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ENVIRONMENTAL BASELINE SAMPLING REPORT

Parcel SS-86, Summit County, Utah

Prepared for

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On behalf of

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Project SLC1029

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1. INTRODUCTION

Geosyntec Consultants, Inc. (Geosyntec) was retained by Stoel Rives, LLP (Stoel Rives) on behalf of the Town of Hideout to conduct environmental baseline sampling within Parcel SS-86, which encompasses approximately 138 acres of undeveloped land within Summit County, Utah (Subject Property or Site). The sampling was conducted in accordance with Geosyntec's proposal to Stoel Rives dated 21 January 2021. The Site location is shown on **Figure 1** (Site Location Map). The general layout and features of the Site are shown in **Figure 2** (Site Layout Map).

The sampling was conducted to establish baseline environmental conditions within the Site relative to the presence of the Richardson Flat Tailings site (Richardson Flat), which is located immediately to the northwest of the Subject Property, and to assess conditions as part of the potential annexation of the Site by the Town of Hideout and the potential future development of the property.

1.1 Site Description and Background

The Site contains approximately 138 acres of undeveloped land located at roughly 40°40'30.2" N 111°26'32.6" W along Richardson Flat Road in Summit County, Utah. The Site is comprised of a discontinuous parcel, which is bisected from east to west by an historic Union Pacific railroad grade that has been converted into a hiking and biking trail (Rail Trail). The property containing the Rail Trail in not part of the Site and is located within a separate parcel that is owned by the State of Utah (See **Figure 1** – Site Layout Map).

An earthen embankment is present in the southeast portion of the Site. This feature crosses an ephemeral stream that drains topographically higher areas along the western, southern, and eastern margins of the Site. The embankment dates back to at least the 1930s and appears to have potentially been constructed as part of an old road embankment or railroad grade. It is also speculated that it may have been constructed as a water retention feature (CMT Engineering 2020). However, the exact purpose of this structure is unknown. Surrounding land use includes a mix of undeveloped, past industrial/historic mining, commercial, and residential land.

The Site is currently owned by Stichting Mayflower Mountain Fonds and is reportedly used for livestock grazing. In addition to livestock grazing, Site observations also indicate that the Subject Property has historically been trespassed and periodically used for ad-hoc recreational purposes such as hiking, off-road vehicle use and clay pigeon target shooting.

The Richardson Flat site is listed on the proposed National Priorities List (NPL) and consists of four operable units (OUs) which have been impacted by historic mining activities and/or wastes. OU1, which consists of the historical Richardson Flat tailings impoundment, is located immediately adjacent to the north/northwest of the Subject Property (it is noted that the Subject Property is not within the boundary of OU1). The tailings impoundment is owned by United Park City Mines (UPCM) and covers an area of approximately 160 acres (USEPA 2005). Aerial photographs suggest that the impoundment potentially received tailings from at least the late 1930s until approximately 1982. Over course of operation, the impoundment received approximately 450,000 tons of tailings (USEPA 2005).

OU2 and OU3 encompass approximately 2,000 acres of the Lower Silver Creek floodplain, which has been impacted by the discharge of mine tailings, and are located downstream of OU1 (the nearest OU2/OU3 boundary is approximately 1 mile west of the Site). OU4 is comprised of a surface water discharge to Lower Silver Creek known as the Prospector Drain, which is located approximately 2.5 miles west of the Site. The constituents of concern for the Richardson Flat site include aluminum, arsenic, cadmium, copper, lead, mercury, nickel, and zinc (USEPA 2021).

Investigation of OU1 began in the mid-1980's. Remediation of OU1 was completed in 2011 and involved stabilizing the existing tailings impoundment, diverting surface water, and consolidating, then capping, the mine tailings that were present within the impoundment. Capping of the impoundment has been completed except for select areas within OU1 that have a temporary 6-inch soil cover to facilitate potential further consolidation of wastes from OU2 and OU3. Groundwater investigations have shown that groundwater flows to the north-northwest within the boundary of OU1 and that the capped impoundment does not present a risk to offsite groundwater. Based on the most recent 5-year review for Richardson Flat (USEPA 2018), the remedy for OU1 is reported to be functioning well and is protective of human health and the environment; however, it is noted that institutional controls for the OU1 called for in the Record of Decision (ROD) have not yet been implemented (USEPA 2018). Future institutional controls would likely include formal land and groundwater use limitations for the Richardson Flat site. EPA is working with the responsible party for OU1 to develop an institutional control plan, which will address this issue (USEPA 2018). Investigation of the remaining OUs (OUs 2, 3, and 4) is ongoing and final remedial actions have not been determined.

2. SCOPE OF WORK

Baseline sampling activities were conducted by Geosyntec on 13 April 2021 and included the collection of surface soil, surface water, and groundwater samples from representative locations within the Site to establish baseline conditions. Sample locations were recorded in the field with a hand-held GPS and are shown on the attached **Figure 3 – Sample Location Map**. Detailed sampling information is provided in the following sections.

2.1 Surface Soil Sample Collection

Grab surface soil samples were collected from a total of 14 locations (samples SS-1 through SS-14), an average of approximately 1 sample per each 10 acres, to evaluate general surface soil conditions and potential metals impacts from wind-blown deposition of tailings from the Richardson Flat site. Samples were collected from approximately 0 to 3 inches below ground surface (bgs), to be representative of the uppermost surficial soil, using disposable plastic sampling scoops.

2.2 Groundwater Sample Collection

Shallow groundwater samples were collected from two locations (SB-01 and SB-02) near the northwest boundary of the Site. The groundwater samples were collected to assess general groundwater conditions on the downgradient edge of the property, immediately upgradient from the Richardson Flat site.

The groundwater samples were collected via temporary direct-push borings advanced in each location and extracted using a temporary 4-foot long, stainless-steel sampling screen and peristaltic pump equipped with disposable tubing to extract the groundwater from the boring and collect the samples. All downhole equipment (drill rods temporary sampling screens, etc.) were decontaminated between locations using a high-pressure sprayer.

At boring location SB-01, refusal was encountered on large rock and cobbles at depth of 30 inches bgs. However, shallow groundwater was detected at a depth of 20 inches bgs in the boring, and sufficient water was present to obtain a sample. At boring location SB-02, groundwater was detected at depth of approximately 2 feet bgs and the sample was obtained from 2 to 6 feet bgs. Soils observed in both locations consisted primarily of gravelly clay. Boring logs completed during the drilling are included in Appendix A.

2.3 Surface Water Sample Collection

Two surface water samples (SW-01 and SW-02) were collected from the small ephemeral drainage that emanates from the central portion of the Site and flows to the north-northwest to assess general surface water conditions. This drainage contains infrequent water, generally only in the spring from snowmelt or during high precipitation events. The Site does not contain any perennial surface water bodies.

Sample SW-01 was collected from a seep in the upper portion of the drainage. Sample SW-02 was collected from a small area of ponded water at the bottom of the drainage, near the offsite discharge point in the northwest corner of the Site. The ponded water in this area appears to form due to the presence of the Richards Flat Road, which forms an embankment across the drainage, backing up surface water that collects along the upstream side of the road. Surface water samples were collected from both locations by slowly submersing and directly filling the sample bottles from the ponded water in both locations by hand.

2.4 Laboratory Analysis

Upon collection, all samples were labeled and placed into laboratory-supplied sampling jars and stored in a cooler with wet ice for delivery to the analytical laboratory under chain-of-custody. All samples were submitted to Pace Analytical Laboratory (Pace), a Utah-certified environmental laboratory for the following analyses:

- Soil – Total RCRA metals plus aluminum antimony copper and zinc by EPA Methods 6010B and 7471A.
- Surface water and groundwater – Dissolved RCRA metals plus aluminum antimony copper and zinc by EPA Methods 6010B and 7470A.

All surface water and groundwater samples were filtered by the laboratory prior to analysis. The laboratory report prepared by Pace is included as Appendix B. The laboratory sample results are discussed in Section 3.0.

3. LABORATORY SAMPLE RESULTS

The following sections present a discussion of the laboratory sample results for the surface soil, groundwater, and surface water samples collected from the Site.

3.1 Surface Soil Sample Results

The surface soil sample results are summarized in Table 1. As a means of evaluating the surface soil data, the results were screened against the USEPA Regional Screening Levels (RSLs) for residential soil. The RSLs are risk-based screening criteria that are used by the USEPA to evaluate chemical concentrations for different media under the Superfund program. Concentrations below the RSL are protective of human health and generally indicate no further action or study is needed. The Utah Department of Environmental Quality (UDEQ) does not have established screening criteria for metals in soil and typically utilizes the RSLs as default screening criteria for sites managed under their regulatory programs.

As shown in Table 1, with the exception of arsenic, all of the analyzed metals concentrations are below the USEPA RSLs for residential soil and do not indicate potentially elevated metals concentrations that would pose a risk to human health are present in soil within the Site. As discussed further below, the arsenic concentrations observed in the surface soil samples are consistent with typical background levels for the surrounding area and western United States (U.S), which commonly exceed the USEPA RSLs due to naturally occurring concentrations of this element.

To evaluate the arsenic that was detected in the surface soil samples, arsenic concentrations were compared to background samples collected from the OU1 (RMC 2004) and OU2/OU3 (USEPA 2018) of the Richardson Flat site and typical background levels for the western U.S. soil (Shacklette, et al. 1984), as shown in Table 2[1]. Arsenic concentrations in the surface soil samples from the Site were observed to range from 5.50 mg/kg to 14.0 mg/kg. In comparison, background concentrations for arsenic for OU1 and OU2/OU3 as a whole ranged from 3.1 mg/kg to 17.5 mg/kg. Similarly, studies of background concentrations of arsenic in the western U.S. soils show arsenic concentrations ranging from 0.1 to 97 mg/kg.

Based on the above comparison, the observed arsenic concentrations are consistent with naturally occurring elemental concentrations of arsenic found in the surrounding area and western U.S. and do appear to be related to potential impacts from the Richardson Flat site. Further, the observed concentrations would not pose a greater risk of exposure to arsenic in comparison to surrounding native and undisturbed areas. Under the Superfund program, USEPA does not require cleanup actions to address background concentrations of metals or other constituents, as it is not feasible to reduce concentrations below naturally occurring levels.

[1] Background samples for OU1 and OU2/OU3 were collected from representative areas outside the boundaries of the OUs and are representative of natural background conditions, not background levels within the sites themselves.

3.2 Groundwater Sample Results

The groundwater sample results are summarized on Table 3. As a means of evaluating the groundwater sample data, the results were screened against the Utah Groundwater Quality Standards (UGWQSs) established under Utah Administrative Code (UAC) R317-6-2. In instances where established UGWQSs do not exist for certain parameters, the USEPA RSLs for tap water ingestion have been conservatively applied.

As shown in Table 3, low concentrations of arsenic, barium, chromium, nickel, and selenium were detected in one or both of the groundwater samples. Of the detected compounds, none of the reported concentrations exceeded the UGWQSs or USEPA RSLs. Based on the observed results, elevated metals concentrations were not detected in shallow groundwater near the northwestern (downgradient) edge of the Site and groundwater does not appear to be impacted by the Richardson Flat site. It is noted that groundwater flow is generally towards the north-northwest of the Site (RMEC 2004), and the Subject Property is located upgradient from the Richardson Flat property. Hence, it is unlikely that groundwater would be impacted in the future given the downgradient location of the Richardson Flat site relative to the Subject Property.

3.3 Surface Water Sample Results

The surface water sample results are summarized in Table 4. As a means of evaluating the surface water sample data, the results were screened against the Numeric Surface Water Criteria (NSWC) and Human Health Criteria (HHC) for surface waters established under UAC R317-2-14. The NSWC and HHC criteria were both conservatively based on Class 1C water (protected for domestic purposes with prior treatment) based on the designated use classification for the Silver Creek drainage by the UDEQ Division of Water Quality (DWQ). The DWQ classifies Silver Creek from the confluence of the Weber River to the headwaters of the drainage as being protected for domestic purposes (1C), infrequent recreational (2B), cold water game fish and aquatic species (3A), and agricultural uses (4). It is noted that the criteria for Class 1C water was conservatively used, as it is the most stringent criteria, but that surface water is not currently used for drinking water within the Site, and it is not anticipated that it will be used as part of any future development.

As shown in Table 4, the sample collected from location SW-01, which was collected from a seep in the central portion of the Site, showed detections for aluminum, barium, copper, and nickel, with all the concentrations falling below the relevant NSWC or HHC criteria. Sample SW-02, collected from the area of ponded water near the bottom drainage, showed detections for aluminum, antimony, arsenic, barium, and zinc. With the exception for antimony and arsenic, all of the reported detections were below the relevant NSWC or HHC criteria.

Antimony was detected in SW-02 at a reported concentration of 0.00762 mg/L, which slightly exceeds the HHC criteria for antimony of 0.0056 mg/L (there is no NSWC criteria for antimony). Arsenic was detected in this same sample at a concentration of 0.0178 mg/L, which slightly exceeds both the NSWC and HHC criteria for arsenic of 0.01 mg/L.

As part of the remedial investigation conducted for OU1 of the Richardson Flat site, select background surface water samples were collected to assess background surface water conditions (REMC 2004)[2]. Background concentrations of dissolved antimony were reported to range from < 0.005 to 0.01 mg/L. Background concentrations of arsenic were reported to range from < 0.005 to 0.008 mg/L. The reported antimony concentration detected in sample SW-02 is within the range of background concentrations of antimony detected as part of the OU1 remedial investigation. Arsenic was detected slightly above the OU1 background concentration range, but within the same order or magnitude (difference of less than 0.0098 mg/L). As noted in Section 2.1, elevated levels of naturally occurring arsenic are present in the Site and surrounding areas, which may be a contributing source to the observed arsenic concentrations.

Based on the above comparison, the observed detections of antimony and arsenic are likely representative of naturally occurring background levels of these metals. This is supported by the fact that the Site is located higher in elevation and hydrologically upgradient from Richardson Flat, and as such, surface water does not flow from the Richardson Flat site onto the Subject Property. Further, the observed surface water results are generally consistent with background concentrations that are reported for OU1 and evidence of potential impacts from the Richardson Flat site are not observed in other media (surface soil or groundwater data).

The NSWC and HHC criteria that were used to evaluate the surface water samples are very conservative and assume domestic surface water use or consumption. Surface water within the Site is limited in extent and is only intermittently present within the Subject Property and will not be used for drinking water purposes as part of any potential future development. While the Silver Creek drainage is designated for domestic use (Class 1 C), the criteria for aquatic wildlife and agricultural use are more directly applicable to the Site (there are no surface water criteria for recreational use). For comparison, the numeric surface water criteria for aquatic wildlife and agricultural use are 0.087 mg/L (acute exposure) and 0.1 mg/L, respectively, for arsenic (there is no standard for antimony), which are both higher than the observed arsenic concentrations that were detected in SW-02.

[2] Background samples collected upgradient of OU1.

4. QUALITY ASSURANCE QUALITY CONTROL

Quality assurance/quality control (QA/QC) samples that were collected and procedures that were performed in conjunction with this assessment are summarized and evaluated in the following sections. These evaluations did not identify significant data quality issues and demonstrate that the laboratory data are of sufficient quality for the intended use of evaluating baseline conditions within the Site.

4.1 Field Sampling Procedures

All samples were placed into clean, laboratory-supplied sample vials and stored on wet ice during transport to the laboratory. All samples were received by the laboratory properly labeled and in good condition. Temperatures at the time of delivery met the method-specified temperature. During sampling, chain-of-custody records were maintained as evidence of sample custody and control from the point of collection through laboratory analysis.

4.2 Laboratory Analytical Procedures

All samples were analyzed for the metals specified in Section 2.4 using EPA Methods 6010B and/or 7470A and 7471A in accordance with the analytical tests that were requested on the chain-of-custody. Based on a review of the laboratory reports, all sample holding times were met.

4.3 Field QA/QC Samples

QA/QC samples were collected in conjunction with the sampling activities for each media (surface soil, surface water, and groundwater) to verify the quality of the laboratory data. This included the collection of blind field duplicate and matrix spike/matrix spike duplicate (MS/MSD) samples. Field duplicates were collected at a frequency of 1 per 10 samples, and MS/MSD samples were collected at a frequency of 1 per 20 samples. Additionally, one equipment blank sample was also collected from the temporary stainless-steel sampling screen used to collect the groundwater samples. This was the only non-disposable sampling equipment used during the sampling; therefore, no other equipment blanks were collected.

4.3.1 Blind Duplicate Samples

Based on the total number of samples that were collected, two blind duplicate surface soil samples were collected (blind duplicate sample SS-44 collected at location SS-01 and blind duplicate sample SS-66 collected at location SS-06). One blind duplicate each was collected with the surface water and groundwater samples (blind duplicate surface water sample SW-12 collected from location SW-01, and blind duplicate groundwater sample SB-12 collected at location SB-12). All duplicate samples were given fabricate sample identifications and sample times so that the true location of the samples was not known to the laboratory. A summary of the blind duplicate and parent sample results is presented on Table 5.

As shown in Table 5, good reproducibility and precision was observed between the parent and duplicate sample results with the relative percent difference (RPD) for detected parameters falling

below 20 percent, where applicable. An RPD of 20 percent was as used as a general guideline for evaluating the overall accuracy and precision of the laboratory data in accordance with general guidelines presented in National Functional Guidelines for Inorganic Superfund Methods Data Review (EPA 2017).

4.3.2 MS/MSD Samples

Project-specific MS/MSD samples were collected with the surface soil, surface water, and groundwater samples that were collected with the project.

The surface soil MS/MSD was collected at sample location SS-06. All recoveries for the MS/MSD performed on SS-06 were within the laboratory control limits, except for antimony and lead. Antimony showed a low recovery in both the MS and MSD samples. Lead was within the laboratory control limit for the MS sample, but showed a slightly high recovery in the MSD sample. The above results indicate that antimony may be biased low and lead may be biased high in the results from SS-06. The recoveries outside of the laboratory control limits for antimony and lead were attributed to potential matrix interference in the sample and were qualified by the laboratory. The serial dilution performed on aluminum also indicated potential matrix interference for this parameter and was qualified. The laboratory qualifications are included the surface soil sample summary table (Table 1).

The surface water MS/MSD was collected at location SW-02, and the groundwater MS/MSD was collected at location SB-02. Both MS and MSD samples at these locations were within the laboratory control limits for all parameters. The serial dilution performed for barium in the sample from SW-02 indicating a potential matrix interference for this parameter and was qualified by the laboratory.

4.3.3 Equipment Blank

An equipment blank sample (GW-EB) was collected from the stainless-steel sampling screen used to collect the groundwater samples from locations SB-01 and SB-02. No other non-disposable sampling equipment was used.

With the exception of trace levels of aluminum and barium, all parameters were non-detect in the equipment blank sample. A review of the groundwater sample results shows that aluminum was not detected in any of the associated groundwater samples. Barium was detected in the groundwater samples, but the observed concentrations were several orders of magnitude higher than the observed concentrations in the equipment blank, indicating that the observed detections were associated with concentrations of barium in groundwater and not a result of potential cross-contamination from the sampling equipment. Based on the above results, the decontamination procedures that were used during the field sampling were effective at reducing potential cross-contamination and the data do not appear to be significantly affected by potential cross-contamination.

4.4 Laboratory QA/AC Samples

Internal laboratory QC sample (Method Blanks and Laboratory Control Samples) summaries were reviewed for all samples analyzed during the project. The following presents a discussion of these results and any associated qualification of the data by the laboratory.

4.4.1 Method Blanks

All laboratory method blank sample results were below the laboratory method detection limit, with the exception for a trace detections (below the reporting limit) of barium in the Method Blank associated with sample SW-02 and arsenic in the Method Blank associated with samples SB-01, SB-02, and SB-12 (duplicate sample of SB-02). The observed detections of barium and arsenic may indicate potential laboratory cross-contamination for these parameters in these samples. The detected results of barium and arsenic in the above samples have been qualified by laboratory. The associated laboratory qualifications are included the analytical summary tables.

4.4.2 Laboratory Control Samples

All laboratory control sample (LCS) results were within laboratory specified control limits, and no qualification of the data was required.

4.5 QA/QC Summary

The field and laboratory QA/QC samples did not identify and significant data quality issues and none of the data are rejected.

5. FINDINGS AND CONCLUSIONS

Baseline sample results do not show evidence of impact to the Subject Property from the Richardson Flat site. Concentrations of arsenic in soil and arsenic and antimony in one of the surface water samples were detected above relevant screening criteria; however, these concentrations appear to be related to naturally occurring concentrations of these constituents and not related to impacts from the Richardson Flat site. All other metals concentrations in the environmental baseline samples that were collected were below relevant screening criteria.

6. REFERENCES

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Shacklette et. al. 1984. *Elemental Concentrations in Soils and Other Surficial Materials of the Conterminous United States*. USGS Survey Professional Paper 1270

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USEPA. 2018. *Second Five-Year Review Report for Richardson Flat Tailings Superfund Site Summit County, Utah*. Prepared by USEPA Region 8. August 10.

USEPA. 2021. *Richardson Flat Tailings Contaminant List* accessed from https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.contams&id=0800705 April 16th, 2021.

TABLES

Table 1
Surface Soil Sample Analytical Summary
Parcel SS-86
Summit County, Utah

Lab Sample ID		L1339512-01		L1339512-15		L1339512-02		L1339512-03		L1339512-04		L1339512-05		L1339512-06		L1339512-16		USEPA Residential RSL for Soil[1]
Client Sample ID		SS-01		SS-01 (Duplicate)[a]		SS-02		SS-03		SS-04		SS-05		SS-06		SS-06 (Duplicate)[b]		
Date Collected		04/13/2021		04/13/2021		04/13/2021		04/13/2021		04/13/2021		04/13/2021		04/13/2021		04/13/2021		
Analyte	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	
ALUMINUM	mg/kg	18700		20600		23500		24100		17900		23700		26300	O1 V	27200		77000
ANTIMONY	mg/kg	<0.655		0.941	J	2.06	J	<0.684		0.956	J	3.07		<0.662	J6	<0.670		31
ARSENIC	mg/kg	**7.87**		**7.85**		**13.1**		**5.78**		**7.78**		**14.0**		**8.38**		**8.02**		0.68
BARIUM	mg/kg	188		195		257		256		289		234		311		293		15000
CADMIUM	mg/kg	0.612		0.588	J	2.17		0.312	J	0.930		3.05		0.910		0.876		71
CHROMIUM	mg/kg	31.9		32.8		22.3		20.9		16.9		24.5		30.6		31.0		NS
COPPER	mg/kg	22.6		24.5		43.6		25.5		31.9		40.0		37.3		36.4		3100
LEAD	mg/kg	80.0		76.2		237		40.9		90.6		301		184	J5	161		400
NICKEL	mg/kg	13.3		13.9		14.7		15.4		14.9		18.0		20.8		21		1500
SELENIUM	mg/kg	1.24	J	<0.925		<1.08		<0.961		1.41	J	<0.899		<0.929		<0.941		390
SILVER	mg/kg	0.273	J	0.302	J	0.933	J	<0.160		0.406	J	1.60		0.421	J	0.398	J	390
ZINC	mg/kg	132		140		330		80.3		126		475		168		170		23000
MERCURY	mg/kg	0.0488		0.057		0.142		0.0494	J	0.085		0.255		0.0695		0.0727		11

Lab Sample ID		L1339512-07		L1339512-08		L1339512-09		L1339512-10		L1339512-11		L1339512-12		L1339512-13		L1339512-14		USEPA Residential RSL for Soil[1]
Client Sample ID		SS-07		SS-08		SS-09		SS-10		SS-11		SS-12		SS-13		SS-14		
Date Collected		04/13/2021		04/13/2021		04/13/2021		04/13/2021		04/13/2021		04/13/2021		04/13/2021		04/13/2021		
Analyte	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	
ALUMINUM	mg/kg	21700		24300		21100		23100		24400		30000		27400		21600		77000
ANTIMONY	mg/kg	1.26	J	<0.833		<0.615		0.676	J	<0.719		<0.664		<0.642		0.891	J	31
ARSENIC	mg/kg	**9.32**		**9.74**		**5.50**		**8.87**		**9.25**		**6.05**		**5.91**		**9.71**		0.68
BARIUM	mg/kg	296		357		213		248		290		268		271		285		15000
CADMIUM	mg/kg	1.42		1.55		0.488	J	0.844		1.35		0.307	J	0.345	J	1.71		71
CHROMIUM	mg/kg	20.4		18.8		20.0		17.5		19.5		21.6		21.0		18.2		NS
COPPER	mg/kg	42.0		40.2		29.4		37.3		44.7		26.4		33.3		50.9		3100
LEAD	mg/kg	153		139		42.6		98.7		125		24.4		28.1		211		400
NICKEL	mg/kg	15.4		14.8		19.0		17.7		17		19.8		20.6		18.6		1500
SELENIUM	mg/kg	<1.15		<1.17		<0.863		0.96	J	<1.01		1.05	J	<0.902		<0.807		390
SILVER	mg/kg	0.725	J	0.676	J	<0.144		0.664	J	0.442	J	<0.155		<0.150		1.50		390
ZINC	mg/kg	208		193		96.2		133		193		74.1		76.8		221		23000
MERCURY	mg/kg	0.122		0.11		0.166		0.0966		0.092		<0.220		0.0283	J	0.146		11

Notes:
[1]USEPA RSL for residential soil dated, November 2020
[a]Duplicate collected from location SS-01. Sample labled SS-44
[b]Duplicate collected from location SS-06. Sample labled SS-66
Concentrations **underlined and bolded** exceed RSL
NS = No Standard
RSL = Regional Screening Level

Qualifiers:
J :The identification of the analyte is acceptable; the reported value is an estimate.
O1 :The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
V :The sample concentration is too high to evaluate accurate spike recoveries.
J6 :The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J5 :The sample matrix interfered with the ability to make any accurate determination; spike value is high.

Table 2
Arsenic Background Soil Comparison Summary
Parcel SS-86
Summit County, Utah

Parcel SS-86 Detected Arsenic Concentrations		Richardson Flat OU1 Background Soil Arsenic Concentrations[1]		Richardson Flat OU2/OU3 Background Soil Arsenic Concentrations[2]		Typical Background Soil Arsenic Concentrations for Western U.S. Soils[3]	
Min	Max	Min	Max	Min	Max	Min	Max
5.50	14	6.7	14	3.1	17.5	0.10	97

Notes:

[1]OU1 background soil concentrations based on background data presented in the Focused Remedial Investigation Report for Richardson Flat Tailings Site, dated May 7, 2004 (RMC 2004)

[2]OU2/OU3 background soil concentrations based on background data presented in the Richardson Flat OU2/OU3 Background Determination Memorandum, dated August 7, 2018 (USEPA 2018)

[3]Shacklette et. al. 1984. Elemental Concentrations in Soils and Other Surficial Materials of the Conterminous United States. USGS Survey Professional Paper 1270

Background samples for OU1 and OU2/OU3 were collected from representative areas outside the boundaries of the OUs and are representative of natural background conditions, not background levels within the sites themselves
OU = Operable Unit
All concentrations in mg/kg

Table 3
Groundwater Analytical Summary
Parcel SS-86
Summit County, Utah

Lab Sample ID		L1339512-20		L1339512-21		L1339512-22		Utah Groundwater Quality Standard[1]	USEPA RSL for Tapwater[2]
Client Sample ID		SB-01		SB-02		SB-02 (Duplicate)[a]			
Date Collected		04/13/2021		04/13/2021		04/13/2021			
Analyte	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier		
ARSENIC	mg/l	<0.00440		0.00583	B J	0.00742	B J	0.05	-
BARIUM	mg/l	0.127		0.144		0.151		2.0	-
CHROMIUM	mg/l	0.00195	J	<0.00140		<0.00140		0.1	-
NICKEL	mg/l	0.00261	J	<0.00161		<0.00161		NS	NS
SELENIUM	mg/l	<0.00735		0.0121		<0.00735		0.05	-

Notes:
[1]Utah Groundwater Quality Standard, R317-6-2, Table 1
[2]USEPA RSL for tapwater ingestion. For metals that do not have established Utah Groundwater Qaulity Standard, USEPA RSL for tapwater applied.
[a]Duplicate sample collected from location SB-02. Sample labled SB-12
All concentrations are dissolved metals
Table shows only detected compounds
NS = No Standard
RSL = Regional Screening Level

Qualifiers:
J :The identification of the analyte is acceptable; the reported value is an estimate.
B :The same analyte is found in the associated blank.

Table 4
Surface Water Analytical Summary
Parcel SS-86
Summit County, Utah

Lab Sample ID		L1339512-17		L1339512-19		L1339512-18		Utah Numeric Surface Water Criteria[1]	Utah Human Health Surface Water Consumption Criteria[2]
Client Sample ID		SW-01		SW-01 (Duplicate)[a]		SW-02			
Date Collected		04/13/2021		04/13/2021		04/13/2021			
Analyte	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier		
ALUMINUM	mg/l	0.0593	J	0.0562	J	0.069	J	NS	NS
ANTIMONY	mg/l	<0.00430		<0.00430		**0.00762**	J	NS	0.0056
ARSENIC	mg/l	<0.00440		<0.00440		**0.0178**		0.01	0.01
BARIUM	mg/l	0.101		0.109		0.124	O1	1.0	NS
COPPER	mg/l	0.00395	J	0.0079	J	<0.00368		NS	1.3
ZINC	mg/l	<0.00652		<0.00652		0.0188	J	NS	7.4

Notes:
[1]Numeric Surface Water Criteria for Domestic, Recreation and Agricultural Uses, R317-2-14, Table 2.14.1. Criteria based on Class 1C water
[2]Numeric Human Health Criteria for Consumption, R317-2-14, Table 2.14.6. Criteria based on Class 1C water.
[a]Duplicate sample collected from location SW-01. Sample labled SW-11
All concentrations are dissolved metals
Table shows only detected compounds
Concentrations **underlined and bolded** exceed Numeric Surface Water Criteria and/or Surface Water Consupmtion Criteria
NS = No Standard

Qualifiers:
J :The identification of the analyte is acceptable; the reported value is an estimate.
O1 :The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

Table 5
Field Blind Duplicate Sample Summary
Parcel SS-86
Summit County, Utah

Surface Soil Blind Duplicate Sample Summary

Lab Sample ID			L1339512-01		L1339512-15		Relative Percent Difference	L1339512-06		L1339512-16		Relative Percent Difference
Client Sample ID			SS-01		SS-01 (Duplicate)[a]			SS-06		SS-06 (Duplicate)[b]		
Date Collected			04/13/2021		04/13/2021			04/13/2021		04/13/2021		
Analyte	Method	Units	Result	Qualifier	Result	Qualifier		Result	Qualifier	Result	Qualifier	
ALUMINUM	6010B	mg/kg	18700		20600		9.7	26300	O1 V	27200		3.4
ANTIMONY	6010B	mg/kg	<2.41		0.941	J	NA	<2.43	J6	<2.46		NA
ARSENIC	6010B	mg/kg	7.87		7.85		NA	8.38		8.02		NA
BARIUM	6010B	mg/kg	188		195		3.7	311		293		6.0
CADMIUM	6010B	mg/kg	0.612		0.588	J	NA	0.910		0.876		NA
CHROMIUM	6010B	mg/kg	31.9		32.8		2.8	30.6		31.0		1.3
COPPER	6010B	mg/kg	22.6		24.5		8.1	37.3		36.4		2.4
LEAD	6010B	mg/kg	80.0		76.2		4.9	184	J5	161		13.3
NICKEL	6010B	mg/kg	13.3		13.9		4.4	20.8		21		1.0
SELENIUM	6010B	mg/kg	1.24	J	<2.42		NA	<2.43		<2.46		NA
SILVER	6010B	mg/kg	0.273	J	0.302	J	NA	0.421	J	0.398	J	NA
ZINC	6010B	mg/kg	132		140		5.9	168		170		1.2
MERCURY	7471A	mg/kg	0.0488		0.0566		14.8	0.0695		0.0727		NA

Surface Water Blind Duplicate Summary

Lab Sample ID			L1339512-17		L1339512-19		Relative Percent Difference
Client Sample ID			SW-01		SW-01 (Duplicate)[c]		
Date Collected			04/13/2021		04/13/2021		
Analyte	Method	Units	Result	Qualifier	Result	Qualifier	
ALUMINUM	6010B	mg/l	0.0593	J	0.0562	J	NA
ANTIMONY	6010B	mg/l	<0.0100		<0.0100		NA
ARSENIC	6010B	mg/l	<0.0100		<0.0100		NA
BARIUM	6010B	mg/l	0.101		0.109		7.62
CADMIUM	6010B	mg/l	<0.00200		<0.00200		NA
CHROMIUM	6010B	mg/l	<0.0100		<0.0100		NA
COPPER	6010B	mg/l	0.00395	J	0.0079	J	NA
LEAD	6010B	mg/l	<0.00600		<0.00600		NA
NICKEL	6010B	mg/l	<0.0100		0.00186	J	NA
SELENIUM	6010B	mg/l	<0.0100		<0.0100		NA
SILVER	6010B	mg/l	<0.00500		<0.00500		NA
ZINC	6010B	mg/l	<0.0500		<0.0500		NA
MERCURY	7470A	mg/l	<0.000200		<0.000200		NA

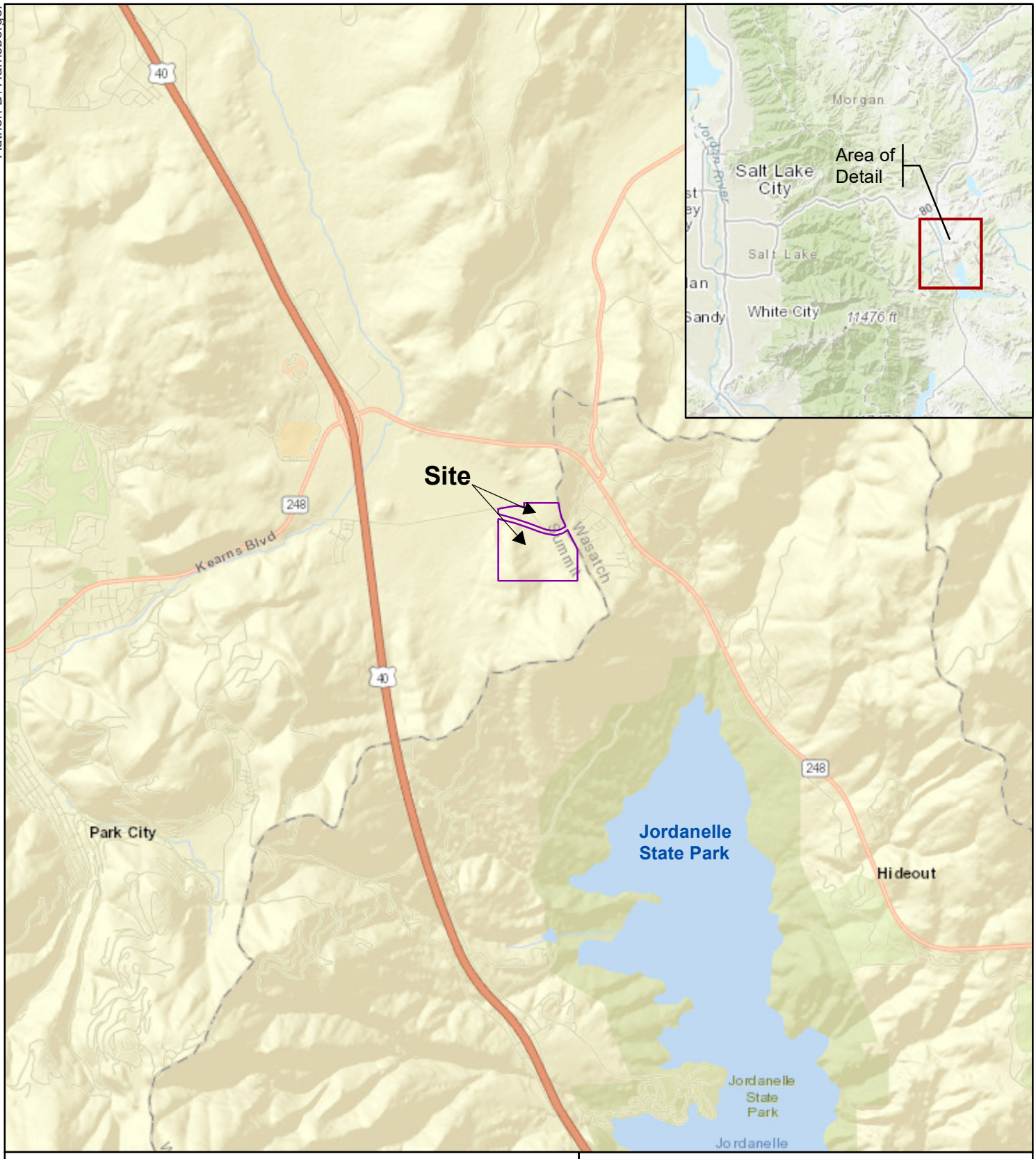
Groundwater Blind Duplicate Summary

Lab Sample ID			L1339512-21		L1339512-22		Relative Percent Difference
Client Sample ID			SB-02		SB-02 (Duplicate)[d]		
Date Collected			04/13/2021		04/13/2021		
Analyte	Method	Units	Result	Qualifier	Result	Qualifier	
ALUMINUM	6010B	mg/l	<0.200		<0.200		NA
ANTIMONY	6010B	mg/l	<0.0100		<0.0100		NA
ARSENIC	6010B	mg/l	0.00583	B J	0.00742	B J	NA
BARIUM	6010B	mg/l	0.144		0.151		4.7
CADMIUM	6010B	mg/l	<0.00200		<0.00200		NA
CHROMIUM	6010B	mg/l	<0.0100		<0.0100		NA
COPPER	6010B	mg/l	<0.0100		<0.0100		NA
LEAD	6010B	mg/l	<0.00600		<0.00600		NA
NICKEL	6010B	mg/l	<0.0100		<0.0100		NA
SELENIUM	6010B	mg/l	0.0121		<0.0100		NA
SILVER	6010B	mg/l	<0.00500		<0.00500		NA
ZINC	6010B	mg/l	<0.0500		<0.0500		NA
MERCURY	7470A	mg/l	<0.000200		<0.000200		NA

Notes
[a]Duplicate collected from location SS-01. Sample labled SS-44
[b]Duplicate collected from location SS-06. Sample labled SS-66
[c]Duplicate sample collected from location SW-01. Sample labled SW-11
[d]Duplicate sample collected from location SB-02. Sample labled SB-12
RPD = Absolute difference between parent and duplicate samples, divided by the average of the parent duplicate samples and expressed as a percentage
NA = One or both results are non-detect or results are < 5X the laboratory reporting limit and absolute difference between results is less than the reporting limit
RPD limit for soil and water samples 20%

FIGURES

Author: D. Harnsberger



Legend

Site Boundary

N

0 6,000 Feet

Site Location Map

Parcel SS-86
Environmental Baseline Sampling Report
Summit County, Utah

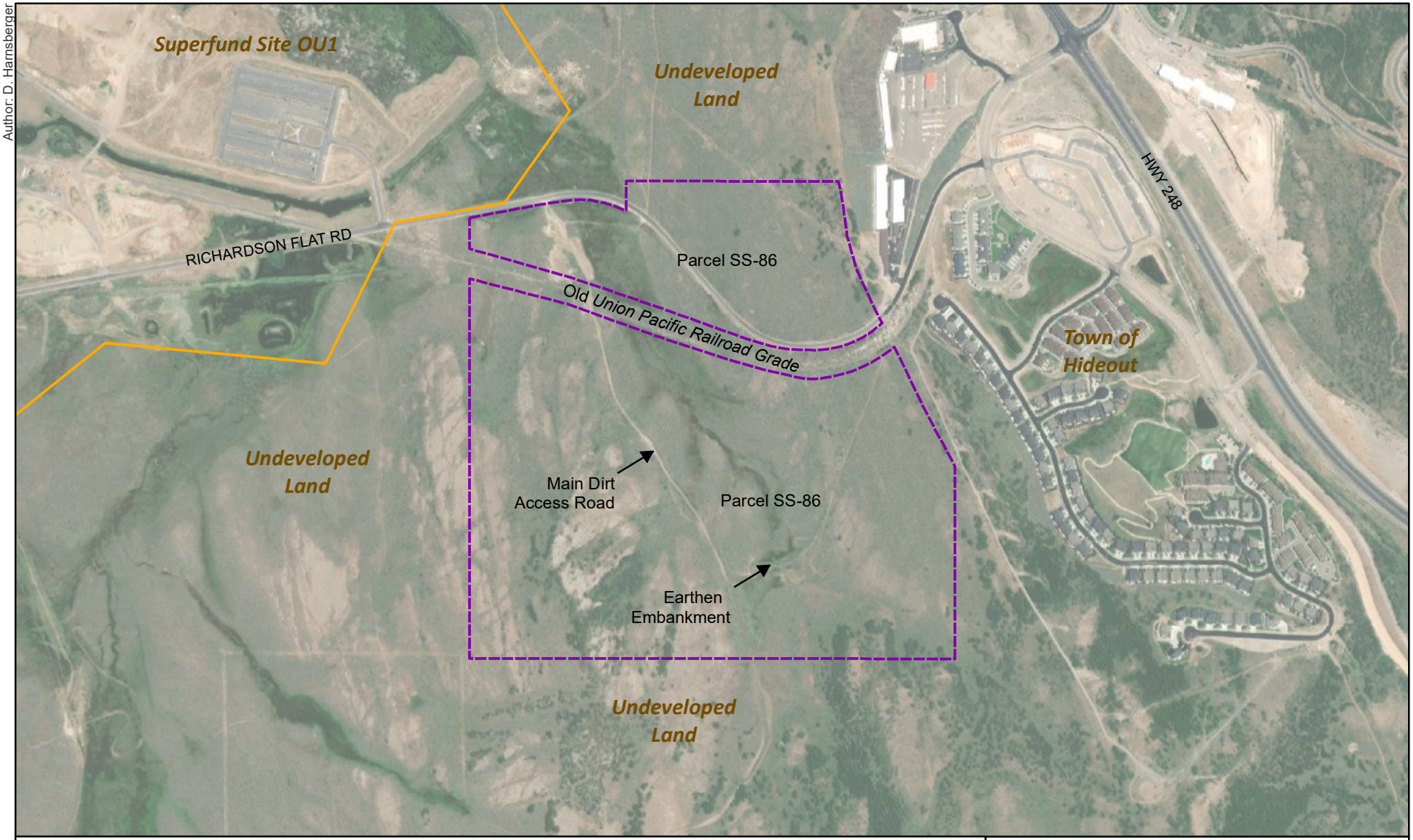
Geosyntec consultants

Geosyntec Proj. No. SLC1029 | June 2021

Figure 1

C:\DFH Local GIS Drive\DFH Projects\Stoel Rives\Richardson Flat\Projects_MXD\Baseline Assessment\Figure 1. Site Location Map (BA).mxd 5/12/2021 2:46:22 PM

Author: D. Harnsberger



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Site Boundary

Richardson Flat Tailings Superfund Site OU1

Basemap Source:
ESRI World Imagery, 2019

N

0 1,000 Feet

Site Layout Map

Parcel SS-86
Environmental Baseline Sampling Report
Summit County, Utah

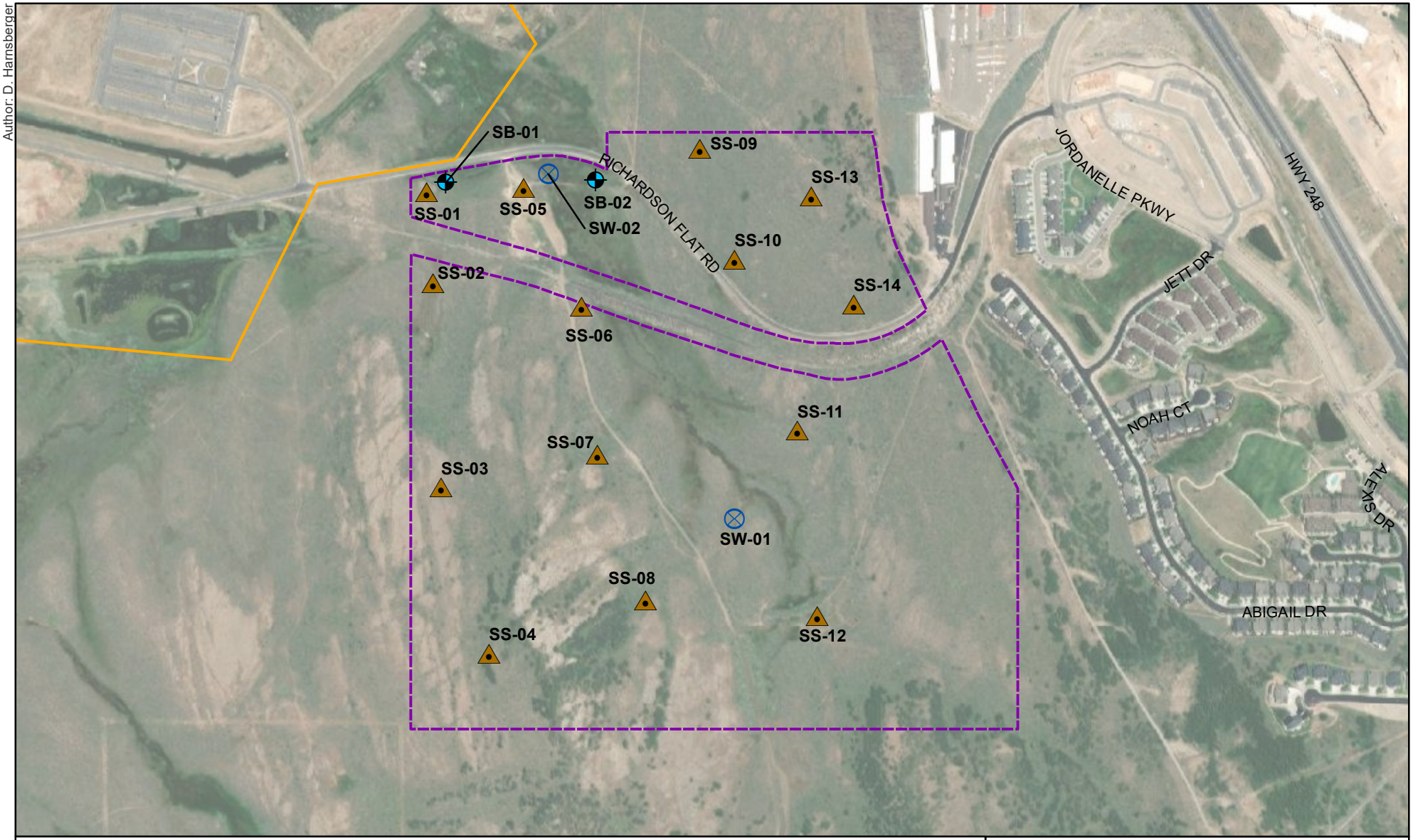
Geosyntec consultants

Figure 2

Geosyntec Proj. No. SLC1029 | June 2021

C:\DFH Local GIS Drive\DFH Projects\Stoel Rives\Richardson Flat\Projects_MXD\Baseline Assessment\Figure 2. Site Layout Map (BA).mxd 5/12/2021 2:59:36 PM

Author: D. Harnsberger



Legend

Proposed Sampling Location Type

- Soil Boring
- Surface Water
- Surface Soil
- Site Boundary
- Richardson Flat Tailings Superfund Site OU1

Notes:
1) Basemap Source: ESRI World Imagery, 2019

N

0 800 Feet

Sampling Locations Map

Parcel SS-86
Environmental Baseline Sampling Report
Summit County, Utah

Geosyntec consultants

Geosyntec Proj. No. SLC1029 | June 2021

Figure 3

C:\DFH Local GIS Drive\DFH Projects\Stoel Rives\Richardson Flat\Projects_MXD\Baseline Assessment\Figure 3. Sampling Locations Map (BA).mxd 5/12/2021 2:59:52 PM

APPENDIX A
Boring Logs

215 S. State St. Ste. 500; SLC, UT 84111

Geosyntec consultants
~~2100 Main St~~
~~Suite 150~~
~~Huntington Beach, CA 92648~~
~~Tel: (714) 969-0800~~
~~Fax: (714) 969-0820~~

GS FORM: WELL BORE 01/04

BOREHOLE LOG

BORING SB-01 SHEET 1 OF 1
START DRILL DATE 4/13/21 ELEVATION DATA:
FINISH DRILL DATE 4/13/21 GROUND SURF. See GPS
LOCATION SB-01 TOP OF CASING
PROJECT Parcel 55-86 BA DATUM
NUMBER SLC1029 Phase 02

DEPTH (ft-bgs) (in-bgs)	DESCRIPTION (1) Unit/Formation, Mem. (2) Soil/Rock Name (3) Color (4) Moisture (5) Grain Size (6) Percentage (7) Plasticity (8) Density/Consistency (9) Structure (10) Other (Mineralization, Discoloration, Odor, etc.)	GRAPHIC LOG	WELL LOG	GROUNDWATER OR STRUCTURE	ELEVATION (ft)	SAMPLE NO.	TYPE	BLOWS PER 6"	RECOVERY (%)	PID READING (ppm)	TIME (00:00)	COMMENTS (1) Rig Behavior (2) Air Monitoring
4	dark brown peat grading to mod. brown, gravelly clay											
8	Clayey gravel + cobbles, coarse-grained sands are pink rhyolite											
12												
16	Bluish gray, sandy cobbles, cobbles are andesite in comp. Wet @ 20" bgs	andesite cobbles	▽	▽					50			
20					20-30" bgs	SB-01	GW				1150	
24												
28												Refusal on volcanic rocks @ 30" bgs
32												

CONTRACTOR Direct Push
EQUIPMENT Track-mounted
DRILL MTHD DP Rig
DIAMETER 2"
LOGGER D. Harnsberger REVIEWER

NORTHING
EASTING
COORDINATE SYSTEM:

NOTES:

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

07-WELL BORE BLANKS_0104.GPJ GEOSNTEC.GDT 3/16/07

215 S. State St. Ste. 500; SLC, UT 84111

Geosyntec consultants

~~2100 Main St~~
~~Suite 150~~
~~Huntington Beach, CA 92648~~
~~Tel: (714) 969-0800~~
~~Fax: (714) 969-0820~~

GS FORM: WELL BORE 01/04

BOREHOLE LOG

BORING SB-02 SHEET 1 OF 1
START DRILL DATE 4/13/21 ELEVATION DATA:
FINISH DRILL DATE 4/13/21 GROUND SURF.
LOCATION Parcel 55-86 TOP OF CASING See GPS
PROJECT Baseline Assess DATUM
NUMBER SLC1029 Phase 02

DEPTH (ft-bgs)	DESCRIPTION (1) Unit/Formation, Mem. 2) Soil/Rock Name 3) Color 4) Moisture 5) Grain Size 6) Percentage; 7) Plasticity 8) Density/Consistency 9) Structure 10) Other (Mineralization, Discoloration, Odor, etc.)	GRAPHIC LOG	WELL LOG	GROUNDWATER OR STRUCTURE	ELEVATION (ft)	SAMPLE NO.	TYPE	BLOWS PER 6"	RECOVERY (%)	PID READING (ppm)	TIME (00:00)	COMMENTS (1) Rig Behavior 2) Air Monitoring
0	Sandy, brown surf. soil	OL										
1	Blackish brown peaty; some sand	Pt			1							
2	Brown clay; med. plastic; trace volcanic gravel	CL	▽	▽ Top of GW Table @ 25" bgs	2							
3					3							
4					4	SB02-G 2'-6' bgs	GW		60%		1411 1412	SB02 + SB3-12 collected @ 1410 + 1412, respectively
5	Brown clay; med. plastic; Very stiff; trace volc. gravel	CL			5							
6												
7	Silty, brownish-orange loam; 20% volc. cobble + gravel	CL										
8	Varying bluish/greenish/ brownish gray clay; V. stiff; trace volc. sand + gravel	CH							100%			
9												
10					10							

CONTRACTOR Direct Push
EQUIPMENT DP Rig
DRILL MTHD
DIAMETER 2"
LOGGER D. Harnsberger REVIEWER

NORTHING
EASTING
COORDINATE SYSTEM:

NOTES:

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

07-WELL BORE BLANKS_0104.GPJ GEOSNTEC.GDT 3/16/07

APPENDIX B
Laboratory Analytical Report

ANALYTICAL REPORT

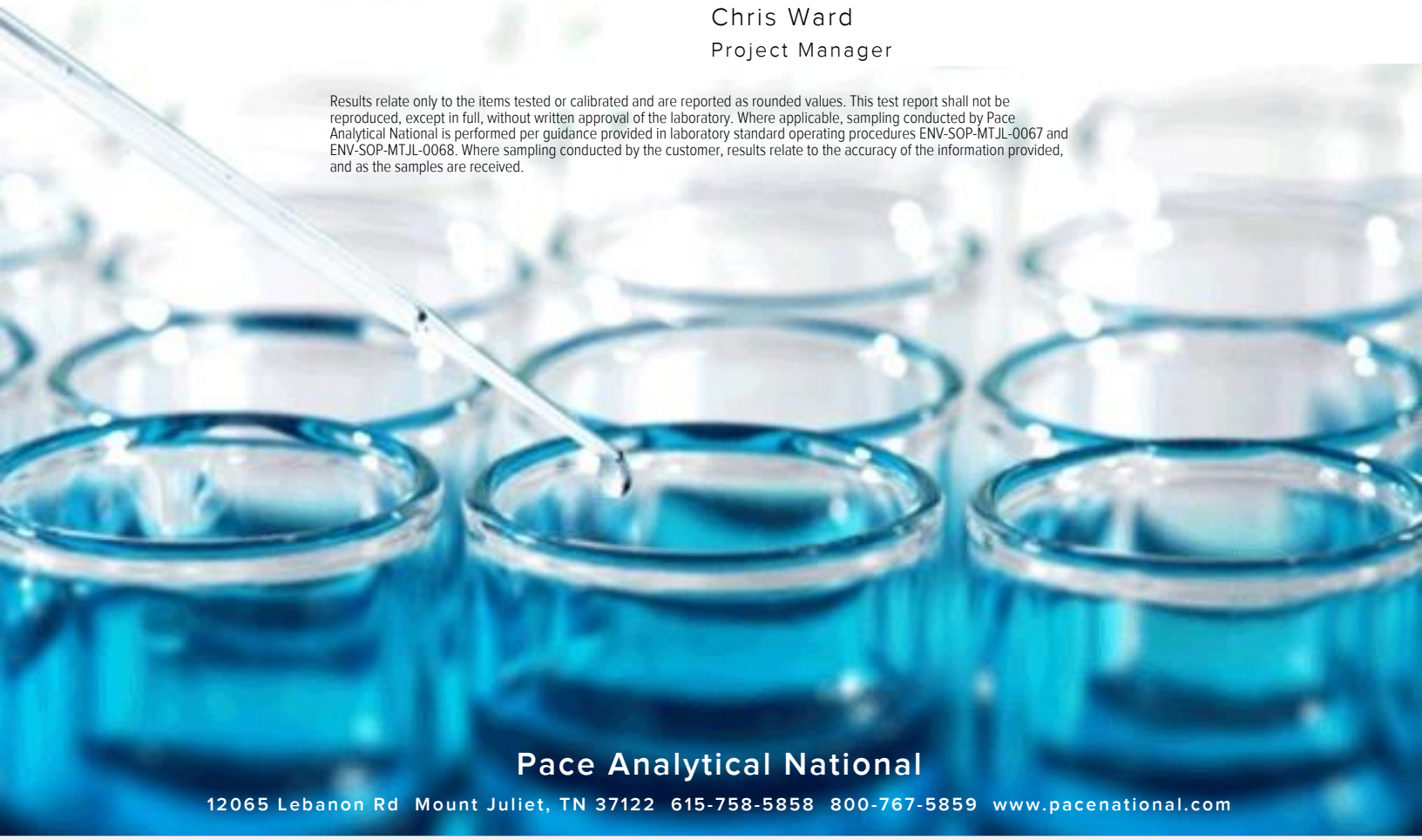
April 26, 2021

Geosyntec Consultants - UT

Sample Delivery Group:	L1339512
Samples Received:	04/15/2021
Project Number:	SLC1029
Description:	Parcel SS-86 Baseline Assessment
Site:	PARCEL SS-86
Report To:	David Harnsberger 215 South State Street Suite 500 Salt Lake City, UT 84111

Entire Report Reviewed By: Chris Ward

Chris Ward
Project Manager



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

SS-01 L1339512-01 Solid

Collected by: D. Harrisberger | Collected date/time: 04/13/21 10:00 | Received date/time: 04/15/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1654927	1	04/20/21 08:18	04/20/21 08:28	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1653216	1	04/21/21 07:35	04/21/21 17:59	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1653250	1	04/19/21 18:25	04/23/21 01:25	CCE	Mt. Juliet, TN

SS-02 L1339512-02 Solid

Collected by: D. Harrisberger | Collected date/time: 04/13/21 10:40 | Received date/time: 04/15/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1654927	1	04/20/21 08:18	04/20/21 08:28	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1653216	1	04/21/21 07:35	04/21/21 18:09	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1653250	1	04/19/21 18:25	04/23/21 01:28	CCE	Mt. Juliet, TN

SS-03 L1339512-03 Solid

Collected by: D. Harrisberger | Collected date/time: 04/13/21 11:20 | Received date/time: 04/15/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1654927	1	04/20/21 08:18	04/20/21 08:28	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1653216	1	04/21/21 07:35	04/21/21 18:12	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1653250	1	04/19/21 18:25	04/23/21 01:31	CCE	Mt. Juliet, TN

SS-04 L1339512-04 Solid

Collected by: D. Harrisberger | Collected date/time: 04/13/21 16:00 | Received date/time: 04/15/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1654927	1	04/20/21 08:18	04/20/21 08:28	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1653216	1	04/21/21 07:35	04/21/21 18:14	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1653250	1	04/19/21 18:25	04/23/21 01:33	CCE	Mt. Juliet, TN

SS-05 L1339512-05 Solid

Collected by: D. Harrisberger | Collected date/time: 04/13/21 11:00 | Received date/time: 04/15/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1654927	1	04/20/21 08:18	04/20/21 08:28	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1653216	1	04/21/21 07:35	04/21/21 18:17	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1653250	1	04/19/21 18:25	04/23/21 01:36	CCE	Mt. Juliet, TN

SS-06 L1339512-06 Solid

Collected by: D. Harrisberger | Collected date/time: 04/13/21 15:20 | Received date/time: 04/15/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1655046	1	04/20/21 20:21	04/20/21 20:27	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1653216	1	04/21/21 07:35	04/21/21 17:52	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1653250	1	04/19/21 18:25	04/23/21 00:56	CCE	Mt. Juliet, TN

SS-07 L1339512-07 Solid

Collected by: D. Harrisberger | Collected date/time: 04/13/21 15:30 | Received date/time: 04/15/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1655046	1	04/20/21 20:21	04/20/21 20:27	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1653216	1	04/21/21 07:35	04/21/21 18:20	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1653250	1	04/19/21 18:25	04/23/21 01:39	CCE	Mt. Juliet, TN

SS-08 L1339512-08 Solid

Collected by: D. Harrisberger | Collected date/time: 04/13/21 15:40 | Received date/time: 04/15/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1655046	1	04/20/21 20:21	04/20/21 20:27	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1653216	1	04/21/21 07:35	04/21/21 18:22	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1653250	1	04/19/21 18:25	04/23/21 01:41	CCE	Mt. Juliet, TN

SS-09 L1339512-09 Solid

Collected by: D. Harrisberger | Collected date/time: 04/13/21 17:30 | Received date/time: 04/15/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1655046	1	04/20/21 20:21	04/20/21 20:27	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1653216	1	04/21/21 07:35	04/21/21 18:25	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1653250	1	04/19/21 18:25	04/23/21 01:44	CCE	Mt. Juliet, TN

SS-10 L1339512-10 Solid

Collected by: D. Harrisberger | Collected date/time: 04/13/21 17:10 | Received date/time: 04/15/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1655046	1	04/20/21 20:21	04/20/21 20:27	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1653216	1	04/21/21 07:35	04/21/21 18:27	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1653250	1	04/19/21 18:25	04/23/21 01:47	CCE	Mt. Juliet, TN

SS-11 L1339512-11 Solid

Collected by: D. Harrisberger | Collected date/time: 04/13/21 16:50 | Received date/time: 04/15/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1655046	1	04/20/21 20:21	04/20/21 20:27	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1653216	1	04/21/21 07:35	04/21/21 18:30	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1653250	1	04/19/21 18:25	04/23/21 01:55	CCE	Mt. Juliet, TN

SS-12 L1339512-12 Solid

Collected by: D. Harrisberger | Collected date/time: 04/13/21 16:30 | Received date/time: 04/15/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1655046	1	04/20/21 20:21	04/20/21 20:27	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1653216	1	04/21/21 07:35	04/21/21 18:32	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1653250	1	04/19/21 18:25	04/23/21 01:58	CCE	Mt. Juliet, TN

SS-13 L1339512-13 Solid

Collected by: D. Harrisberger | Collected date/time: 04/13/21 17:20 | Received date/time: 04/15/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1655046	1	04/20/21 20:21	04/20/21 20:27	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1653216	1	04/21/21 07:35	04/21/21 18:40	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1653250	1	04/19/21 18:25	04/23/21 02:01	CCE	Mt. Juliet, TN

SS-14 L1339512-14 Solid

Collected by: D. Harrisberger | Collected date/time: 04/13/21 17:00 | Received date/time: 04/15/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1655046	1	04/20/21 20:21	04/20/21 20:27	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1653216	1	04/21/21 07:35	04/21/21 18:43	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1653250	1	04/19/21 18:25	04/23/21 02:04	CCE	Mt. Juliet, TN

SS-44 L1339512-15 Solid

Collected by: D. Harrisberger | Collected date/time: 04/13/21 10:00 | Received date/time: 04/15/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1655046	1	04/20/21 20:21	04/20/21 20:27	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1654744	1	04/19/21 17:25	04/20/21 12:53	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1653250	1	04/19/21 18:25	04/23/21 02:06	CCE	Mt. Juliet, TN

SS-66 L1339512-16 Solid

Collected by: D. Harrisberger | Collected date/time: 04/13/21 15:22 | Received date/time: 04/15/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1655047	1	04/20/21 11:47	04/20/21 12:17	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1654744	1	04/19/21 17:25	04/20/21 12:55	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1653250	1	04/19/21 18:25	04/23/21 02:09	CCE	Mt. Juliet, TN

SW-01 L1339512-17 GW

Collected by: D. Harrisberger | Collected date/time: 04/13/21 16:20 | Received date/time: 04/15/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG1654199	1	04/19/21 09:51	04/19/21 13:55	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1656499	1	04/25/21 12:59	04/26/21 11:00	EL	Mt. Juliet, TN

SW-02 L1339512-18 GW

Collected by: D. Harrisberger | Collected date/time: 04/13/21 15:10 | Received date/time: 04/15/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG1654199	1	04/19/21 09:51	04/19/21 13:43	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1654846	1	04/20/21 02:10	04/21/21 14:40	CCE	Mt. Juliet, TN

SW-11 L1339512-19 GW

Collected by: D. Harrisberger | Collected date/time: 04/13/21 16:22 | Received date/time: 04/15/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG1654199	1	04/19/21 09:51	04/19/21 13:57	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1656499	1	04/25/21 12:59	04/26/21 11:02	EL	Mt. Juliet, TN

SB-01 L1339512-20 GW

Collected by: D. Harrisberger | Collected date/time: 04/13/21 11:50 | Received date/time: 04/15/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG1654199	1	04/19/21 09:51	04/19/21 13:49	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1656499	1	04/25/21 12:59	04/26/21 10:13	EL	Mt. Juliet, TN

SB-02 L1339512-21 GW

Collected by: D. Harrisberger | Collected date/time: 04/13/21 14:10 | Received date/time: 04/15/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG1654199	1	04/19/21 09:51	04/19/21 14:03	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1656499	1	04/25/21 12:59	04/26/21 11:05	EL	Mt. Juliet, TN

SB-12 L1339512-22 GW

Collected by: D. Harrisberger | Collected date/time: 04/13/21 14:12 | Received date/time: 04/15/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG1654199	1	04/19/21 09:51	04/19/21 14:05	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1656499	1	04/25/21 12:59	04/26/21 11:08	EL	Mt. Juliet, TN

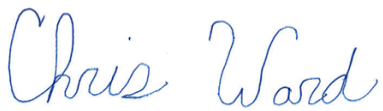
GW-EB L1339512-23 GW

Collected by: D. Harrisberger | Collected date/time: 04/13/21 14:20 | Received date/time: 04/15/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG1654199	1	04/19/21 09:51	04/19/21 14:07	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1656499	1	04/25/21 12:59	04/26/21 11:16	EL	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Chris Ward
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	83.0		1	04/20/2021 08:28	WG1654927

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.0488		0.0217	0.0482	1	04/21/2021 17:59	WG1653216

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aluminum	18700		7.32	24.1	1	04/23/2021 01:25	WG1653250
Antimony	U		0.655	2.41	1	04/23/2021 01:25	WG1653250
Arsenic	7.87		0.624	2.41	1	04/23/2021 01:25	WG1653250
Barium	188		0.103	0.602	1	04/23/2021 01:25	WG1653250
Cadmium	0.612		0.0567	0.602	1	04/23/2021 01:25	WG1653250
Chromium	31.9		0.160	1.20	1	04/23/2021 01:25	WG1653250
Copper	22.6		0.482	2.41	1	04/23/2021 01:25	WG1653250
Lead	80.0		0.251	0.602	1	04/23/2021 01:25	WG1653250
Nickel	13.3		0.159	2.41	1	04/23/2021 01:25	WG1653250
Selenium	1.24	J	0.920	2.41	1	04/23/2021 01:25	WG1653250
Silver	0.273	J	0.153	1.20	1	04/23/2021 01:25	WG1653250
Zinc	132		1.00	6.02	1	04/23/2021 01:25	WG1653250

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	70.7		1	04/20/2021 08:28	WG1654927

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.142		0.0255	0.0566	1	04/21/2021 18:09	WG1653216

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aluminum	23500		8.60	28.3	1	04/23/2021 01:28	WG1653250
Antimony	2.06	J	0.770	2.83	1	04/23/2021 01:28	WG1653250
Arsenic	13.1		0.733	2.83	1	04/23/2021 01:28	WG1653250
Barium	257		0.121	0.707	1	04/23/2021 01:28	WG1653250
Cadmium	2.17		0.0666	0.707	1	04/23/2021 01:28	WG1653250
Chromium	22.3		0.188	1.41	1	04/23/2021 01:28	WG1653250
Copper	43.6		0.566	2.83	1	04/23/2021 01:28	WG1653250
Lead	237		0.294	0.707	1	04/23/2021 01:28	WG1653250
Nickel	14.7		0.187	2.83	1	04/23/2021 01:28	WG1653250
Selenium	U		1.08	2.83	1	04/23/2021 01:28	WG1653250
Silver	0.933	J	0.180	1.41	1	04/23/2021 01:28	WG1653250
Zinc	330		1.18	7.07	1	04/23/2021 01:28	WG1653250

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	79.5		1	04/20/2021 08:28	WG1654927

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.0494	J	0.0226	0.0503	1	04/21/2021 18:12	WG1653216

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aluminum	24100		7.65	25.2	1	04/23/2021 01:31	WG1653250
Antimony	U		0.684	2.52	1	04/23/2021 01:31	WG1653250
Arsenic	5.78		0.652	2.52	1	04/23/2021 01:31	WG1653250
Barium	256		0.107	0.629	1	04/23/2021 01:31	WG1653250
Cadmium	0.312	J	0.0592	0.629	1	04/23/2021 01:31	WG1653250
Chromium	20.9		0.167	1.26	1	04/23/2021 01:31	WG1653250
Copper	25.5		0.503	2.52	1	04/23/2021 01:31	WG1653250
Lead	40.9		0.262	0.629	1	04/23/2021 01:31	WG1653250
Nickel	15.4		0.166	2.52	1	04/23/2021 01:31	WG1653250
Selenium	U		0.961	2.52	1	04/23/2021 01:31	WG1653250
Silver	U		0.160	1.26	1	04/23/2021 01:31	WG1653250
Zinc	80.3		1.05	6.29	1	04/23/2021 01:31	WG1653250

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	65.6		1	04/20/2021 08:28	WG1654927

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.0854		0.0274	0.0609	1	04/21/2021 18:14	WG1653216

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aluminum	17900		9.26	30.5	1	04/23/2021 01:33	WG1653250
Antimony	0.956	J	0.829	3.05	1	04/23/2021 01:33	WG1653250
Arsenic	7.78		0.789	3.05	1	04/23/2021 01:33	WG1653250
Barium	289		0.130	0.762	1	04/23/2021 01:33	WG1653250
Cadmium	0.930		0.0718	0.762	1	04/23/2021 01:33	WG1653250
Chromium	16.9		0.203	1.52	1	04/23/2021 01:33	WG1653250
Copper	31.9		0.609	3.05	1	04/23/2021 01:33	WG1653250
Lead	90.6		0.317	0.762	1	04/23/2021 01:33	WG1653250
Nickel	14.9		0.201	3.05	1	04/23/2021 01:33	WG1653250
Selenium	1.41	J	1.16	3.05	1	04/23/2021 01:33	WG1653250
Silver	0.406	J	0.193	1.52	1	04/23/2021 01:33	WG1653250
Zinc	126		1.27	7.62	1	04/23/2021 01:33	WG1653250

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	84.9		1	04/20/2021 08:28	WG1654927

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.255		0.0212	0.0471	1	04/21/2021 18:17	WG1653216

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aluminum	23700		7.16	23.5	1	04/23/2021 01:36	WG1653250
Antimony	3.07		0.640	2.35	1	04/23/2021 01:36	WG1653250
Arsenic	14.0		0.610	2.35	1	04/23/2021 01:36	WG1653250
Barium	234		0.100	0.589	1	04/23/2021 01:36	WG1653250
Cadmium	3.05		0.0554	0.589	1	04/23/2021 01:36	WG1653250
Chromium	24.5		0.157	1.18	1	04/23/2021 01:36	WG1653250
Copper	40.0		0.471	2.35	1	04/23/2021 01:36	WG1653250
Lead	301		0.245	0.589	1	04/23/2021 01:36	WG1653250
Nickel	18.0		0.155	2.35	1	04/23/2021 01:36	WG1653250
Selenium	U		0.899	2.35	1	04/23/2021 01:36	WG1653250
Silver	1.60		0.150	1.18	1	04/23/2021 01:36	WG1653250
Zinc	475		0.979	5.89	1	04/23/2021 01:36	WG1653250

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.2		1	04/20/2021 20:27	WG1655046

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.0695		0.0219	0.0486	1	04/21/2021 17:52	WG1653216

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aluminum	26300	O1 V	7.39	24.3	1	04/23/2021 00:56	WG1653250
Antimony	U	J6	0.662	2.43	1	04/23/2021 00:56	WG1653250
Arsenic	8.38		0.630	2.43	1	04/23/2021 00:56	WG1653250
Barium	311		0.104	0.608	1	04/23/2021 00:56	WG1653250
Cadmium	0.910		0.0573	0.608	1	04/23/2021 00:56	WG1653250
Chromium	30.6		0.162	1.22	1	04/23/2021 00:56	WG1653250
Copper	37.3		0.486	2.43	1	04/23/2021 00:56	WG1653250
Lead	184	J5	0.253	0.608	1	04/23/2021 00:56	WG1653250
Nickel	20.8		0.161	2.43	1	04/23/2021 00:56	WG1653250
Selenium	U		0.929	2.43	1	04/23/2021 00:56	WG1653250
Silver	0.421	J	0.154	1.22	1	04/23/2021 00:56	WG1653250
Zinc	168		1.01	6.08	1	04/23/2021 00:56	WG1653250

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	66.6		1	04/20/2021 20:27	WG1655046

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.122		0.0270	0.0600	1	04/21/2021 18:20	WG1653216

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aluminum	21700		9.12	30.0	1	04/23/2021 01:39	WG1653250
Antimony	1.26	J	0.816	3.00	1	04/23/2021 01:39	WG1653250
Arsenic	9.32		0.777	3.00	1	04/23/2021 01:39	WG1653250
Barium	296		0.128	0.750	1	04/23/2021 01:39	WG1653250
Cadmium	1.42		0.0707	0.750	1	04/23/2021 01:39	WG1653250
Chromium	20.4		0.200	1.50	1	04/23/2021 01:39	WG1653250
Copper	42.0		0.600	3.00	1	04/23/2021 01:39	WG1653250
Lead	153		0.312	0.750	1	04/23/2021 01:39	WG1653250
Nickel	15.4		0.198	3.00	1	04/23/2021 01:39	WG1653250
Selenium	U		1.15	3.00	1	04/23/2021 01:39	WG1653250
Silver	0.725	J	0.191	1.50	1	04/23/2021 01:39	WG1653250
Zinc	208		1.25	7.50	1	04/23/2021 01:39	WG1653250

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	65.3		1	04/20/2021 20:27	WG1655046

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.110		0.0276	0.0613	1	04/21/2021 18:22	WG1653216

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aluminum	24300		9.31	30.6	1	04/23/2021 01:41	WG1653250
Antimony	U		0.833	3.06	1	04/23/2021 01:41	WG1653250
Arsenic	9.74		0.793	3.06	1	04/23/2021 01:41	WG1653250
Barium	357		0.130	0.766	1	04/23/2021 01:41	WG1653250
Cadmium	1.55		0.0721	0.766	1	04/23/2021 01:41	WG1653250
Chromium	18.8		0.204	1.53	1	04/23/2021 01:41	WG1653250
Copper	40.2		0.613	3.06	1	04/23/2021 01:41	WG1653250
Lead	139		0.319	0.766	1	04/23/2021 01:41	WG1653250
Nickel	14.8		0.202	3.06	1	04/23/2021 01:41	WG1653250
Selenium	U		1.17	3.06	1	04/23/2021 01:41	WG1653250
Silver	0.676	J	0.194	1.53	1	04/23/2021 01:41	WG1653250
Zinc	193		1.27	7.66	1	04/23/2021 01:41	WG1653250

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.5		1	04/20/2021 20:27	WG1655046

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.166		0.0203	0.0452	1	04/21/2021 18:25	WG1653216

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aluminum	21100		6.87	22.6	1	04/23/2021 01:44	WG1653250
Antimony	U		0.615	2.26	1	04/23/2021 01:44	WG1653250
Arsenic	5.50		0.585	2.26	1	04/23/2021 01:44	WG1653250
Barium	213		0.0963	0.565	1	04/23/2021 01:44	WG1653250
Cadmium	0.488	J	0.0532	0.565	1	04/23/2021 01:44	WG1653250
Chromium	20.0		0.150	1.13	1	04/23/2021 01:44	WG1653250
Copper	29.4		0.452	2.26	1	04/23/2021 01:44	WG1653250
Lead	42.6		0.235	0.565	1	04/23/2021 01:44	WG1653250
Nickel	19.0		0.149	2.26	1	04/23/2021 01:44	WG1653250
Selenium	U		0.863	2.26	1	04/23/2021 01:44	WG1653250
Silver	U		0.144	1.13	1	04/23/2021 01:44	WG1653250
Zinc	96.2		0.940	5.65	1	04/23/2021 01:44	WG1653250

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	81.0		1	04/20/2021 20:27	WG1655046

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.0966		0.0222	0.0494	1	04/21/2021 18:27	WG1653216

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aluminum	23100		7.51	24.7	1	04/23/2021 01:47	WG1653250
Antimony	0.676	J	0.672	2.47	1	04/23/2021 01:47	WG1653250
Arsenic	8.87		0.639	2.47	1	04/23/2021 01:47	WG1653250
Barium	248		0.105	0.617	1	04/23/2021 01:47	WG1653250
Cadmium	0.844		0.0581	0.617	1	04/23/2021 01:47	WG1653250
Chromium	17.5		0.164	1.23	1	04/23/2021 01:47	WG1653250
Copper	37.3		0.494	2.47	1	04/23/2021 01:47	WG1653250
Lead	98.7		0.257	0.617	1	04/23/2021 01:47	WG1653250
Nickel	17.7		0.163	2.47	1	04/23/2021 01:47	WG1653250
Selenium	0.960	J	0.943	2.47	1	04/23/2021 01:47	WG1653250
Silver	0.664	J	0.157	1.23	1	04/23/2021 01:47	WG1653250
Zinc	133		1.03	6.17	1	04/23/2021 01:47	WG1653250

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	75.7		1	04/20/2021 20:27	WG1655046

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.0919		0.0238	0.0528	1	04/21/2021 18:30	WG1653216

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aluminum	24400		8.03	26.4	1	04/23/2021 01:55	WG1653250
Antimony	U		0.719	2.64	1	04/23/2021 01:55	WG1653250
Arsenic	9.25		0.684	2.64	1	04/23/2021 01:55	WG1653250
Barium	290		0.113	0.661	1	04/23/2021 01:55	WG1653250
Cadmium	1.35		0.0622	0.661	1	04/23/2021 01:55	WG1653250
Chromium	19.5		0.176	1.32	1	04/23/2021 01:55	WG1653250
Copper	44.7		0.528	2.64	1	04/23/2021 01:55	WG1653250
Lead	125		0.275	0.661	1	04/23/2021 01:55	WG1653250
Nickel	17.0		0.174	2.64	1	04/23/2021 01:55	WG1653250
Selenium	U		1.01	2.64	1	04/23/2021 01:55	WG1653250
Silver	0.442	J	0.168	1.32	1	04/23/2021 01:55	WG1653250
Zinc	193		1.10	6.61	1	04/23/2021 01:55	WG1653250

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	81.9		1	04/20/2021 20:27	WG1655046

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	U		0.0220	0.0488	1	04/21/2021 18:32	WG1653216

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aluminum	30000		7.42	24.4	1	04/23/2021 01:58	WG1653250
Antimony	U		0.664	2.44	1	04/23/2021 01:58	WG1653250
Arsenic	6.05		0.632	2.44	1	04/23/2021 01:58	WG1653250
Barium	268		0.104	0.610	1	04/23/2021 01:58	WG1653250
Cadmium	0.307	J	0.0575	0.610	1	04/23/2021 01:58	WG1653250
Chromium	21.6		0.162	1.22	1	04/23/2021 01:58	WG1653250
Copper	26.4		0.488	2.44	1	04/23/2021 01:58	WG1653250
Lead	24.4		0.254	0.610	1	04/23/2021 01:58	WG1653250
Nickel	19.8		0.161	2.44	1	04/23/2021 01:58	WG1653250
Selenium	1.05	J	0.933	2.44	1	04/23/2021 01:58	WG1653250
Silver	U		0.155	1.22	1	04/23/2021 01:58	WG1653250
Zinc	74.1		1.02	6.10	1	04/23/2021 01:58	WG1653250

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	84.7		1	04/20/2021 20:27	WG1655046

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.0283	J	0.0213	0.0472	1	04/21/2021 18:40	WG1653216

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aluminum	27400		7.18	23.6	1	04/23/2021 02:01	WG1653250
Antimony	U		0.642	2.36	1	04/23/2021 02:01	WG1653250
Arsenic	5.91		0.612	2.36	1	04/23/2021 02:01	WG1653250
Barium	271		0.101	0.590	1	04/23/2021 02:01	WG1653250
Cadmium	0.345	J	0.0556	0.590	1	04/23/2021 02:01	WG1653250
Chromium	21.0		0.157	1.18	1	04/23/2021 02:01	WG1653250
Copper	33.3		0.472	2.36	1	04/23/2021 02:01	WG1653250
Lead	28.1		0.246	0.590	1	04/23/2021 02:01	WG1653250
Nickel	20.6		0.156	2.36	1	04/23/2021 02:01	WG1653250
Selenium	U		0.902	2.36	1	04/23/2021 02:01	WG1653250
Silver	U		0.150	1.18	1	04/23/2021 02:01	WG1653250
Zinc	76.8		0.982	5.90	1	04/23/2021 02:01	WG1653250

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.7		1	04/20/2021 20:27	WG1655046

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.146		0.0190	0.0422	1	04/21/2021 18:43	WG1653216

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aluminum	21600		6.42	21.1	1	04/23/2021 02:04	WG1653250
Antimony	0.891	J	0.574	2.11	1	04/23/2021 02:04	WG1653250
Arsenic	9.71		0.547	2.11	1	04/23/2021 02:04	WG1653250
Barium	285		0.0899	0.528	1	04/23/2021 02:04	WG1653250
Cadmium	1.71		0.0497	0.528	1	04/23/2021 02:04	WG1653250
Chromium	18.2		0.140	1.06	1	04/23/2021 02:04	WG1653250
Copper	50.9		0.422	2.11	1	04/23/2021 02:04	WG1653250
Lead	211		0.220	0.528	1	04/23/2021 02:04	WG1653250
Nickel	18.6		0.139	2.11	1	04/23/2021 02:04	WG1653250
Selenium	U		0.807	2.11	1	04/23/2021 02:04	WG1653250
Silver	1.50		0.134	1.06	1	04/23/2021 02:04	WG1653250
Zinc	221		0.878	5.28	1	04/23/2021 02:04	WG1653250

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.6		1	04/20/2021 20:27	WG1655046

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.0566		0.0218	0.0484	1	04/20/2021 12:53	WG1654744

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aluminum	20600		7.36	24.2	1	04/23/2021 02:06	WG1653250
Antimony	0.941	J	0.659	2.42	1	04/23/2021 02:06	WG1653250
Arsenic	7.85		0.627	2.42	1	04/23/2021 02:06	WG1653250
Barium	195		0.103	0.606	1	04/23/2021 02:06	WG1653250
Cadmium	0.588	J	0.0570	0.606	1	04/23/2021 02:06	WG1653250
Chromium	32.8		0.161	1.21	1	04/23/2021 02:06	WG1653250
Copper	24.5		0.484	2.42	1	04/23/2021 02:06	WG1653250
Lead	76.2		0.252	0.606	1	04/23/2021 02:06	WG1653250
Nickel	13.9		0.160	2.42	1	04/23/2021 02:06	WG1653250
Selenium	U		0.925	2.42	1	04/23/2021 02:06	WG1653250
Silver	0.302	J	0.154	1.21	1	04/23/2021 02:06	WG1653250
Zinc	140		1.01	6.06	1	04/23/2021 02:06	WG1653250

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	81.2		1	04/20/2021 12:17	WG1655047

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.0727		0.0222	0.0493	1	04/20/2021 12:55	WG1654744

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aluminum	27200		7.49	24.6	1	04/23/2021 02:09	WG1653250
Antimony	U		0.670	2.46	1	04/23/2021 02:09	WG1653250
Arsenic	8.02		0.638	2.46	1	04/23/2021 02:09	WG1653250
Barium	293		0.105	0.616	1	04/23/2021 02:09	WG1653250
Cadmium	0.876		0.0580	0.616	1	04/23/2021 02:09	WG1653250
Chromium	31.0		0.164	1.23	1	04/23/2021 02:09	WG1653250
Copper	36.4		0.493	2.46	1	04/23/2021 02:09	WG1653250
Lead	161		0.256	0.616	1	04/23/2021 02:09	WG1653250
Nickel	21.0		0.163	2.46	1	04/23/2021 02:09	WG1653250
Selenium	U		0.941	2.46	1	04/23/2021 02:09	WG1653250
Silver	0.398	J	0.156	1.23	1	04/23/2021 02:09	WG1653250
Zinc	170		1.02	6.16	1	04/23/2021 02:09	WG1653250

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury,Dissolved	U		0.000100	0.000200	1	04/19/2021 13:55	WG1654199

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	0.0593	J	0.0561	0.200	1	04/26/2021 11:00	WG1656499
Antimony,Dissolved	U		0.00430	0.0100	1	04/26/2021 11:00	WG1656499
Arsenic,Dissolved	U		0.00440	0.0100	1	04/26/2021 11:00	WG1656499
Barium,Dissolved	0.101		0.000736	0.00500	1	04/26/2021 11:00	WG1656499
Cadmium,Dissolved	U		0.000479	0.00200	1	04/26/2021 11:00	WG1656499
Chromium,Dissolved	U		0.00140	0.0100	1	04/26/2021 11:00	WG1656499
Copper,Dissolved	0.00395	J	0.00368	0.0100	1	04/26/2021 11:00	WG1656499
Lead,Dissolved	U		0.00299	0.00600	1	04/26/2021 11:00	WG1656499
Nickel,Dissolved	U		0.00161	0.0100	1	04/26/2021 11:00	WG1656499
Selenium,Dissolved	U		0.00735	0.0100	1	04/26/2021 11:00	WG1656499
Silver,Dissolved	U		0.00154	0.00500	1	04/26/2021 11:00	WG1656499
Zinc,Dissolved	U		0.00652	0.0500	1	04/26/2021 11:00	WG1656499

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury,Dissolved	U		0.000100	0.000200	1	04/19/2021 13:43	WG1654199

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	0.0690	J	0.0561	0.200	1	04/21/2021 14:40	WG1654846
Antimony,Dissolved	0.00762	J	0.00430	0.0100	1	04/21/2021 14:40	WG1654846
Arsenic,Dissolved	0.0178		0.00440	0.0100	1	04/21/2021 14:40	WG1654846
Barium,Dissolved	0.124	O1	0.000736	0.00500	1	04/21/2021 14:40	WG1654846
Cadmium,Dissolved	U		0.000479	0.00200	1	04/21/2021 14:40	WG1654846
Chromium,Dissolved	U		0.00140	0.0100	1	04/21/2021 14:40	WG1654846
Copper,Dissolved	U		0.00368	0.0100	1	04/21/2021 14:40	WG1654846
Lead,Dissolved	U		0.00299	0.00600	1	04/21/2021 14:40	WG1654846
Nickel,Dissolved	U		0.00161	0.0100	1	04/21/2021 14:40	WG1654846
Selenium,Dissolved	U		0.00735	0.0100	1	04/21/2021 14:40	WG1654846
Silver,Dissolved	U		0.00154	0.00500	1	04/21/2021 14:40	WG1654846
Zinc,Dissolved	0.0188	J	0.00652	0.0500	1	04/21/2021 14:40	WG1654846

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury,Dissolved	U		0.000100	0.000200	1	04/19/2021 13:57	WG1654199

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	0.0562	J	0.0561	0.200	1	04/26/2021 11:02	WG1656499
Antimony,Dissolved	U		0.00430	0.0100	1	04/26/2021 11:02	WG1656499
Arsenic,Dissolved	U		0.00440	0.0100	1	04/26/2021 11:02	WG1656499
Barium,Dissolved	0.109		0.000736	0.00500	1	04/26/2021 11:02	WG1656499
Cadmium,Dissolved	U		0.000479	0.00200	1	04/26/2021 11:02	WG1656499
Chromium,Dissolved	U		0.00140	0.0100	1	04/26/2021 11:02	WG1656499
Copper,Dissolved	0.00790	J	0.00368	0.0100	1	04/26/2021 11:02	WG1656499
Lead,Dissolved	U		0.00299	0.00600	1	04/26/2021 11:02	WG1656499
Nickel,Dissolved	0.00186	J	0.00161	0.0100	1	04/26/2021 11:02	WG1656499
Selenium,Dissolved	U		0.00735	0.0100	1	04/26/2021 11:02	WG1656499
Silver,Dissolved	U		0.00154	0.00500	1	04/26/2021 11:02	WG1656499
Zinc,Dissolved	U		0.00652	0.0500	1	04/26/2021 11:02	WG1656499

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury,Dissolved	U		0.000100	0.000200	1	04/19/2021 13:49	WG1654199

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0561	0.200	1	04/26/2021 10:13	WG1656499
Antimony,Dissolved	U		0.00430	0.0100	1	04/26/2021 10:13	WG1656499
Arsenic,Dissolved	U		0.00440	0.0100	1	04/26/2021 10:13	WG1656499
Barium,Dissolved	0.127		0.000736	0.00500	1	04/26/2021 10:13	WG1656499
Cadmium,Dissolved	U		0.000479	0.00200	1	04/26/2021 10:13	WG1656499
Chromium,Dissolved	0.00195	J	0.00140	0.0100	1	04/26/2021 10:13	WG1656499
Copper,Dissolved	U		0.00368	0.0100	1	04/26/2021 10:13	WG1656499
Lead,Dissolved	U		0.00299	0.00600	1	04/26/2021 10:13	WG1656499
Nickel,Dissolved	0.00261	J	0.00161	0.0100	1	04/26/2021 10:13	WG1656499
Selenium,Dissolved	U		0.00735	0.0100	1	04/26/2021 10:13	WG1656499
Silver,Dissolved	U		0.00154	0.00500	1	04/26/2021 10:13	WG1656499
Zinc,Dissolved	U		0.00652	0.0500	1	04/26/2021 10:13	WG1656499

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury,Dissolved	U		0.000100	0.000200	1	04/19/2021 14:03	WG1654199

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0561	0.200	1	04/26/2021 11:05	WG1656499
Antimony,Dissolved	U		0.00430	0.0100	1	04/26/2021 11:05	WG1656499
Arsenic,Dissolved	0.00583	B J	0.00440	0.0100	1	04/26/2021 11:05	WG1656499
Barium,Dissolved	0.144		0.000736	0.00500	1	04/26/2021 11:05	WG1656499
Cadmium,Dissolved	U		0.000479	0.00200	1	04/26/2021 11:05	WG1656499
Chromium,Dissolved	U		0.00140	0.0100	1	04/26/2021 11:05	WG1656499
Copper,Dissolved	U		0.00368	0.0100	1	04/26/2021 11:05	WG1656499
Lead,Dissolved	U		0.00299	0.00600	1	04/26/2021 11:05	WG1656499
Nickel,Dissolved	U		0.00161	0.0100	1	04/26/2021 11:05	WG1656499
Selenium,Dissolved	0.0121		0.00735	0.0100	1	04/26/2021 11:05	WG1656499
Silver,Dissolved	U		0.00154	0.00500	1	04/26/2021 11:05	WG1656499
Zinc,Dissolved	U		0.00652	0.0500	1	04/26/2021 11:05	WG1656499

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury,Dissolved	U		0.000100	0.000200	1	04/19/2021 14:05	WG1654199

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	U		0.0561	0.200	1	04/26/2021 11:08	WG1656499
Antimony,Dissolved	U		0.00430	0.0100	1	04/26/2021 11:08	WG1656499
Arsenic,Dissolved	0.00742	B J	0.00440	0.0100	1	04/26/2021 11:08	WG1656499
Barium,Dissolved	0.151		0.000736	0.00500	1	04/26/2021 11:08	WG1656499
Cadmium,Dissolved	U		0.000479	0.00200	1	04/26/2021 11:08	WG1656499
Chromium,Dissolved	U		0.00140	0.0100	1	04/26/2021 11:08	WG1656499
Copper,Dissolved	U		0.00368	0.0100	1	04/26/2021 11:08	WG1656499
Lead,Dissolved	U		0.00299	0.00600	1	04/26/2021 11:08	WG1656499
Nickel,Dissolved	U		0.00161	0.0100	1	04/26/2021 11:08	WG1656499
Selenium,Dissolved	U		0.00735	0.0100	1	04/26/2021 11:08	WG1656499
Silver,Dissolved	U		0.00154	0.00500	1	04/26/2021 11:08	WG1656499
Zinc,Dissolved	U		0.00652	0.0500	1	04/26/2021 11:08	WG1656499

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury,Dissolved	U		0.000100	0.000200	1	04/19/2021 14:07	WG1654199

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	0.377		0.0561	0.200	1	04/26/2021 11:16	WG1656499
Antimony,Dissolved	U		0.00430	0.0100	1	04/26/2021 11:16	WG1656499
Arsenic,Dissolved	U		0.00440	0.0100	1	04/26/2021 11:16	WG1656499
Barium,Dissolved	0.00497	J	0.000736	0.00500	1	04/26/2021 11:16	WG1656499
Cadmium,Dissolved	U		0.000479	0.00200	1	04/26/2021 11:16	WG1656499
Chromium,Dissolved	U		0.00140	0.0100	1	04/26/2021 11:16	WG1656499
Copper,Dissolved	U		0.00368	0.0100	1	04/26/2021 11:16	WG1656499
Lead,Dissolved	U		0.00299	0.00600	1	04/26/2021 11:16	WG1656499
Nickel,Dissolved	U		0.00161	0.0100	1	04/26/2021 11:16	WG1656499
Selenium,Dissolved	U		0.00735	0.0100	1	04/26/2021 11:16	WG1656499
Silver,Dissolved	U		0.00154	0.00500	1	04/26/2021 11:16	WG1656499
Zinc,Dissolved	U		0.00652	0.0500	1	04/26/2021 11:16	WG1656499

Method Blank (MB)

(MB) R3644167-1 04/20/21 08:28

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1340574-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1340574-01 04/20/21 08:28 • (DUP) R3644167-3 04/20/21 08:28

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	86.0	86.6	1	0.631		10

Laboratory Control Sample (LCS)

(LCS) R3644167-2 04/20/21 08:28

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3644595-1 04/20/21 20:27

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00300			

L1339512-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1339512-06 04/20/21 20:27 • (DUP) R3644595-3 04/20/21 20:27

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	82.2	82.0	1	0.287		10

Laboratory Control Sample (LCS)

(LCS) R3644595-2 04/20/21 20:27

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	99.9	85.0-115	

Method Blank (MB)

(MB) R3644507-1 04/20/21 12:17

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1339516-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1339516-01 04/20/21 12:17 • (DUP) R3644507-3 04/20/21 12:17

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	92.2	90.8	1	1.51		10

Laboratory Control Sample (LCS)

(LCS) R3644507-2 04/20/21 12:17

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3643733-1 04/19/21 13:40

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Mercury,Dissolved	U		0.000100	0.000200

Laboratory Control Sample (LCS)

(LCS) R3643733-2 04/19/21 13:41

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury,Dissolved	0.00300	0.00288	96.1	80.0-120	

L1339512-18 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1339512-18 04/19/21 13:43 • (MS) R3643733-3 04/19/21 13:45 • (MSD) R3643733-4 04/19/21 13:47

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury,Dissolved	0.00300	U	0.00310	0.00321	103	107	1	75.0-125			3.60	20

L1339512-20 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1339512-20 04/19/21 13:49 • (MS) R3643733-5 04/19/21 13:51 • (MSD) R3643733-6 04/19/21 13:53

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury,Dissolved	0.00300	U	0.00298	0.00298	99.5	99.3	1	75.0-125			0.124	20

Method Blank (MB)

(MB) R3644803-1 04/21/21 17:47

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.0180	0.0400

Laboratory Control Sample (LCS)

(LCS) R3644803-2 04/21/21 17:49

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	0.500	0.519	104	80.0-120	

L1339512-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1339512-06 04/21/21 17:52 • (MS) R3644803-3 04/21/21 17:54 • (MSD) R3644803-4 04/21/21 17:57

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.608	0.0695	0.632	0.632	92.5	92.5	1	75.0-125			0.0269	20

Method Blank (MB)

(MB) R3644110-1 04/20/21 12:27

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.0180	0.0400

Laboratory Control Sample (LCS)

(LCS) R3644110-2 04/20/21 12:29

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	0.500	0.504	101	80.0-120	

L1340440-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1340440-12 04/20/21 12:32 • (MS) R3644110-3 04/20/21 12:35 • (MSD) R3644110-4 04/20/21 12:37

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.589	U	0.585	0.582	99.4	98.9	1	75.0-125			0.553	20

Method Blank (MB)

(MB) R3645477-1 04/23/21 00:51

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Aluminum	U		6.08	20.0
Antimony	U		0.544	2.00
Arsenic	U		0.518	2.00
Barium	U		0.0852	0.500
Cadmium	U		0.0471	0.500
Chromium	U		0.133	1.00
Copper	U		0.400	2.00
Lead	U		0.208	0.500
Nickel	U		0.132	2.00
Selenium	U		0.764	2.00
Silver	U		0.127	1.00
Zinc	U		0.832	5.00

Laboratory Control Sample (LCS)

(LCS) R3645477-2 04/23/21 00:53

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aluminum	1000	926	92.6	80.0-120	
Antimony	100	92.0	92.0	80.0-120	
Arsenic	100	91.7	91.7	80.0-120	
Barium	100	95.2	95.2	80.0-120	
Cadmium	100	90.6	90.6	80.0-120	
Chromium	100	91.6	91.6	80.0-120	
Copper	100	94.1	94.1	80.0-120	
Lead	100	90.3	90.3	80.0-120	
Nickel	100	92.7	92.7	80.0-120	
Selenium	100	94.0	94.0	80.0-120	
Silver	20.0	18.2	90.8	80.0-120	
Zinc	100	90.2	90.2	80.0-120	

L1339512-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1339512-06 04/23/21 00:56 • (MS) R3645477-5 04/23/21 01:04 • (MSD) R3645477-6 04/23/21 01:07

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aluminum	1220	26300	28700	30000	197	304	1	75.0-125	V	V	4.40	20
Antimony	122	U	41.3	41.4	34.0	34.0	1	75.0-125	J6	J6	0.132	20

L1339512-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1339512-06 04/23/21 00:56 • (MS) R3645477-5 04/23/21 01:04 • (MSD) R3645477-6 04/23/21 01:07

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	122	8.38	123	120	93.8	91.4	1	75.0-125			2.45	20
Barium	122	311	409	406	81.2	78.3	1	75.0-125			0.886	20
Cadmium	122	0.910	115	113	94.2	92.1	1	75.0-125			2.21	20
Chromium	122	30.6	144	141	93.1	90.6	1	75.0-125			2.14	20
Copper	122	37.3	156	156	97.9	97.9	1	75.0-125			0.0233	20
Lead	122	184	318	343	110	130	1	75.0-125		J5	7.57	20
Nickel	122	20.8	150	148	106	104	1	75.0-125			1.67	20
Selenium	122	U	116	115	95.2	94.6	1	75.0-125			0.681	20
Silver	24.3	0.421	23.8	23.6	96.0	95.5	1	75.0-125			0.581	20
Zinc	122	168	274	282	87.4	93.8	1	75.0-125			2.79	20

Method Blank (MB)

(MB) R3644730-1 04/21/21 14:35

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Aluminum,Dissolved	U		0.0561	0.200
Antimony,Dissolved	U		0.00430	0.0100
Arsenic,Dissolved	U		0.00440	0.0100
Barium,Dissolved	0.00153	J	0.000736	0.00500
Cadmium,Dissolved	U		0.000479	0.00200
Chromium,Dissolved	U		0.00140	0.0100
Copper,Dissolved	U		0.00368	0.0100
Lead,Dissolved	U		0.00299	0.00600
Nickel,Dissolved	U		0.00161	0.0100
Selenium,Dissolved	U		0.00735	0.0100
Silver,Dissolved	U		0.00154	0.00500
Zinc,Dissolved	U		0.00652	0.0500

Laboratory Control Sample (LCS)

(LCS) R3644730-2 04/21/21 14:38

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aluminum,Dissolved	10.0	10.2	102	80.0-120	
Antimony,Dissolved	1.00	0.967	96.7	80.0-120	
Arsenic,Dissolved	1.00	0.961	96.1	80.0-120	
Barium,Dissolved	1.00	0.994	99.4	80.0-120	
Cadmium,Dissolved	1.00	0.952	95.2	80.0-120	
Chromium,Dissolved	1.00	0.946	94.6	80.0-120	
Copper,Dissolved	1.00	0.947	94.7	80.0-120	
Lead,Dissolved	1.00	0.994	99.4	80.0-120	
Nickel,Dissolved	1.00	0.994	99.4	80.0-120	
Selenium,Dissolved	1.00	0.974	97.4	80.0-120	
Silver,Dissolved	0.200	0.195	97.6	80.0-120	
Zinc,Dissolved	1.00	0.995	99.5	80.0-120	

L1339512-18 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1339512-18 04/21/21 14:40 • (MS) R3644730-4 04/21/21 14:46 • (MSD) R3644730-5 04/21/21 14:48

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aluminum,Dissolved	10.0	0.0690	10.2	10.1	102	101	1	75.0-125			1.24	20
Antimony,Dissolved	1.00	0.00762	1.03	1.02	102	101	1	75.0-125			0.561	20
Arsenic,Dissolved	1.00	0.0178	1.03	1.03	101	101	1	75.0-125			0.241	20

L1339512-18 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1339512-18 04/21/21 14:40 • (MS) R3644730-4 04/21/21 14:46 • (MSD) R3644730-5 04/21/21 14:48

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Barium,Dissolved	1.00	0.124	1.11	1.10	98.5	97.7	1	75.0-125			0.744	20
Cadmium,Dissolved	1.00	U	0.983	0.976	98.3	97.6	1	75.0-125			0.660	20
Chromium,Dissolved	1.00	U	0.947	0.945	94.7	94.5	1	75.0-125			0.190	20
Copper,Dissolved	1.00	U	0.968	0.962	96.8	96.2	1	75.0-125			0.591	20
Lead,Dissolved	1.00	U	1.03	1.03	103	103	1	75.0-125			0.0335	20
Nickel,Dissolved	1.00	U	1.04	1.03	104	103	1	75.0-125			0.342	20
Selenium,Dissolved	1.00	U	1.03	1.03	103	103	1	75.0-125			0.618	20
Silver,Dissolved	0.200	U	0.201	0.199	100	99.6	1	75.0-125			0.744	20
Zinc,Dissolved	1.00	0.0188	1.03	1.02	101	100	1	75.0-125			0.552	20

Method Blank (MB)

(MB) R3646689-1 04/26/21 10:08

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Aluminum,Dissolved	U		0.0561	0.200
Antimony,Dissolved	U		0.00430	0.0100
Arsenic,Dissolved	0.00519	J	0.00440	0.0100
Barium,Dissolved	U		0.000736	0.00500
Cadmium,Dissolved	U		0.000479	0.00200
Chromium,Dissolved	U		0.00140	0.0100
Copper,Dissolved	U		0.00368	0.0100
Lead,Dissolved	U		0.00299	0.00600
Nickel,Dissolved	U		0.00161	0.0100
Selenium,Dissolved	U		0.00735	0.0100
Silver,Dissolved	U		0.00154	0.00500
Zinc,Dissolved	U		0.00652	0.0500

Laboratory Control Sample (LCS)

(LCS) R3646689-2 04/26/21 10:10

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aluminum,Dissolved	10.0	9.40	94.0	80.0-120	
Antimony,Dissolved	1.00	0.909	90.9	80.0-120	
Arsenic,Dissolved	1.00	0.901	90.1	80.0-120	
Barium,Dissolved	1.00	0.945	94.5	80.0-120	
Cadmium,Dissolved	1.00	0.898	89.8	80.0-120	
Chromium,Dissolved	1.00	0.912	91.2	80.0-120	
Copper,Dissolved	1.00	0.917	91.7	80.0-120	
Lead,Dissolved	1.00	0.906	90.6	80.0-120	
Nickel,Dissolved	1.00	0.924	92.4	80.0-120	
Selenium,Dissolved	1.00	0.923	92.3	80.0-120	
Silver,Dissolved	0.200	0.167	83.3	80.0-120	
Zinc,Dissolved	1.00	0.910	91.0	80.0-120	

L1339512-20 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1339512-20 04/26/21 10:13 • (MS) R3646689-4 04/26/21 10:18 • (MSD) R3646689-5 04/26/21 10:21

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aluminum,Dissolved	10.0	U	9.65	9.50	96.5	95.0	1	75.0-125			1.53	20
Antimony,Dissolved	1.00	U	0.930	0.930	93.0	93.0	1	75.0-125			0.0770	20
Arsenic,Dissolved	1.00	U	0.948	0.930	94.8	93.0	1	75.0-125			1.91	20

L1339512-20 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1339512-20 04/26/21 10:13 • (MS) R3646689-4 04/26/21 10:18 • (MSD) R3646689-5 04/26/21 10:21

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Barium,Dissolved	1.00	0.127	1.08	1.06	95.3	93.4	1	75.0-125			1.72	20
Cadmium,Dissolved	1.00	U	0.931	0.917	93.1	91.7	1	75.0-125			1.52	20
Chromium,Dissolved	1.00	0.00195	0.926	0.902	92.4	90.0	1	75.0-125			2.62	20
Copper,Dissolved	1.00	U	0.948	0.928	94.8	92.8	1	75.0-125			2.04	20
Lead,Dissolved	1.00	U	0.927	0.902	92.7	90.2	1	75.0-125			2.68	20
Nickel,Dissolved	1.00	0.00261	0.955	0.932	95.2	92.9	1	75.0-125			2.43	20
Selenium,Dissolved	1.00	U	0.982	0.960	98.2	96.0	1	75.0-125			2.25	20
Silver,Dissolved	0.200	U	0.173	0.169	86.7	84.6	1	75.0-125			2.49	20
Zinc,Dissolved	1.00	U	0.927	0.908	92.7	90.8	1	75.0-125			2.03	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
Geosyntec Consultants - UT

215 South State Street
Suite 500
Salt Lake City, UT 84111

Billing Information:
Accounts Payable
2100 Main Street
Suite 150
Huntington Beach, CA 92648

Pres Chk

Report to: David Harnsberger → SS-86

Email To: dharnsberger@geosyntec.com;bsmith@geosynt

Project Description: ~~Parcel 86~~ Baseline Assessment

City/State Collected: Park City, UT

Please Circle: PT MT CT ET

Phone: 801-448-3550

Client Project # ~~SLC1028~~ SLC1029

Lab Project # GEOCONSLCUT-RICHARD

Collected by (print): D. Harnsberger

Site/Facility ID # Parcel SS-86

P.O. #

Collected by (signature): D Harnsberger

Immediately Packed on Ice N (Y)

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote # 88010

Date Results Needed

No. of Cntrs

Analysis / Container / Preservative

MRCRA8Sb,Cu,Zn,Ni,Al 250mlHDPE-NoPres

MRCRA8Sb,Cu,Zn,Ni,Al 2ozClr-NoPres

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8Sb,Cu,Zn,Ni,Al 250mlHDPE-NoPres	MRCRA8Sb,Cu,Zn,Ni,Al 2ozClr-NoPres	Remarks	Sample # (lab only)
SS-01	G	SS	0-3	4/13/21	1000	1		X		-01
SS-02		SS			1040	1		X		-02
SS-03		SS			1120	1		X		-03
SS-04		SS			1600	1		X		-04
SS-05		SS			1100	1		X		-05
SS-06		SS			1520	X2		X	~~MS~~ MS/MSD Please	-06
SS-07		SS			1530	1		X		-07
SS-08		SS			1540	1		X		-08
SS-09		SS			1730	1		X		-09
SS-10		SS			1710	1		X		-10

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: Water samples must be filtered & HNO3 preserved. by the lab prior to analysis. pH _____ Temp _____ Flow _____ Other _____

Samples returned via: __ UPS __ FedEx __ Courier _____ SWA

Tracking #

Chain of Custody Page 1 of 3

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Road Mt Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # 135952

Table # M016

Acctnum: GEOCONSLCUT
Template: T185117
Prelogin: P840056
PM: 824 - Chris Ward
PB:

Shipped Via: FedEX Ground

Sample Receipt Checklist

COC Seal Present/Intact:	NP	Y N
COC Signed/Accurate:		Y N
Bottles arrive intact:		Y N
Correct bottles used:		Y N
Sufficient volume sent:		Y N
If Applicable		
VOA Zero Headspace:		Y N
Preservation Correct/Checked:		Y N
RAD Screen <0.5 mR/hr:		Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
D Harnsberger	4/14/21	1130		ADOT
Relinquished by : (Signature) PNSLCUT	Date: 4/14/21	Time: 17:00	Received by: (Signature)	Temp: 3.9+3=4.2 °C Bottles Received: 25
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) B. Barnes	Date: 4/15/21 Time: 0800

If preservation required by Login: Date/Time

Hold:

Condition NCF / OK

Company Name/Address:
Geosyntec Consultants - UT

215 South State Street
Suite 500
Salt Lake City. UT 84111

Billing Information:
Accounts Payable
2100 Main Street
Suite 150
Huntington Beach, CA 92648

Pres Chk

Report to: David Harnsberger → SS-86

Email To: dharnsberger@geosyntec.com;bsmith@geosynt

Project Description: ~~Parcel 86~~ Baseline Assessment

City/State Collected: Park City, UT

Please Circle: PT MT CT ET

Phone: 801-448-3550

Client Project # SLC1029 ~~SLC1028~~

Lab Project # GEOCONSLCUT-RICHARD

Collected by (print): D Harnsberger

Site/Facility ID # Parcel SS-86

P.O. #

Collected by (signature): D Harnsberger

Immediately Packed on Ice N (Y)

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote # 88010

Date Results Needed

No. of Cntrs

Analysis / Container / Preservative

MRCRA8Sb,Cu,Zn,Ni,Al 250mlHDPE ~~HNO3~~ NoPres

MRCRA8Sb,Cu,Zn,Ni,Al 2oz Clr-NoPres

Sample ID	Comp/Grab	Matrix *	Depth (inches bgs)	Date	Time	No. of Cntrs	MRCRA8Sb,Cu,Zn,Ni,Al 250mlHDPE ~~HNO3~~ NoPres	MRCRA8Sb,Cu,Zn,Ni,Al 2oz Clr-NoPres	Remarks	Sample # (lab only)
SS-11	G	SS	0-3	4/13/21	1650	1		X		-11
SS-12		SS			1630	1		X		-12
SS-13		SS			1720	1		X		-13
SS-14		SS			1700	1		X		-14
SS-44		SS			1000	1		X		-15
SS-66	G	SS	0-3	4/13/21	1522	1		X		-16
		SS				1		X		
		SS				1		X		
		SS				1		X		
SW-01	G	GW	NA	4/13/21	1620	1	X			-17

Chain of Custody Page 2 of 3

Pace Analytical® National Center for Testing & Innovation

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SDG # 133952

Table #

Acctnum: GEOCONSLCUT

Template: T185117

Prelogin: P840056

PM: 824 - Chris Ward

PB:

Shipped Via: FedEX Ground

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: Water samples should be lab filtered prior to analysis and HNO3 Preserved

pH _____ Temp _____

Flow _____ Other _____

Samples returned via: __ UPS __ FedEx __ Courier _____ SWA

Tracking #

Sample Receipt Checklist

COC Seal Present/Intact:	NP	Y N
COC Signed/Accurate:		Y N
Bottles arrive intact:		Y N
Correct bottles used:		Y N
Sufficient volume sent:		Y N
If Applicable		
VOA Zero Headspace:		Y N
Preservation Correct/Checked:		Y N
RAD Screen <0.5 mR/hr:		Y N

4/15

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes (No) HCL / MeoH TBR	
D Harnsberger	4/14/21	1130			
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.9+.3=4.2 °C	Bottles Received: 25
PNBLCUT	4/14/21	17:00			
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 4/15/21	Time: 0800
			B. Barnes		

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Company Name/Address:
Geosyntec Consultants - UT

215 South State Street
Suite 500
Salt Lake City, UT 84111

Billing Information:
Accounts Payable
2100 Main Street
Suite 150
Huntington Beach, CA 92648

Pres Chk

Report to:
David Harnsberger → SS-86

Email To:
dharnsberger@geosyntec.com;bsmith@geosynt

Project Description:
Parcel ~~SS~~ Baseline Assessment

City/State Collected: Park City, UT

Please Circle: PT (MT) CT ET

Phone: 801-448-3550

Client Project # ~~SLC1029~~ ~~SLC1035~~

Lab Project # GEOCONSLCUT-RICHARD

Collected by (print): D. Harnsberger

Site/Facility ID # Parcel SS-86

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ (Y)

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote # 88010

Date Results Needed

No. of Cntrs

Analysis / Container / Preservative

MRCRA8Sb,Cu,Zn,Ni,Al 250mlHDPE-NoPres

MRCRA8Sb,Cu,Zn,Ni,Al 2oz Clr-NoPres

Sample ID	Comp/Grab	Matrix *	Depth (inches bgs)	Date	Time	No. of Cntrs	MRCRA8Sb,Cu,Zn,Ni,Al 250mlHDPE-NoPres	MRCRA8Sb,Cu,Zn,Ni,Al 2oz Clr-NoPres	Remarks	Sample # (lab only)
SW-02	G	GW	NA	4/13/21	1510	~~2~~ 1	X	MS/MSD Please		-18
SW-11		GW	NA		1622	1	X			-19
SB-01		GW	20-30		1150	1	X	MS/MSD Please		-20
SB-02		GW	24-72		1410	1	X			-21
SB-12		GW	24-72		1412	1	X			-22
GW-EB		GW	24-72		1420	1	X			-23
		GW				1	X			
		GW				1	X			
		GW				1	X			

Chain of Custody Page 3 of 3

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National Center for Testing & Innovation

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SDG # 1339512

Table #

Acctnum: GEOCONSLCUT

Template: T185117

Prelogin: P840056

PM: 824 - Chris Ward

PB:

Shipped Via: FedEX Ground

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: Water samples should be lab filtered prior to analysis and HNO3 Preserved.

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____ SWA

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: ✓NP __Y __N
COC Signed/Accurate: ✓Y __N
Bottles arrive intact: ✓Y __N
Correct bottles used: ✓Y __N
Sufficient volume sent: ✓Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: ✓Y __N
RAD Screen <0.5 mR/hr: ✓Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / (No) HCL / MeoH TBR	If preservation required by Login: Date/Time
D Harnsberger	4/14/21	1130			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.9+.3=4.2 °C Bottles Received: 25	
PNSLCUT	4/14/21	17:00			
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 4/15/21 Time: 0800	Hold: Condition: NCF / (OK)
			B. Barnes		