland, California 94612  
Contact: Skyler Bowersmith  
Project: Near SSFL

---

Client Sample ID: L-1-240507                      Project: GSIE00119  
Sample ID: 667131001                      Client ID: GSIE002

---

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
-----------	-----------	--------	----	----	-------	----	----	---------	------	------	-------	--------

**Notes:**

*Column headers are defined as follows:*

DF: Dilution Factor                      Lc/LC: Critical Level

DL: Detection Limit                      PF: Prep Factor

MDA: Minimum Detectable Activity      RL: Reporting Limit

MDC: Minimum Detectable Concentration      SQL: Sample Quantitation Limit

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

**Certificate of Analysis**

Report Date: June 4, 2024

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612  
 Contact: Skyler Bowersmith  
 Project: Near SSFL

Client Sample ID:	G-1-240507	Project:	GSIE00119
Sample ID:	667131002	Client ID:	GSIE002
Matrix:	Vegetation		
Collect Date:	07-MAY-24 14:05		
Receive Date:	11-MAY-24		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>LC-MS/MS Perchlorate</b>												
<b>Perchlorate by LC-MS/MS "As Received"</b>												
Perchlorate	U	ND	2.53	10.1	ug/kg	10.1	5	EC5	05/21/24	1810	2612071	1
<b>Mercury Analysis-CVAA</b>												
<b>7471 Cold Vapor Mercury, Solid "As Received"</b>												
Mercury	U	ND	6.88	20.5	ug/kg	103	1	JP2	05/16/24	1040	2612006	2
<b>Metals Analysis-ICP</b>												
<b>SW846 3050B/6010D Metals, Solid "As Received"</b>												
Antimony	U	ND	299	1810	ug/kg	90.6	1	LS	05/21/24	1608	2611974	3
Arsenic	U	ND	453	2720	ug/kg	90.6	1					
Barium	J	407	90.6	453	ug/kg	90.6	1					
Beryllium	U	ND	90.6	453	ug/kg	90.6	1					
Cadmium	U	ND	90.6	453	ug/kg	90.6	1					
Chromium	U	ND	136	906	ug/kg	90.6	1					
Cobalt	U	ND	136	453	ug/kg	90.6	1					
Copper	J	418	272	1810	ug/kg	90.6	1					
Lead	U	ND	299	1810	ug/kg	90.6	1					
Molybdenum	U	ND	181	906	ug/kg	90.6	1					
Nickel	U	ND	136	453	ug/kg	90.6	1					
Selenium	J	707	453	2720	ug/kg	90.6	1					
Silver	U	ND	90.6	453	ug/kg	90.6	1					
Thallium	U	ND	453	1810	ug/kg	90.6	1					
Vanadium	U	ND	90.6	453	ug/kg	90.6	1					
Zinc	J	687	362	1810	ug/kg	90.6	1					

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3050B	SW846 3050B Prep	AB5	05/16/24	0850	2611973
SW846 7471B Prep	SW846 7471B Mercury Prep Soil	SD	05/15/24	1440	2612005
GEL Prep Method	Laboratory Composite				2611312
SW846 6850 Modified	EPA 6850 Perchlorate Extraction Solids	AZ4	05/20/24	0811	2612069

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 6850 Modified	
2	SW846 7471B	
3	SW846 3050B/6010D	

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

***Certificate of Analysis***

Report Date: June 4, 2024

Company : GSI Environmental Inc.  
Address : 155 Grand Ave  
              Suite 704  
              Oakland, California 94612  
Contact: Skyler Bowersmith  
Project: Near SSFL

Client Sample ID: G-1-240507  
Sample ID: 667131002

Project: GSIE00119  
Client ID: GSIE002

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
-----------	-----------	--------	----	----	-------	----	----	---------	------	------	-------	--------

**Notes:**

*Column headers are defined as follows:*

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

**Certificate of Analysis**

Report Date: June 4, 2024

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612  
 Contact: Skyler Bowersmith  
 Project: Near SSFL

Client Sample ID:	O-1-240507	Project:	GSIE00119
Sample ID:	667131003	Client ID:	GSIE002
Matrix:	Vegetation		
Collect Date:	07-MAY-24 14:10		
Receive Date:	11-MAY-24		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>LC-MS/MS Perchlorate</b>												
<b>Perchlorate by LC-MS/MS "As Received"</b>												
Perchlorate	U	ND	2.36	9.43	ug/kg	9.43	5	EC5	05/21/24	1820	2612071	1
<b>Mercury Analysis-CVAA</b>												
<b>7471 Cold Vapor Mercury, Solid "As Received"</b>												
Mercury	U	ND	7.08	21.1	ug/kg	106	1	JP2	05/16/24	1042	2612006	2
<b>Metals Analysis-ICP</b>												
<b>SW846 3050B/6010D Metals, Solid "As Received"</b>												
Antimony	J	671	326	1980	ug/kg	98.8	1	LS	05/21/24	1611	2611974	3
Arsenic	U	ND	494	2960	ug/kg	98.8	1					
Barium	J	338	98.8	494	ug/kg	98.8	1					
Beryllium	U	ND	98.8	494	ug/kg	98.8	1					
Cadmium	U	ND	98.8	494	ug/kg	98.8	1					
Chromium	U	ND	148	988	ug/kg	98.8	1					
Cobalt	U	ND	148	494	ug/kg	98.8	1					
Copper	J	459	296	1980	ug/kg	98.8	1					
Lead	U	ND	326	1980	ug/kg	98.8	1					
Molybdenum	U	ND	198	988	ug/kg	98.8	1					
Nickel	U	ND	148	494	ug/kg	98.8	1					
Selenium	U	ND	494	2960	ug/kg	98.8	1					
Silver	U	ND	98.8	494	ug/kg	98.8	1					
Thallium	U	ND	494	1980	ug/kg	98.8	1					
Vanadium	U	ND	98.8	494	ug/kg	98.8	1					
Zinc	J	813	395	1980	ug/kg	98.8	1					

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
GEL Prep Method	Laboratory Composite				2611312
SW846 3050B	SW846 3050B Prep	AB5	05/16/24	0850	2611973
SW846 7471B Prep	SW846 7471B Mercury Prep Soil	SD	05/15/24	1440	2612005
SW846 6850 Modified	EPA 6850 Perchlorate Extraction Solids	AZ4	05/20/24	0811	2612069

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 6850 Modified	
2	SW846 7471B	
3	SW846 3050B/6010D	

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

***Certificate of Analysis***

Report Date: June 4, 2024

Company : GSI Environmental Inc.  
Address : 155 Grand Ave  
              Suite 704  
              Oakland, California 94612  
Contact: Skyler Bowersmith  
Project: Near SSFL

---

Client Sample ID: O-1-240507  
Sample ID: 667131003

Project: GSIE00119  
Client ID: GSIE002

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
-----------	-----------	--------	----	----	-------	----	----	---------	------	------	-------	--------

**Notes:**

*Column headers are defined as follows:*

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

**Certificate of Analysis**

Report Date: June 4, 2024

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612  
 Contact: Skyler Bowersmith  
 Project: Near SSFL

Client Sample ID:	L-2-240507	Project:	GSIE00119
Sample ID:	667131004	Client ID:	GSIE002
Matrix:	Vegetation		
Collect Date:	07-MAY-24 15:00		
Receive Date:	11-MAY-24		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>LC-MS/MS Perchlorate</b>												
<b>Perchlorate by LC-MS/MS "As Received"</b>												
Perchlorate	U	ND	2.22	8.89	ug/kg	8.89	5	EC5	05/21/24	1830	2612071	1
<b>Mercury Analysis-CVAA</b>												
<b>7471 Cold Vapor Mercury, Solid "As Received"</b>												
Mercury	U	ND	7.88	23.5	ug/kg	118	1	JP2	05/16/24	1044	2612006	2
<b>Metals Analysis-ICP</b>												
<b>SW846 3050B/6010D Metals, Solid "As Received"</b>												
Antimony	J	311	308	1870	ug/kg	93.3	1	LS	05/21/24	1614	2611974	3
Arsenic	U	ND	466	2800	ug/kg	93.3	1					
Barium	U	ND	93.3	466	ug/kg	93.3	1					
Beryllium	U	ND	93.3	466	ug/kg	93.3	1					
Cadmium	U	ND	93.3	466	ug/kg	93.3	1					
Chromium	U	ND	140	933	ug/kg	93.3	1					
Cobalt	U	ND	140	466	ug/kg	93.3	1					
Copper	U	ND	280	1870	ug/kg	93.3	1					
Lead	U	ND	308	1870	ug/kg	93.3	1					
Molybdenum	U	ND	187	933	ug/kg	93.3	1					
Nickel	U	ND	140	466	ug/kg	93.3	1					
Selenium	J	614	466	2800	ug/kg	93.3	1					
Silver	U	ND	93.3	466	ug/kg	93.3	1					
Thallium	U	ND	466	1870	ug/kg	93.3	1					
Vanadium	U	ND	93.3	466	ug/kg	93.3	1					
Zinc	J	771	373	1870	ug/kg	93.3	1					

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3050B	SW846 3050B Prep	AB5	05/16/24	0850	2611973
GEL Prep Method	Laboratory Composite				2611312
SW846 7471B Prep	SW846 7471B Mercury Prep Soil	SD	05/15/24	1440	2612005
SW846 6850 Modified	EPA 6850 Perchlorate Extraction Solids	AZ4	05/20/24	0811	2612069

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 6850 Modified	
2	SW846 7471B	
3	SW846 3050B/6010D	

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

***Certificate of Analysis***

Report Date: June 4, 2024

Company : GSI Environmental Inc.  
Address : 155 Grand Ave  
              Suite 704  
              Oakland, California 94612  
Contact: Skyler Bowersmith  
Project: Near SSFL

---

Client Sample ID: L-2-240507                      Project: GSIE00119  
Sample ID: 667131004                      Client ID: GSIE002

---

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
-----------	-----------	--------	----	----	-------	----	----	---------	------	------	-------	--------

**Notes:**

*Column headers are defined as follows:*

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

**Certificate of Analysis**

Report Date: June 4, 2024

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612  
 Contact: Skyler Bowersmith  
 Project: Near SSFL

Client Sample ID:	G-2-240507	Project:	GSIE00119
Sample ID:	667131005	Client ID:	GSIE002
Matrix:	Vegetation		
Collect Date:	07-MAY-24 15:05		
Receive Date:	11-MAY-24		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>LC-MS/MS Perchlorate</b>												
<b>Perchlorate by LC-MS/MS "As Received"</b>												
Perchlorate	U	ND	2.06	8.23	ug/kg	8.23	5	EC5	05/21/24	1840	2612071	1
<b>Mercury Analysis-CVAA</b>												
<b>7471 Cold Vapor Mercury, Solid "As Received"</b>												
Mercury	U	ND	6.86	20.5	ug/kg	102	1	JP2	05/16/24	1045	2612006	2
<b>Metals Analysis-ICP</b>												
<b>SW846 3050B/6010D Metals, Solid "As Received"</b>												
Antimony	J	355	299	1810	ug/kg	90.6	1	LS	05/21/24	1617	2611974	3
Arsenic	U	ND	453	2720	ug/kg	90.6	1					
Barium	J	441	90.6	453	ug/kg	90.6	1					
Beryllium	U	ND	90.6	453	ug/kg	90.6	1					
Cadmium	U	ND	90.6	453	ug/kg	90.6	1					
Chromium	U	ND	136	906	ug/kg	90.6	1					
Cobalt	U	ND	136	453	ug/kg	90.6	1					
Copper	U	ND	272	1810	ug/kg	90.6	1					
Lead	U	ND	299	1810	ug/kg	90.6	1					
Molybdenum	U	ND	181	906	ug/kg	90.6	1					
Nickel	U	ND	136	453	ug/kg	90.6	1					
Selenium	J	1010	453	2720	ug/kg	90.6	1					
Silver	U	ND	90.6	453	ug/kg	90.6	1					
Thallium	U	ND	453	1810	ug/kg	90.6	1					
Vanadium	U	ND	90.6	453	ug/kg	90.6	1					
Zinc	J	473	362	1810	ug/kg	90.6	1					

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7471B Prep	SW846 7471B Mercury Prep Soil	SD	05/15/24	1440	2612005
SW846 6850 Modified	EPA 6850 Perchlorate Extraction Solids	AZ4	05/20/24	0811	2612069
GEL Prep Method	Laboratory Composite				2611312
SW846 3050B	SW846 3050B Prep	AB5	05/16/24	0850	2611973

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 6850 Modified	
2	SW846 7471B	
3	SW846 3050B/6010D	

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

***Certificate of Analysis***

Report Date: June 4, 2024

Company : GSI Environmental Inc.  
Address : 155 Grand Ave  
              Suite 704  
              Oakland, California 94612  
Contact: Skyler Bowersmith  
Project: Near SSFL

---

Client Sample ID: G-2-240507                      Project: GSIE00119  
Sample ID: 667131005                      Client ID: GSIE002

---

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
-----------	-----------	--------	----	----	-------	----	----	---------	------	------	-------	--------

**Notes:**

*Column headers are defined as follows:*

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

**Certificate of Analysis**

Report Date: June 4, 2024

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612  
 Contact: Skyler Bowersmith  
 Project: Near SSFL

Client Sample ID:	O-2-240507	Project:	GSIE00119
Sample ID:	667131006	Client ID:	GSIE002
Matrix:	Vegetation		
Collect Date:	07-MAY-24 15:10		
Receive Date:	11-MAY-24		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>LC-MS/MS Perchlorate</b>												
<b>Perchlorate by LC-MS/MS "As Received"</b>												
Perchlorate	U	ND	2.28	9.13	ug/kg	9.13	5	EC5	05/22/24	0852	2612071	1
<b>Mercury Analysis-CVAA</b>												
<b>7471 Cold Vapor Mercury, Solid "As Received"</b>												
Mercury	U	ND	6.98	20.8	ug/kg	104	1	JP2	05/16/24	1047	2612006	2
<b>Metals Analysis-ICP</b>												
<b>SW846 3050B/6010D Metals, Solid "As Received"</b>												
Antimony	J	343	321	1950	ug/kg	97.3	1	LS	05/21/24	1620	2611974	3
Arsenic	U	ND	486	2920	ug/kg	97.3	1					
Barium		695	97.3	486	ug/kg	97.3	1					
Beryllium	U	ND	97.3	486	ug/kg	97.3	1					
Cadmium	U	ND	97.3	486	ug/kg	97.3	1					
Chromium	U	ND	146	973	ug/kg	97.3	1					
Cobalt	U	ND	146	486	ug/kg	97.3	1					
Copper	J	306	292	1950	ug/kg	97.3	1					
Lead	U	ND	321	1950	ug/kg	97.3	1					
Molybdenum	U	ND	195	973	ug/kg	97.3	1					
Nickel	U	ND	146	486	ug/kg	97.3	1					
Selenium	J	1320	486	2920	ug/kg	97.3	1					
Silver	U	ND	97.3	486	ug/kg	97.3	1					
Thallium	U	ND	486	1950	ug/kg	97.3	1					
Vanadium	U	ND	97.3	486	ug/kg	97.3	1					
Zinc	J	527	389	1950	ug/kg	97.3	1					

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3050B	SW846 3050B Prep	AB5	05/16/24	0850	2611973
SW846 7471B Prep	SW846 7471B Mercury Prep Soil	SD	05/15/24	1440	2612005
SW846 6850 Modified	EPA 6850 Perchlorate Extraction Solids	AZ4	05/20/24	0811	2612069
GEL Prep Method	Laboratory Composite				2611312

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 6850 Modified	
2	SW846 7471B	
3	SW846 3050B/6010D	

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

***Certificate of Analysis***

Report Date: June 4, 2024

Company : GSI Environmental Inc.  
Address : 155 Grand Ave  
              Suite 704  
              Oakland, California 94612  
Contact: Skyler Bowersmith  
Project: Near SSFL

---

Client Sample ID: O-2-240507                      Project: GSIE00119  
Sample ID: 667131006                      Client ID: GSIE002

---

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
-----------	-----------	--------	----	----	-------	----	----	---------	------	------	-------	--------

**Notes:**

*Column headers are defined as follows:*

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612  
 Contact: Skyler Bowersmith  
 Project: Near SSFL

Report Date: June 4, 2024

Client Sample ID: L-1-240507  
 Sample ID: 667131001  
 Matrix: Vegetation  
 Collect Date: 07-MAY-24  
 Receive Date: 11-MAY-24  
 Collector: Client  
 Moisture: 88.8%

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
<b>Rad Gamma Spec Analysis</b>														
<i>Gammasp, Gamma, Solid vegetation "As Received"</i>														
Cesium-137	U	0.00198	+/-0.00856	0.0180	+/-0.00860	0.100	pCi/g			MXR1	05/15/24	1552	2611998	1
<b>Rad Gas Flow Proportional Counting</b>														
<i>GFPC, Sr90, Vegetation "As Received"</i>														
Strontium-90	U	-0.0157	+/-0.0522	0.102	+/-0.0522	0.500	pCi/g			JE1	05/22/24	1308	2614684	2
<b>Rad Liquid Scintillation Analysis</b>														
<i>LSC, Tritium Distillation, Vegetation "As Received"</i>														
Tritium	U	0.502	+/-0.748	1.28	+/-0.756	2.00	pCi/g			HB2	06/02/24	1852	2612451	3
<b>Solid Preparation</b>														
<i>Laboratory Composite "As Received"</i>														

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	LC2	05/18/24	1054	2611972
GEL Prep Method	Wet Soil Prep GL-RAD-A-026	WGR	05/15/24	0955	2611966
GEL Prep Method	Laboratory Composite				2611312

**The following Analytical Methods were performed**

Method	Description
1	DOE HASL 300, 4.5.2.3/Ga-01-R
2	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
3	EPA 906.0 Modified
4	GEL Prep Method

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Strontium Carrier	GFPC, Sr90, Vegetation "As Received"	2614684	95	(25%-125%)

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

***Certificate of Analysis***

Company : GSI Environmental Inc.  
Address : 155 Grand Ave  
Suite 704  
Oakland, California 94612

Contact: Skyler Bowersmith  
Project: Near SSFL

Client Sample ID: L-1-240507  
Sample ID: 667131001

Report Date: June 4, 2024

Project: GSIE00119  
Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test										Batch ID	Recovery%	Acceptable Limits	

**Notes:**

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

*Column headers are defined as follows:*

DF: Dilution Factor

Mtd.: Method

DL: Detection Limit

PF: Prep Factor

Lc/LC: Critical Level

RL: Reporting Limit

MDA: Minimum Detectable Activity

TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612

Report Date: June 4, 2024

Contact: Skyler Bowersmith  
 Project: Near SSFL

Client Sample ID: G-1-240507  
 Sample ID: 667131002  
 Matrix: Vegetation  
 Collect Date: 07-MAY-24  
 Receive Date: 11-MAY-24  
 Collector: Client  
 Moisture: 88.7%

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
<b>Rad Gamma Spec Analysis</b>														
<i>Gammaspec, Gamma, Solid vegetation "As Received"</i>														
Cesium-137	U	0.00826	+/-0.0109	0.0227		+/-0.0116	0.100	pCi/g		MXR1	05/15/24	1553	2611998	1
<b>Rad Gas Flow Proportional Counting</b>														
<i>GFPC, Sr90, Vegetation "As Received"</i>														
Strontium-90	U	0.0258	+/-0.0425	0.0749		+/-0.0429	0.500	pCi/g		JE1	05/22/24	1309	2614684	2
<b>Rad Liquid Scintillation Analysis</b>														
<i>LSC, Tritium Distillation, Vegetation "As Received"</i>														
Tritium	U	0.511	+/-0.742	1.27		+/-0.751	2.00	pCi/g		HB2	06/02/24	1919	2612451	3
<b>Solid Preparation</b>														
<i>Laboratory Composite "As Received"</i>														

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
GEL Prep Method	Laboratory Composite				2611312
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	LC2	05/18/24	1054	2611972
GEL Prep Method	Wet Soil Prep GL-RAD-A-026	WGR	05/15/24	0955	2611966

**The following Analytical Methods were performed**

Method	Description
1	DOE HASL 300, 4.5.2.3/Ga-01-R
2	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
3	EPA 906.0 Modified
4	GEL Prep Method

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Strontium Carrier	GFPC, Sr90, Vegetation "As Received"	2614684	90.4	(25%-125%)

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

***Certificate of Analysis***

Company : GSI Environmental Inc.  
Address : 155 Grand Ave  
Suite 704  
Oakland, California 94612

Contact: Skyler Bowersmith  
Project: Near SSFL

Client Sample ID: G-1-240507  
Sample ID: 667131002

Report Date: June 4, 2024

Project: GSIE00119  
Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test										Batch ID	Recovery%	Acceptable Limits	

**Notes:**

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

*Column headers are defined as follows:*

DF: Dilution Factor

Mtd.: Method

DL: Detection Limit

PF: Prep Factor

Lc/LC: Critical Level

RL: Reporting Limit

MDA: Minimum Detectable Activity

TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612

Report Date: June 4, 2024

Contact: Skyler Bowersmith  
 Project: Near SSFL

Client Sample ID: O-1-240507  
 Sample ID: 667131003  
 Matrix: Vegetation  
 Collect Date: 07-MAY-24  
 Receive Date: 11-MAY-24  
 Collector: Client  
 Moisture: 88.7%

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
<b>Rad Gamma Spec Analysis</b>														
<i>Gammaspac, Gamma, Solid vegetation "As Received"</i>														
Cesium-137	U	-0.00649	+/-0.00785	0.0130		+/-0.00840	0.100	pCi/g		MXR1	05/15/24	1553	2611998	1
<b>Rad Gas Flow Proportional Counting</b>														
<i>GFPC, Sr90, Vegetation "As Received"</i>														
Strontium-90	U	0.0259	+/-0.0430	0.0759		+/-0.0434	0.500	pCi/g		JE1	05/22/24	1309	2614684	2
<b>Rad Liquid Scintillation Analysis</b>														
<i>LSC, Tritium Distillation, Vegetation "As Received"</i>														
Tritium	U	-0.176	+/-0.684	1.27		+/-0.684	2.00	pCi/g		HB2	06/02/24	1946	2612451	3
<b>Solid Preparation</b>														
<i>Laboratory Composite "As Received"</i>														

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	LC2	05/18/24	1054	2611972
GEL Prep Method	Laboratory Composite				2611312
GEL Prep Method	Wet Soil Prep GL-RAD-A-026	WGR	05/15/24	0955	2611966

**The following Analytical Methods were performed**

Method	Description
1	DOE HASL 300, 4.5.2.3/Ga-01-R
2	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
3	EPA 906.0 Modified
4	GEL Prep Method

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Strontium Carrier	GFPC, Sr90, Vegetation "As Received"	2614684	90.4	(25%-125%)

**GEL LABORATORIES LLC**  
 2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612

Contact: Skyler Bowersmith  
 Project: Near SSFL

Client Sample ID: O-1-240507  
 Sample ID: 667131003

Report Date: June 4, 2024

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test										Batch ID	Recovery%		Acceptable Limits

**Notes:**

The MDC is a sample specific MDC.  
 TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

*Column headers are defined as follows:*

DF: Dilution Factor

Mtd.: Method

DL: Detection Limit

PF: Prep Factor

Lc/LC: Critical Level

RL: Reporting Limit

MDA: Minimum Detectable Activity

TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612

Contact: Skyler Bowersmith  
 Project: Near SSFL

Report Date: June 4, 2024

Client Sample ID: L-2-240507  
 Sample ID: 667131004  
 Matrix: Vegetation  
 Collect Date: 07-MAY-24  
 Receive Date: 11-MAY-24  
 Collector: Client  
 Moisture: 91.1%

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
<b>Rad Gamma Spec Analysis</b>														
<i>Gammasp, Gamma, Solid vegetation "As Received"</i>														
Cesium-137	U	-0.00607	+/-0.00721	0.0115	+/-0.00773	0.100	pCi/g			MXR1	05/15/24	1554	2611998	1
<b>Rad Gas Flow Proportional Counting</b>														
<i>GFPC, Sr90, Vegetation "As Received"</i>														
Strontium-90	U	0.0733	+/-0.0892	0.151	+/-0.0908	0.500	pCi/g			JE1	05/22/24	1309	2614684	2
<b>Rad Liquid Scintillation Analysis</b>														
<i>LSC, Tritium Distillation, Vegetation "As Received"</i>														
Tritium	U	0.0726	+/-0.707	1.28	+/-0.708	2.00	pCi/g			HB2	06/02/24	2012	2612451	3
<b>Solid Preparation</b>														
<i>Laboratory Composite "As Received"</i>														

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
GEL Prep Method	Wet Soil Prep GL-RAD-A-026	WGR	05/15/24	0955	2611966
GEL Prep Method	Laboratory Composite				2611312
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	LC2	05/18/24	1054	2611972

**The following Analytical Methods were performed**

Method	Description
1	DOE HASL 300, 4.5.2.3/Ga-01-R
2	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
3	EPA 906.0 Modified
4	GEL Prep Method

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Strontium Carrier	GFPC, Sr90, Vegetation "As Received"	2614684	60.3	(25%-125%)

**GEL LABORATORIES LLC**  
 2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612

Contact: Skyler Bowersmith  
 Project: Near SSFL

Client Sample ID: L-2-240507  
 Sample ID: 667131004

Report Date: June 4, 2024

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test										Batch ID	Recovery%		Acceptable Limits

**Notes:**

The MDC is a sample specific MDC.  
 TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

*Column headers are defined as follows:*

DF: Dilution Factor

Mtd.: Method

DL: Detection Limit

PF: Prep Factor

Lc/LC: Critical Level

RL: Reporting Limit

MDA: Minimum Detectable Activity

TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612

Report Date: June 4, 2024

Contact: Skyler Bowersmith  
 Project: Near SSFL

Client Sample ID: G-2-240507  
 Sample ID: 667131005  
 Matrix: Vegetation  
 Collect Date: 07-MAY-24  
 Receive Date: 11-MAY-24  
 Collector: Client  
 Moisture: 88.7%

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.	
<b>Rad Gamma Spec Analysis</b>															
<i>Gammaspec, Gamma, Solid vegetation "As Received"</i>															
Cesium-137	U	-0.00105	+/-0.00517	0.0102		+/-0.00519	0.100	pCi/g			MXR1	05/15/24	1555	2611998	1
<b>Rad Gas Flow Proportional Counting</b>															
<i>GFPC, Sr90, Vegetation "As Received"</i>															
Strontium-90	U	-0.0122	+/-0.0265	0.0589		+/-0.0265	0.500	pCi/g			JE1	05/22/24	1309	2614684	2
<b>Rad Liquid Scintillation Analysis</b>															
<i>LSC, Tritium Distillation, Vegetation "As Received"</i>															
Tritium	U	-0.326	+/-0.678	1.29		+/-0.678	2.00	pCi/g			HB2	06/02/24	2039	2612451	3
<b>Solid Preparation</b>															
<i>Laboratory Composite "As Received"</i>															

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
GEL Prep Method	Wet Soil Prep GL-RAD-A-026	WGR	05/15/24	0955	2611966
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	LC2	05/18/24	1054	2611972
GEL Prep Method	Laboratory Composite				2611312

**The following Analytical Methods were performed**

Method	Description
1	DOE HASL 300, 4.5.2.3/Ga-01-R
2	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
3	EPA 906.0 Modified
4	GEL Prep Method

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Strontium Carrier	GFPC, Sr90, Vegetation "As Received"	2614684	107	(25%-125%)

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612

Contact: Skyler Bowersmith  
 Project: Near SSFL

Client Sample ID: G-2-240507  
 Sample ID: 667131005

Report Date: June 4, 2024

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test										Batch ID	Recovery%		Acceptable Limits

**Notes:**

The MDC is a sample specific MDC.  
 TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

*Column headers are defined as follows:*

DF: Dilution Factor

Mtd.: Method

DL: Detection Limit

PF: Prep Factor

Lc/LC: Critical Level

RL: Reporting Limit

MDA: Minimum Detectable Activity

TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612

Contact: Skyler Bowersmith  
 Project: Near SSFL

Report Date: June 4, 2024

Client Sample ID: O-2-240507  
 Sample ID: 667131006  
 Matrix: Vegetation  
 Collect Date: 07-MAY-24  
 Receive Date: 11-MAY-24  
 Collector: Client  
 Moisture: 89.8%

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
<b>Rad Gamma Spec Analysis</b>														
<i>Gammaspec, Gamma, Solid vegetation "As Received"</i>														
Cesium-137	U	-0.000209	+/-0.00691	0.0130	+/-0.00691	0.100	pCi/g			MXR1	05/15/24	1557	2611998	1
<b>Rad Gas Flow Proportional Counting</b>														
<i>GFPC, Sr90, Vegetation "As Received"</i>														
Strontium-90	U	0.0435	+/-0.0736	0.128	+/-0.0743	0.500	pCi/g			JE1	05/22/24	1610	2614684	2
<b>Rad Liquid Scintillation Analysis</b>														
<i>LSC, Tritium Distillation, Vegetation "As Received"</i>														
Tritium	U	0.569	+/-0.759	1.29	+/-0.770	2.00	pCi/g			HB2	06/02/24	2106	2612451	3
<b>Solid Preparation</b>														
<i>Laboratory Composite "As Received"</i>														

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
GEL Prep Method	Wet Soil Prep GL-RAD-A-026	WGR	05/15/24	0955	2611966
GEL Prep Method	Laboratory Composite				2611312
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	LC2	05/18/24	1054	2611972

**The following Analytical Methods were performed**

Method	Description
1	DOE HASL 300, 4.5.2.3/Ga-01-R
2	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
3	EPA 906.0 Modified
4	GEL Prep Method

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Strontium Carrier	GFPC, Sr90, Vegetation "As Received"	2614684	78.8	(25%-125%)

**GEL LABORATORIES LLC**  
 2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

***Certificate of Analysis***

Company : GSI Environmental Inc.  
 Address : 155 Grand Ave  
 Suite 704  
 Oakland, California 94612

Contact: Skyler Bowersmith  
 Project: Near SSFL

Client Sample ID: O-2-240507  
 Sample ID: 667131006

Report Date: June 4, 2024

Project: GSIE00119  
 Client ID: GSIE002

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test										Batch ID	Recovery%		Acceptable Limits

**Notes:**

The MDC is a sample specific MDC.  
 TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

*Column headers are defined as follows:*

DF: Dilution Factor

Mtd.: Method

DL: Detection Limit

PF: Prep Factor

Lc/LC: Critical Level

RL: Reporting Limit

MDA: Minimum Detectable Activity

TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

***QC Summary***

Report Date: June 4, 2024

Page 1 of 8

**GSI Environmental Inc.**

**155 Grand Ave  
Suite 704  
Oakland, California**

Contact: Skyler Bowersmith

Workorder: 667131

Parlname	NOM	Sample	Qual	QC	Units	RPD/D%	REC%	Range	Anlst	Date	Time
<b>LC-MS/MS Perchlorate</b>											
Batch	2612071										
Perchlorate	QC1205733621	ICS		J	ug/kg		99	(80%-120%)	EC5	05/21/24	17:30
Perchlorate	QC1205733620	LCS	1.99	J	ug/kg		98	(80%-120%)		05/21/24	17:20
Perchlorate	QC1205733619	MB		U	ug/kg					05/21/24	17:10
Perchlorate	QC1205733622	667131001 MS	1.85	U	ND	ug/kg	0 *	(70%-130%)		05/21/24	17:50
Perchlorate	QC1205733623	667131001 MSD	1.99	U	ND	ug/kg	N/A	0 *	(0%-15%)	05/21/24	18:00
<b>Metals Analysis-ICP</b>											
Batch	2611974										
Antimony	QC1205733443	LCS	42500		ug/kg		93	(80%-120%)	LS	05/21/24	15:47
Arsenic											
Barium											
Beryllium											
Cadmium											

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

***QC Summary***

Workorder: 667131

Page 2 of 8

Parmname	NOM	Sample Qual	QC	Units	RPD/D%	REC%	Range	Anlst	Date	Time
<b>Metals Analysis-ICP</b>										
Batch	2611974									
Chromium	42500		39500	ug/kg		93	(80%-120%)	LS	05/21/24	15:47
Cobalt	42500		41300	ug/kg		97.2	(80%-120%)			
Copper	42500		39300	ug/kg		92.4	(80%-120%)			
Lead	42500		39300	ug/kg		92.4	(80%-120%)			
Molybdenum	42500		40400	ug/kg		95.1	(80%-120%)			
Nickel	42500		39900	ug/kg		93.9	(80%-120%)			
Selenium	42500		41200	ug/kg		97	(80%-120%)			
Silver	8500		7780	ug/kg		91.5	(80%-120%)			
Thallium	42500		39600	ug/kg		93.1	(80%-120%)			
Vanadium	42500		38800	ug/kg		91.3	(80%-120%)			
Zinc	42500		39300	ug/kg		92.4	(80%-120%)			
Antimony	QC1205733442 MB	J	731	ug/kg					05/21/24	15:43
Arsenic		U	ND	ug/kg						
Barium		U	ND	ug/kg						

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

***QC Summary***

Workorder: **667131**

Page 3 of 8

<b>Paramname</b>	<b>NOM</b>	<b>Sample</b>	<b>Qual</b>	<b>QC</b>	<b>Units</b>	<b>RPD/D%</b>	<b>REC%</b>	<b>Range</b>	<b>Anlst</b>	<b>Date</b>	<b>Time</b>
<b>Metals Analysis-ICP</b>											
Batch	2611974										
Beryllium			U	ND	ug/kg					LS	05/21/24 15:43
Cadmium			U	ND	ug/kg						
Chromium			U	ND	ug/kg						
Cobalt			U	ND	ug/kg						
Copper			U	ND	ug/kg						
Lead			U	ND	ug/kg						
Molybdenum			U	ND	ug/kg						
Nickel			U	ND	ug/kg						
Selenium			U	ND	ug/kg						
Silver			U	ND	ug/kg						
Thallium			U	ND	ug/kg						
Vanadium			U	ND	ug/kg						
Zinc			U	ND	ug/kg						
Antimony	QC1205733444	667131001	MS	44200	U	ND	36400	ug/kg	82.3	(75%-125%)	05/21/24 15:53

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

***QC Summary***

Workorder: 667131

Page 4 of 8

Parmname	NOM	Sample	Qual	QC	Units	RPD/D%	REC%	Range	Anlst	Date	Time
<b>Metals Analysis-ICP</b>											
Batch	2611974										
Arsenic	44200	U	ND	37800	ug/kg		85.3	(75%-125%)	LS	05/21/24	15:53
Barium	44200	J	376	36400	ug/kg		81.3	(75%-125%)			
Beryllium	44200	U	ND	38400	ug/kg		86.8	(75%-125%)			
Cadmium	44200	U	ND	37500	ug/kg		84.8	(75%-125%)			
Chromium	44200	U	ND	36000	ug/kg		81.2	(75%-125%)			
Cobalt	44200	U	ND	38000	ug/kg		85.7	(75%-125%)			
Copper	44200	J	330	36800	ug/kg		82.4	(75%-125%)			
Lead	44200	U	ND	37200	ug/kg		84.2	(75%-125%)			
Molybdenum	44200	U	ND	37700	ug/kg		85.2	(75%-125%)			
Nickel	44200	U	ND	36500	ug/kg		82.6	(75%-125%)			
Selenium	44200	J	733	39700	ug/kg		88.1	(75%-125%)			
Silver	8850	U	ND	7640	ug/kg		86.3	(75%-125%)			
Thallium	44200	U	ND	38100	ug/kg		85.8	(75%-125%)			
Vanadium	44200	U	ND	35700	ug/kg		80.5	(75%-125%)			

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

***QC Summary***

**Workorder:** 667131

Page 5 of 8

Parmname	NOM	Sample	Qual	QC	Units	RPD/D%	REC%	Range	Anlst	Date	Time
<b>Metals Analysis-ICP</b>											
Batch	2611974										
Zinc	44200 J	844		37700	ug/kg		83.4	(75%-125%)	LS	05/21/24	15:53
Antimony	QC1205733445 667131001 MSD	44000 U	ND	41100	ug/kg	12	93.3	(0%-20%)			05/21/24 15:56
Arsenic	44000 U	ND		42000	ug/kg	10.7	95.5	(0%-20%)			
Barium	44000 J	376		42200	ug/kg	14.9	95.1	(0%-20%)			
Beryllium	44000 U	ND		44800	ug/kg	15.3	102	(0%-20%)			
Cadmium	44000 U	ND		42100	ug/kg	11.4	95.6	(0%-20%)			
Chromium	44000 U	ND		41900	ug/kg	15.1	95	(0%-20%)			
Cobalt	44000 U	ND		43600	ug/kg	13.8	99	(0%-20%)			
Copper	44000 J	330		42900	ug/kg	15.2	96.7	(0%-20%)			
Lead	44000 U	ND		41800	ug/kg	11.6	95	(0%-20%)			
Molybdenum	44000 U	ND		43000	ug/kg	13.2	97.7	(0%-20%)			
Nickel	44000 U	ND		41700	ug/kg	13.2	94.7	(0%-20%)			
Selenium	44000 J	733		43800	ug/kg	9.62	97.7	(0%-20%)			
Silver	8800 U	ND		8270	ug/kg	7.87	93.9	(0%-20%)			

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

***QC Summary***

Workorder: **667131**

Page **6** of **8**

Parmname	NOM	Sample	Qual	QC	Units	RPD/D%	REC%	Range	Anlst	Date	Time
<b>Metals Analysis-ICP</b>											
Batch	2611974										
Thallium	44000	U	ND	42200	ug/kg	10	95.4	(0%-20%)	LS	05/21/24	15:56
Vanadium	44000	U	ND	41400	ug/kg	14.7	93.8	(0%-20%)			
Zinc	44000	J	844	42700	ug/kg	12.3	95.1	(0%-20%)			
QC1205733446 667131001 SDILT											
Antimony		U	ND	U	ND	ug/L	N/A	(0%-20%)		05/21/24	15:59
Arsenic		U	ND	U	ND	ug/L	N/A	(0%-20%)			
Barium		J	4.24	U	ND	ug/L	N/A	(0%-20%)			
Beryllium		U	ND	U	ND	ug/L	N/A	(0%-20%)			
Cadmium		U	ND	U	ND	ug/L	N/A	(0%-20%)			
Chromium		U	ND	U	ND	ug/L	N/A	(0%-20%)			
Cobalt		U	ND	U	ND	ug/L	N/A	(0%-20%)			
Copper		J	3.72	U	ND	ug/L	N/A	(0%-20%)			
Lead		U	ND	U	ND	ug/L	N/A	(0%-20%)			
Molybdenum		U	ND	U	ND	ug/L	N/A	(0%-20%)			
Nickel		U	ND	U	ND	ug/L	N/A	(0%-20%)			

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

***QC Summary***

Workorder: 667131

Page 7 of 8

Parmname	NOM	Sample	Qual	QC	Units	RPD/D%	REC%	Range	Anlst	Date	Time
<b>Metals Analysis-ICP</b>											
Batch	2611974										
Selenium		J	8.27	J	7.58	ug/L	358	(0%-20%)	LS	05/21/24	15:59
Silver		U	ND	U	ND	ug/L	N/A	(0%-20%)			
Thallium		U	ND	U	ND	ug/L	N/A	(0%-20%)			
Vanadium		U	ND	U	ND	ug/L	N/A	(0%-20%)			
Zinc		J	9.52	U	ND	ug/L	N/A	(0%-20%)			
<b>Metals Analysis-Mercury</b>											
Batch	2612006										
QC1205733496	666674001	DUP									
Mercury			39.5		67.9	ug/kg	52.8 *^	(+-27.2)	JP2	05/16/24	10:20
QC1205733495	LCS										
Mercury		21300			19800	ug/kg	93.1	(80%-120%)		05/16/24	10:13
QC1205733494	MB										
Mercury			U	ND	ug/kg					05/16/24	10:12
QC1205733497	666674001	MS									
Mercury		254	39.5		291	ug/kg	99.2	(80%-120%)		05/16/24	10:22
QC1205733498	666674001	SDILT									
Mercury			0.328	J	0.0900	ug/L	37.2	(0%-10%)		05/16/24	10:23

**Notes:**

The Qualifiers in this report are defined as follows:

U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

J Value is estimated

## ***QC Summary***

**Workorder:** 667131

**Page 8 of 8**

Parmname	NOM	Sample Qual	QC	Units	RPD/D%	REC%	Range	Anlst	Date	Time
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, the difference is >70%.									
C	Analyte has been confirmed by GC/MS analysis									
B	The target analyte was detected in the associated blank.									
E	Concentration of the target analyte exceeds the instrument calibration range									
A	The TIC is a suspected aldol-condensation product									
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier									
N	Metals--The Matrix spike sample recovery is not within specified control limits									
N	Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor									
H	Analytical holding time was exceeded									
**	Analyte is a surrogate compound									
<	Result is less than value reported									
>	Result is greater than value reported									
h	Preparation or preservation holding time was exceeded									
R	Sample results are rejected									
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.									
D	Results are reported from a diluted aliquot of the sample									
N/A	RPD or %Recovery limits do not apply.									
ND	Analyte concentration is not detected above the detection limit									
E	%difference of sample and SD is >10%. Sample concentration must meet flagging criteria									
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier									
JNX	Non Calibrated Compound									
UJ	Compound cannot be extracted									
Q	One or more quality control criteria have not been met. Refer to the applicable narrative or DER.									
FB	Mercury was found present at quantifiable concentrations in field blanks received with these samples. Data associated with the blank are deemed invalid for reporting to regulatory agencies									
N1	See case narrative									
Y	Other specific qualifiers were required to properly define the results. Consult case narrative.									
Y	QC Samples were not spiked with this compound									
N	Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor									
J	See case narrative for an explanation									

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

<sup>^</sup> The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

\* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

**QC Summary**

Report Date: June 4, 2024  
Page 1 of 3

Client : GSI Environmental Inc.  
155 Grand Ave  
Suite 704  
Oakland, California  
Contact: Skyler Bowersmith  
Workorder: 667131

Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gamma Spec</b>										
Batch	2611998									
QC1205733485	667131001 DUP									
Cesium-137		U 0.00198	U 0.00671	pCi/g	0				N/AMXR1	05/15/2417:23
		Uncert: +/-0.00856	+/-0.00764							
		TPU: +/-0.00860	+/-0.00824							
QC1205733486	LCS									
Americium-241		98.2		101	pCi/g		103 (75%-125%)	MXR1	05/15/2417:24	
		Uncert:	+/-1.52							
		TPU:	+/-8.53							
Cobalt-60		13.8		14.6	pCi/g		105 (75%-125%)			
		Uncert:	+/-0.483							
		TPU:	+/-1.23							
Cesium-137		32.4		35.0	pCi/g		108 (75%-125%)			
		Uncert:	+/-0.625							
		TPU:	+/-3.85							
QC1205733484	MB									
Cesium-137			U 0.00163	pCi/g					MXR1	05/15/2415:59
		Uncert:	+/-0.00783							
		TPU:	+/-0.00786							
<b>Rad Gas Flow</b>										
Batch	2614684									
QC1205739293	667131001 DUP									
Strontium-90		U -0.0157	U 0.00169	pCi/g	0				N/A JE1	05/22/2413:08
		Uncert: +/-0.0522	+/-0.0650							
		TPU: +/-0.0522	+/-0.0650							
QC1205739294	LCS									
Strontium-90		4.08		4.33	pCi/g		106 (75%-125%)	JE1	05/22/2413:09	
		Uncert:	+/-0.233							
		TPU:	+/-1.01							
QC1205739292	MB									
Strontium-90			0.0654	pCi/g					JE1	05/22/2413:08
		Uncert:	+/-0.0429							
		TPU:	+/-0.0456							
<b>Rad Liquid Scintillation</b>										
Batch	2612451									
QC1205734412	667131001 DUP									
Tritium		U 0.502	U 0.596	pCi/g	0				N/A HB2	06/02/2421:59
		Uncert: +/-0.748	+/-0.766							
		TPU: +/-0.756	+/-0.778							
QC1205734414	LCS									
Tritium		23.8		20.1	pCi/g		84.4 (75%-125%)	HB2	06/02/2422:53	
		Uncert:	+/-1.74							

***QC Summary***

**Workorder:** 667131

Page 2 of 3

<b>Parmname</b>	<b>NOM</b>	<b>Sample Qual</b>	<b>QC</b>	<b>Units</b>	<b>RPD%</b>	<b>REC%</b>	<b>Range</b>	<b>Anlst</b>	<b>Date</b>	<b>Time</b>
<b>Rad Liquid Scintillation</b>										
Batch 2612451										
QC1205734411	MB	TPU:		+/-4.88						
Tritium			U	-0.406	pCi/g				HB2	06/02/2421:33
		Uncert:		+/-0.661						
		TPU:		+/-0.661						
QC1205734413	667131001 MS									
Tritium	232	U	0.502	193	pCi/g	83.1 (75%-125%)	HB2	06/02/2422:26		
		Uncert:	+/-0.748	+/-16.9						
		TPU:	+/-0.756	+/-46.9						

**Notes:**

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The Qualifiers in this report are defined as follows:

- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- J Value is estimated
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- H Analytical holding time was exceeded
- < Result is less than value reported
- > Result is greater than value reported
- UI Gamma Spectroscopy--Uncertain identification
- BD Results are either below the MDC or tracer recovery is low
- h Preparation or preservation holding time was exceeded
- R Sample results are rejected
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- M M if above MDC and less than LLD
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- FA Failed analysis.
- UJ Gamma Spectroscopy--Uncertain identification
- Q One or more quality control criteria have not been met. Refer to the applicable narrative or DER.
- K Analyte present. Reported value may be biased high. Actual value is expected to be lower.
- UL Not considered detected. The associated number is the reported concentration, which may be inaccurate due to a low bias.
- L Analyte present. Reported value may be biased low. Actual value is expected to be higher.
- N1 See case narrative
- Y Other specific qualifiers were required to properly define the results. Consult case narrative.
- \*\* Analyte is a Tracer compound
- M REMP Result > MDC/CL and < RDL
- J See case narrative for an explanation

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

***QC Summary***

**Workorder:** 667131

Page 3 of 3

Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
----------	-----	-------------	----	-------	------	------	-------	-------	------	------

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

\*\* Indicates analyte is a surrogate/tracer compound.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.



667131  
Am 5/17

667132

FROM:	PROJECT NAME: AJU-BB		PROJECT NO.: 5182		
	PROJECT CONTACT: Matt Goerz, Skyler Bowersmith		LAB CONTACT Delaney Stone		
GLOBAL ID:			SAMPLE(S) (PRINT) <i>SIBS/CJB</i>		
TEL:	E-MAIL: <a href="mailto:mgoerz@gsi-net.com">mgoerz@gsi-net.com</a> ; <a href="mailto:sibowersmith@gsi-i-net.com">sibowersmith@gsi-i-net.com</a>		REQUESTED ANALYSES		
LABORATORY:	GEL Laboratories		Please check box or fill in blank as needed.		
TURNAROUND TIME:	<input type="checkbox"/> SAME DAY <input checked="" type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD				
SPECIAL INSTRUCTIONS: - Sr-90 MDC of 0.5 pCi/g    - Cs-137 MDC of 1 pCi/g - H-3 MDC of 2 pCi/g    - Include flesh only; no peel					
LAB USE ONLY	SAMPLE ID	SAMPLING DATE	TIME	MATRIX	NO. OF CONT.
L-1-240507		5/7/24	1400	Fruit	1
G-1-240507			1405		1
O-1-240507			1410		1
L-2-240507			1500		1
G-2-240507			1505		1
O-2-240507			1510		1
Field Filtered					
Preserved					
Unpreserved					
Perchlorate (314.0)					
CA Title 22 Metals (6010/7471)					
H-3 (906)					
Cs-137 (901.1)					
Sr-90 (905.0)					

*[Handwritten signatures and initials are present across the grid area, indicating analysis status for each sample.]*

## SAMPLE RECEIPT &amp; REVIEW FORM

Client: GSIE	SDG/AR/COC/Work Order: 10107131		
Received By: JW	Date Received: 5/11/24		
Carrier and Tracking Number		Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other 7763 1356 0939 - 6 <sup>e</sup> (r chem) 7763 1356 0938 - 12 <sup>d</sup>	
Suspected Hazard Information	Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A) Shipped as a DOT Hazardous?	<input checked="" type="checkbox"/> Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes No		
B) Did the client designate the samples are to be received as radioactive?	<input checked="" type="checkbox"/> COC notation or radioactive stickers on containers equal client designation.		
C) Did the RSO classify the samples as radioactive?	<input checked="" type="checkbox"/> Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM/mR/Hr Classified as: Rad 1 Rad 2 Rad 3		
D) Did the client designate samples are hazardous?	<input checked="" type="checkbox"/> COC notation or hazard labels on containers equal client designation.		
E) Did the RSO identify possible hazards?	<input checked="" type="checkbox"/> D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:		
Sample Receipt Criteria			
	Yes	NA	No
1 Shipping containers received intact and sealed?	<input checked="" type="checkbox"/> Circle Applicable: Seals broken Damaged container Leaking container Other (describe)		
2 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/> Circle Applicable: Client contacted and provided COC COC created upon receipt		
3 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/> Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: 12°		
4 Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/> Temperature Device Serial #: IR2-23 Secondary Temperature Device Serial # (If Applicable):		
5 Sample containers intact and sealed?	<input checked="" type="checkbox"/> Circle Applicable: Seals broken Damaged container Leaking container Other (describe)		
6 Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/> Sample ID's and Containers Affected: If Preservation added, Lot#:		
7 Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/> If Yes, are Encores or Soil Kits present for solids? Yes No NA (If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes No NA (If unknown, select No) Are liquid VOA vials free of headspace? Yes No NA Sample ID's and containers affected:		
8 Samples received within holding time?	<input checked="" type="checkbox"/> ID's and tests affected:		
9 Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/> ID's and containers affected: Sample ID: HW-W-240508 (3 bottles) does not match chain		
10 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/> Circle Applicable: No dates on containers No times on containers COC missing info Other (describe) Sample ID: HW-W-240508 (3 bottles) does not match time on chain.		
11 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/> Circle Applicable: No container count on COC Other (describe)		
12 Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>		
13 COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/> Circle Applicable: Not relinquished Other (describe)		
Comments (Use Continuation Form if needed):			
11. Received 2 containers for L-1-240507.			

**List of current GEL Certifications as of 04 June 2024**

<b>State</b>	<b>Certification</b>
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-00651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	KY90129
Kentucky Wastewater	KY90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2023019
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122024-05
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2023-152
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235
Utah NELAP	SC000122024-41
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

**Technical Case Narrative  
GSI Environmental Inc.  
SDG #: 667131**

## **Perchlorates by LCMSMS**

**Product:** Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)

**Analytical Method:** SW846 6850 Modified

**Analytical Procedure:** GL-OA-E-067 REV# 19

**Analytical Batches:** 2612071 and 2612069

**Composite Preparation Method:** GEL Prep Method

**Composite Preparation Procedure:** GL-RAD-A-026 REV# 19

**Composite Preparation Batch:** 2611312

The following samples were analyzed using the above methods and analytical procedure(s).

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
667131001	L-1-240507
667131002	G-1-240507
667131003	O-1-240507
667131004	L-2-240507
667131005	G-2-240507
667131006	O-2-240507
1205733619	Method Blank (MB)
1205733620	Laboratory Control Sample (LCS)
1205733621	Interference Check Sample (ICS)
1205733622	667131001(L-1-240507) Matrix Spike (MS)
1205733623	667131001(L-1-240507) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on an "as received" basis.

### **Data Summary:**

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

### **Quality Control (QC) Information**

#### **Matrix Spike (MS) Recovery Statement**

The MS and/or MSD (See Below) did not meet the recommended quality control acceptance criteria for percent recoveries. The failure may be attributed to possible sample matrix interference and/or non-homogeneity.

<b>Sample</b>	<b>Analyte</b>	<b>Value</b>
1205733622 (L-1-240507MS)	Perchlorate	0* (70%-130%)
1205733623 (L-1-240507MSD)	Perchlorate	0* (70%-130%)

### **Technical Information**

#### **Sample Dilutions**

Samples 667131001 (L-1-240507), 667131002 (G-1-240507), 667131003 (O-1-240507), 667131004 (L-2-240507), 667131005 (G-2-240507) and 667131006 (O-2-240507) and/or QC 667131001 (L-1-240507), 667131002 (G-1-240507), 667131003 (O-1-240507), 667131004 (L-2-240507), 667131005 (G-2-240507) and 667131006 (O-2-240507) were diluted due to matrix interference.

Analyte	667131					
	001	002	003	004	005	006
Perchlorate	5X	5X	5X	5X	5X	5X
Perchlorate-O(18)	5X	5X	5X	5X	5X	5X

## Metals

**Product: Determination of Metals by ICP**

**Analytical Method:** SW846 3050B/6010D

**Analytical Procedure:** GL-MA-E-013 REV# 33

**Analytical Batch:** 2611974

**Preparation Method:** SW846 3050B

**Preparation Procedure:** GL-MA-E-009 REV# 30

**Preparation Batch:** 2611973

**Composite Preparation Method:** GEL Prep Method

**Composite Preparation Procedure:** GL-RAD-A-026 REV# 19

**Composite Preparation Batch:** 2611312

The following samples were analyzed using the above methods and analytical procedure(s).

<b>GEL Sample ID#</b>	<b>Client Sample Identification</b>
667131001	L-1-240507
667131002	G-1-240507
667131003	O-1-240507
667131004	L-2-240507
667131005	G-2-240507
667131006	O-2-240507
1205733442	Method Blank (MB)ICP
1205733443	Laboratory Control Sample (LCS)
1205733446	667131001(L-1-240507L) Serial Dilution (SD)
1205733444	667131001(L-1-240507S) Matrix Spike (MS)
1205733445	667131001(L-1-240507SD) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on an "as received" basis.

**Data Summary:**

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

**Technical Information**

**Preparation/Analytical Method Verification**

Method SW-846 3050B is not a total digestion technique for most samples. It is a very strong acid digestion that will

dissolve almost all elements that could become environmentally available. By design, elements bound in silicate structures are not normally dissolved by this procedure as they are not usually mobile in the environment.

**Product:** Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

**Analytical Method:** SW846 7471B

**Analytical Procedure:** GL-MA-E-010 REV# 40

**Analytical Batch:** 2612006

**Preparation Method:** SW846 7471B Prep

**Preparation Procedure:** GL-MA-E-010 REV# 40

**Preparation Batch:** 2612005

**Composite Preparation Method:** GEL Prep Method

**Composite Preparation Procedure:** GL-RAD-A-026 REV# 19

**Composite Preparation Batch:** 2611312

The following samples were analyzed using the above methods and analytical procedure(s).

**GEL Sample ID#**

**Client Sample Identification**

667131001	L-1-240507
667131002	G-1-240507
667131003	O-1-240507
667131004	L-2-240507
667131005	G-2-240507
667131006	O-2-240507
1205733494	Method Blank (MB)CVAA
1205733495	Laboratory Control Sample (LCS)
1205733498	666674001(NonSDGL) Serial Dilution (SD)
1205733496	666674001(NonSDGD) Sample Duplicate (DUP)
1205733497	666674001(NonSDGS) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

**Data Summary:**

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

**Quality Control (QC) Information**

**Duplicate Relative Percent Difference (RPD) Statement**

The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required reporting limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. Not all the applicable analyte RPD values were within the acceptance criteria.

Sample	Analyte	Value
1205733496 (Non SDG 666674001DUP)	Mercury	abs(67.9 - 39.5)* (+/-27.2 ug/kg)

## **Radiochemistry**

**Product: Dry Weight**

**Preparation Method:** Dry Soil Prep

**Preparation Procedure:** GL-RAD-A-021 REV# 25

**Preparation Batch:** 2611972

**Composite Preparation Method:** GEL Prep Method

**Composite Preparation Procedure:** GL-RAD-A-026 REV# 19

**Composite Preparation Batch:** 2611312

The following samples were analyzed using the above methods and analytical procedure(s).

**GEL Sample ID#**

**Client Sample Identification**

667131001	L-1-240507
667131002	G-1-240507
667131003	O-1-240507
667131004	L-2-240507
667131005	G-2-240507
667131006	O-2-240507

The samples in this SDG were analyzed on an "as received" basis.

**Data Summary:**

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

**Product: Gammaspec, Gamma, Solid vegetation**

**Analytical Method:** DOE HASL 300, 4.5.2.3/Ga-01-R

**Analytical Procedure:** GL-RAD-A-013 REV# 29

**Analytical Batch:** 2611998

**Preparation Method:** GEL Prep Method

**Preparation Procedure:** GL-RAD-A-026 REV# 19

**Preparation Batches:** 2611966 and 2611312

The following samples were analyzed using the above methods and analytical procedure(s).

**GEL Sample ID#**

**Client Sample Identification**

667131001	L-1-240507
667131002	G-1-240507
667131003	O-1-240507
667131004	L-2-240507
667131005	G-2-240507
667131006	O-2-240507
1205733484	Method Blank (MB)
1205733485	667131001(L-1-240507) Sample Duplicate (DUP)

1205733486

Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

**Data Summary:**

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

**Product: GFPC, Sr90, Vegetation**

**Analytical Method:** EPA 905.0 Modified/DOE RP501 Rev. 1 Modified

**Analytical Procedure:** GL-RAD-A-004 REV# 22

**Analytical Batch:** 2614684

**Preparation Method:** Dry Soil Prep

**Preparation Procedure:** GL-RAD-A-021 REV# 25

**Preparation Batch:** 2611972

**Composite Preparation Method:** GEL Prep Method

**Composite Preparation Procedure:** GL-RAD-A-026 REV# 19

**Composite Preparation Batch:** 2611312

The following samples were analyzed using the above methods and analytical procedure(s).

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
667131001	L-1-240507
667131002	G-1-240507
667131003	O-1-240507
667131004	L-2-240507
667131005	G-2-240507
667131006	O-2-240507
1205739292	Method Blank (MB)
1205739293	667131001(L-1-240507) Sample Duplicate (DUP)
1205739294	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

**Data Summary:**

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

**Preparation Information**

**Homogenous Matrix**

Samples were non-homogenous matrix. dark brown powder

**Quality Control (QC) Information**

**Method Blank Criteria**

The blank result (See Below) is greater than the MDC but less than the required detection limit.

Sample	Analyte	Value
1205739292 (MB)	Strontium-90	Result: 0.0654 pCi/g > MDA: 0.0647 pCi/g <= RDL: 0.500 pCi/g

**Technical Information****Sample Re-prep/Re-analysis**

Samples were reprepped due to low carrier/tracer yield. The re-analysis is being reported.

**Product: LSC, Tritium Distillation, Vegetation**

**Analytical Method:** EPA 906.0 Modified

**Analytical Procedure:** GL-RAD-A-002 REV# 24

**Analytical Batch:** 2612451

**Composite Preparation Method:** GEL Prep Method

**Composite Preparation Procedure:** GL-RAD-A-026 REV# 19

**Composite Preparation Batch:** 2611312

The following samples were analyzed using the above methods and analytical procedure(s).

<b>GEL Sample ID#</b>	<b>Client Sample Identification</b>
667131001	L-1-240507
667131002	G-1-240507
667131003	O-1-240507
667131004	L-2-240507
667131005	G-2-240507
667131006	O-2-240507
1205734411	Method Blank (MB)
1205734412	667131001(L-1-240507) Sample Duplicate (DUP)
1205734413	667131001(L-1-240507) Matrix Spike (MS)
1205734414	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

**Data Summary:**

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

**Miscellaneous Information****Additional Comments**

The matrix spike, 1205734413 (L-1-240507MS), aliquot was reduced to conserve sample volume.

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

**2024 MONITORING REPORT**  
**AJU Brandeis-Bardin Campus**  
Brandeis, CA

**ATTACHMENT B**

Data Validation Summary

## Appendix B

### Data Validation Summary AJU Brandeis-Bardin Campus Brandeis, California

Analytical results for soil, sediment, water, and fruit samples collected during the 2024 sampling event at the AJU Brandeis-Bardin Campus are tabulated and presented on Tables 2 through 7. The analytical results were reviewed in accordance with the following documents:

- 2020 National Functional Guidelines for Inorganic Superfund Methods Data Review published by the USEPA.
- 2020 National Functional Guidelines for Organic Superfund Methods Data Review published by the USEPA.
- 2004 Multi-Agency Radiological Laboratory Analytical Protocols Manual published by the USEPA et al.

Analytical results reported by the laboratory between the reporting limit (RL) and method detection limit (MDL) for a compound were flagged with a "J", indicating the results are estimated quantities. Additional data qualifier flags were assigned as follows:

- Perchlorate was recovered in the Matrix Spike (MS)/ Matrix Spike Duplicate (MSD) for the fruit samples below 30%. In addition, the temperature of the fruit samples submitted for perchlorate analysis was outside specifications upon receipt by the laboratory. Perchlorate was not detected in any of the fruit samples and the non-detected perchlorate results are flagged with "UJ", indicating the reported MDL is approximate and may be inaccurate or imprecise.
- Antimony was recovered in the MS/MSD for the sediment samples below the laboratory limit of 75%, but greater than 30%. Antimony was not detected in any of the sediment samples and the non-detect results are flagged with "UJ", indicating the reported MDL is approximate and may be inaccurate or imprecise.
- Antimony was detected in the laboratory method blank for the fruit samples. Therefore, all detections of antimony in fruit samples within 10 times the detection in the blank are flagged with a "B". In addition, all detected concentrations of antimony in the fruit samples are less than the RL and are also flagged with a "J", indicating the results are estimated quantities.

All sample results are considered usable, and data quality is judged to be adequate for the intended purpose.