ADEQ Arizona Department of Environmental Quality

Clean Air, Safe Water
Healthy Land for Everyone

Preliminary Investigation Report Summary

6th Street and Birch Street
Cottonwood, Arizona
January 21, 2025

ADEQ completed a Preliminary Investigation (PI) Report for the 6th Street and Birch Street Site (the Site) located in Cottonwood, Arizona. The PI was conducted through the Water Quality Assurance Revolving Fund (WQARF) program, which supports ADEQ in identifying, prioritizing, assessing and resolving the threat of contaminated soil and groundwater areas in the state. This PI report describes the information gathered about the Site and the fieldwork conducted, and presents ADEQ's findings and recommendations.

In December 2023, the WQARF program learned of a possible release of heavy metals in the area of the Minerals Research, Inc. (MRI) facility in Cottonwood. If a potential release has occurred and no other regulatory program has jurisdiction, a WQARF PI may be initiated. The purpose of the PI is to confirm the release or potential release and determine whether further investigation or action is necessary. The PI is not a full investigation to determine the extent of contamination, nor is its purpose to identify the parties potentially responsible for the release.

The Site area is a mix of residential, commercial, and light industry, and includes parks and other public places. The Site area is also a known historical mining area and soil and rocks in the area have high metal concentrations that occur naturally in the local geology. The Site area includes a former smelter and the MRI slag processing facility, which manufactures a variety of products used for roofing, pavement and other applications. The slag MRI is processing is a waste product resulting from historical smelting of metal ores from local mines and has been in its current location for over 100 years. Test results of the slag that MRI provided to ADEQ show that the slag contains heavy metals including arsenic.

The PI for the Site area focused on potential impacts to soil and groundwater associated with the slag pile located at the MRI facility and the former smelter operations in the surrounding area. In addition to reviewing available historical reports and environmental data regarding operations and activities in the area of the MRI facility, the PI included collecting soil and groundwater samples in the field for laboratory testing. During March and June 2024, ADEQ collected and tested soil and groundwater samples from properties and wells that allowed ADEQ access to conduct sampling.

Sampling and Testing

Slag

- ADEQ tested two samples of crushed slag from MRI using a technology called X-Ray Fluorescence (XRF), a handheld device that uses X-rays to give real-time, approximate readings of what metals are present, and sent one slag sample to a state-certified laboratory to undergo testing to determine actual metal concentrations.

Groundwater

- ADEQ collected and tested groundwater samples from 17 wells (7 private, 5 City, and 5 monitor wells) for 11 metals.

Soil

- ADEQ tested 704 surface soil samples in the Site area for up to 27 heavy metals using XRF. ADEQ sent about 10 ten percent of these soil samples to a state-certified laboratory to undergo testing to determine actual metal concentrations.
- Arizona soil contains many naturally occurring metals. To understand what the naturally occurring, otherwise known as "natural background" metal concentrations in the soils are, ADEQ conducted an additional 65 XRF soil tests outside of the Site area, and sent seven of these soil samples to a state-certified laboratory to undergo testing to determine actual metal concentrations.

The soil sampling results revealed three types of metals data: one similar to the slag, one similar to natural background levels, and one with higher metal levels than natural background, but different from the slag.

Findings & Recommendations

- Groundwater tests confirmed that no heavy metals were above regulatory standards in City or private wells, and that the Site area is not impacting groundwater quality.
- XRF soil tests showed multiple heavy metals at levels higher than Arizona's residential cleanup standards, which are known as Soil Remediation Levels (SRLs). Arsenic was the most widespread metal found at levels higher than the SRL – both in the Site area and in the background or off-Site area. With the exception of arsenic, all heavy metals found higher than SRLs were located on non-residential properties.

Based on these PI test results, ADEQ determined that additional soil sample collection and laboratory testing is needed to determine natural background metals concentrations and what actions may be needed at the Site area. ADEQ has identified ten focus areas in the Site area to conduct this additional work. ADEQ is also going to take additional samples for background that will be analyzed in a fixed based laboratory. All additional sampling will include aluminum. Following the completion of the additional soil sample collection and laboratory testing, an addendum to this PI report will be prepared and shared with the public.

PRELIMINARY INVESTIGATION REPORT
6TH STREET AND BIRCH STREET
COTTONWOOD, ARIZONA

January, 2025

ADEQ Arizona Department of Environmental Quality

Clean Air, Safe Water, Healthy Land for Everyone

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Acronyms

AAC	Arizona Administrative Code
ADEQ	Arizona Department of Environmental Quality
ARS	Arizona Revised Statues
bgs	below ground surface
MCL	Maximum Contaminant Level
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MRI	Mineral Research, Inc.
PI	Preliminary Investigation
SRL	Soil Remediation Level
USEPA	United States Environmental Protection Agency
WQARF	Water Quality Assurance Revolving Fund
XRF	X-Ray Fluorescence

1.0 INTRODUCTION

1.1 Site Location

The 6th Street and Birch Street Preliminary Investigation (PI) Site (the Site) is located in the area of 6th Street and Birch Street, in Cottonwood, Arizona (Figure 1). The area of the PI is generally bounded by East Mingus Avenue to the north, East Date Street to the south, South Willard Street to the west, and South 14th Street to the east.

The area is a mix of residential, commercial, and light industry. The Valley Verde Fairgrounds and the Valley Verde Senior Center are located near the center of the Site, with the Cottonwood Kids Park towards the east. The area to the northwest includes the Cottonwood Recreation Center, the Cottonwood Public Library, and Garrison Park. Cottonwood Community School is located to the north of the Site. The Valley Verde Medical Center lies to the west of the Site, and the Cottonwood Airport to the west and southwest. Residential properties are located in the south, north, northeast and western portions of the Site.

1.2 Objective

The purpose of a Water Quality Assurance Revolving Fund (WQARF) PI is to determine if a site should be added to the WQARF Registry. Pursuant to Arizona Administrative Code (AAC) R18-16-201(D), the WQARF PI is a screening level investigation based primarily upon existing information. If sufficient information does not exist to complete the WQARF PI, additional field data may be collected. The objective of this PI Report is to summarize the available Site information and fieldwork conducted to provide the Arizona Department of Environmental Quality (ADEQ) with sufficient information to determine if further action or investigation is needed, if no further action or investigation is needed, or if the site should be scored under Arizona Revised Statues (ARS) 49-287.01(B) through (C) and AAC R18-16-202.

2.0 SITE CONDITIONS

2.1. Site Background

In December 2023, ADEQ Air Quality Division notified the WQARF program of a possible release of heavy metals from air deposition in the area of the Mineral Research, Inc. (MRI) facility in Cottonwood. The MRI facility operates a slag crushing-recycling facility (Place ID 137664) at 705 East Birch Street, Cottonwood, Arizona. Multiple residents in the area had notified the Air Quality Division of possible releases to the surrounding area.

Laboratory analytical results of the slag provided by MRI to ADEQ showed concentrations of arsenic, copper, and zinc (Appendix A). Arsenic was reported ranging from 73 to 129 milligrams per kilogram (mg/kg), copper from 1,200 to 1,400mg/kg, and zinc from 3,090 to-– 3,100 mg/kg. Of these, only arsenic exceeded its residential and non-residential Soil Remediation Level (SRL) of 10 mg/kg in the slag sample provided by MRI.

2.2. Potential Source Areas

The slag pile located in Cottonwood was the result of historical metal smelting as well as processing ores mined from the area, and has been in its current location for over 100 years (Figure 2). The slag originated from the United Verde Extension smelter at Clemenceau (Verde Valley Independent, 2023), which is now located within the City of Cottonwood city boundaries.

The United Verde Extension smelter was reportedly in operation from 1918 to 1936 (Arizona Daily Star, 2008). Other sources state that construction of the smelter started in 1917, and operations continued to 1937 (Verde Valley Independent, 2022). The town of Cottonwood subsequently expanded to encompass the Clemenceau area, and various smelter buildings that were not dismantled were turned to other uses (Verde Valley, 2022). According to the Clemenceau Heritage Museum, buildings still in existence include:

- The former ore bins, now commercial shops at 516 Arizona 89A;
- The former machine shop, now the Verde Valley Senior Center at 500 East Cherry Street;
- The former offices and dormitories, now buildings associated with the non-profit Y.E.S. The Arc at 417 South Willard Street; and
- The former residences of the smelters' master engineer and superintendent, now a residence (333 South Willard Street) and the Pillsbury Wine Company Tasting Room (315 South Willard Street).

The former smelter stack was located on the hill to the south of what is now Arizona 89A, just east of a church (Figure 2, Clemenceau Heritage Museum representative, personal communication, January 9 2024).

In approximately 2014, the MRI facility began crushing the slag into aggregate for sale. According to ADEQ records, starting in 2017 residents started lodging complaints with ADEQ that a dark colored dust was being observed offsite of the facility (ADEQ, 2017).

2.3 Hydrogeologic Conditions

The Site is located in the Verde Valley in the mountainous transition between the Colorado Plateau Province to the northeast and the Basin and Range Province to the southwest. The geological description of the area is based on boring logs from monitor well installation at the Highway 260 and Main Street WQARF site, which is located downgradient of the Site, approximately 0.5 miles to the east. Additional geological information was obtained from the descriptive guide prepared by the Arizona Geological Survey on the Geologic Map of the Cottonwood 7.5' Quadrangle, Yavapai County, Arizona (Figure 3; House et al, 2019).

In general, the geology at the Site is classified as Piedmont Unit terrace deposits Qi_2 and Qi_4, composed of unconsolidated sand, gravel, and silt, extending approximately 65 feet (ft) below ground surface (bgs). The Piedmont Unit is underlain by a heavily weathered and fractured mudstone of the Verde Formation, with heavily fractured limestone and diatomite beds that are five to 10 ft thick. The Verde Formation is underlain by interbedded mudstone, limestone, and diatomite beds of varying thickness that are gradually less fractured at depth to about 175 ft bgs, which is the deepest boring completed at the Highway 260 and Main Street WQARF site (Matrix-Calibre, 2021). Numerous municipal and private wells are completed in the deeper bedrock zone in the area indicating the bedrock is sufficiently fractured to transmit groundwater.

The surficial geology shows erosional drainage features from the southwest to the northeast towards the Verde River. The former smelter stack was located on top of an outcropping of the Verde Formation (including T_{vl} overlain by the Q_o unit) which is visible on Willard Lane/Highway 89A.. The tailings from the former smelter also appear on the Arizona Geological Survey Geologic Map of the area (Figure 3).

The Arizona Department of Water Resources (ADWR) shows records of 37 wells in the immediate area around the site (Table 1; ADWR, 2024). Of these wells, four are listed as monitoring wells, and four are listed as "Other" wells, which is a designation typically given to boreholes where no permanent well was installed. An additional four wells that appeared to be within the Site based on the ADWR cadastral location were determined to be located outside of the Site area.

Of the remaining 25 wells, 17 are listed as exempt and eight as non-exempt. Six of the non-exempt wells are listed as owned by the City of Cottonwood (discussed below), one by the Cottonwood Oak Creek School District (55-633416), and one by Mingus Land Co. The location of the well owned by Mingus Land Co. could not be field verified.

Two City of Cottonwood wells are located adjacent to the smelter slag pile (Figure 4). Well 55-609078 was drilled in 1920 to a depth of 1,250 ft bgs. Due to the date drilled, it is likely that this well was originally a supply well for the former smelter. Well 55-609075 was installed in 1972, to a depth of 630 feet bgs. A third City of Cottonwood well, 55-560414, is located near the former smelter stack. The water from all

three wells undergoes arsenic treatment by the City before delivery to customers. Two additional City wells located in the area of Cottonwood Kids Park are not used for drinking water: 55-227884 is identified as a former injection well for the City and 55-604220 is used for irrigation water for the park. The sixth well registered to the City, 55-609077, was not known of by the City and could not be located in the field.

Of the 17 exempt wells, six locations were field verified and the owners granted access for sampling (Table 1). All of these wells are privately owned.

In addition to these wells found through ADWR, ADEQ has multiple monitoring wells located downgradient of the Site that are part of the northern area of the Highway 260 and Main Street WQARF site groundwater monitoring network. Five monitoring wells from the WQARF Site were included in sampling for this PI (Table 2). Since the contaminants of concern at the WQARF site are chlorinated solvents, no metals analysis had been performed. Depth to groundwater measured in the area of the Site during the PI ranged from approximately 132 to 170 ft bgs.

3.0 HISTORICAL CONTAMINANT RELEASE

3.1 Historical Soil Contamination

No historical metal analysis for soils in the area of the Site were found.

3.2 Historical Groundwater Concentrations

ADEQ obtained laboratory analytical results of arsenic from City of Cottonwood wells 55-609075 and 55-609078 for the time period of March 1994 to April 2010 (Table 3; ADEQ, 2024). Arsenic concentrations from these wells ranged from 0.0078 milligrams per liter (mg/L) in January 2010 to 0.018 mg/L in June 2008. Historical laboratory results from the City of Cottonwood wells indicates that naturally occurring arsenic may be present in area groundwater. These results do not represent concentrations in delivered water, as the City of Cottonwood wells all have arsenic treatment systems in place to ensure arsenic levels in water served meet all regulatory standards. Results obtained for the City of Cottonwood system over the last five years (2019 to 2024) show arsenic levels after treatment range from <0.002 to 0.0026 mg/L.

One water quality sample was provided by a member of the community (Appendix A). The sample was collected from a bathroom sink in a building connected to the City of Cottonwood water supply. None of the constituents included in the analysis exceeded the respective USEPA's Maximum Contaminant Level (MCL) in this sample. Laboratory analytical results reported arsenic at 0.006 mg/L, below its MCL of 0.010 mg/L.

3.3 Historical Surface Water Contamination

No historical metal analysis for surface water were found. The Verde River is located approximately 1.6 miles north and 1.0 mile east of the Site, outside of the PI Site boundary.

3.4 Other Samples

Concerned citizens provided ADEQ with results of analyses of dust samples they had collected in the area of the Site (Appendix A). Methods of sample collection are unknown, and method of analysis for one set of sample results provided was by a medical laboratory using a method meant for blood samples and not environmental analysis.

In the dust sample analyzed by Doctor's Data laboratory using a non-EPA certified method, arsenic was detected at 200 mg/kg (reported as 200,000 nanograms per gram (ng/g) due to the units used). Copper was reported at 2,200 mg/kg, and zinc at 6,100 mg/kg. Other metals included iron at 51,000 mg/kg and aluminum at 3,500 mg/kg.

In the dust sample analyzed by Eurofins laboratory using EPA method 6010C, arsenic was detected at 230 mg/kg, copper was detected at 2,700 mg/kg, and zinc at 8,800 mg/kg. Aluminum was also detected at 5,700 mg/kg. Iron was not included in the analyte list.

As discussed above in Section 2.1, the laboratory results of slag samples provided by MRI contained arsenic, copper, and zinc, with only arsenic over its SRL (Appendix A).

4.0 FIELD WORK

4.1 Description of Work

4.1.1 Soil sampling – March 2024

The sampling locations were determined based on proximity to the former smelter and current operations, and by those properties which granted access (Figures 5a through 5e). Samples were also collected along stormwater pathways, based on local resident input and in-field observations of the field crew. A total of 584 samples were collected via X-Ray Fluorescence (XRF) in these locations. Two additional sample locations were samples of the processed slag materials provided by the facility (March Sample IDs 91 and 93; Table 4a). The 26 metals analyzed in March via XRF analysis were antimony, arsenic, barium, cadmium, calcium, chlorine, chromium (total), cobalt, copper, iron, lead, manganese, mercury, molybdenum, nickel, phosphorous, potassium, rubidium, selenium, silver, strontium, sulfur, tin, titanium, zinc, and zirconium (Table 4a). The determination of metals included in analysis were guided by results of slag samples obtained from MRI, the samples results citizens previously provided to ADEQ, and with the ADEQ consultant recommendations for the Site; however, aluminum was inadvertently left off the analysis list.

The XRF used was a hand-held Olympus Delta Professional XRF Analyzer. An initial calibration and blank standard test were performed prior to the start of the fieldwork. Thereafter, XRF calibration and blank tests were performed between XRF readings at each parcel and after approximately every 20 readings.

A total of 63 confirmatory soil samples for metals analysis by a state-certified laboratory were collected at approximately 10 percent of XRF measurement points (location denoted on Figures 5a through 5e). In addition, as XRF only reads total chromium, soil samples were also collected for hexavalent chromium analysis. These sample locations were chosen at random and at locations where total chromium XRF readings exceeded the SRL for hexavalent chromium of 30 mg/kg. This was done to ensure the chromium detected was not in the hexavalent form. A total of 29 samples were collected for hexavalent chromium analysis, with 14 of these samples collected at shared locations with confirmatory samples. Surface soils were collected from the upper two to three inches of soil using a hand trowel which was decontaminated after collecting each sample using deionized water and an alcohol wipe. The soil samples were placed into laboratory-supplied jars and immediately stored on ice.

Samples of the processed slag material were provided by the MRI facility. One sample was collected by MRI staff directly from the packing line chute within the facility and provided to ADEQ in a resealable plastic bag. A second sample was provided in the form of a freshly opened product bag, after concerns were raised by MRI that there was not enough material for XRF analysis in the first provided sample. Each bag was then opened by ADEQ, analyzed via XRF, then a sample for the laboratory was collected in the same manner as the soil samples above. These are identified as March Sample IDs 91 and 93, respectively. A sample collected from sample ID March 91 was also laboratory analyzed for hexavalent chromium.

An initial background area was selected due to being of similar geology to the Site (Figure 3), crosswind of the typical wind direction in the area, and separated from the Site by a change in elevation. XRF readings were collected from a total of 35 sample locations in this area to help determine background screening level concentrations for metals. The sample locations were in an area east of Mingus Road near Happy Jack Way (Figure 5e). The same sampling procedures were used as above, including collection of approximately 10% confirmation samples for laboratory analysis, resulting in two laboratory confirmation samples and two samples analyzed for hexavalent chromium.

A total of 65 confirmation soil samples and two slag samples were submitted under chain-of-custody procedures to state-certified Pace Analytical (Mt. Juliet, Tennessee). All samples were analyzed by United States Environmental Protection Agency (USEPA) Method 6010D/6020B for 13 metals (antimony, arsenic, barium, cadmium, copper, iron, lead, manganese, nickel, silver, thallium, zinc and uranium). A total of 31 soil samples and one slag sample were submitted to the laboratory for analysis of Cr(VI) using USEPA Method 7199.

4.1.2 Soil sampling – June 2024

An additional 120 XRF samples were collected in the west and south areas of the Site due to a lack of coverage in the initial sampling (Figures 5a and d). Due to XRF instrument availability, the XRF instrument used during this sampling was an Olympus Vanta C Series XRF analyzer. This XRF instrument measured 27 metals, specifically antimony, arsenic, barium, cadmium, calcium, chlorine, chromium (total), cobalt, copper, iron, lead, manganese, mercury, molybdenum, nickel, phosphorous, rubidium, selenium, silver, strontium, sulfur, tin, thallium, titanium, uranium, zinc, zirconium (Table 4b). Thallium and uranium were included with the June XRF results, and potassium was excluded due to the difference in XRF instruments.

As with the March sampling, approximately 10% confirmatory laboratory samples were also collected, resulting in a total of 11 soil samples being sent to the state-certified laboratory under chain-of-custody procedures for analysis. The sample collection methodologies were the same as outlined above, and the samples were analyzed for the same 13 metals (antimony, arsenic, barium, cadmium, copper, iron, lead, manganese, nickel, silver, thallium, zinc and uranium) using the same analysis methods. No samples were collected for hexavalent chromium during this sampling event, as the March sampling event showed the highest hexavalent chromium detection was 1.38 mg/kg, below the residential SRL of 35 mg/kg. As with the March sampling event, aluminum was still inadvertently left off the analysis list.

A total of 30 additional XRF samples were also collected in a second background area southwest of the Site, on the west side of Mingus Avenue, in the area of Mesquite Hills Drive (Figure 5f). These additional samples were collected due to concerns raised of other possible anthropogenic sources effecting the results in the initial background area selected. Five confirmation soil samples were also collected in the background area and sent to the state-certified laboratory under chain-of-custody procedures for analysis, using the procedures and methodologies above.

4.4.2 Groundwater sampling

Between March 20 and March 29, 2024, groundwater samples were collected from a total of 17 wells, seven private, five City, and five monitor wells. At wells 55-227884 and 55-225609 and at all monitoring

wells, fluid levels were measured from the top of the well casing using a water level sounder. Groundwater samples were collected from wells with dedicated pumps through an existing sampling port or spigot (Table 5). Private wells with dedicated pumps were purged and then samples were collected, before the pressure tank where possible. City wells were constantly running during the sampling and did not require purging.

For wells with no dedicated pump, samples were collected by Hydrasleeve™ (Table 5). Samplers were deployed using a tether set to collect the groundwater sample from approximately five feet below the water surface, as measured by the water level indicator. All groundwater samples were field-filtered using a 0.45 micrometer filter, then placed into 250 milliliter laboratory-supplied bottles, stored on ice, and shipped to the state-certified laboratory under chain-of-custody procedures for analysis using UEPA Method 6010D. All samples were laboratory analyzed for eleven dissolved metals (antimony, arsenic, barium, cadmium, copper, iron, lead, manganese, nickel, silver, and zinc).

4.1.3 Field observations during sampling

The location where sample IDs March 52 through 67 and 214 through 217 were collected had an observed black gravel at the property, which was located adjacent to and west of the MRI facility (Figure 5a). The owner of the property indicated to ADEQ staff that they had purchased crushed slag from MRI to use as gravel on their lot (Appendix B, Photos 8-10). The surficial gravel was scraped off to expose native soil at each sample location, but residual gravel may have remained mixed with the soil and been detected by the XRF measurements.

The VFW property, located north of the MRI facility, was observed to have dark coloring staining the gravel of their parking lot (Appendix B, Photos 12-15). Samples collected in the area of the staining were March 75 through 77 and 357 (Figure 5a). The VFW property was also observed to have residents living in several motor homes on the southeast side of the property.

The former smelter stack property, located on the hill south of what is now Arizona 89A between South Willard Street and South Sixth Street, had former stack materials still in evidence (Appendix B, Photos 19-21). Sample ID March 113 (Figure 5d) was collected in the area with the largest amount of former stack materials. Some human and bicycle tracks were observed on the former smelter stack hill, and recent trash debris were observed, indicating this area is accessed by trespassers. Samples IDs March 129 and 130 were collected along the bicycle tracks.

Storm water flow was observed to travel down Aspen Street to the east, then through a drainage area owned by the City, north towards East Mingus Avenue (Figure 4). A stormwater channel was also observed south of the Site near Arizona 89A and Cottonwood Street that traveled east across Main Street, towards the Verde river (Figure 4).

4.2 Sampling Results

4.2.1 Soil Sampling

XRF soil sample results indicated multiple metals exceeding Arizona SRLs across the Site (Tables 4a and b). Constituents with exceedances of residential SRLs in the XRF results included arsenic, copper, zinc, cadmium, selenium, cadmium, antimony, mercury, lead, and manganese.

Some metals that XRF sample results indicated were above SRLs were shown in laboratory samples to be present only at very low concentrations (Table 6). These constituents, namely antimony, thallium, and uranium, are not well detected at lower levels by XRF, as interferences from other signals within the soil can create false positive detections. Therefore, the laboratory samples indicate these constituents are likely not present at high concentrations at the Site.

Laboratory confirmation samples had elevated levels of arsenic, cadmium, copper, lead, and manganese (Table 6). Comparison to the XRF data showed the XRF results were normally higher than laboratory results (Table 7). Therefore, the XRF results can be used as a screening tool, as they are more conservative and delineate a wider area for further investigation than laboratory samples alone. Correlation analysis of the laboratory and XRF data is discussed in Section 5.2.

The most extensive metal detected above SRLs was arsenic, with widespread results above its SRL of 10 mg/kg, including in background area samples. While arsenic is naturally occurring in soils in the region, arsenic was also detected at levels above the calculated screening level concentrations (see Section 5.1) in multiple locations (Figure 6a). Arsenic values ranged from less than detection to 6,266 mg/kg in soils across the Site area.

Copper was detected above residential SRLs in the two slag samples (location IDs March 91 and 93), and in five samples on two properties; the property with slag gravel (sample IDs March 58 and 64), and near the former smelter stack (sample IDs March 113, 134 and 135, Figure 6b). All of these properties are non-residential and there were no detections above the non-residential SRLs. No samples collected on residential properties had copper concentrations that exceeded residential regulatory levels.

Cadmium was detected by XRF at six sample locations above residential SRLs (Figure 6c). The two highest results (sample IDs March 113 and 135) were near the former smelter stack location, and the four others on ROW or City properties (sample IDs March 230, 318, 457, and June 5). No laboratory samples contained cadmium above residential or non-residential SRLs.

Manganese was detected in two XRF samples (sample ID March 99 and June 66) and one laboratory sample (sample ID 0328#52, location March 472) above its residential SRL of 3,300 mg/kg, with levels ranging from 18 to 8,358 mg/kg in soils across the Site. The three locations were in the general area where former smelter operations may have occurred; however, manganese was not present in elevated concentrations in the slag samples or near the former smelter stack. In addition, the samples were collected from non-residential properties and there were no exceedances of the non-residential SRL for

manganese. No samples collected on residential properties had manganese concentrations that exceeded residential regulatory levels.

Zinc was detected above its residential SRL of 23,000 mg/kg in one processed slag sample (sample ID March 91), in the one sample collected near the MRI facility (sample ID March 92), and in samples on the property with observable slag gravel (sample IDs March 58 and 60). These properties are all non-residential, and zinc did not exceed its non-residential standard. No samples collected on residential properties had zinc concentrations that exceeded residential regulatory levels.

One sample collected near the former smelter stack detected lead, selenium and mercury exceeding SRLs, along with previously discussed metals above (sample ID March 113; Figure 6f).

- Lead was reported at 3,537 mg/kg in the XRF sample, above the non-residential SRL for lead of 800 mg/kg. However, the laboratory confirmation sample reported lead in this sample location at 651 mg/kg, which is below the non-residential SRL but above the residential SRL of 400 mg/kg.
- Selenium was detected at 595 mg/kg by XRF which is above the residential SRL of 390 mg/kg but below the non-residential SRL of 5,100 mg/kg.
- Mercury was detected by XRF at 183 mg/kg, which is above the residential SRL of 23 mg/kg, but below the non-residential SRL of 310 mg/kg.

No other sample locations contained lead that exceeded SRLs. This was the only sample location with selenium and mercury present above the method of detection for XRF.

Hexavalent chromium was not detected above the residential SRL of 30 mg/kg anywhere at the Site. The highest concentration detected was 1.38 mg/kg (sample ID March 382), indicating that the majority of the 126 mg/kg total chromium detected in that sample via XRF was in trivalent chromium form (Table 7).

Background Area Sample Results

A total of 65 samples were collected in the background area in March and June near Mingus Road. Due to concerns raised of possible anthropogenic influences in the first background location, an analysis of the data in the two background areas was conducted. This analysis did not show any statistical differences in the results between the two areas, so data from both areas were pooled together.

In the background areas (sample location IDs March 165 through 199 and June 98 through 127), arsenic, antimony, cadmium, manganese, and uranium were detected above SRLs via XRF. As mentioned above, uranium and thallium detections were likely false positives due to matrix interferences with the XRF and were likely not present.

Arsenic concentrations in these background areas ranged from less than method detection limits to 303 mg/kg in the XRF results. Of the 65 background area locations, 50 of these were equal to or exceeded the residential and non-residential SRL of 10 mg/kg in XRF results. Laboratory results had arsenic detections ranging from 7.3 to 24.5 mg/kg, with five of the seven sample results exceeding SRLs. See section 5.1 for discussion of the XRF arsenic background area screening level data analysis.

Antimony in background samples ranged from less than method detection to 96 mg/kg in the XRF results. Four out of the 65 locations exceeded the residential SRL of 39 mg/kg. The laboratory results showed antimony ranging from 0.83 to 1.80 mg/kg, all below the SRLs. Because none of the laboratory background samples exceeded the SRLs, no background screening level number for antimony was calculated for this report.

Cadmium was detected in the background areas ranging from less than detection limits to 64 mg/kg in XRF results. Four out of the 65 locations exceeded the residential SRL of 39 mg/kg. The laboratory results showed cadmium ranging from 0.0846 to 3.11 mg/kg, all below the SRLs. Because none of the laboratory background samples exceeded the SRLs, no background screening level number for cadmium was calculated for this report.

Manganese ranged from 210 to 5,456 mg/kg in the XRF results in the background areas. One of these samples, location ID June 117, exceeded the residential SRL of 3,300 mg/kg. Laboratory sample results detected manganese ranging from 235 to 541 mg/kg, all below SRLs. Because none of the laboratory samples exceeded the SRLs, no background screening level number for manganese was calculated for this report.

4.2.2 Groundwater Sampling

Depth to groundwater in the two wells on the Site were measured at 135.56 (55-604220) and 173.57 (55-225609) ft below the top of the casing. Both wells had a casing that extended approximately three feet above the ground surface, meaning depth to groundwater was approximately 132 and 170 feet bgs, respectively.

Laboratory analyses determined that metals detected in production and private wells did not exceed the AWQS, with the exception of antimony (Table 5). Antimony exceeded its AWQS of 6 milligrams per liter (mg/L) in one deep monitoring well (NW-8D), at a concentration of 6.94 mg/L. Due to the distance from the Site and the lack of other detections, it is unlikely that this detection is related to the Site.

Laboratory analyses determined that arsenic was not detected above the AWQS of 50 µg/L in any of the wells sampled. Arsenic concentrations did exceed the USEPA's MCL of 10 mg/L in six production wells and one monitoring well (Table 5). The highest concentration of arsenic detected was 22.8 mg/L in the sample from ADWR # 55-600512. These data indicate that the arsenic detections in groundwater are from naturally occurring metals in the aquifer materials, and not from a source at the surface infiltrating down.

The City of Cottonwood production wells have arsenic treatment systems installed to ensure the delivered City water meets the regulatory standards. All sample results were provided to the private well owners. Private wells are the responsibility of the well owner and are not regulated by ADEQ.

5.0 Discussion of Soil Results

5.1 Screening Level Concentration Determination

Screening level concentrations of arsenic were calculated using the XRF data to help determine where the Site may have concentrations over the XRF sample data collected in the background areas. The methods used were the same as allowed for by ACC R18-7-204 for establishing background standards, namely by using site-specific historical information on land use, site-specific sampling of soils unaffected by the release but having similar characteristics as the site, and by using statistical analysis of the background concentrations using the 95th percentile Upper Confidence Limit (UCL).

All XRF background area readings except one were used to help determine an XRF background screening level concentration for the Site by determining the 95th percentile UCL. This is the statistically determined number under which 95% of the background area XRF concentrations would fall. The UCL for the XRF samples were calculated using the statistical analysis tool ProUCL v5.2 (USEPA, 2022). ProUCL is a comprehensive statistical software package initially developed by the USEPA for computing confidence, prediction, and tolerance intervals and upper limits to respond to concerns at a specific site. ProUCL is used to establish background levels and exposure point concentrations, determine outliers in data sets, and compare background and site sample data sets for site evaluation and risk assessments. Using ProUCL, 95th percentile bootstrap calculations with 95% coverage was selected to determine the UCL for arsenic for the Site. The highest arsenic concentration of 303 mg/kg was excluded from the statistical analysis of the background area data as an outlier.

Based on the XRF data from the background data sets, the 95% UCL for arsenic was calculated at 57 mg/Kg. This ensured that there is 95% confidence that 95% percent of background area arsenic soil concentrations for the XRF data are below the resulting value of 57 mg/kg. Due to the variability in the data and comparison to confirmation laboratory samples, this value is not considered a cleanup value, but a screening level number by which areas can be delineated using XRF for more focused investigation.

5.2 XRF Results Comparison to Laboratory Results

In approximately 10% of the XRF sample locations, soil samples were also collected and sent to the laboratory for confirmation analyses. Samples were submitted for laboratory analysis to help determine the accuracy and precision of the field XRF readings. The XRF can be affected by various factors, including variability in soil particle size and moisture content, element interferences, and the weather.

The relationship between XRF and laboratory soil concentrations was highly variable and dependent on the metal and the type of sample. As discussed above, antimony, thallium, and uranium were detected above SRLs by XRF, but were shown to be only present at very low levels in the laboratory samples. With XRF, matrix interferences can cause poor accuracy at low detection levels for these metals, and therefore the laboratory analysis results are typically more accurate representations of concentrations in soil.

Regression model analysis was then applied to the remaining metals detected in both XRF and laboratory samples. These results indicated that especially in slag-affected materials, XRF tends to read higher than the laboratory analysis. In samples identified as slag affected (see Section 5.3), the XRF result could be three to five times greater than the laboratory result, while the background area and other sample XRF results are 1.5 to two times greater than the laboratory results.

As only a small number of background laboratory samples collected, statistical analysis on the laboratory data alone could not be performed. Regression analysis between the XRF and laboratory data was then prepared to determine possible screening level values for arsenic in laboratory samples. The resulting estimated laboratory sample UCLs are 37.8 mg/kg for arsenic, with a 95% prediction interval of 26.3 to 49.2 mg/kg. The large variability this number illustrates high uncertainty from the XRF-laboratory sample regression. Therefore, to establish a true laboratory sample background number for the Site, additional background and Site location laboratory samples would be needed to establish an accurate laboratory 95% UCL that could be used as a site-specific background concentration.

5.3 Signal Analysis

In an initial statistical cluster analysis using gaussian mixture modelling, a signal clearly indicative of slag was determined due to the clustering of arsenic, copper, lead, iron, and zinc present in the site samples compared to the processed slag samples. Of the 704 XRF samples collected at the Site, 26 samples were found to be statistically indistinguishable from the samples of the slag.

To determine whether there was evidence of slag impacts in other samples across the Site, random forest cluster analysis was applied to the remaining samples. In the random forest analysis, 50 samples were found to have a high probability of slag contribution, and when these samples were plotted, were found to have a spatial pattern that is reasonably associated with the slag pile or the former smelter site. Combined with the 26 previously identified samples in the initial cluster analysis, there are a total of 76 samples at the Site that are likely affected by local slag processing operations (Figure 7).

There are also 29 samples not identified as slag affected by the above analyses, yet had arsenic concentrations above the calculated screening level of 57 mg/kg (Figure 7). These areas may be impacted by other former smelter operations, or other unknown anthropomorphic contributions.

Additional discussions of these signal locations are in Section 6.1.

6.0 CONCEPTUAL SITE MODEL

6.1 Potential Sources of Contamination

Statistical analysis of the data indicates that the elevated metal concentrations in the soil appear to have three distinct source signals (Figure 7):

- Background area: The area of Cottonwood is highly mineralized, with metals naturally occurring in the rocks and soils. While many of the metals are below their respective SRLs, arsenic was present above SRLs across the site, including background samples. Samples similar to the background area samples are denoted as a round symbol on Figure 7. The background area signal appears throughout the Site, and is not confined to any distinct area.

- Slag: While slag is typically inert due to its glass-like composition through vitrification in the smelting process, when processed and crushed, the material can then impact surrounding soils. With the processes occurring at this former slag pile, slag-associated metals may be spread through dust or run off from the slag processing area. Continued slag crushing operations may contribute heavy metals to areas currently at or below background concentrations. Samples that are similar to the slag samples are denoted with stars on Figure 7. The areas that show a distinct slag signal and are over the XRF arsenic screening level are:
    1. An area immediately north and northwest of the slag pile, including the property with the slag gravel and the VFW property;
    2. An area slightly further north that encompasses the eastern edge of the Cottonwood Police property and along Aspen Street;
    3. A small area to the west along Willard St;
    4. The former smelter stack hill;
    5. An area just south of the slag pile;
    6. A small area in a wash by Main Street.

    Two areas that remain below XRF arsenic screening level but are showing slag signals are along South 8th Place, and South 10th Place/Street area.

- The third signal could not be attributed to the background area or slag, and may be the result of former smelter operations and potentially the former smelter stack demolition. However, other anthropogenic sources could also not be ruled out. Samples of this type are denoted by triangles on Figure 7. The areas with this other signal above the XRF arsenic screening level are:

    1. Along Willard Street and in the area of former smelter buildings;
    2. On the former smelter stack hill and in the residential area to the south of the hill;
    3. One location in the Kids Park, near to the parking lot side; and
    4. A small area in a wash by Main Street.

While some of these areas may have become slag affected due to proximity to the historical pile and smelter operations, others can only be explained by airborne or stormwater transport of slag.

Soil sample results collected along stormwater flow paths did not indicate that metal-impacted soils are likely reaching or impacting surface water. However, slag signals detected along sampled drainage pathways at the Site indicate this may be a concern for the future.

The groundwater data indicate that the arsenic detections in groundwater are from naturally occurring metals in the aquifer materials, and not from a source at the surface infiltrating down. As heavy metals do not transport easily in typical Arizona soil conditions and groundwater is greater than 130 feet bgs, future impacts to groundwater from the slag pile would be unlikely.

6.2 Potential Exposure Pathways

Direct dermal exposure to the slag and soils contaminated with heavy metals over the background area concentrations is possible at the Site. Soils with heavy metals over the background area sample concentrations could also be incidentally ingested or inhaled by those living on or working in the area.

6.3 Potential Receptors

Receptors for the Site include people in the area where metals concentrations are elevated over the background area concentrations. These includes those using the VFW property, trespassers and workers on the hillslope of the former smelter stack property, the property where crushed slag was used as gravel, and potentially those using other areas shown on Figure 7 with metals concentrations over the arsenic screening level.

7.0 CONCLUSIONS AND RECOMMENDATIONS

The most extensive metal detected at the Site was arsenic. Arsenic was detected in XRF and laboratory samples across the entire Site and ranged from less than detection to 6,266 mg/kg. Out of 704 XRF samples analyzed, 493 samples were over the residential and non-residential SRL of 10 mg/kg for arsenic. Elevated arsenic concentrations were also detected in 50 of the 65 the background area samples, with a maximum concentration of 303 mg/kg in sample location ID June 118. The background sampling areas were selected to be outside of the area possibly impacted by the Site but in the same geologic materials as the Site.

Other metals detected over residential SRLs at the Site were copper (five samples), cadmium (six samples), manganese (three samples), and zinc (three samples). The metals uranium, antimony, and thallium were also reported by XRF as being over SRLs in some samples, but were determined to likely be false positive detections. One sample location (sample ID March 113) near the former smelter stack also contained lead, selenium, and mercury over their respective SRLs; this was the only location these three metals were detected in exceedance SRLs. All of these metals were detected on one non-residential use property, and with the exception of one lead sample were below their respective non-residential SRLs.

Statistical analysis that took multiple metal detections into account identified areas that have distinct metals signatures. These signals were: a background area signal, where samples were correlated with similar background concentrations; a slag signal, where the samples were correlated with slag samples; and an anthropogenic signal, where samples had metals elevated over the background area signal, but were not associated with slag materials.

Due to its presence in background area samples, an arsenic screening level for the XRF data was calculated to delineate areas with possible Site impacts above the naturally occurring arsenic concentration. Statistical analysis was used to determine the 95% UCL for arsenic for the XRF data at 57 mg/kg. However, correlation analysis to compare the XRF results to the laboratory analysis showed high uncertainty in the relationship of these values. The XRF data was in general observed to biased high compared to the laboratory analysis. Therefore, the arsenic 95% UCL concentration of 57 mg/kg will only be used as a screening level to identify focus areas for further sampling using laboratory analysis for more accurate results.

The areas over the arsenic XRF screening level can also be used as an indicator for other elevated metals present at the Site. The other metals detected over SRLs fall within the focus areas where arsenic exceeded the calculated XRF screening level concentration of 57 mg/kg. The focus area sampling will include more rigorous sampling of all metals of concern, using laboratory analysis.

In the follow-up sampling, aluminum should also be included as an analyte to ensure there are no impacts from aluminum at the Site. This sampling would only need to occur within the focus and background areas, as areas with the other metals at high concentrations would also be where elevated aluminum would be found, if present.

Not enough laboratory data was collected in the background areas to statistically determine a laboratory 95% UCL. It was expected that the XRF data would correlate with the laboratory data to be able to determine this value. However, the regression analysis of the XRF compared to laboratory data resulted in a value with large uncertainty. Therefore, additional soil sampling with laboratory analysis is also required in background areas to determine a laboratory 95% UCL value on which any further remedial efforts should be based. Areas where arsenic values fall between SRLs and laboratory 95% UCL background concentration could also be further evaluated to include all metals detected in the location to determine if remedial action is required (e.g. use of a Hazard Quotient calculation).

Based on the findings presented above, ADEQ has determined that additional information is necessary to determine the extent and scope of any remedial actions needed at the Site. An addendum to the PI Report will be issued containing summaries of further work conducted.

7.0 REFERENCES

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FIGURES

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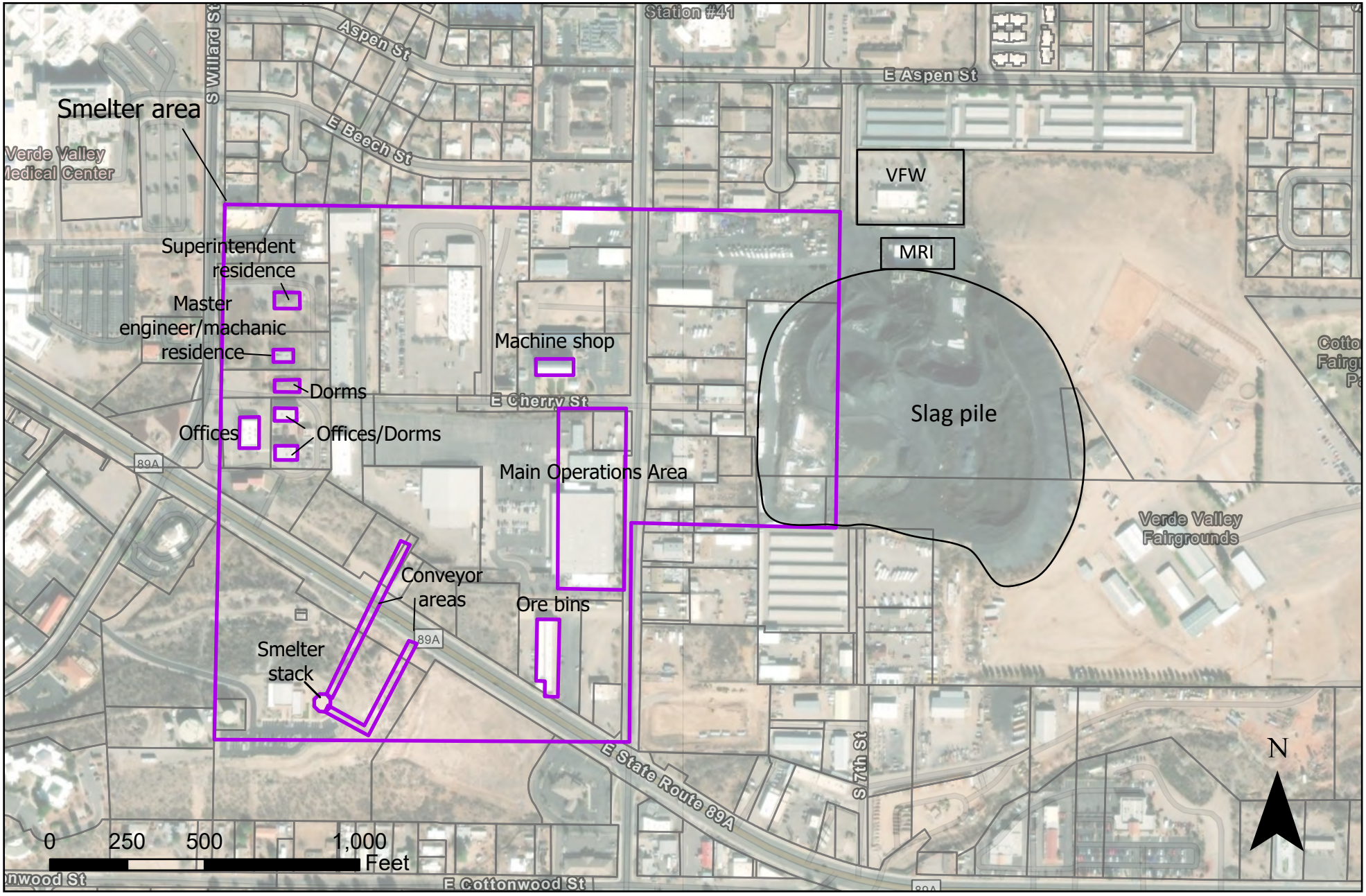
Figure 1

6th St and Birch St Site
Preliminary Investigation Report
Site Location



Legend

- Former Smelter Area Features
- Other Area Features
- Yavapai County Parcels

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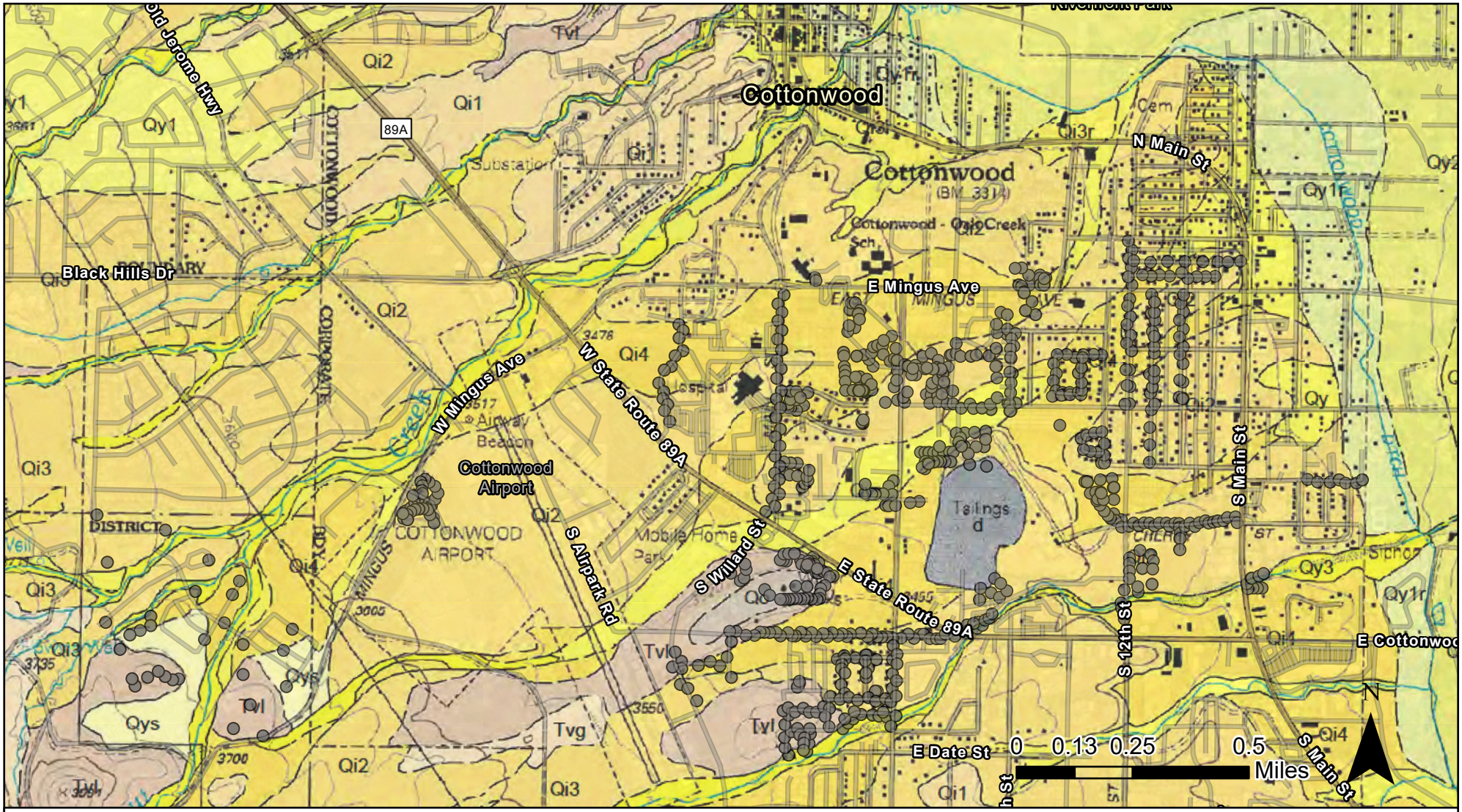
Figure 2

6th St and Birch St Site

Preliminary Investigation Report

Site Features



Legend

Piedmont Units, Pleistocene

- Qi_1 Older intermediate alluvial fan and terrace deposits
- Qi_2 Intermediate alluvial fan and terrace deposits
- Qi_3 Younger intermediate terrace and alluvial fan deposits
- Qi_4 Youngest intermediate fan and terrace deposits

River Alluvium

- Qy_1r Young terrace deposits

Piedmont Units, Holocene - Modern

- Qy Young alluvium, undifferentiated
- Qy_1 Slightly higher terrace and alluvial fan deposits
- Qy_3 Deposits in active channels, low terraces and bars
- Qys Young fine-grained deposits

Other Units

- d Disturbed ground (Modern)

Neogene Units, Verde Formation

- Tvl Verde Formation, lacustrine carbonate facies
- Tvg Verde Formation, conglomeratic facies

Sample location

Figure 3

6th St and Birch St Site

Preliminary Investigation Report

Site Geology

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From: Geologic Map of the Cottonwood 7½ ' Quadrangle, Yavapai County, Arizona. Arizona Geological Survey HAC 10/16/2024

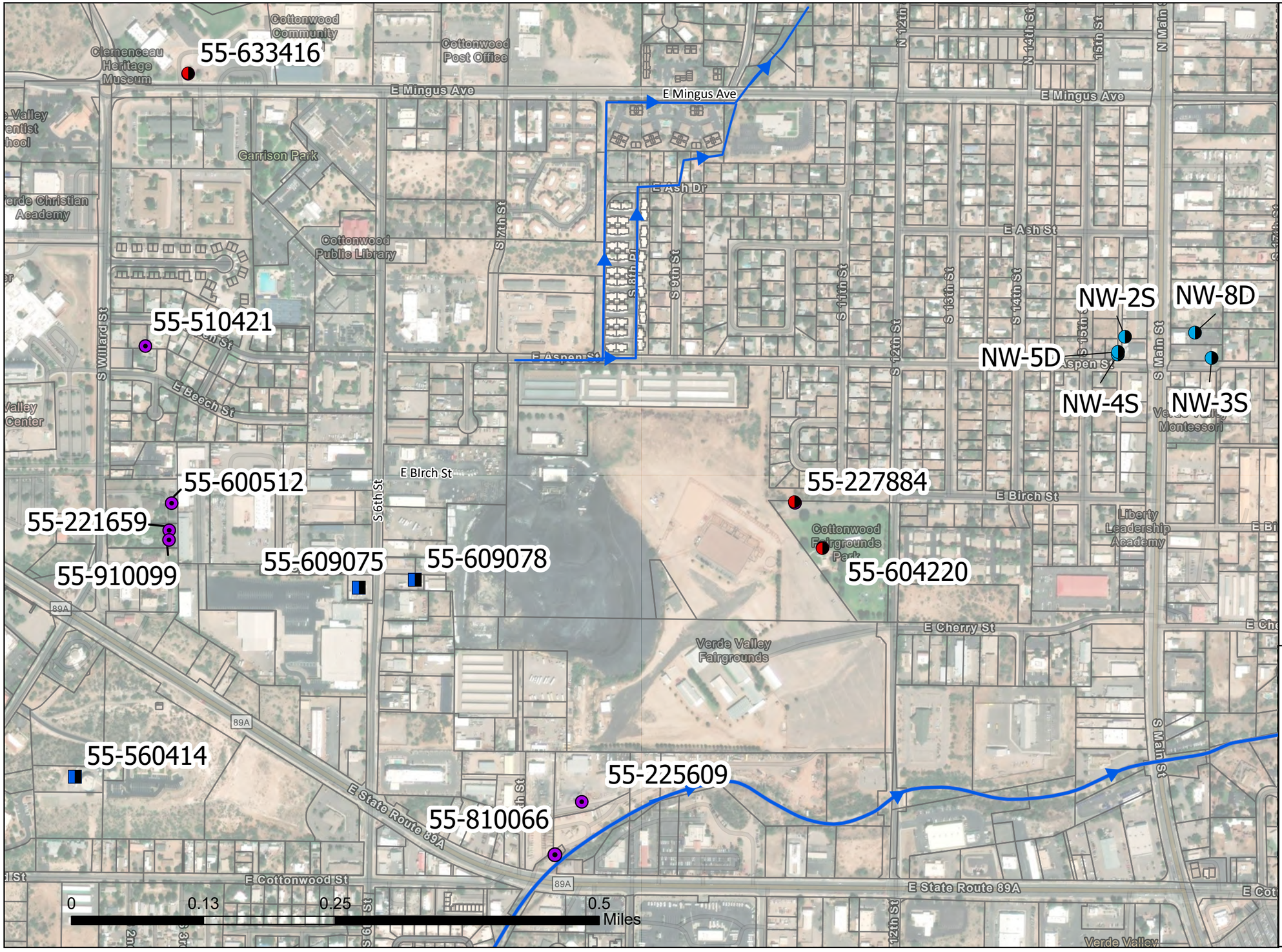

Figure 4

6th St and Birch St Site

Preliminary Investigation Report

Well Locations and Stormwater Pathways

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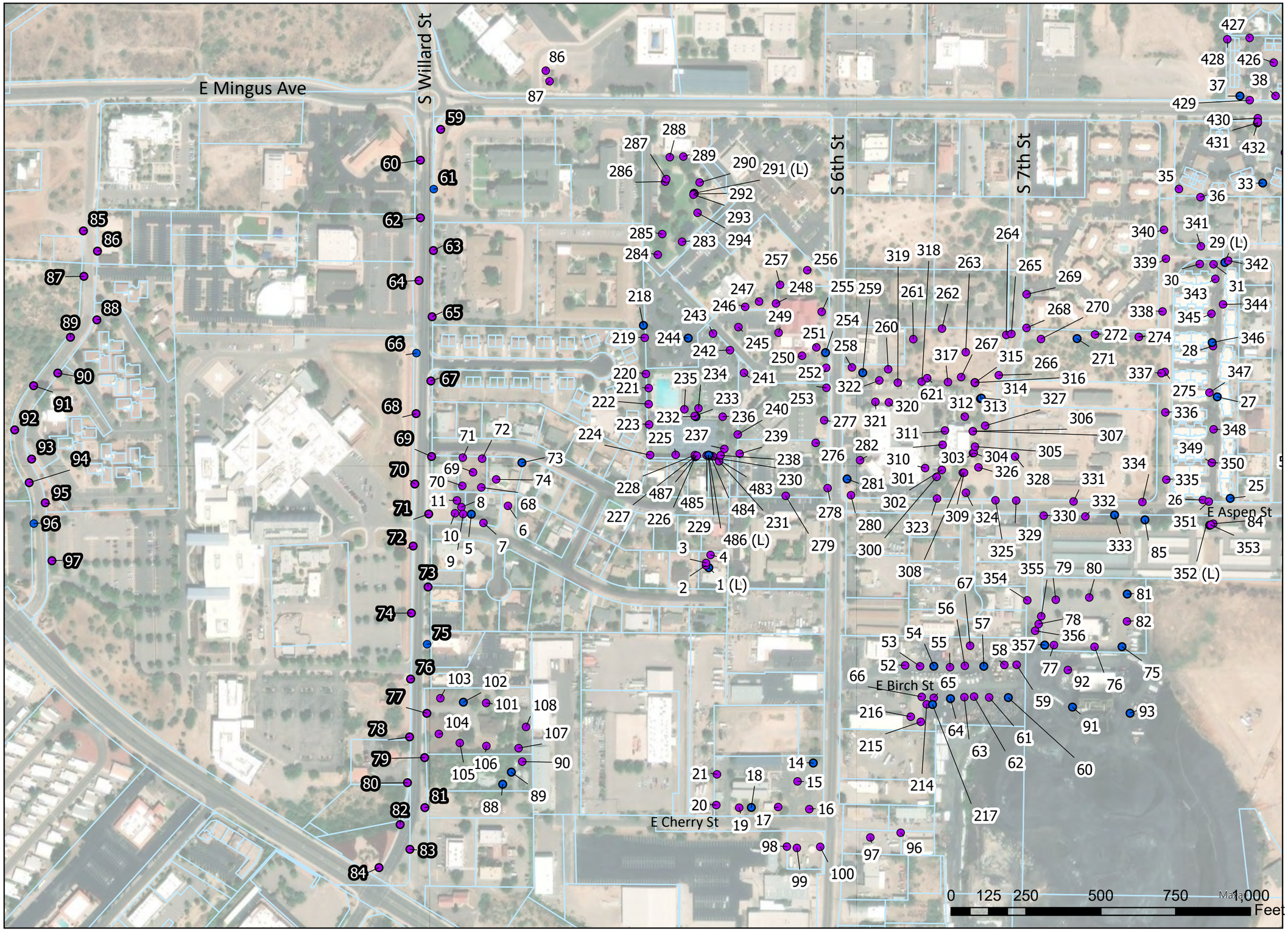
Legend

- City Drinking Water Wells
- Irrigation/Other Wells
- Private Wells
- Monitoring Wells
- Observed Stormwater Pathways

Figure 5a
6th St and Birch St Site
Preliminary Investigation Report
Sample Locations, NW



Legend

- XRF Sample Location with Lab Result
- XRF Sample Location
- Yavapai Parcel
- 70 March Sample ID #
- **70** June Sample ID #

Note: (L) has been added to sample ID # on this figure to distinguish a location with a lab result when the marker overlaps with a different sample on the figure.

N

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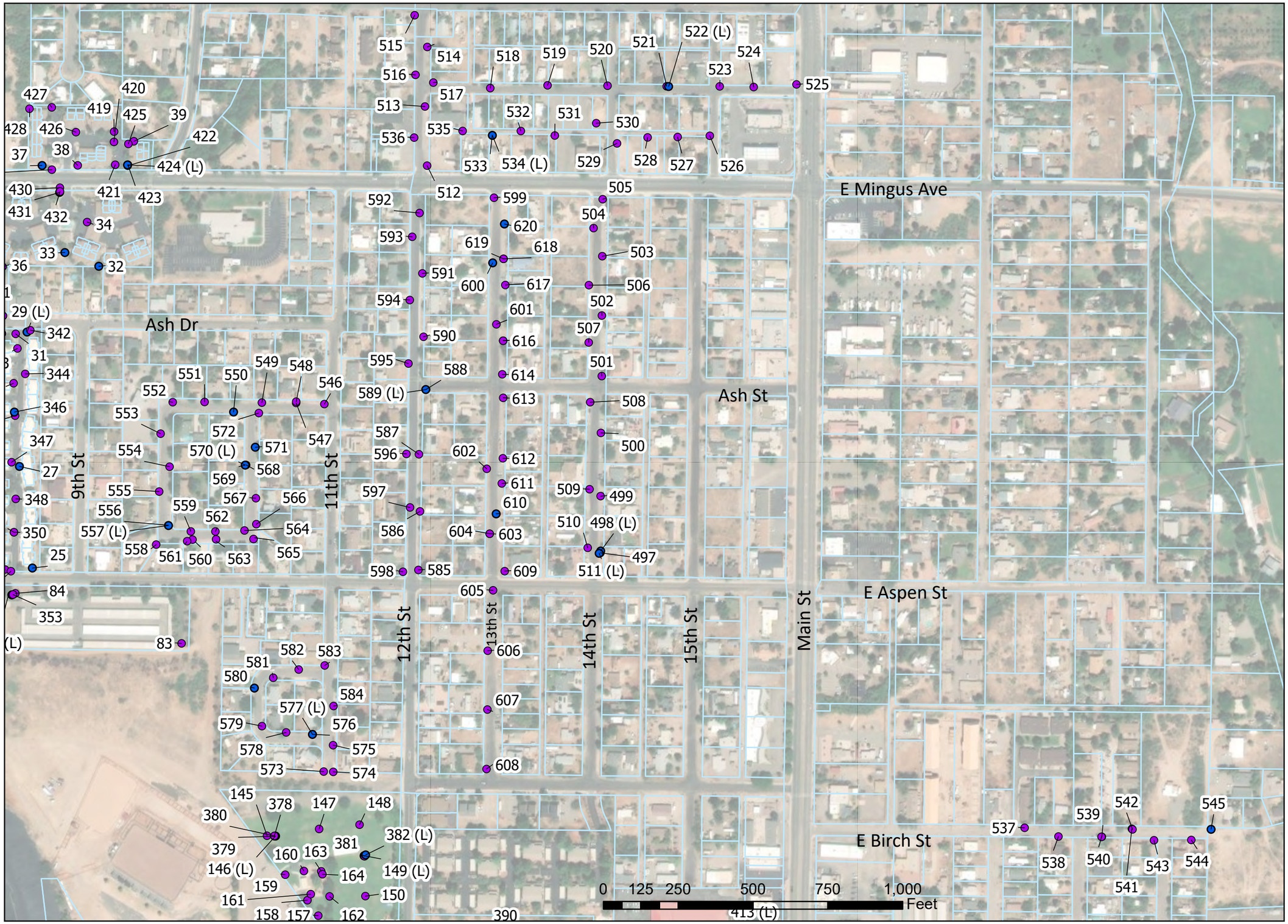
Figure 5b
6th St and Birch St Site
Preliminary Investigation
Report
Sample Locations, NE



Legend

- XRF Sample Location with Lab Result
- XRF Sample Location
- Yavapai Parcel
- 70 March Sample ID #

Note: (L) has been added to sample ID # on this figure to distinguish a location with a lab result when the marker overlaps with a different sample on the figure.

N

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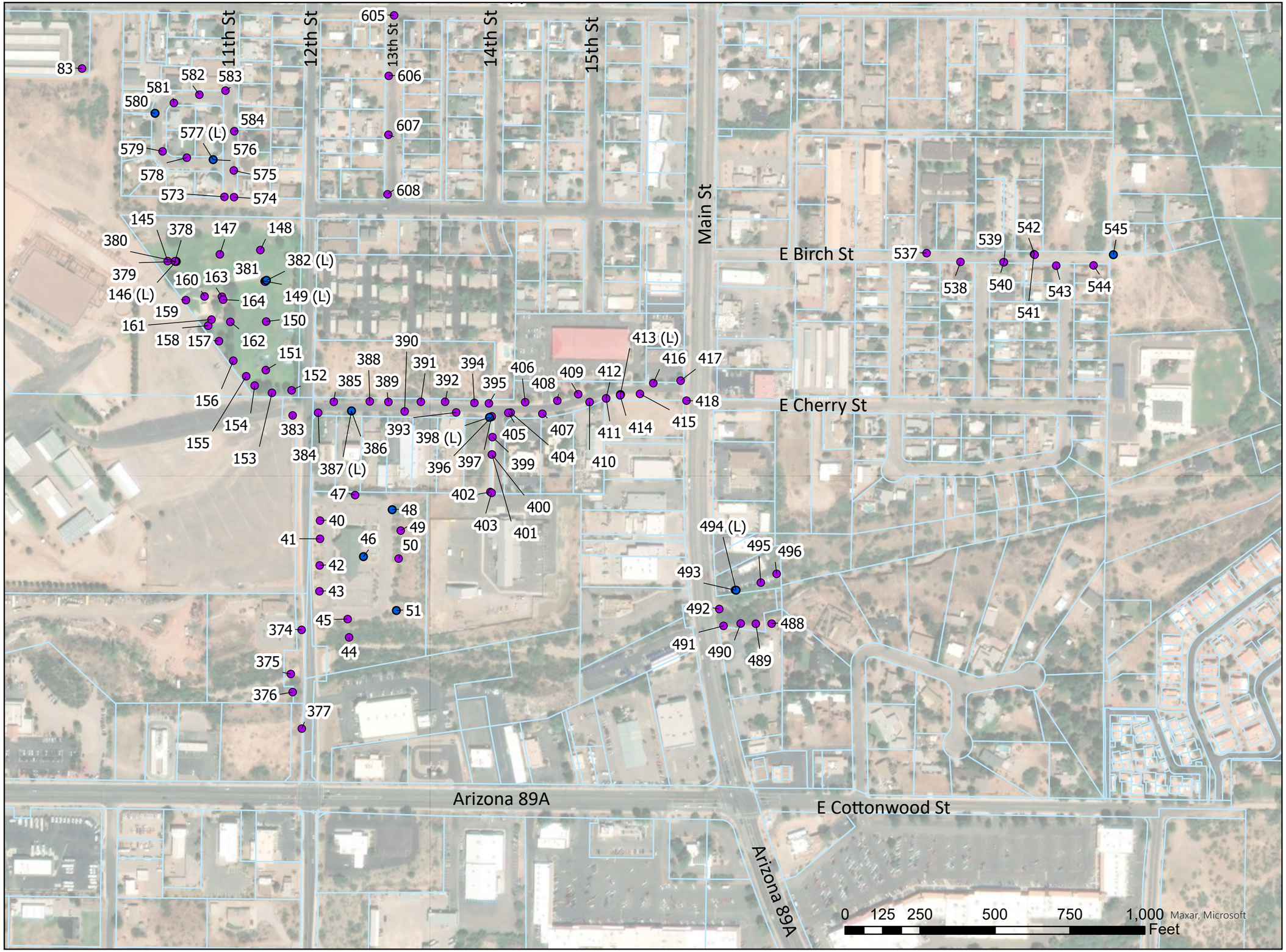
Figure 5c
6th St and Birch St Site
Preliminary Investigation Report
Sample Locations, SE



Legend

- XRF Sample Location with Lab Result
- XRF Sample Location
- Yavapai Parcel
- 70 March Sample ID #

Note: (L) has been added to sample ID # on this figure to distinguish a location with a lab result when the marker overlaps with a different sample on the figure.

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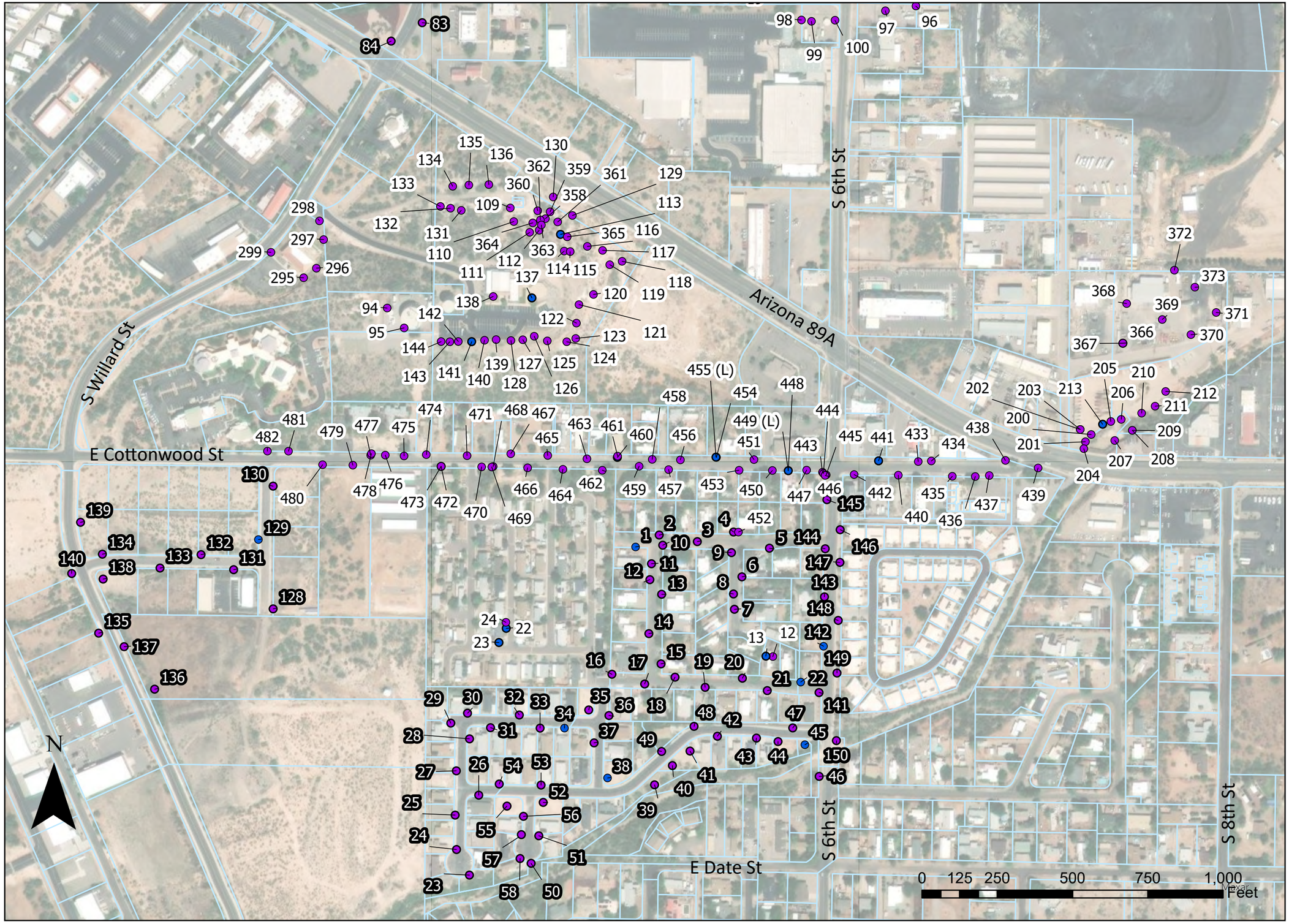
Figure 5d
6th St and Birch St Site
Preliminary Investigation Report
Sample Locations, SW



Legend

- XRF Sample Location with Lab Result
- XRF Sample Location
- Yavapai Parcel
- 70 March Sample ID #
- **70** June Sample ID #

Note: (L) has been added to sample ID # on this figure to distinguish a location with a lab result when the marker overlaps with a different sample on the figure.

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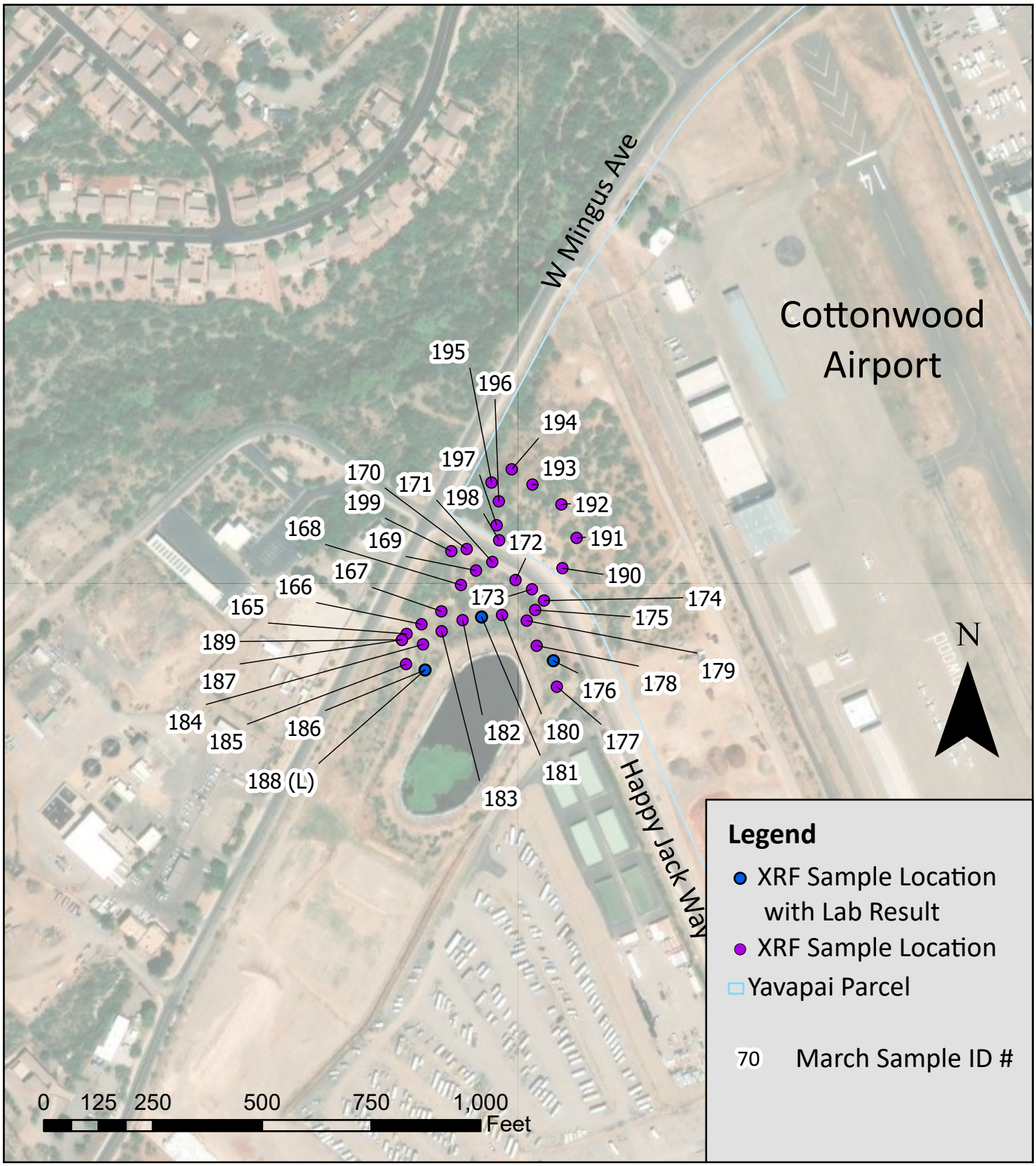

Note: (L) has been added to sample ID # on this figure to distinguish a location with a lab result when the marker overlaps with a different sample on the figure.

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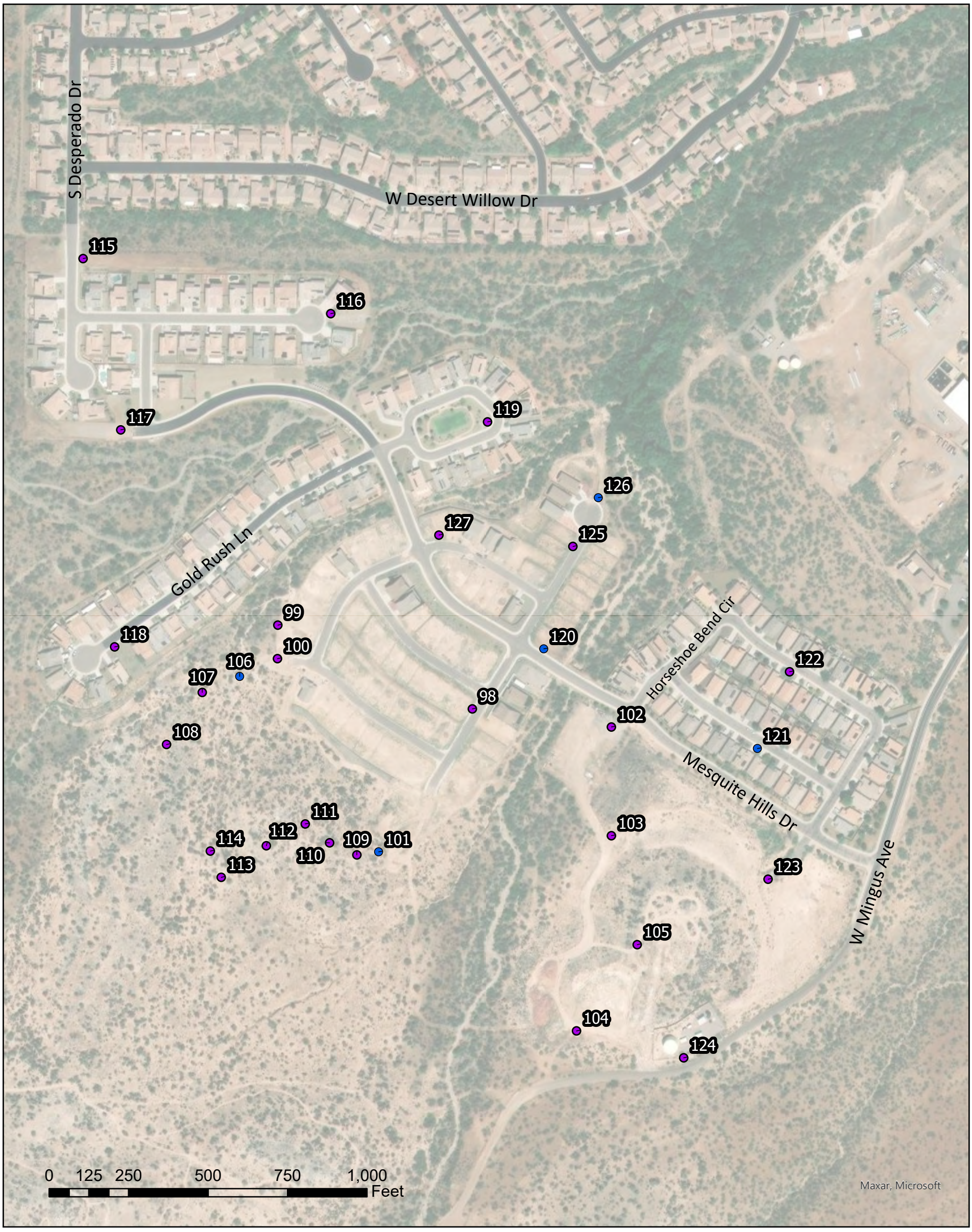
Figure 5e

6th St and Birch St Site

Preliminary Investigation Report

Sample Locations, Background Area 1



Legend

- XRF Sample Location with Lab Result
- XRF Sample Location
- Yavapai Parcel

70 June Sample ID #

N

Figure 5f

6th St and Birch St Site

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Sample Locations, Background Area 2

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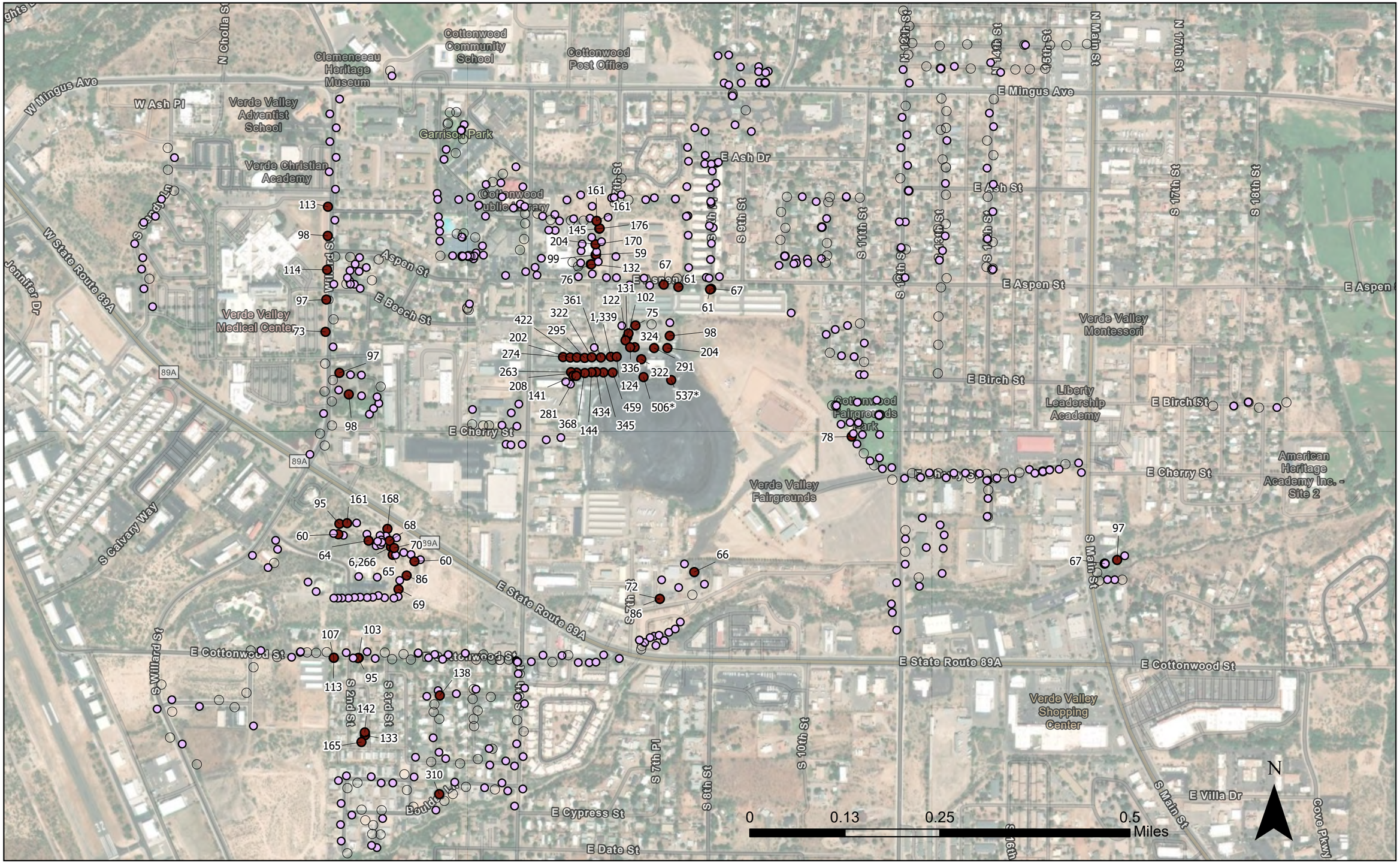

Legend

- Over screening level, XRF arsenic result shown
- Over SRLs, under screening level
- Under SRLs

Notes:
*Processed slag results, actual locations within facility buildings
All results in mg/kg
Arsenic residential and non-residential SRL = 10 mg/kg
Screening level for arsenic for XRF measurements = 57 mg/kg
Screening level calculated using the 95% upper confidence limit of the background area XRF samples

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Figure 6a
6th St and Birch St Site
Preliminary Investigation
Arsenic Results

Legend

- Over SRLs, XRF copper results shown
- Under SRLs

Notes
*Processed slag results, actual locations within facility buildings
All results in mg/kg
Copper residential SRL = 3,100 mg/kg
Copper non-residential SRL = 41,000 mg/kg

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Figure 6b
6th St and Birch St Site
Preliminary Investigation
Copper Results

Legend

- Over SRLs, XRF cadmium results shown
- Under SRLs

Notes:
All results in mg/kg
Cadmium residential SRL = 39 mg/kg
Cadmium non-residential SRL = 510 mg/kg

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Figure 6c
6th St and Birch St Site
Preliminary Investigation
Cadmium Results

Legend

- Over SRLs, manganese results shown
- Under SRLs

Notes:
*Laboratory result
All results in mg/kg
Manganese residential SRL = 3,300 mg/kg
Manganese non-residential SRL = 32,000 mg/kg

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Figure 6d
6th St and Birch St Site
Preliminary Investigation
Manganese Results

Legend

- Over SRLs, zinc results shown
- Under SRLs

Notes:
*Processed slag results, actual locations within facility building
All results in mg/kg
Zinc residential SRL = 23,000 mg/kg
Zinc non-residential SRL = 310,000 mg/kg

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Figure 6e
6th St and Birch St Site
Preliminary Investigation
Zinc Results

March 113	XRF	Lab
Lead	3,537	651
Selenium	595	~
Mercury	183	~

Legend

- Over SRLs, results shown
- Under SRLs

Notes:
All results in mg/kg
Lead: residential SRL = 400 mg/kg, non-residential SRL = 800 mg/kg
Selenium: residential SRL = 390 mg/kg, non-residential SRL = 5,100 mg/kg
Mercury: residential SRL = 23 mg/kg, non-residential SRL = 310 mg/kg

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Figure 6f
6th St and Birch St Site
Preliminary Investigation
Lead, Selenium, and Mercury Results

Legend

- Slag signal, over arsenic screening level
- Slag signal, under arsenic screening level
- Slag signal, under arsenic SRLs
- Other signal, over arsenic screening level
- No signal, under arsenic screening level
- No signal, under arsenic SRLs

Notes:
Arsenic residential and non-residential SRL = 10 mg/kg
Screening level for arsenic for XRF measurements = 57 mg/kg
Screening level calculated using the 95% upper confidence limit of the background area XRF samples

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Figure 7
6th St and Birch St Site
Preliminary Investigation Report
Signal Analysis

TABLES

Table 1

Groundwater Well Details

6th St and Birch St PI Report

	ADWR Number	ADWR Owner Name	Well Type	Well Depth (feet)	Application or Drill Date	Address	Notes
Wells sampled	55-510421	STUMP,J	EXEMPT	200	3/12/1985	15 E Aspen St	
	55-600512	ALLYSON TILTON INVESTMENTS LLC &	EXEMPT	405	3/13/1973	315 S Willard St	Former smelter associated house
	55-221659	DAVID & NANCY KORES	EXEMPT	490	8/31/2012	333 S Willard St	Former smelter associated house
	55-910099	DAVID & NANCY KORES	EXEMPT	300	12/8/2008	333 S Willard St	Former smelter associated house
	55-225609	D&O CRANE	EXEMPT	550	1/16/2016	525 S 7th St	Not in use - capped
	55-810066	BEDROCK LEASING LLC	EXEMPT	500	4/25/2019	820 AZ-89A	
	55-633416	COTTONWOOD-OAK CREEK,	NON-EXEMPT	400	1/3/1979	500 E Mingus Ave/1 N Willard	Irrigation well Cottonwood Community School
	55-227884	CITY OF COTTONWOOD	NON-EXEMPT	800	1/2/2018	350 S 12th St	Former injection well -capped
	55-604220	COTTONWOOD, TOWN OF,	NON-EXEMPT	375	6/20/1980	350 S 12th St	Irrigation well for Cottonwood Kids Park
	55-609075	CITY OF COTTONWOOD	NON-EXEMPT	630	1/1/1972	595 E Cherry St	City well SW corner Cherry and 6th
	55-609078	CITY OF COTTONWOOD	NON-EXEMPT	1250	1/1/1928	609 E Cherry St	City well SE corner Cherry and 6th - original Smelter well
	55-560414	CITY OF COTTONWOOD	NON-EXEMPT	1025	5/22/1996	193 E State Route 89A	City well near old smelter stack
Wells not sampled	55-802774	ROGELIO HERNANDEZ POBEDANO	EXEMPT	0	7/30/1985	156 S 12th St	Not field varified
	55-802582	CORP PRES BISHOP LDS CHURCH	EXEMPT	0	7/18/1985	1013 E Mingus Ave	Possible location, former church of Latter Day Saints. Could not be field varified
	55-509993	ALLRED,H	EXEMPT	200	1/16/1985	205 E Aspen St	Could not be field varified
	55-904801	ROBERT & KRISTIN GASSICK	EXEMPT			40 E Cottonwood St	Could not be field varified - near former stack
	55-503775	VERDE VLY FAIRGROUND,	EXEMPT	400	8/9/1982	800 E Cherry	Fairgrounds - could not be field varified
	55-630420	EILAND INVESTMENTS, LTD	EXEMPT	200	1/1/1977	707 - 709 E Mingus	Could not be field varified
	55-503731	ALLRED,T	EXEMPT	296	8/2/1982	In region of 201 E Mingus Ave/195 S Willard St/197 S Willard St	Location unknown - could not be field varified
	55-533626	MINGUS LAND CO,	NON-EXEMPT	350	11/22/1991	Unknown	Could not be field varified
Wells unlikely to ex	55-503746	ROBYNN L. & CHARLES KLECK	EXEMPT	279	8/3/1982	116 E Beech St	Address owner said there was no well on property
	55-609077	CITY OF COTTONWOOD	NON-EXEMPT	1250	1/1/1920	Unknown	City had no records of a well in this location
	55-223734	D & O CRANE	EXEMPT			525 S 7th St	Likely never installed. Owner reported only one well reported on property (55-225609)
	55-510544	IRONS, LEE,	EXEMPT	0		Unknown	No ADWR imaged record available
	55-506472	SEVENTH DAY ADVENT,	EXEMPT	0		Unknown	No ADWR imaged record available
Wells outside of area	55-809787	BEE & POPS FARMS, LLC	EXEMPT	149	1/1/1980	621 N 6th St	Outside of area
	55-809816	JANE MARGARET CHAVEZ	EXEMPT	150	1/1/1980	619 N 6th St	Outside of area
	55-629489	PENNY FORTNER	EXEMPT	150	5/27/1976	917 E Coconino St	Outside of area
	55-644427	JONES,I L	EXEMPT	0	6/9/1982	NA	Old Cemetary well, cemetary outside of site area
Other wells	55-507813	HERMANSON CONST,	OTHER	190	5/1/1984		
	55-922614	RICHARD BACKUS	OTHER	44	2/13/2019		
	55-913946	CITY OF COTTONWOOD	OTHER				
	55-921788	ADEQ (ATTN: MATT NARTER)	OTHER	178	6/14/2018		
	55-570032	YAVAPAI COUNTY PUBLIC WORKS	MONITOR	89	9/17/1998		
	55-591634	RAYMOND BLUFF IV	MONITOR				
	55-570033	YAVAPAI COUNTY PUBLIC WORKS	MONITOR				
	55-591633	RAYMOND BLUFF IV	MONITOR				

Notes: ADWR = Arizona Department of Water Resources

Table 2

Select Highway 260 and Main St WQARF Site Monitoring Wells
6th St and Birch St PI Report

ADWR ID Number	Well name	Well Depth (feet)	Screened Interval (feet bgs)
55-921575	NW-2S	85	75-85
55-921576	NW-3S	100	88-98
55-921578	NW-4S	85	75-85
55-921788	NW-5D	178	167-177
55-924424	NW-8D	130	105-125

Notes:
ADWR = Arizona Department of Water Resources
bgs = below ground surface

Table 3

Historical Arsenic City Sampling Results

6th St and Birch St PI Report

	Arsenic Concentrations	
Well ID	55-609075	55-609078
Date	mg/L	mg/L
3/22/1994	0.012	0.016
3/17/1997	0.018	0.015
6/8/2000	0.018	0.019
6/25/2003	0.012	0.014
10/12/2006	0.016	0.015
11/17/2006	0.016	0.014
6/20/2008	0.018	0.018
9/11/2008	0.017	0.015
12/4/2008	0.017	0.014
2/27/2009	0.017	0.015
3/17/2009	0.017	0.015
4/6/2009	0.016	0.014
4/10/2009	0.015	0.015
10/27/2009	0.015	0.014
1/4/2010	0.0078	0.014
4/22/2010	0.016	0.016

Notes:

mg/L = milligrams per liter

Aquifer Water Quality Standard = 0.050 mg/L

Maximum Contaminant Level = 0.010mg/L

Shading denotes over Maximum Contaminant Level

Table 4a
March XRF Results
6th St and Birch St PI Report

March Location ID	Date	Time	Latitude	Longitude	Lab Sample ID	XRFNo	Ti	Cr*	Co	Ni	Cu	Zn	As	Se	Mo	Ag	Cd	Sb	Ba	Hg	Pb	P	S	Cl	K	Ca	Mn	Fe	Rb	Sr	Zr	Sn
1	3/20/2024	12:40:40	34.735273	-112.024166	326 Beech-1 (CrVI)	#2	2,472	39	<LOD	<LOD	50	273	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	177	<LOD	17	<LOD	<LOD	<LOD	9,249	83,216	284	18,607	33	265	211	<LOD
2	3/20/2024	12:48:37	34.735294	-112.024197		#3	532	<LOD	<LOD	<LOD	16	104	7	<LOD	<LOD	<LOD	<LOD	<LOD	31	<LOD	<LOD	<LOD	1,691	<LOD	2,631	16,751	134	5,930	16	126	100	<LOD
3	3/20/2024	12:52:50	34.735316	-112.024197		#4	372	<LOD	<LOD	<LOD	26	130	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	42	<LOD	<LOD	<LOD	2,280	<LOD	2,992	30,822	150	6,280	17	126	114	<LOD
4	3/20/2024	12:57:07	34.73539	-112.024148		#5	2,118	22	<LOD	<LOD	109	255	13	<LOD	<LOD	<LOD	<LOD	<LOD	148	<LOD	9	<LOD	3,506	<LOD	7,283	82,701	365	14,245	17	275	120	<LOD
5	3/20/2024	13:19:55	34.7357421	-112.0268138	18 E Beech-1	#6	4,091	67	<LOD	44	93	689	10	<LOD	<LOD	<LOD	<LOD	<LOD	202	<LOD	33	<LOD	<LOD	<LOD	13,626	125,452	340	23,164	33	298	279	<LOD
6	3/20/2024	14:06:20	34.735822	-112.026407		#9	3,401	66	<LOD	62	66	92	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	134	<LOD	22	<LOD	<LOD	<LOD	12,855	86,899	282	23,582	33	237	251	<LOD
7	3/20/2024	13:30:03	34.735663	-112.026678		#8	3,582	47	<LOD	<LOD	65	134	17	<LOD	<LOD	<LOD	<LOD	<LOD	241	<LOD	25	<LOD	<LOD	<LOD	12,264	124,894	412	26,833	30	308	245	<LOD
8	3/20/2024	13:25:04	34.735806	-112.026924		#7	7,790	160	<LOD	98	146	207	15	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	40						553	40,241	32	513	273	<LOD
9	3/20/2024	14:09:41	34.735743	-112.026904		#10	4,922	86	<LOD	48	104	186	19	<LOD	<LOD	<LOD	<LOD	<LOD	260	<LOD	34	23,030	<LOD	<LOD	11,684	101,559	411	36,288	25	357	303	<LOD
10	3/20/2024	14:11:20	34.735749	-112.026996		#11	6,840	<LOD		<LOD	119	207	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	54						592	36,216	37	351	294	<LOD
11	3/20/2024	14:13:02	34.735867	-112.026975		#12	3,702	55	<LOD	66	42	109	11	<LOD	<LOD	<LOD	<LOD	<LOD	256	<LOD	15	<LOD	<LOD	<LOD	11,575	157,211	365	30,962	19	558	180	<LOD
12	3/20/2024	14:31:50	34.7269074	-112.0235109		#13	4,572	<LOD		<LOD	<LOD	151	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD						393	32,340	46	262	174	<LOD
13	3/20/2024	14:34:26	34.7269102	-112.0235873	508 Cottonwood DE	#14	4,444	66	<LOD	<LOD	101	207	13	<LOD	<LOD	<LOD	<LOD	<LOD	209	<LOD	24	<LOD	<LOD	<LOD	11,935	57,553	444	30,584	36	217	240	<LOD
14	3/20/2024	14:58:37	34.733489	-112.022982	500 Cherry-1(CrVI)	#16	2,489	42	<LOD	<LOD	770	819	32	<LOD	<LOD	<LOD	<LOD	<LOD	206	<LOD	86	<LOD	2,137	<LOD	9,942	48,281	419	33,288	27	284	138	90
15	3/20/2024	15:04:56	34.733319	-112.023155		#17	4,407	85	<LOD	59	728	367	24	<LOD	<LOD	<LOD	<LOD	<LOD	174	<LOD	48	<LOD	<LOD	<LOD	13,051	64,289	497	34,022	40	364	163	<LOD
16	3/20/2024	15:06:50	34.733065	-112.023021		#18	4,071	78	<LOD	44	628	441	21	<LOD	<LOD	<LOD	<LOD	<LOD	290	<LOD	57	<LOD	1,902	<LOD	12,903	90,936	445	36,937	32	376	202	<LOD
17	3/20/2024	15:08:38	34.733082	-112.023367		#19	2,356	38	<LOD	32	303	512	14	<LOD	<LOD	<LOD	<LOD	<LOD	237	<LOD	33	<LOD	1,906	<LOD	10,904	39,517	466	27,915	50	302	127	<LOD
18	3/20/2024	15:10:22	34.733075	-112.023666	500 Cherry-2	#22	1,728	<LOD	<LOD	<LOD	74	197	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	20						202	15,215	27	478	94	<LOD
19	3/20/2024	15:11:45	34.733072	-112.023801		#23	3,877	<LOD		<LOD	203	396	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	56						541	27,195	86	380	249	<LOD
20	3/20/2024	15:13:40	34.733094	-112.024056		#25	4,409	<LOD		<LOD	480	967	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	132						475	37,736	38	306	239	<LOD
21	3/20/2024	15:16:31	34.733376	-112.024052		#29	4,871	53	<LOD	<LOD	436	633	24	<LOD	<LOD	<LOD	<LOD	<LOD	294	<LOD	70	18,930	<LOD	<LOD	13,829	111,308	475	37,928	30	314	250	<LOD
22	3/20/2024	15:49:50	34.72714	-112.0264616	692 2nd Dr-1	#30	5,820	260	<LOD	112	55	72	133	<LOD	<LOD	<LOD	<LOD	<LOD	506	<LOD	12	47,552	<LOD	955	11,379	37,924	1,286	53,433	35	158	199	<LOD
23	3/20/2024	15:54:49	34.72701	-112.026541	692 2nd Dr-2 (CrVI)	#31	6,753	493	<LOD	232	88	101	165	<LOD	<LOD	<LOD	<LOD	<LOD	420	<LOD	<LOD	18,507	<LOD	<LOD	8,643	61,877	1,200	66,563	23	170	201	<LOD
24	3/20/2024	16:02:27	34.7271951	-112.0264656		#32	7,145	214	<LOD	137	92	316	142	<LOD	<LOD	<LOD	<LOD	<LOD	384	<LOD	<LOD	24,837	<LOD	<LOD	10,718	58,695	1,349	95,078	51	138	245	<LOD
25	3/20/2024	16:29:42	34.735958	-112.018374	S. 8th Place-1	#34	2,337	34	<LOD	<LOD	153	408	16	<LOD	8	<LOD	<LOD	<LOD	250	<LOD	22	<LOD	<LOD	<LOD	14,858	75,173	957	46,062	55	182	211	<LOD
26	3/20/2024	16:31:16	34.7359418	-112.0186773		#35	2,924	52	<LOD	<LOD	332	1,499	53	<LOD	<LOD	<LOD	<LOD	<LOD	181	<LOD	31	<LOD	2,960	<LOD	13,574	71,093	485	60,234	60	203	218	<LOD
27	3/20/2024	16:34:20	34.7368894	-112.0185295	S. 8th Place-2 (CrVI)	#38	1,493	36	<LOD	<LOD	434	1,974	40	<LOD	18	<LOD	<LOD	<LOD	102	<LOD	48	<LOD	6,795	<LOD	5,967	70,571	322	49,554	19	216	134	<LOD
28	3/20/2024	16:37:09	34.737355	-112.018583		#39	2,695	63	<LOD	40	370	1,495	39	<LOD	8	<LOD	<LOD	<LOD	257	<LOD	31	17,206	8,201	<LOD	11,361	71,701	398	55,569	34	259	214	<LOD
29	3/20/2024	16:39:44	34.738124	-112.01846	S. 8th Place-3	#40	2,728	83	<LOD	<LOD	138	612	20	<LOD	<LOD	<LOD	<LOD	<LOD	420	<LOD	20	<LOD	1,821	<LOD	14,152	50,155	681	45,030	55	189	219	<LOD
30	3/20/2024	16:41:57	34.738108	-112.018739		#41	949	24	<LOD	<LOD	86	449	20	<LOD	<LOD	<LOD	<LOD	<LOD	205	<LOD	23	10,438	2,590	<LOD	39,843	17,266	217	21,398	177	66	91	<LOD
31	3/20/2024	16:44:07	34.738106	-112.018586		#43	4,408	85	<LOD	<LOD	111	631	13	<LOD	<LOD	<LOD	<LOD	<LOD	193	<LOD	24	<LOD	<LOD	<LOD	9,602	113,853	360	32,297	28	310	221	<LOD
32	3/20/2024	17:12:49	34.738734	-112.017669	985 E Mingus -1	#44	3,208	55	<LOD	45	173	710	10	<LOD	<LOD	<LOD	<LOD	<LOD	285	<LOD	18	<LOD	<LOD	<LOD	12,554	71,973	400	27,109	37	283	202	<LOD
33	3/20/2024	17:15:01	34.738857	-112.018048	985 E Mingus -2	#45	3,071	79	<LOD	37	1,461	1,364	24	<LOD	71	<LOD	<LOD	<LOD	290	<LOD	26	<LOD	5,543	<LOD	10,039	65,564	305	44,925	24	284	162	<LOD
34	3/20/2024	17:19:15	34.739139	-112.017804		#48	2,371	52	<LOD	<LOD	61	186	<LOD	<LOD	13	<LOD	<LOD	<LOD	262	<LOD	16	<LOD	<LOD	<LOD	14,152	34,115	297	23,345	59	129	216	<LOD
35	3/20/2024	17:25:17	34.7387945	-112.0189793		#49	3,244	111	<LOD	39	27	118	13	<LOD	<LOD	<LOD	<LOD	<LOD	762	<LOD	27	<LOD	<LOD	<LOD	29,244	40,330	526	28,570	143	132	319	<LOD
36	3/20/2024	17:27:58	34.7387212	-112.0187393		#50	2,390	52	<LOD	<LOD	63	192	10	<LOD	<LOD	<LOD	<LOD	<LOD	163	<LOD	10	<LOD	<LOD	<LOD	11,140	94,280	371	19,935	31	371	198	<LOD
37	3/20/2024	17:42:39	34.739654	-112.018311	950 E Mingus-1	#51	4,204	78	<LOD	42	92	422	19	<LOD	<LOD	<LOD	<LOD	<LOD	267	<LOD	15	<LOD	<LOD	<LOD	11,944	96,743	399	35,747	32	340	264	<LOD
38	3/20/2024	17:46:17	34.7396585	-112.0179148		#52	2,661	52	<LOD	36	39	180	11	<LOD	<LOD	<LOD	<LOD	<LOD	289	<LOD	16	<LOD	<LOD	<LOD	16,532	61,743	309	23,120	83	126	210	<LOD
39	3/20/2024	17:50:59	34.739885	-112.0172929		#53	5,208	<LOD	<LOD	<LOD	58	166	19	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD						402	28,512	34	305	277	<LOD
40	3/21/2024	9:03:57	34.731157	-112.014013		#2	4,040	67	<LOD	55	81	180	9	<LOD	<LOD	<LOD	<LOD	<LOD	266	<LOD	13	<LOD	<LOD	<LOD	12,642	27,632	435	27,437	63	121	132	<LOD
41	3/21/2024	9:06:02	34.73099	-112.014011		#3	4,888	70	<LOD	63	127	259	14	<LOD	<LOD	<LOD	<LOD	<LOD	344	<LOD	14	<LOD	<LOD	<LOD	18,330	37,954	591	44,423	56	256	267	<LOD
42	3/21/2024	9:07:48	34.730746	-112.014012		#4	4,256	87	<LOD	55	48	159	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	327	<LOD	27	<LOD	<LOD	<LOD	14,880	25,281	415	35,096	52	194	289	<LOD
43	3/21/2024	9:09:19	34.730509	-112.014011		#5	4,483	85	<LOD	42	138	362	14	<LOD	12	<LOD	<LOD	<LOD	236	<LOD	25	<LOD	2,516	<LOD	12,751	75,442	474	37,898	32	276	233	<LOD
44	3/21/2024	9:11:32	34.730089	-112.013677		#7	6,433	93	<LOD	67	172	290	13	<LOD	<LOD	<LOD	<LOD	<LOD	307	<LOD	45	12,513	<LOD	<LOD	12,859	32,924	555	52,210	41	242	312	<LOD
45	3/21/2024	9:13:53	34.730257	-112.013695		#8	4,291	75	<LOD	54	41	83	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	347	<LOD	20	<LOD	<LOD	<LOD	17,772	51,808	657	34,769	83	207	215	<LOD
46	3/21/2024	9:15:59	34.730831	-112.013527	525 12th St-2	#9	4,644	99	<LOD	37	55	163	17	<LOD	<LOD	<LOD	<LOD	<LOD	359	<LOD	11	<LOD	<LOD	<LOD	15,103	25,901	474	47,659	57	260	321	<LOD
47	3/21/2024	9:18:02	34.731394	-112.013626		#11	2,405	56	<LOD	58	76	159	10	<LOD	9	<LOD	<LOD	<LOD	156	<LOD	23	<LOD	2,765	<LOD	10,970	27,563	335	28,379	39	291	260	<LOD
48	3/21/2024	9:20:15	34.731264	-112.013213	525 12th St-1	#12	2,342	41	<LOD	55	171	330	10	<LOD	16	<LOD	<LOD	<LOD	221	<LOD	11	<LOD	3,412	<LOD	6,485	50,804	310	25,368	20	486	138	<LOD
49	3/21/2024	9:22:33	34.731073	-112.013116		#13	7,020	155	<LOD	98	110	183	15	<LOD	11	<LOD	<LOD	<LOD	400	<LOD	30	17,537	<LOD	<LOD	19,983	64,762	734	57,143	55	345	306	<LOD
50	3/21/2024	9:24:55	34.730816	-112.013136		#14	5,964	131	<LOD	47	50	154	20	<LOD	<LOD	<LOD	<LOD	<LOD	270	<LOD	18	<LOD	<LOD	<LOD	15,066	45,893	614	42,293	32	223	305	<LOD
51	3/21/2024	9:28:29	34.73034	-112.013155	525 12th St-3	#16	5,010	88	<LOD	65	61	131	15	<LOD	<LOD	<LOD	<LOD	<LOD	236	<LOD	<LOD	<LOD	<LOD	<LOD	12,340	59,247	452	44,188	35	289	261	<LOD
52	3/21/2024	9:52:53	34.734394	-112.021971		#17	3,061	100	<LOD	<LOD	2,118	16,708	274	<LOD	27	<LOD	<LOD	<LOD	<LOD	<LOD	238	58,936	12,587	2,353	8,804	148,413	428	301,102	16	386	187	132
53	3/21/2024	9:56:54	34.734387	-112.021805		#18	4,058	140	<LOD	<LOD	1,565	10,650	202	<LOD	18	<LOD	<LOD	<LOD	296	<LOD	188	68,708	7,518	1,789	12,212	154,125	454	224,932	17	540	212	<LOD
54	3/21/2024	9:58:22	34.734389	-112.021652	319 6th St-1	#19	3,319	196	<LOD	<LOD	2,394	16,803	422	<LOD	36	<LOD	<LOD	<LOD	<LOD	<LOD	270	73,196	19,927	3,834	9,668	158,839	349	463,709	<LOD	533	219	<LOD
55	3/21/2024	10:01:04	34.734382	-112.021472		#20	3,789	327	<LOD	<LOD	2,197	16,028	295	<LOD	26	<LOD	<LOD	<LOD	319	<LOD	257	57,161	9,650	<LOD	10,118	126,974	520	334,919	23	342	202	<LOD
56	3/21/2024	10:02:30	34.734396	-112.021307		#21	4,271	142	<LOD	<LOD	2,538	19,559	322	<LOD	27	<LOD	<LOD	<LOD	<LOD	<LOD	289	100,425	26,940	<LOD	11,207	152,140	473	362,765	12	327	204	123
57	3/21/2024	10:03:45	34.734393	-112.021096	319 6th St-2	#22	2,950	131	<LOD	<LOD	2,488	16,117	361	<LOD	18	<LOD	<LOD	<LOD	<LOD	<LOD	244	90,623	167,094	<LOD	6,960	197,346	401	377,613	16	314	166	<LOD
58	3/21/2024	10:05:14	34.734408	-112.020868		#23	1,261	139	<LOD	<LOD	3,426	35,216	1,339	<LOD	22	<LOD	<LOD	<LOD	<LOD	<LOD	240	129,132	13,678	<LOD	3,551	113,506	204	568,582	13	287	173	153
59	3/21/2024	10:06:34	34.73441	-112.020731		#24	3,517	105	<LOD	<LOD	2,208	7,113	124	<LOD	<LOD	<LOD	<LOD	<LOD	219	<LOD	147	44,963	9,777	<LOD	13,895	144,375	503	170,309	27	752	167	<LOD

Table 4a
March XRF Results
6th St and Birch St PI Report

March Location ID	Date	Time	Latitude	Longitude	Lab Sample ID	XRFNo	Ti	Cr*	Co	Ni	Cu	Zn	As	Se	Mo	Ag	Cd	Sb	Ba	Hg	Pb	P	S	Cl	K	Ca	Mn	Fe	Rb	Sr	Zr	Sn
60	3/21/2024	10:08:23	34.734108	-112.02082	319 6th St-4 (CrVI)	#25	2,386	148	<LOD	<LOD	2,833	24,079	459	<LOD	22	<LOD	<LOD	<LOD	<LOD	<LOD	342	120,019	24,996	<LOD	3,492	133,518	423	540,646	<LOD	329	134	<LOD
61	3/21/2024	10:09:43	34.734108	-112.021033		#26	6,389	<LOD	<LOD	<LOD	2,529	15,710	345	<LOD	24	<LOD	<LOD	<LOD	<LOD	<LOD	244						600	373,965	16	301	201	135
62	3/21/2024	10:11:33	34.734114	-112.021201		#27	4,171	218	<LOD	<LOD	3,086	16,294	434	<LOD	28	<LOD	<LOD	<LOD	<LOD	<LOD	241	91,213	7,253	<LOD	7,952	149,167	375	473,761	<LOD	338	203	<LOD
63	3/21/2024	10:16:13	34.734108	-112.021309		#28	5,061	146	<LOD	68	1,248	6,821	144	<LOD	44	<LOD	<LOD	<LOD	281	<LOD	141	49,587	19,853	1,032	12,580	99,681	465	169,540	29	266	227	<LOD
64	3/21/2024	10:18:00	34.734093	-112.021463	319 6th St-3	#29	4,153	227	<LOD	<LOD	7,100	17,285	368	16	14	<LOD	<LOD	<LOD	<LOD	<LOD	275	91,350	11,270	<LOD	10,113	148,936	534	395,073	20	313	136	<LOD
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67	3/21/2024	10:25:24	34.734581	-112.021251		#33	4,471	354	<LOD	57	737	1,625	47	<LOD	10	<LOD	<LOD	<LOD	349	<LOD	105	<LOD	<LOD	<LOD	13,447	70,690	485	55,081	38	236	181	<LOD
68	3/21/2024	10:57:30	34.735989	-112.026706		#34	3,796	62	<LOD	41	169	326	18	<LOD	<LOD	<LOD	<LOD	<LOD	255	<LOD	36	18,716	<LOD	<LOD	13,431	80,991	457	29,304	43	234	273	<LOD
69	3/21/2024	10:59:39	34.736127	-112.026799		#35	3,347	59	<LOD	<LOD	364	402	17	<LOD	<LOD	<LOD	<LOD	<LOD	260	<LOD	71	<LOD	2,228	<LOD	13,531	85,647	569	28,467	38	253	272	<LOD
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71	3/21/2024	11:03:11	34.736261	-112.026915		#37	515	<LOD	<LOD	<LOD	54	328	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	51	<LOD	11	<LOD	3,801	<LOD	3,838	153,035	215	6,350	17	416	54	<LOD
72	3/21/2024	11:04:47	34.736253	-112.0267		#38	3,489	63	<LOD	59	279	381	20	<LOD	<LOD	<LOD	<LOD	<LOD	269	<LOD	74	<LOD	<LOD	536	14,187	77,427	524	31,291	48	260	263	<LOD
73	3/21/2024	11:12:14	34.73622	-112.026257	57 E Aspen S-1	#39	3,284	43	<LOD	43	62	100	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	243	<LOD	41	<LOD	<LOD	<LOD	18,293	67,031	528	21,778	99	277	324	<LOD
74	3/21/2024	11:14:36	34.736064	-112.026541		#40	5,419	135	<LOD	39	184	462	19	<LOD	<LOD	<LOD	<LOD	<LOD	283	<LOD	50	<LOD	<LOD	<LOD	10,593	84,022	414	25,618	38	211	282	<LOD
75	3/21/2024	11:36:24	34.734586	-112.019561	705 E. Aspen St-1	#41	4,430	155	<LOD	<LOD	1,593	9,888	204	<LOD	19	<LOD	<LOD	<LOD	<LOD	<LOD	172	55,216	4,427	<LOD	10,845	125,696	418	254,545	29	298	179	<LOD
76	3/21/2024	11:39:26	34.734583	-112.019867		#42	5,471	<LOD	<LOD	<LOD	2,387	12,021	291	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	194	97,453	10,261	<LOD	4,063	124,809	251	345,877	11	260	128	<LOD
77	3/21/2024	11:42:39	34.734595	-112.020318		#43	2,518	133	<LOD	<LOD	2,665	14,886	324	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	225	100,476	12,731	<LOD	3,422	108,316	216	419,080	<LOD	304	136	<LOD
78	3/21/2024	11:45:30	34.734786	-112.020491		#44	3,371	117	<LOD	<LOD	1,898	6,683	131	<LOD	<LOD	<LOD	<LOD	<LOD	255	<LOD	128	53,176	8,571	1,063	12,525	121,054	461	153,294	28	263	224	<LOD
79	3/21/2024	11:47:26	34.735011	-112.020303		#45	753	35	<LOD	<LOD	1,105	3,943	75	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	82	32,773	12,049	<LOD	12,577	91,305	244	60,813	11	259	52	<LOD
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81	3/21/2024	11:50:31	34.73507	-112.019509	705 E. Aspen St-2	#47	3,372	92	<LOD	50	282	1,290	37	<LOD	<LOD	<LOD	<LOD	<LOD	207	<LOD	27	<LOD	<LOD	<LOD	10,152	405,116	323	41,731	20	288	221	<LOD
82	3/21/2024	11:52:12	34.734819	-112.019509		#48	4,674	128	<LOD	85	475	2,332	98	<LOD	<LOD	<LOD	<LOD	<LOD	419	<LOD	38	27,936	18,394	<LOD	15,388	134,090	2,148	92,843	25	910	175	<LOD
83	3/21/2024	12:48:21	34.73528	-112.016706		#49	8,505	162	<LOD	128	184	642	23	<LOD	<LOD	<LOD	<LOD	<LOD	511	<LOD	36	28,150	<LOD	<LOD	25,502	73,719	809	77,987	59	415	341	<LOD
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85	3/21/2024	12:59:11	34.735753	-112.01932	751 E Aspen St-1	#52	4,984	105	<LOD	71	671	4,114	61	<LOD	<LOD	<LOD	<LOD	<LOD	287	<LOD	64	19,401	3,122	<LOD	9,972	64,368	635	80,972	31	371	179	<LOD
86	3/21/2024	13:35:46	34.739822	-112.026036		#53	3,043	43	<LOD	52	66	246	9	<LOD	<LOD	<LOD	<LOD	<LOD	196	<LOD	19	<LOD	<LOD	<LOD	9,923	123,982	308	24,869	22	272	178	<LOD
87	3/21/2024	13:37:27	34.739725	-112.025993		#54	6,930	115	<LOD	81	58	181	13	<LOD	<LOD	<LOD	<LOD	<LOD	392	<LOD	39	<LOD	<LOD	<LOD	20,859	90,935	516	39,825	59	207	417	<LOD
88	3/21/2024	14:12:15	34.733265	-112.026434	333 Willard-1	#55	2,149	26	<LOD	<LOD	2,071	2,073	36	<LOD	<LOD	<LOD	<LOD	<LOD	270	<LOD	221	<LOD	3,216	<LOD	9,827	87,343	321	25,388	41	241	205	<LOD
89	3/21/2024	14:13:56	34.733377	-112.026339	333 Willard-2	#57	3,781	57	<LOD	51	783	455	23	<LOD	<LOD	<LOD	<LOD	<LOD	239	<LOD	105	<LOD	<LOD	<LOD	11,780	109,893	342	33,048	37	261	263	<LOD
90	3/21/2024	14:15:23	34.733475	-112.026219		#58	2,266	36	<LOD	<LOD	581	388	33	<LOD	<LOD	<LOD	<LOD	<LOD	169	<LOD	74	<LOD	1,977	<LOD	11,269	114,494	289	20,117	27	250	202	<LOD
91**	3/21/2024	14:48:17	34.734027	-112.020105	MRI-1 (CrVI)**; MRI-2**	#59	1,396	128	<LOD	<LOD	3,602	23,820	506	18	41	<LOD	<LOD	<LOD	<LOD	<LOD	365	151,663	28,673	<LOD	1,216	172,144	215	753,526	<LOD	373	205	<LOD
92	3/21/2024	14:52:40	34.734367	-112.020161		#60	<LOD	97	<LOD	<LOD	2,437	24,944	322	<LOD	23	<LOD	<LOD	<LOD	<LOD	<LOD	303	107,642	312,803	<LOD	3,911	242,593	410	424,185	<LOD	445	133	<LOD
93**	3/21/2024	14:55:02	34.733976	-112.019464	MRI-3**	#61	1,022	195	<LOD	<LOD	3,252	19,772	537	<LOD	30	<LOD	<LOD	<LOD	<LOD	<LOD	310	125,494	27,524	<LOD	1,378	233,001	189	620,159	14	350	218	<LOD
94	3/22/2024	9:00:21	34.730052	-112.027814		#2	4,930	95	<LOD	<LOD	93	114	29	<LOD	<LOD	<LOD	<LOD	<LOD	268	<LOD	<LOD	<LOD	<LOD	<LOD	15,849	119,650	756	83,855	43	529	248	<LOD
95	3/22/2024	9:02:05	34.729872	-112.027624		#3	2,337	<LOD	<LOD	<LOD	64	118	10	<LOD	<LOD	<LOD	<LOD	<LOD	152	<LOD	21	<LOD	<LOD	<LOD	10,905	103,581	220	16,604	33	200	242	<LOD
96	3/22/2024	9:27:46	34.732857	-112.022002		#4	6,345	150	<LOD	137	156	812	16	<LOD	<LOD	<LOD	<LOD	<LOD	808	<LOD	33	<LOD	66,814	2,102	10,575	184,371	623	59,069	17	822	227	<LOD
97	3/22/2024	9:29:47	34.732811	-112.022339		#6	3,227	59	<LOD	67	206	293	25	7	<LOD	<LOD	<LOD	<LOD	274	<LOD	30	<LOD	5,429	112,543	10,116	165,808	425	31,508	19	831	159	<LOD
98	3/22/2024	9:47:13	34.732719	-112.023266		#8	3,850	82	<LOD	<LOD	1,205	506	29	<LOD	<LOD	<LOD	<LOD	<LOD	173	<LOD	47	<LOD	<LOD	<LOD	10,537	117,316	320	36,320	31	234	244	<LOD
99	3/22/2024	9:50:43	34.732708	-112.023155		#9	4,432	74	<LOD	91	525	214	17	<LOD	<LOD	<LOD	<LOD	<LOD	349	<LOD	27	<LOD	<LOD	<LOD	13,839	169,783	8,358	41,097	28	682	252	<LOD
100	3/22/2024	9:52:04	34.73272	-112.022895		#10	4,674	89	<LOD	64	277	1,093	23	<LOD	<LOD	<LOD	<LOD	<LOD	343	<LOD	27	<LOD	5,218	<LOD	12,319	150,768	487	45,578	19	513	158	<LOD
101	3/22/2024	10:10:37	34.73401	-112.026628		#11	3,325	49	<LOD	52	659	389	18	<LOD	<LOD	<LOD	<LOD	<LOD	209	<LOD	92	<LOD	<LOD	<LOD	11,532	118,628	375	25,513	32	234	197	<LOD
102	3/22/2024	10:12:06	34.734015	-112.026881	315 Willard St-1	#12	3,902	<LOD	<LOD	73	912	466	26	<LOD	<LOD	<LOD	<LOD	<LOD	1,153	<LOD	103						571	30,437	40	243	288	<LOD
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104	3/22/2024	10:17:07	34.733721	-112.02715		#17	3,814	75	<LOD	45	255	163	27	<LOD	<LOD	<LOD	<LOD	<LOD	222	<LOD	46	<LOD	<LOD	514	14,284	53,231	522	32,254	61	185	332	<LOD
105	3/22/2024	10:18:34	34.73364	-112.026916		#18	2,781	45	<LOD	39	542	274	98	<LOD	<LOD	<LOD	<LOD	<LOD	212	<LOD	71	<LOD	<LOD	<LOD	9,676	107,708	723	35,997	30	237	185	<LOD
106	3/22/2024	10:20:08	34.733615	-112.02662		#19	4,272	72	<LOD	<LOD	805	415	30	<LOD	<LOD	<LOD	<LOD	<LOD	307	<LOD	99	<LOD	<LOD	<LOD	14,967	168,963	391	33,538	41	263	337	<LOD
107	3/22/2024	10:21:26	34.733598	-112.026261		#20	3,610	<LOD	<LOD	<LOD	525	270	12	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	48						451	24,141	34	227	283	<LOD
108	3/22/2024	10:23:23	34.733794	-112.026181		#23	692	<LOD	<LOD	<LOD	13	75	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	66	<LOD	<LOD	11,153	1,549	<LOD	2,649	21,106	148	6,070	12	72	58	<LOD
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111	3/22/2024	10:53:41	34.730756	-112.026247		#26	679	<LOD	<LOD	45	561	315	24	<LOD	<LOD	<LOD	<LOD	<LOD	61	<LOD	39	<LOD	4,416	<LOD	5,071	355,376	90	6,785	12	366	70	<LOD
112	3/22/2024	10:56:12	34.730776	-112.026142		#27	3,303	29	<LOD	37	121	109	41	<LOD	<LOD	<LOD	<LOD	<LOD	181	<LOD	24	<LOD	<LOD	<LOD	14,303	88,937	243	22,760	65	616	301	<LOD
113	3/22/2024	10:57:41	34.73074	-112.025906	497 Willard St-1	#28	4,975	265	<LOD	73	18,934	12,284	6,266	595	<LOD	<LOD	428	101	567	183	3,537	44,853	77,710	797	12,784	62,719	254	71,840	55	451	243	346
114	3/22/2024	10:59:56	34.730588	-112.025863		#29	4,653	69	<LOD	85	351	294	65	<LOD	<LOD	<LOD	<LOD	<LOD	303	<LOD	50	<LOD	3,039	<LOD	14,566	110,041	480	31,863	49	278	400	<LOD
115	3/22/2024	11:03:41	34.730584	-112.025797		#30	2,122	50	<LOD	<LOD	451	267	47	6	<LOD	<LOD	<LOD	<LOD	183	<LOD	50	<LOD	3,417	<LOD	14,137	139,638	229	15,211	30	910	225	<LOD
116	3/22/2024	11:05:19	34.730633	-112.025608		#31	1,689	<LOD	<LOD	39	185	122	26	<LOD	<LOD	<LOD	<LOD	<LOD	89	<LOD	18	<LOD	<LOD	<LOD	8,813	205,678	177	10,393	25	1,001	143	<LOD
117	3/22/2024	11:07:22	34.730598	-112.025439		#32	3,692	46	<LOD	41	270	223	34	<LOD	<LOD	<LOD	<LOD	<LOD	172	<LOD	28	<LOD	<LOD	<LOD	14,571	100,562	307	18,861	54	642	355	<LOD
118	3/22/2024	11:08:54	34.7305	-112.025222		#34	1,216	<LOD	<LOD	<LOD	394	151	38	<LOD	<LOD	<LOD	<LOD	<LOD	84	<LOD	18	<LOD	<LOD	<LOD	7,781	211,796	153	8,570	29	1,119	129	<LOD

Table 4a
March XRF Results
6th St and Birch St PI Report

March Location ID	Date	Time	Latitude	Longitude	Lab Sample ID	XRFNo	Ti	Cr*	Co	Ni	Cu	Zn	As	Se	Mo	Ag	Cd	Sb	Ba	Hg	Pb	P	S	Cl	K	Ca	Mn	Fe	Rb	Sr	Zr	Sn
119	3/22/2024	11:10:20	34.730468	-112.025358		#35	3,163	53	<LOD	<LOD	1,375	413	60	6	<LOD	<LOD	<LOD	<LOD	241	<LOD	64	<LOD	1,765	<LOD	14,477	103,765	268	23,227	48	662	395	<LOD
120	3/22/2024	11:12:11	34.730195	-112.025535		#37	6,646	183	<LOD	162	1,440	389	86	9	<LOD	<LOD	<LOD	<LOD	525	<LOD	61	<LOD	<LOD	<LOD	18,403	87,745	567	51,753	38	835	330	75
121	3/22/2024	11:13:42	34.730101	-112.025694		#38	4,468	151	<LOD	45	344	221	28	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	37						313	21,288	41	444	348	<LOD
122	3/22/2024	11:15:11	34.729932	-112.02572		#39	2,834	46	<LOD	<LOD	1,574	537	69	<LOD	<LOD	<LOD	<LOD	<LOD	172	<LOD	125	<LOD	4,437	<LOD	12,605	147,493	258	19,652	36	483	288	<LOD
123	3/22/2024	11:16:44	34.729792	-112.025726		#40	1,039	<LOD	<LOD	<LOD	68	79	24	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	12	<LOD	2,885	<LOD	6,340	295,616	102	6,657	16	1,041	136	<LOD
124	3/22/2024	11:18:06	34.729761	-112.025825		#41	3,980	67	<LOD	66	140	119	31	<LOD	<LOD	<LOD	<LOD	<LOD	314	<LOD	25	<LOD	<LOD	<LOD	12,468	126,157	596	37,632	30	312	220	<LOD
125	3/22/2024	11:19:25	34.729767	-112.02604		#42	1,797	27	<LOD	<LOD	98	123	32	<LOD	<LOD	<LOD	<LOD	<LOD	138	<LOD	15	<LOD	<LOD	<LOD	10,545	382,515	235	17,812	24	427	128	<LOD
126	3/22/2024	11:21:08	34.729808	-112.026185		#45	6,132	96	<LOD	69	196	246	33	<LOD	<LOD	<LOD	<LOD	<LOD	387	<LOD	29	25,311	<LOD	<LOD	16,147	154,409	539	46,021	38	317	278	<LOD
127	3/22/2024	11:22:41	34.729775	-112.026311		#46	6,151	81	<LOD	71	92	168	18	<LOD	<LOD	<LOD	<LOD	<LOD	253	<LOD	21	<LOD	<LOD	<LOD	12,414	192,584	580	46,329	21	748	228	<LOD
128	3/22/2024	11:23:48	34.729767	-112.026442		#47	11,407	<LOD	<LOD	78	215	347	51	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	32						668	55,962	39	331	315	<LOD
129	3/22/2024	11:37:44	34.730914	-112.025777		#48	2,567	33	<LOD	<LOD	435	238	40	<LOD	<LOD	<LOD	<LOD	<LOD	209	<LOD	43	<LOD	2,436	610	15,022	111,269	286	17,722	60	698	287	<LOD
130	3/22/2024	11:40:07	34.731081	-112.025991		#51	2,799	35	<LOD	<LOD	546	438	168	11	<LOD	<LOD	<LOD	<LOD	244	<LOD	100	<LOD	<LOD	<LOD	15,933	94,110	286	22,124	63	574	151	<LOD
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132	3/22/2024	11:52:59	34.730969	-112.027125		#55	3,696	<LOD	<LOD	<LOD	560	351	60	<LOD	<LOD	<LOD	<LOD	<LOD	146	<LOD	67	<LOD	<LOD	<LOD	7,440	315,427	208	24,645	17	401	225	<LOD
133	3/22/2024	11:55:28	34.730984	-112.027237		#56	2,390	<LOD	<LOD	56	677	370	44	<LOD	<LOD	<LOD	<LOD	<LOD	92	<LOD	80	<LOD	<LOD	<LOD	8,940	264,233	148	18,940	26	210	192	<LOD
134	3/22/2024	11:57:16	34.731169	-112.027103		#57	2,780	65	<LOD	56	3,397	1,058	95	20	<LOD	<LOD	<LOD	<LOD	449	<LOD	127	<LOD	5,606	<LOD	25,299	71,690	363	54,546	110	690	265	<LOD
135	3/22/2024	11:58:21	34.731182	-112.026925		#58	4,487	122	<LOD	<LOD	9,545	2,116	161	19	<LOD	<LOD	66	<LOD	335	<LOD	201	24,604	8,475	<LOD	14,861	82,233	419	53,101	96	288	314	<LOD
136	3/22/2024	11:59:44	34.731188	-112.026704		#60	1,741	30	<LOD	<LOD	2,774	774	52	9	<LOD	<LOD	<LOD	<LOD	150	<LOD	127	<LOD	5,059	<LOD	7,133	123,235	214	18,778	29	265	155	<LOD
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139	3/22/2024	12:10:02	34.729774	-112.026606		#64	4,107	<LOD	<LOD	<LOD	65	151	24	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	17						856	52,196	24	456	171	<LOD
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143	3/22/2024	12:16:39	34.72975	-112.027117		#69	3,290	56	<LOD	53	454	471	25	<LOD	<LOD	<LOD	<LOD	<LOD	289	<LOD	74	<LOD	<LOD	<LOD	15,111	181,836	469	30,571	43	284	345	<LOD
144	3/22/2024	12:17:52	34.729751	-112.027214		#70	4,151	77	<LOD	39	795	441	44	<LOD	<LOD	<LOD	<LOD	<LOD	204	<LOD	114	<LOD	<LOD	<LOD	14,319	157,601	382	30,645	45	226	259	<LOD
145	3/22/2024	12:35:56	34.733522	-112.015734		#71	128	<LOD	<LOD	<LOD	44	129	5	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	13	<LOD	1,514	1,207	5,583	6,193	60	3,043	11	85	50	<LOD
146	3/22/2024	12:37:41	34.73352	-112.015639	350 S 12th St-1	#72	3,470	66	<LOD	106	75	165	18	<LOD	<LOD	<LOD	<LOD	<LOD	226	<LOD	23	<LOD	3,078	<LOD	12,287	173,964	531	34,768	39	679	178	<LOD
147	3/22/2024	12:40:18	34.733589	-112.015155		#73	1,625	33	<LOD	<LOD	100	168	16	<LOD	<LOD	<LOD	36	<LOD	151	<LOD	30	<LOD	2,176	<LOD	9,778	26,101	267	16,185	31	119	152	<LOD
148	3/22/2024	12:42:01	34.733632	-112.014706		#74	2,603	80	<LOD	66	72	84	15	<LOD	<LOD	<LOD	<LOD	<LOD	205	<LOD	16	<LOD	3,423	923	11,575	123,528	426	23,187	31	610	119	<LOD
149	3/22/2024	12:44:09	34.733347	-112.014652	350 S 12th St-2	#75	3,642	70	<LOD	62	67	76	10	<LOD	<LOD	<LOD	<LOD	<LOD	296	<LOD	13	<LOD	<LOD	895	10,256	115,790	417	29,500	37	537	140	<LOD
150	3/22/2024	12:46:16	34.732977	-112.014633		#76	3,730	<LOD	<LOD	<LOD	157	136	18	<LOD	<LOD	<LOD	<LOD	<LOD	181	<LOD	20	<LOD	2,956	<LOD	6,653	55,230	212	11,156	22	132	154	<LOD
151	3/22/2024	12:50:24	34.732532	-112.014632		#77	4,712	82	<LOD	91	91	94	17	<LOD	<LOD	<LOD	<LOD	<LOD	377	<LOD	<LOD	<LOD	3,846	2,625	16,044	211,150	682	38,141	36	829	157	<LOD
152	3/22/2024	12:52:00	34.732349	-112.014343		#79	4,479	83	<LOD	40	227	354	23	<LOD	<LOD	<LOD	<LOD	<LOD	268	<LOD	38	<LOD	2,620	1,048	15,830	100,623	526	31,473	36	303	242	<LOD
153	3/22/2024	12:54:23	34.732324	-112.014561		#80	2,367	53	<LOD	36	127	235	18	<LOD	<LOD	<LOD	<LOD	<LOD	207	<LOD	29	<LOD	3,713	567	10,900	74,753	331	18,764	26	224	169	<LOD
154	3/22/2024	12:55:53	34.732389	-112.014754		#81	195	<LOD	70	<LOD	65	135	8	<LOD	<LOD	<LOD	<LOD	<LOD	40	<LOD	18	<LOD	1,451	1,776	8,538	5,941	100	5,880	17	141	95	<LOD
155	3/22/2024	12:57:02	34.732474	-112.014849		#82	1,307	<LOD	<LOD	<LOD	91	139	18	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	19						288	13,349	28	147	130	<LOD
156	3/22/2024	12:58:17	34.732615	-112.014994		#83	571	<LOD	<LOD	<LOD	51	111	9	<LOD	<LOD	<LOD	<LOD	<LOD	87	<LOD	11	<LOD	862	<LOD	2,437	30,337	114	7,544	17	148	90	<LOD
157	3/22/2024	12:59:37	34.732793	-112.015155		#84	4,581	88	<LOD	<LOD	107	242	21	<LOD	<LOD	<LOD	<LOD	<LOD	299	<LOD	28	18,748	2,517	682	14,039	103,580	477	29,962	34	260	187	<LOD
158	3/22/2024	13:00:53	34.732934	-112.015277		#85	4,284	74	<LOD	59	116	297	78	<LOD	<LOD	<LOD	<LOD	<LOD	356	<LOD	59	<LOD	2,003	<LOD	16,177	107,203	561	37,150	31	301	197	<LOD
159	3/22/2024	13:02:09	34.733166	-112.015527		#88	1,280	<LOD	<LOD	<LOD	84	142	15	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	16						187	12,380	24	175	130	<LOD
160	3/22/2024	13:04:50	34.7332019	-112.0153197		#90	5,271	99	<LOD	50	121	208	21	<LOD	<LOD	<LOD	<LOD	<LOD	300	<LOD	40	<LOD	4,212	856	19,659	91,461	521	36,446	45	366	231	<LOD
161	3/22/2024	13:06:00	34.7329903	-112.0152406		#91	5,843	<LOD	<LOD	62	153	255	21	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	48						459	34,031	42	264	280	<LOD
162	3/22/2024	13:07:18	34.732971	-112.015031		#92	5,680	119	<LOD	62	165	203	28	<LOD	<LOD	<LOD	<LOD	<LOD	334	<LOD	37	24,542	<LOD	1,946	17,044	108,980	524	39,110	36	337	329	<LOD
163	3/22/2024	13:08:43	34.733201	-112.015127		#93	1,067	22	<LOD	<LOD	85	131	11	<LOD	<LOD	<LOD	<LOD	<LOD	92	<LOD	21	<LOD	2,096	927	10,438	25,363	215	12,475	29	138	130	<LOD
164	3/22/2024	13:12:04	34.733174	-112.015113		#95	259	<LOD	<LOD	<LOD	<LOD	17	<LOD	<LOD	<LOD	17	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	879	6,703	18	1,370	2	23	6	<LOD
165	3/25/2024	15:29:59	34.7323481	-112.0415049		#4	6,574	257	<LOD	81	71	126	24	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	26						453	35,585	25	383	258	<LOD
166	3/25/2024	15:37:05	34.7324095	-112.0413925		#9	<LOD	<LOD		<LOD	<LOD	83	27	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD						600	34,560	27	221	225	<LOD
167	3/25/2024	15:41:42	34.7324922	-112.041242		#14	5,686	<LOD		<LOD	267	203	57	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	95						533	43,617	52	162	396	<LOD
168	3/25/2024	15:44:10	34.7326592	-112.0410945		#15	6,185	<LOD		<LOD	<LOD	142	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	85						654	36,540	40	123	298	<LOD
169	3/25/2024	15:45:22	34.7327509	-112.0409812		#16	4,499	<LOD		<LOD	196	237	31	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	84						460	39,021	59	143	403	<LOD
170	3/25/2024	15:47:10	34.7328856	-112.0410536		#17	5,656	<LOD		<LOD	132	153	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	905	<LOD	40						614	40,084	57	320	287	<LOD
171	3/25/2024	15:48:39	34.7328063	-112.0408574		#18	4,729	<LOD		<LOD	140	117	33	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	38						493	31,882	44	216	248	<LOD
172	3/25/2024	15:49:58	34.732694	-112.040679		#19	4,063	<LOD		<LOD	338	327	36	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	115						388	34,534	38	229	219	<LOD
173	3/25/2024	15:51:07	34.732637	-112.040553		#20	4,699	<LOD		<LOD	<LOD	101	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	41						493	27,486	24	223	184	<LOD
174	3/25/2024	15:52:15	34.732567	-112.04046		#22	5,184	<LOD		<LOD	<LOD	66	22	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	41						680	46,660	59	153	296	<LOD
175	3/25/2024	15:53:59	34.732507	-112.040527		#23	4,582	82	<LOD	<LOD	91	113	15	<LOD	<LOD	<LOD	<LOD	<LOD	300	<LOD	28	<LOD	<LOD	<LOD	15,569	18,112	425	42,024	66	132	311	<LOD
176	3/25/2024	15:55:35	34.7321888	-112.0403844	0325#24, 0325#24 (CrVI)	#24	6,241	114	<LOD	57	154	196	24	<LOD	<LOD	<LOD	<LOD	<LOD	341	<LOD	55	<LOD	<LOD	<LOD	16,418	23,530	526	39,412	53	162	459	<LOD
177	3/25/2024	16:04:24	34.7320254	-112.0403559		#25	4,205	67	<LOD	59	46	61	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	207	<LOD	<LOD	<LOD	<LOD	<LOD	12,455	130,679	375	32,770	23	411	230	<LOD

Table 4a
March XRF Results
6th St and Birch St PI Report

March Location ID	Date	Time	Latitude	Longitude	Lab Sample ID	XRFNo	Ti	Cr*	Co	Ni	Cu	Zn	As	Se	Mo	Ag	Cd	Sb	Ba	Hg	Pb	P	S	Cl	K	Ca	Mn	Fe	Rb	Sr	Zr	Sn
178	3/25/2024	16:07:27	34.7322817	-112.0405125		#29	6,296	115	<LOD	39	44	87	10	<LOD	<LOD	<LOD	<LOD	<LOD	370	<LOD	22	12,812	<LOD	<LOD	16,827	25,293	650	41,478	62	143	464	<LOD
179	3/25/2024	16:09:54	34.7324393	-112.0405906		#30	6,845	82	<LOD	<LOD	53	156	16	<LOD	<LOD	<LOD	<LOD	<LOD	275	<LOD	20	<LOD	<LOD	<LOD	13,769	97,152	658	63,126	35	269	240	<LOD
180	3/25/2024	16:11:39	34.7324732	-112.0407793		#31	3,469	<LOD		<LOD	<LOD	298	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD						246	22,784	29	179	237	<LOD
181	3/25/2024	16:14:19	34.7324591	-112.0409352	0325#33 (CrVI)	#33	8,481	160	<LOD	123	119	244	13	<LOD	<LOD	<LOD	<LOD	<LOD	770	<LOD	17	<LOD	<LOD	<LOD	14,978	147,639	982	73,831	27	762	230	<LOD
182	3/25/2024	16:19:16	34.7324379	-112.0410794		#35	5,416	<LOD	<LOD	<LOD	48	86	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	15						432	35,796	33	247	239	<LOD
183	3/25/2024	16:20:25	34.7323668	-112.0412383		#37	3,917	<LOD	<LOD	<LOD	<LOD	44	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	21						710	37,681	20	248	183	<LOD
184	3/25/2024	16:22:13	34.7322833	-112.0413788		#39	4,652	<LOD		<LOD	<LOD	73	42	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	37						356	37,728	43	227	247	<LOD
185	3/25/2024	16:24:31	34.7321579	-112.0415069		#40	5,837	<LOD		<LOD	<LOD	132	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	58						425	34,759	59	230	282	<LOD
186	3/25/2024	16:27:27	34.7321219	-112.0413617		#42	2,092	44	<LOD	<LOD	40	93	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	153	<LOD	282	<LOD	4,767	<LOD	7,421	62,899	373	18,564	22	219	169	<LOD
187	3/25/2024	16:29:14	34.7323098	-112.0415401		#43	3,896	80	<LOD	<LOD	55	67	17	<LOD	<LOD	<LOD	<LOD	<LOD	363	<LOD	<LOD	<LOD	<LOD	<LOD	11,051	169,180	407	28,057	17	201	237	<LOD
188	3/25/2024	16:32:18	34.7321219	-112.0413617	0325#44	#44	4,913	100	<LOD	50	50	97	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	233	<LOD	30	<LOD	<LOD	<LOD	13,330	105,935	403	30,517	44	322	260	<LOD
189	3/25/2024	16:43:20	34.7323098	-112.0415401		#45	5,393	<LOD	<LOD	<LOD	71	78	17	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	18						499	33,480	52	199	248	<LOD
190	3/25/2024	16:45:00	34.7327713	-112.0403227		#46	4,672	77	<LOD	<LOD	345	274	24	<LOD	<LOD	<LOD	<LOD	<LOD	310	<LOD	126	<LOD	<LOD	<LOD	13,823	23,494	526	30,521	55	123	320	<LOD
191	3/25/2024	16:47:02	34.7329628	-112.0402171		#47	4,598	86	<LOD	<LOD	90	105	13	<LOD	<LOD	<LOD	<LOD	<LOD	224	<LOD	49	<LOD	<LOD	<LOD	12,621	69,383	455	30,643	37	136	265	<LOD
192	3/25/2024	16:49:23	34.7331725	-112.0403354		#48	5,038	94	<LOD	<LOD	225	192	21	<LOD	<LOD	<LOD	<LOD	<LOD	221	<LOD	83	10,429	<LOD	<LOD	16,085	29,289	497	33,698	57	128	307	<LOD
193	3/25/2024	16:52:35	34.7332956	-112.0405574		#52	2,045	31	<LOD	<LOD	111	85	8	<LOD	<LOD	<LOD	<LOD	<LOD	135	<LOD	34	<LOD	998	<LOD	6,731	33,845	210	19,433	29	179	220	<LOD
194	3/25/2024	16:54:32	34.7333901	-112.040717		#53	2,895	50	<LOD	33	98	122	14	<LOD	<LOD	<LOD	<LOD	<LOD	184	<LOD	33	<LOD	<LOD	<LOD	9,684	18,745	462	26,992	45	124	229	<LOD
195	3/25/2024	16:56:11	34.7333056	-112.0408699		#54	5,070	70	<LOD	43	155	181	20	<LOD	<LOD	<LOD	<LOD	<LOD	234	<LOD	57	<LOD	<LOD	<LOD	13,221	14,444	543	37,835	56	136	435	<LOD
196	3/25/2024	16:58:10	34.7331879	-112.0408125		#55	1,026	14	<LOD	<LOD	143	83	10	<LOD	<LOD	<LOD	32	<LOD	80	<LOD	34	<LOD	<LOD	<LOD	5,164	24,237	265	11,783	13	187	85	<LOD
197	3/25/2024	17:00:08	34.7330372	-112.0408273		#57	3,813	108	<LOD	55	244	238	41	<LOD	<LOD	<LOD	<LOD	<LOD	304	<LOD	207	<LOD	<LOD	<LOD	11,458	69,238	720	39,396	23	332	231	<LOD
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199	3/25/2024	17:05:11	34.732871	-112.041171		#59	3,271	54	<LOD	43	69	87	12	<LOD	<LOD	<LOD	<LOD	<LOD	224	<LOD	14	<LOD	<LOD	<LOD	7,204	81,065	432	33,444	23	155	172	<LOD
200	3/26/2024	8:36:16	34.7289633	-112.0200163		#6	2,945	58	<LOD	<LOD	55	118	11	<LOD	<LOD	<LOD	<LOD	<LOD	213	<LOD	19	14,436	<LOD	<LOD	12,596	74,893	335	22,701	40	332	174	<LOD
201	3/26/2024	8:41:00	34.7288969	-112.020079		#8	4,478	68	<LOD	51	61	109	9	<LOD	<LOD	<LOD	<LOD	<LOD	305	<LOD	14	<LOD	<LOD	<LOD	10,515	83,122	540	35,043	23	469	166	<LOD
202	3/26/2024	8:42:44	34.7290082	-112.0201377		#9	3,772	40	<LOD	42	51	267	11	<LOD	<LOD	<LOD	<LOD	<LOD	291	<LOD	19	<LOD	1,647	<LOD	14,121	69,223	398	31,279	34	562	189	<LOD
203	3/26/2024	8:45:46	34.7290082	-112.0201377		#10	5,168	124	<LOD	86	58	136	10	<LOD	<LOD	<LOD	<LOD	<LOD	264	<LOD	15	<LOD	<LOD	<LOD	14,643	60,512	698	41,430	40	325	268	<LOD
204	3/26/2024	8:47:50	34.7288332	-112.0200958		#11	4,063	<LOD	<LOD	45	61	167	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	18						408	25,363	23	342	166	<LOD
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213	3/26/2024	9:36:01	34.729058	-112.019891	0326#26	#26	2,641	51	<LOD	52	39	136	11	<LOD	<LOD	<LOD	<LOD	<LOD	245	<LOD	19	<LOD	<LOD	<LOD	14,890	59,063	1,049	28,324	52	368	252	<LOD
214	3/26/2024	10:13:08	34.734039	-112.0217269		#28	3,875	107	<LOD	<LOD	1,729	6,518	141	<LOD	14	<LOD	<LOD	<LOD	194	<LOD	176	27,273	6,073	<LOD	11,170	122,965	394	161,905	33	385	191	<LOD
215	3/26/2024	10:14:41	34.7338778	-112.021791		#29	4,655	67	<LOD	<LOD	832	410	27	<LOD	<LOD	<LOD	<LOD	<LOD	267	<LOD	64	<LOD	2,091	<LOD	16,113	56,210	544	37,398	35	473	260	<LOD
216	3/26/2024	10:16:27	34.7339233	-112.0219026		#30	3,929	61	<LOD	46	280	728	22	<LOD	<LOD	<LOD	<LOD	<LOD	322	<LOD	48	<LOD	<LOD	<LOD	9,798	92,485	323	39,180	31	309	212	<LOD
217	3/26/2024	10:19:32	34.7340376	-112.0216619	0326#31 (CrVI)	#31	3,285	129	<LOD	<LOD	2,790	12,645	281	<LOD	19	<LOD	<LOD	<LOD	<LOD	<LOD	221	64,845	5,095	<LOD	8,744	130,795	393	306,148	11	492	197	<LOD
218	3/26/2024	10:47:39	34.7374919	-112.0249211	0326#32	#32	4,131	78	<LOD	<LOD	200	281	20	<LOD	<LOD	<LOD	<LOD	<LOD	328	<LOD	28	16,878	<LOD	<LOD	13,341	78,670	463	33,492	40	219	274	<LOD
219	3/26/2024	10:51:45	34.7373781	-112.0249047		#33	3,946	84	<LOD	74	159	709	25	<LOD	<LOD	<LOD	<LOD	<LOD	245	<LOD	20	<LOD	6,024	798	13,369	74,777	475	40,107	39	374	255	<LOD
220	3/26/2024	10:54:34	34.7370459	-112.0248876		#34	3,083	54	<LOD	<LOD	106	291	18	<LOD	<LOD	<LOD	<LOD	<LOD	197	<LOD	18	<LOD	<LOD	<LOD	11,329	77,233	390	23,304	33	234	240	<LOD
221	3/26/2024	10:56:14	34.7369166	-112.0248544		#35	2,479	57	<LOD	<LOD	114	403	18	<LOD	<LOD	<LOD	<LOD	<LOD	186	<LOD	21	<LOD	<LOD	<LOD	10,863	96,331	385	23,161	28	260	193	<LOD
222	3/26/2024	10:57:55	34.736769	-112.0248534		#37	3,981	<LOD	<LOD	<LOD	60	127	13	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD						415	28,865	29	247	230	<LOD
223	3/26/2024	11:00:13	34.7365824	-112.0248463		#39	3,675	90	<LOD	<LOD	73	235	18	<LOD	<LOD	<LOD	<LOD	<LOD	265	<LOD	12	<LOD	1,966	<LOD	13,567	91,037	406	29,048	35	223	223	<LOD
224	3/26/2024	11:02:20	34.7363022	-112.0248319		#40	1,201	55	<LOD	<LOD	68	201	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	92	<LOD	15	<LOD	1,367	<LOD	5,854	55,161	201	12,567	23	204	120	<LOD
225	3/26/2024	11:04:05	34.7363063	-112.0245476		#41	2,799	753	<LOD	<LOD	105	650	19	<LOD	<LOD	<LOD	<LOD	<LOD	182	<LOD	27	<LOD	<LOD	<LOD	11,102	64,078	273	21,907	45	255	225	<LOD
226	3/26/2024	11:06:22	34.7362876	-112.0243297		#42	2,525	1,462	<LOD	<LOD	138	774	17	<LOD	<LOD	<LOD	<LOD	<LOD	194	<LOD	33	<LOD	1,900	<LOD	11,339	54,420	346	22,232	42	230	174	<LOD
227	3/26/2024	11:07:55	34.736297	-112.0243253		#43	2,285	953	<LOD	<LOD	144	902	18	<LOD	<LOD	<LOD	<LOD	<LOD	174	<LOD	28	<LOD	<LOD	<LOD	9,615	35,693	263	22,684	36	216	154	<LOD
228	3/26/2024	11:09:49	34.736306	-112.024333		#47	2,695	500	<LOD	<LOD	130	765	16	<LOD	<LOD	<LOD	<LOD	<LOD	206	<LOD	26	<LOD	2,693	<LOD	9,992	50,782	304	29,332	35	235	183	<LOD
229	3/26/2024	11:12:35	34.7363019	-112.0241862		#49	757	202	<LOD	<LOD	69	473	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	122	<LOD	21	<LOD	1,294	<LOD	7,315	37,180	175	11,079	56	304	106	<LOD
230	3/26/2024	11:14:04	34.7362782	-112.0240755		#50	2,768	1,044	<LOD	<LOD	119	314	11	<LOD	<LOD	<LOD	<LOD	41	295	<LOD	33	<LOD	<LOD	<LOD	14,703	60,081	385	27,163	50	281	155	<LOD
231	3/26/2024	11:15:00	34.7362515	-112.0240631		#51	3,616	165	<LOD	<LOD	152	418	15	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	33						365	25,678	48	191	210	<LOD
232	3/26/2024	11:17:45	34.7366585	-112.024326	0326#52 (CrVI)	#52	3,625	2,659	<LOD	40	195	1,405	22	<LOD	<LOD	<LOD	<LOD	<LOD	265	<LOD	28	<LOD	2,250	<LOD	11,823	59,981	325	32,863	38	333	165	<LOD
233	3/26/2024	11:18:56	34.7366648	-112.0243407		#54	3,859	261	<LOD	<LOD	113	451	31	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	13						251	25,986	30	221	337	<LOD
234	3/26/2024	11:22:34	34.7367351	-112.0242992		#59	2,306	71	<LOD	<LOD	57	224	9	<LOD	<LOD	<LOD	<LOD	<LOD	216	<LOD	16	<LOD	<LOD	<LOD	10,493	77,645	262	19,009	38	292	227	<LOD
235	3/26/2024	11:26:01	34.7367251	-112.0244561		#62	3,142	57	<LOD	43	59	158	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	185	<LOD	15	<LOD	<LOD	<LOD	8,555	76,621	335	20,836	29	340	195	<LOD
236	3/26/2024	11:27:51	34.7366604	-112.0240286		#63	4,794	142	<LOD	69	87	160	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	388	<LOD	23	<LOD	<LOD	<LOD	12,128	119,501	584	32,836	36	324	211	<LOD

Table 4a
March XRF Results
6th St and Birch St PI Report

March Location ID	Date	Time	Latitude	Longitude	Lab Sample ID	XRFNo	Ti	Cr*	Co	Ni	Cu	Zn	As	Se	Mo	Ag	Cd	Sb	Ba	Hg	Pb	P	S	Cl	K	Ca	Mn	Fe	Rb	Sr	Zr	Sn
237	3/26/2024	11:29:54	34.7363653	-112.0240065		#64	4,587	75	<LOD	36	63	188	11	<LOD	<LOD	<LOD	<LOD	<LOD	296	<LOD	17	<LOD	<LOD	<LOD	14,570	95,899	407	30,685	43	271	289	<LOD
238	3/26/2024	11:31:26	34.7363061	-112.0240477		#65	4,655	126	<LOD	45	280	362	27	<LOD	<LOD	<LOD	<LOD	<LOD	258	<LOD	49	<LOD	<LOD	<LOD	14,985	97,423	474	30,490	42	252	310	<LOD
239	3/26/2024	11:34:26	34.7363226	-112.0238355		#66	4,882	87	<LOD	82	138	872	22	<LOD	<LOD	<LOD	<LOD	<LOD	412	<LOD	18	<LOD	5,718	<LOD	11,096	138,254	388	51,433	19	757	188	<LOD
240	3/26/2024	11:36:08	34.7364992	-112.0238593		#67	3,096	39	<LOD	54	104	403	13	<LOD	<LOD	<LOD	<LOD	<LOD	310	<LOD	<LOD	<LOD	3,287	<LOD	12,455	29,854	208	28,994	55	411	193	<LOD
241	3/26/2024	11:45:37	34.737066	-112.0237966		#69	3,402	44	<LOD	<LOD	132	505	17	<LOD	<LOD	<LOD	<LOD	<LOD	339	<LOD	12	<LOD	2,935	<LOD	13,215	60,891	345	38,680	49	503	179	<LOD
242	3/26/2024	11:48:27	34.7372726	-112.0239552		#72	3,800	64	<LOD	<LOD	148	596	17	<LOD	<LOD	<LOD	<LOD	77	159	<LOD	14	<LOD	3,581	<LOD	10,391	56,137	285	31,289	42	342	150	<LOD
243	3/26/2024	11:50:06	34.7374236	-112.0241453		#73	2,747	<LOD	<LOD	<LOD	90	249	12	<LOD	<LOD	<LOD	<LOD	<LOD	182	<LOD	<LOD	<LOD	2,406	<LOD	9,879	73,638	306	22,165	30	300	149	<LOD
244	3/26/2024	11:51:52	34.737379	-112.0244209	0326#74	#74	3,661	64	<LOD	53	194	1,003	26	<LOD	<LOD	<LOD	<LOD	<LOD	261	<LOD	21	<LOD	6,483	<LOD	9,416	86,796	359	41,519	22	620	162	<LOD
245	3/26/2024	12:26:16	34.7374848	-112.0238636		#78	2,375	41	<LOD	<LOD	79	99	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	203	<LOD	<LOD	<LOD	<LOD	<LOD	13,129	78,987	282	18,014	67	146	195	<LOD
246	3/26/2024	12:31:17	34.7376716	-112.0237909		#79	3,963	53	<LOD	52	86	193	15	<LOD	<LOD	<LOD	<LOD	<LOD	214	<LOD	12	<LOD	1,667	<LOD	10,764	97,277	408	26,822	29	254	224	<LOD
247	3/26/2024	12:33:11	34.7377217	-112.0236373		#80	5,746	85	<LOD	<LOD	83	320	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	394	<LOD	23	16,278	<LOD	<LOD	14,378	68,791	914	44,122	42	280	272	<LOD
248	3/26/2024	12:34:39	34.7377054	-112.0234489		#81	3,651	73	<LOD	50	160	837	24	<LOD	<LOD	<LOD	<LOD	<LOD	382	<LOD	33	14,925	2,648	704	20,907	55,639	449	44,398	76	230	444	<LOD
249	3/26/2024	12:37:03	34.7374374	-112.0234164		#82	1,756	36	<LOD	<LOD	74	385	15	<LOD	<LOD	<LOD	<LOD	<LOD	201	<LOD	23	<LOD	<LOD	<LOD	20,091	33,051	270	18,155	63	134	278	<LOD
250	3/26/2024	12:51:33	34.7372282	-112.0231525		#83	4,173	98	<LOD	41	127	459	15	<LOD	<LOD	<LOD	<LOD	<LOD	418	<LOD	15	<LOD	<LOD	<LOD	15,904	59,744	419	35,749	50	248	385	<LOD
251	3/26/2024	12:53:32	34.7373062	-112.0229949		#84	3,468	65	<LOD	<LOD	156	698	25	<LOD	<LOD	<LOD	<LOD	<LOD	358	<LOD	36	<LOD	2,284	<LOD	18,876	72,373	386	37,185	50	257	409	<LOD
252	3/26/2024	12:55:13	34.7371197	-112.022883		#86	1,641	<LOD		<LOD	141	440	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	19						219	18,726	21	152	159	<LOD
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254	3/26/2024	13:00:01	34.7372591	-112.0228917	0326#88	#88	3,634	64	<LOD	<LOD	107	117	19	<LOD	<LOD	<LOD	<LOD	<LOD	270	<LOD	29	<LOD	<LOD	<LOD	11,701	84,727	458	30,025	28	220	241	<LOD
255	3/26/2024	13:03:05	34.7376338	-112.0229393		#89	2,672	46	<LOD	<LOD	107	275	17	<LOD	<LOD	<LOD	<LOD	<LOD	190	<LOD	16	<LOD	<LOD	<LOD	12,172	88,702	322	21,514	32	224	197	<LOD
256	3/26/2024	13:04:47	34.7380138	-112.0231046		#90	3,440	66	<LOD	63	80	265	19	<LOD	<LOD	<LOD	<LOD	<LOD	237	<LOD	17	<LOD	<LOD	<LOD	12,478	110,922	353	28,473	31	255	200	<LOD
257	3/26/2024	13:07:07	34.7378776	-112.0234057		#91	3,371	51	<LOD	45	65	93	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	201	<LOD	39	<LOD	<LOD	<LOD	12,819	83,900	338	20,239	34	230	181	<LOD
258	3/26/2024	13:22:30	34.7371258	-112.0225966		#92	4,135	71	<LOD	<LOD	44	101	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	244	<LOD	17	<LOD	<LOD	<LOD	15,041	172,177	358	26,831	29	314	228	<LOD
259	3/26/2024	13:24:37	34.7370778	-112.0224759	0326#93	#93	3,310	61	<LOD	46	289	1,337	33	<LOD	<LOD	<LOD	<LOD	<LOD	210	<LOD	23	<LOD	6,171	<LOD	7,240	92,261	324	44,957	15	481	130	<LOD
260	3/26/2024	13:27:43	34.737112	-112.022193		#94	4,549	85	<LOD	44	187	157	19	<LOD	<LOD	<LOD	<LOD	<LOD	227	<LOD	26	<LOD	<LOD	<LOD	14,564	115,205	440	32,101	38	206	299	<LOD
261	3/26/2024	13:30:03	34.7373905	-112.0219174		#95	4,065	59	<LOD	41	129	160	16	<LOD	<LOD	<LOD	<LOD	<LOD	220	<LOD	30	<LOD	<LOD	<LOD	13,931	60,911	370	28,974	44	245	336	<LOD
262	3/26/2024	13:32:19	34.73749	-112.0215992		#97	3,384	45	<LOD	<LOD	96	411	17	<LOD	<LOD	<LOD	<LOD	<LOD	201	<LOD	13	<LOD	<LOD	<LOD	9,604	103,359	318	26,224	26	206	243	<LOD
263	3/26/2024	13:35:33	34.7372759	-112.0213323		#100	4,347	79	<LOD	<LOD	115	555	22	<LOD	<LOD	<LOD	<LOD	<LOD	233	<LOD	26	<LOD	<LOD	<LOD	14,772	76,646	371	32,067	39	293	258	<LOD
264	3/26/2024	13:38:13	34.7374385	-112.0208837		#101	4,326	87	<LOD	44	152	583	22	<LOD	<LOD	<LOD	<LOD	<LOD	269	<LOD	22	<LOD	<LOD	<LOD	14,044	108,714	442	33,811	27	243	217	<LOD
265	3/26/2024	13:39:48	34.7374484	-112.0208264		#102	3,111	49	<LOD	43	138	557	23	<LOD	<LOD	<LOD	<LOD	81	180	<LOD	17	<LOD	1,828	<LOD	11,865	80,490	420	27,400	34	200	170	<LOD
266	3/26/2024	13:44:56	34.7370679	-112.0209625		#103	3,509	69	<LOD	51	94	180	12	<LOD	<LOD	<LOD	<LOD	<LOD	300	<LOD	16	<LOD	<LOD	<LOD	15,068	85,884	429	26,551	37	333	252	<LOD
267	3/26/2024	13:47:02	34.737047	-112.0213809		#104	3,967	68	<LOD	<LOD	197	716	31	<LOD	<LOD	<LOD	<LOD	<LOD	173	<LOD	28	<LOD	<LOD	<LOD	14,079	52,957	377	34,630	40	172	303	<LOD
268	3/26/2024	14:02:42	34.7375046	-112.0206597		#106	3,716	70	<LOD	44	140	606	22	<LOD	<LOD	<LOD	<LOD	<LOD	202	<LOD	19	<LOD	<LOD	<LOD	11,518	104,460	371	34,745	30	309	183	<LOD
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272	3/26/2024	14:13:09	34.7374506	-112.0198967		#110	4,795	83	<LOD	36	120	484	14	<LOD	<LOD	<LOD	<LOD	<LOD	176	<LOD	28	<LOD	<LOD	<LOD	14,235	97,696	397	34,364	36	241	293	<LOD
273	3/26/2024	14:16:37	34.7374319	-112.0194088		#112	5,892	110	<LOD	53	135	549	30	<LOD	<LOD	<LOD	<LOD	<LOD	248	<LOD	32	17,298	<LOD	<LOD	13,061	58,166	461	49,520	34	177	399	<LOD
274	3/26/2024	14:18:33	34.7374319	-112.0194088		#113	4,343	84	<LOD	38	111	231	13	<LOD	<LOD	<LOD	<LOD	<LOD	215	<LOD	36	<LOD	<LOD	<LOD	13,852	89,359	440	32,805	34	189	265	<LOD
275	3/26/2024	14:21:36	34.7371136	-112.0191168		#114	3,285	50	<LOD	<LOD	265	616	14	<LOD	<LOD	<LOD	<LOD	<LOD	260	<LOD	41	<LOD	<LOD	<LOD	11,231	76,901	399	26,805	32	237	203	<LOD
276	3/26/2024	15:22:51	34.7364295	-112.0229916		#119	2,747	73	<LOD	44	83	408	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	229	<LOD	13	15,320	4,375	2,264	11,247	40,625	418	33,696	50	319	190	<LOD
277	3/26/2024	15:24:51	34.7366378	-112.0228994		#120	2,445	44	<LOD	<LOD	57	229	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	197	<LOD	<LOD	<LOD	3,317	<LOD	12,815	18,647	241	31,791	62	330	196	<LOD
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280	3/26/2024	15:31:23	34.735952	-112.0225929		#123	3,059	28	<LOD	44	194	642	25	<LOD	<LOD	<LOD	<LOD	<LOD	143	<LOD	27	<LOD	<LOD	<LOD	12,579	76,673	337	31,726	44	148	216	<LOD
281	3/26/2024	15:32:49	34.7361005	-112.0226385	0326#124	#124	6,782	88	<LOD	40	249	1,395	35	<LOD	<LOD	<LOD	<LOD	<LOD	383	<LOD	39	15,619	2,333	<LOD	14,258	64,297	398	49,451	43	260	334	<LOD
282	3/26/2024	15:35:52	34.7362741	-112.0224961		#125	2,911	71	<LOD	<LOD	104	518	19	<LOD	<LOD	<LOD	<LOD	<LOD	358	<LOD	18	<LOD	2,944	<LOD	13,166	35,920	449	27,843	66	118	274	<LOD
283	3/26/2024	15:43:26	34.7382639	-112.0245003		#126	2,798	41	<LOD	34	24	93	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	227	<LOD	19	<LOD	<LOD	<LOD	11,730	81,276	295	19,975	38	575	125	<LOD
284	3/26/2024	15:45:25	34.7381421	-112.0247692		#127	3,530	55	<LOD	<LOD	51	188	10	<LOD	<LOD	<LOD	<LOD	<LOD	183	<LOD	15	<LOD	<LOD	<LOD	10,974	62,295	319	22,532	38	261	289	<LOD
285	3/26/2024	15:46:59	34.7383328	-112.0247216		#128	4,010	78	<LOD	<LOD	65	141	11	<LOD	<LOD	<LOD	<LOD	<LOD	244	<LOD	22	<LOD	<LOD	<LOD	9,979	85,550	365	24,045	37	213	337	<LOD
286	3/26/2024	15:48:26	34.7388144	-112.0246945		#129	2,569	30	<LOD	35	39	94	8	<LOD	<LOD	<LOD	<LOD	<LOD	171	<LOD	<LOD	<LOD	<LOD	<LOD	8,793	77,442	299	16,025	31	204	158	<LOD
287	3/26/2024	15:50:03	34.7388381	-112.0246834		#130	80	<LOD	<LOD	<LOD	<LOD	15	<LOD	<LOD	<LOD	17	22	40	<LOD	<LOD	<LOD	<LOD	<LOD	492	4,858	3,572	<LOD	515	7	53	46	<LOD
288	3/26/2024	15:51:31	34.7390392	-112.0246462		#131	1,253	18	<LOD	<LOD	85	143	7	<LOD	<LOD	<LOD	<LOD	<LOD	116	<LOD	14	<LOD	1,154	<LOD	5,262	29,950	247	11,724	31	137	136	<LOD
289	3/26/2024	15:53:37	34.7390461	-112.0244956		#132	1,326	15	<LOD	<LOD	44	146	7	<LOD	<LOD	<LOD	<LOD	<LOD	139	<LOD	12	<LOD	<LOD	<LOD	4,624	38,029	196	10,740	21	177	89	<LOD
290	3/26/2024	15:55:23	34.7388097	-112.0243116		#134	2,947	60	<LOD	68	36	82	10	<LOD	<LOD	<LOD	<LOD	<LOD	189	<LOD	<LOD	<LOD	<LOD	<LOD	7,158	205,844	356	30,064	17	836	150	<LOD
291	3/26/2024	15:58:05	34.73871	-112.024373	0326#137, 0326#137 (CrVI	#137	5,407	111	<LOD	65	161	234	23	<LOD	9	<LOD	<LOD	<LOD	293	<LOD	49	<LOD	<LOD	<LOD	14,977	69,667	481	35,317	38	241	305	<LOD
292	3/26/2024	16:00:03	34.738704	-112.024367		#143	3,632	52	<LOD	36	204	212	22	<LOD	<LOD	<LOD	<LOD	<LOD	259	<LOD	49	<LOD	<LOD	<LOD	13,597	50,153	405	28,518	44	195	235	<LOD
293	3/26/2024	16:02:44	34.738697	-112.024379		#147	4,780	78	<LOD	<LOD	192	212	25	<LOD	<LOD	<LOD	<LOD	<LOD	287	<LOD	35	<LOD	<LOD	<LOD	15,519	70,925	432	31,999	43	192	410	<LOD
294	3/26/2024	16:05:34	34.7385312	-112.0243317		#151	1,706	<LOD	<LOD	<LOD	67	226	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	180	<LOD	11	<LOD	<LOD	<LOD	8,308	112,552	271	11,576	29	271	114	<LOD
295	3/26/2024	16:28:49	34.7303204	-112.0287412		#152	2,756	35	<LOD	<LOD	122	130	15	<LOD	<LOD	<LOD	<LOD	<LOD	151	<LOD	16	<LOD	<LOD	<LOD	11,835	80,502	283	15,754	43	234	193	<LOD

Table 4a
March XRF Results
6th St and Birch St PI Report

March Location ID	Date	Time	Latitude	Longitude	Lab Sample ID	XRFNo	Ti	Cr*	Co	Ni	Cu	Zn	As	Se	Mo	Ag	Cd	Sb	Ba	Hg	Pb	P	S	Cl	K	Ca	Mn	Fe	Rb	Sr	Zr	Sn
296	3/26/2024	16:31:04	34.7304088	-112.0286014		#153	2,576	33	<LOD	<LOD	100	78	9	<LOD	<LOD	<LOD	<LOD	<LOD	178	<LOD	14	<LOD	<LOD	<LOD	12,393	83,685	227	15,350	38	306	151	<LOD
297	3/26/2024	16:32:44	34.7306706	-112.0285247		#154	1,691	<LOD	<LOD	<LOD	761	210	18	<LOD	<LOD	<LOD	<LOD	<LOD	68	<LOD	22	<LOD	<LOD	<LOD	8,412	99,137	139	13,094	30	318	139	<LOD
298	3/26/2024	16:34:33	34.7308409	-112.0285726		#155	3,846	56	<LOD	47	610	501	24	<LOD	<LOD	<LOD	<LOD	<LOD	245	<LOD	18	<LOD	1,861	<LOD	12,712	110,802	385	34,988	33	364	217	<LOD
299	3/26/2024	16:36:46	34.7305496	-112.029105		#156	2,097	24	<LOD	<LOD	59	41	10	<LOD	<LOD	<LOD	<LOD	<LOD	210	<LOD	<LOD	<LOD	<LOD	<LOD	11,808	62,869	184	11,966	37	310	173	<LOD
300	3/27/2024	7:25:41	34.7361286	-112.0216421		#9	4,879	<LOD		<LOD	103	632	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD						571	39,370	77	233	324	<LOD
301	3/27/2024	7:27:08	34.736208	-112.0217712		#10	5,092	<LOD		<LOD	120	700	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	24						372	33,611	35	243	327	<LOD
302	3/27/2024	7:32:19	34.7361928	-112.0215848		#11	4,025	69	<LOD	74	133	275	18	<LOD	<LOD	<LOD	<LOD	<LOD	309	<LOD	26	<LOD	<LOD	<LOD	17,031	94,578	703	41,005	48	265	302	<LOD
303	3/27/2024	7:35:10	34.7363496	-112.0212414		#12	4,864	152	<LOD	136	140	527	99	<LOD	<LOD	<LOD	<LOD	<LOD	361	<LOD	18	<LOD	<LOD	<LOD	9,399	66,738	1,986	73,009	18	156	137	<LOD
304	3/27/2024	7:36:35	34.7363524	-112.0212321		#13	5,379	169	<LOD	141	78	92	59	<LOD	<LOD	<LOD	<LOD	<LOD	322	<LOD	28	<LOD	<LOD	<LOD	10,945	57,131	1,083	55,033	28	515	226	<LOD
305	3/27/2024	7:42:38	34.7364094	-112.0212193		#14	2,575	<LOD	<LOD	<LOD	21	42	14	<LOD	<LOD	<LOD	<LOD	<LOD	135	<LOD	<LOD	<LOD	<LOD	<LOD	9,518	28,395	342	20,467	26	410	119	<LOD
306	3/27/2024	7:44:26	34.7365505	-112.0212445		#15	5,947	255	<LOD	131	743	3,876	170	<LOD	<LOD	<LOD	<LOD	<LOD	364	<LOD	67	36,954	3,896	<LOD	9,243	92,733	2,196	156,402	17	215	151	<LOD
307	3/27/2024	7:46:35	34.7365505	-112.0212445		#22	8,023	<LOD		<LOD	183	760	204	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD						3,245	115,631	24	124	117	<LOD
308	3/27/2024	7:49:39	34.7361691	-112.0213521		#23	5,220	312	<LOD	139	134	261	76	<LOD	<LOD	<LOD	<LOD	<LOD	234	<LOD	27	<LOD	<LOD	<LOD	12,333	71,607	1,061	56,710	34	245	197	<LOD
309	3/27/2024	7:51:17	34.7361691	-112.0213373		#24	4,590	183	<LOD	133	272	1,380	132	<LOD	<LOD	<LOD	<LOD	<LOD	320	<LOD	26	<LOD	<LOD	<LOD	9,976	91,880	1,153	93,435	21	182	152	<LOD
310	3/27/2024	7:53:39	34.7364237	-112.0215784		#25	3,683	74	<LOD	<LOD	83	212	38	<LOD	<LOD	<LOD	<LOD	<LOD	255	<LOD	<LOD	<LOD	<LOD	<LOD	11,892	49,530	792	38,857	32	396	163	<LOD
311	3/27/2024	7:55:31	34.7365554	-112.0215546		#26	2,970	51	<LOD	56	121	252	30	<LOD	<LOD	<LOD	<LOD	<LOD	219	<LOD	13	<LOD	<LOD	<LOD	11,379	49,372	579	29,120	34	264	154	<LOD
312	3/27/2024	7:58:32	34.7366841	-112.021336		#27	2,897	46	<LOD	<LOD	44	68	24	<LOD	<LOD	<LOD	<LOD	<LOD	185	<LOD	<LOD	<LOD	<LOD	<LOD	9,909	32,664	417	25,227	34	260	345	<LOD
313	3/27/2024	8:00:46	34.73685	-112.0211633	0327#28 (CrVI)	#28	6,972	324	<LOD	148	197	532	176	<LOD	<LOD	<LOD	<LOD	<LOD	443	<LOD	<LOD	21,570	<LOD	<LOD	7,326	72,321	2,476	111,128	16	132	101	<LOD
314	3/27/2024	8:02:14	34.7368552	-112.0211536	0327#29	#29	5,223	250	<LOD	131	201	705	145	<LOD	<LOD	<LOD	<LOD	<LOD	467	<LOD	20	26,409	<LOD	<LOD	10,596	60,069	2,066	101,832	31	153	148	90
315	3/27/2024	8:08:05	34.7369974	-112.0212264	0327#35, 0327#35 (CrVI)	#35	11,358	728	<LOD	270	433	1,693	161	<LOD	<LOD	<LOD	<LOD	<LOD	708	<LOD	33	49,541	<LOD	<LOD	10,519	57,721	3,248	176,276	21	131	183	<LOD
316	3/27/2024	8:09:33	34.7369976	-112.0212264		#36	5,939	236	<LOD	111	558	3,340	161	<LOD	<LOD	<LOD	<LOD	<LOD	341	<LOD	54	28,958	<LOD	<LOD	7,675	75,824	1,354	145,455	19	192	140	<LOD
317	3/27/2024	8:15:30	34.7369998	-112.0215271		#37	1,639	<LOD	<LOD	<LOD	44	191	8	<LOD	<LOD	<LOD	43	<LOD	215	<LOD	<LOD	<LOD	1,316	<LOD	9,199	25,961	345	17,824	48	95	147	<LOD
318	3/27/2024	8:17:43	34.737002	-112.0218195		#38	4,415	78	<LOD	111	73	246	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	492	<LOD	12	<LOD	<LOD	<LOD	18,652	136,575	559	41,900	65	1,015	228	<LOD
319	3/27/2024	8:19:40	34.7369899	-112.022085		#39	4,395	204	<LOD	46	43	214	21	<LOD	<LOD	<LOD	<LOD	<LOD	1,214	<LOD	17						367	31,705	98	126	600	<LOD
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322	3/27/2024	8:26:38	34.7370084	-112.0222905		#42	5,139	83	<LOD	<LOD	91	774	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	684	<LOD	18	<LOD	<LOD	<LOD	17,278	133,693	542	36,173	40	862	203	<LOD
323	3/27/2024	8:41:54	34.7359294	-112.0216354		#46	3,282	103	<LOD	<LOD	234	1,105	27	<LOD	<LOD	<LOD	<LOD	<LOD	282	<LOD	27	<LOD	<LOD	<LOD	14,355	56,114	408	40,907	52	185	311	<LOD
324	3/27/2024	8:44:32	34.7359854	-112.0213152		#47	3,752	66	<LOD	43	256	1,211	38	<LOD	<LOD	<LOD	<LOD	<LOD	210	<LOD	42	<LOD	<LOD	<LOD	12,608	101,860	403	46,655	33	296	191	<LOD
325	3/27/2024	8:47:19	34.7359184	-112.020985		#48	4,969	87	<LOD	66	272	1,362	36	<LOD	<LOD	<LOD	<LOD	<LOD	280	<LOD	37	17,071	<LOD	<LOD	12,425	67,097	415	55,444	33	213	362	<LOD
326	3/27/2024	8:50:47	34.7362196	-112.0211784		#49	4,177	75	<LOD	53	131	425	30	<LOD	<LOD	<LOD	<LOD	<LOD	258	<LOD	24	<LOD	<LOD	<LOD	11,420	84,973	435	47,701	26	285	200	<LOD
327	3/27/2024	8:53:54	34.7366025	-112.021108		#50	4,328	97	<LOD	<LOD	217	897	37	<LOD	<LOD	<LOD	<LOD	<LOD	251	<LOD	25	<LOD	<LOD	<LOD	15,729	77,985	401	44,046	38	302	300	<LOD
328	3/27/2024	8:56:57	34.7363223	-112.0207721		#51	4,005	61	<LOD	<LOD	67	207	14	<LOD	<LOD	<LOD	<LOD	<LOD	208	<LOD	<LOD	<LOD	<LOD	<LOD	13,950	90,434	455	31,234	40	306	227	<LOD
329	3/27/2024	9:15:01	34.7359184	-112.0207546		#52	8,474	310	<LOD	<LOD	296	1,521	53	<LOD	<LOD	<LOD	<LOD	<LOD	1,523	<LOD	31						565	68,901	37	286	260	<LOD
330	3/27/2024	9:17:50	34.7357823	-112.0204468		#55	4,173	95	<LOD	<LOD	274	1,187	37	<LOD	<LOD	<LOD	<LOD	<LOD	296	<LOD	42	<LOD	<LOD	<LOD	14,447	74,925	494	52,165	38	364	223	<LOD
331	3/27/2024	9:20:37	34.7359154	-112.0201163		#56	3,797	82	<LOD	50	208	803	31	<LOD	<LOD	<LOD	<LOD	<LOD	241	<LOD	30	<LOD	<LOD	<LOD	12,977	87,567	409	40,682	37	190	280	<LOD
332	3/27/2024	9:23:26	34.735779	-112.0199835		#57	3,164	25	<LOD	<LOD	313	1,385	29	<LOD	<LOD	<LOD	<LOD	<LOD	217	<LOD	34	<LOD	5,309	<LOD	8,646	64,040	299	39,275	26	223	128	<LOD
333	3/27/2024	9:25:25	34.7357952	-112.0196583	0327#58	#58	4,861	115	<LOD	<LOD	534	2,412	67	<LOD	<LOD	<LOD	<LOD	<LOD	301	<LOD	77	20,409	2,731	<LOD	17,771	69,821	642	79,255	45	206	257	<LOD
334	3/27/2024	9:30:18	34.7359168	-112.0193505		#59	6,091	<LOD		<LOD	247	297	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	40						566	34,809	51	244	314	<LOD
335	3/27/2024	9:33:22	34.7361248	-112.019087		#63	2,627	<LOD		<LOD	251	779	35	<LOD	12	<LOD	<LOD	<LOD	<LOD	<LOD	29						577	40,488	35	263	263	<LOD
336	3/27/2024	9:36:24	34.736742	-112.0191054		#65	3,573	<LOD	<LOD	50	116	148	13	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	20						344	24,900	33	260	238	<LOD
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339	3/27/2024	9:49:09	34.7381532	-112.0191158		#74	4,042	76	<LOD	80	133	325	14	<LOD	<LOD	<LOD	<LOD	<LOD	227	<LOD	16	<LOD	<LOD	<LOD	11,955	118,414	620	42,339	21	320	207	<LOD
340	3/27/2024	9:51:13	34.7384182	-112.0191413		#75	3,973	56	<LOD	<LOD	53	96	12	<LOD	<LOD	<LOD	<LOD	<LOD	185	<LOD	16	<LOD	<LOD	<LOD	11,111	114,052	373	27,351	32	341	212	<LOD
341	3/27/2024	9:53:02	34.7382703	-112.0187286		#76	4,118	<LOD		<LOD	<LOD	736	16	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD						269	33,167	47	182	537	<LOD
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343	3/27/2024	9:59:56	34.7379724	-112.0185649		#78	4,088	60	<LOD	<LOD	177	664	22	<LOD	13	<LOD	<LOD	<LOD	390	<LOD	14	15,320	<LOD	<LOD	14,754	25,799	764	47,259	52	136	382	<LOD
344	3/27/2024	10:01:51	34.7377393	-112.0184754		#79	3,544	47	<LOD	49	40	120	13	<LOD	<LOD	<LOD	<LOD	<LOD	210	<LOD	13	<LOD	<LOD	<LOD	10,889	119,265	372	44,419	29	316	186	<LOD
345	3/27/2024	10:04:32	34.7376525	-112.0186035		#80	3,867	51	<LOD	<LOD	70	175	12	<LOD	<LOD	<LOD	<LOD	<LOD	245	<LOD	16	<LOD	<LOD	<LOD	11,975	96,595	395	33,834	32	283	184	<LOD
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347	3/27/2024	10:11:53	34.7369274	-112.0186172		#82	2,714	53	<LOD	<LOD	99	388	13	<LOD	9	<LOD	<LOD	<LOD	339	<LOD	21	<LOD	1,643	<LOD	14,620	32,795	446	28,329	46	125	247	<LOD
348	3/27/2024	10:17:50	34.736591	-112.018567		#83	2,962	83	<LOD	53	373	1,695	42	<LOD	<LOD	<LOD	<LOD	<LOD	211	<LOD	38	<LOD	9,957	<LOD	8,565	109,033	316	53,631	18	374	145	<LOD
349	3/27/2024	10:20:16	34.7362846	-112.018583		#84	5,152	157	<LOD	64	161	607	22	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	17						442	37,945	38	446	299	<LOD
350	3/27/2024	10:21:22	34.7362846	-112.018583		#85	4,704	80	<LOD	<LOD	177	656	15	<LOD	10	<LOD	<LOD	<LOD	291	<LOD	30	<LOD	<LOD	<LOD	14,203	85,617	428	39,800	34	299	263	<LOD
351	3/27/2024	10:23:23	34.7359269	-112.0186125		#86	3,591	73	<LOD	43	113	440	14	<LOD	<LOD	<LOD	<LOD	<LOD	273	<LOD	23	<LOD	<LOD	<LOD	15,151	65,126	475	32,511	45	221	338	<LOD
352	3/27/2024	10:25:49	34.7357096	-112.0185995	0327#87 (CrVI)	#87	5,428	114	<LOD	57	318	1,563	43	<LOD	<LOD	<LOD	<LOD	<LOD	358	<LOD	37	<LOD	2,762	<LOD	17,247	72,680	634	54,645	43	390	275	<LOD
353	3/27/2024	10:28:06	34.7357126	-112.0185864		#88	5,802	101	<LOD	71	494	2,944	61	<LOD	<LOD	<LOD	<LOD	<LOD	445	<LOD	72	25,762	3,215	<LOD	17,233	93,018	597	82,130	39	388	321	<LOD
354	3/27/2024	10:55:52	34.7350034	-112.0206198		#91	3,112	56	<LOD	<LOD	206	872	28	<LOD	<LOD	<LOD	<LOD	<LOD	185	<LOD	16	<LOD	<LOD	<LOD	9,624	71,209	359	37,170	22	436	147	<LOD

Table 4a
March XRF Results
6th St and Birch St PI Report

March Location ID	Date	Time	Latitude	Longitude	Lab Sample ID	XRFNo	Ti	Cr*	Co	Ni	Cu	Zn	As	Se	Mo	Ag	Cd	Sb	Ba	Hg	Pb	P	S	Cl	K	Ca	Mn	Fe	Rb	Sr	Zr	Sn
355	3/27/2024	10:58:40	34.7348579	-112.0204626		#92	3,230	96	<LOD	59	1,199	4,575	102	<LOD	<LOD	<LOD	<LOD	<LOD	246	<LOD	98	27,499	<LOD	<LOD	12,541	91,110	432	102,697	30	259	183	<LOD
356	3/27/2024	11:00:46	34.734724	-112.0205293		#93	4,734	102	<LOD	54	890	4,990	122	8	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	95	54,529	3,595	<LOD	11,236	123,363	424	138,515	27	249	237	<LOD
357	3/27/2024	11:03:03	34.7345937	-112.0204207	0327#94, 0327#94(CrVI)	#94	2,635	115	<LOD	<LOD	2,325	14,278	336	<LOD	17	<LOD	<LOD	<LOD	<LOD	<LOD	288	91,443	8,598	<LOD	6,037	137,192	332	419,632	16	298	151	<LOD
358	3/27/2024	11:27:14	34.7308825	-112.0260748		#95	1,627	<LOD	<LOD	<LOD	690	372	35	<LOD	<LOD	<LOD	<LOD	<LOD	65	<LOD	160	<LOD	<LOD	<LOD	7,579	242,237	158	9,960	19	258	107	<LOD
359	3/27/2024	11:28:58	34.7309453	-112.0260238		#96	1,680	23	<LOD	<LOD	441	238	15	<LOD	<LOD	<LOD	<LOD	<LOD	109	<LOD	66	<LOD	<LOD	<LOD	9,779	111,479	209	12,387	37	515	213	<LOD
360	3/27/2024	11:30:53	34.7309538	-112.0261603		#97	520	<LOD	<LOD	<LOD	129	103	24	<LOD	<LOD	<LOD	<LOD	<LOD	121	<LOD	18	<LOD	<LOD	<LOD	3,935	367,397	51	3,242	<LOD	473	27	<LOD
361	3/27/2024	11:33:25	34.7308538	-112.0259387		#101	<LOD	<LOD		<LOD	514	280	68	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	35						291	15,344	35	426	404	<LOD
362	3/27/2024	11:35:54	34.7308695	-112.0261298		#102	1,597	28	<LOD	<LOD	705	381	30	<LOD	<LOD	<LOD	<LOD	<LOD	64	<LOD	146	<LOD	<LOD	<LOD	7,049	225,771	145	10,493	19	240	124	<LOD
363	3/27/2024	11:37:50	34.7308243	-112.0261184		#104	1,940	21	<LOD	<LOD	462	245	16	<LOD	<LOD	<LOD	<LOD	<LOD	63	<LOD	41	<LOD	<LOD	<LOD	9,750	80,672	189	11,569	37	537	164	<LOD
364	3/27/2024	11:40:33	34.7308425	-112.0262139		#105	2,429	34	<LOD	44	170	92	15	<LOD	<LOD	<LOD	<LOD	<LOD	167	<LOD	19	<LOD	<LOD	<LOD	11,696	54,517	229	16,187	52	433	229	<LOD
365	3/27/2024	11:43:05	34.7307185	-112.0258314		#106	2,296	<LOD	<LOD	<LOD	578	218	70	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	39						207	13,182	42	619	276	<LOD
366	3/27/2024	13:07:26	34.7297988	-112.0196764	0327#110, 0327#110(CrVI)	#110	4,774	107	<LOD	<LOD	487	3,956	86	<LOD	<LOD	<LOD	<LOD	<LOD	341	<LOD	95	30,712	<LOD	<LOD	13,940	110,497	528	104,439	33	525	322	<LOD
367	3/27/2024	13:09:27	34.7297988	-112.0196764		#111	4,153	114	<LOD	<LOD	483	3,493	72	<LOD	15	<LOD	<LOD	<LOD	249	<LOD	74	24,820	3,482	<LOD	13,218	103,333	499	89,967	26	413	255	<LOD
368	3/27/2024	13:14:28	34.7301614	-112.0196385		#112	2,916	49	<LOD	42	116	620	19	<LOD	<LOD	<LOD	<LOD	<LOD	236	<LOD	138	<LOD	2,625	<LOD	7,592	94,538	235	28,287	19	431	207	<LOD
369	3/27/2024	13:16:36	34.7300192	-112.0192435		#113	4,894	109	<LOD	65	312	1,901	40	<LOD	12	<LOD	<LOD	<LOD	285	<LOD	80	<LOD	6,381	2,062	13,350	187,932	510	66,301	20	744	246	<LOD
370	3/27/2024	13:18:47	34.7298839	-112.0189247		#114	3,339	58	<LOD	86	103	160	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	242	<LOD	21	<LOD	16,970	<LOD	10,774	172,601	413	27,642	37	500	201	<LOD
371	3/27/2024	13:20:42	34.7300884	-112.0186478		#116	3,745	71	<LOD	50	432	1,136	27	<LOD	<LOD	<LOD	<LOD	<LOD	288	<LOD	79	<LOD	3,972	703	13,557	144,958	442	41,446	24	447	223	<LOD
372	3/27/2024	13:24:26	34.7304705	-112.0191148		#117	3,129	66	<LOD	<LOD	229	810	23	<LOD	10	<LOD	<LOD	<LOD	176	<LOD	34	<LOD	<LOD	<LOD	12,964	110,355	377	42,969	36	602	193	<LOD
373	3/27/2024	13:26:32	34.7303173	-112.0188861		#118	3,453	75	<LOD	<LOD	908	3,989	66	<LOD	<LOD	<LOD	<LOD	<LOD	233	<LOD	147	24,253	<LOD	<LOD	12,245	111,958	425	82,675	40	403	184	<LOD
374	3/27/2024	13:37:25	34.7301537	-112.014205		#119	4,475	66	<LOD	69	70	360	28	<LOD	<LOD	<LOD	<LOD	<LOD	318	<LOD	18	17,706	2,390	<LOD	11,308	91,731	638	44,861	36	370	493	<LOD
375	3/27/2024	13:40:08	34.7297483	-112.0143203		#120	3,806	76	<LOD	54	128	359	13	<LOD	<LOD	<LOD	<LOD	<LOD	216	<LOD	41	<LOD	<LOD	<LOD	10,244	120,324	468	38,092	32	310	191	<LOD
376	3/27/2024	13:42:02	34.7295822	-112.0142975		#121	4,430	92	<LOD	<LOD	64	328	16	<LOD	<LOD	<LOD	<LOD	<LOD	283	<LOD	20	21,099	3,494	<LOD	12,587	118,487	544	36,810	28	377	187	<LOD
377	3/27/2024	13:44:20	34.7292485	-112.0141916		#122	3,951	62	<LOD	49	91	287	17	<LOD	<LOD	<LOD	<LOD	<LOD	221	<LOD	21	<LOD	4,405	504	14,022	80,417	385	27,379	34	276	289	<LOD
378	3/27/2024	13:56:17	34.7335213	-112.0156517		#123	5,189	90	<LOD	77	54	88	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	313	<LOD	<LOD	<LOD	<LOD	<LOD	10,936	134,953	636	36,606	33	558	136	<LOD
379	3/27/2024	13:57:43	34.733518	-112.015652		#124	3,247	63	<LOD	56	50	83	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	233	<LOD	11	<LOD	<LOD	<LOD	10,323	101,819	423	24,035	42	575	136	<LOD
380	3/27/2024	13:59:09	34.7335213	-112.0156517		#126	4,459	<LOD	<LOD	58	62	109	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD						477	24,924	60	596	152	<LOD
381	3/27/2024	14:01:42	34.733343	-112.0146459		#127	4,051	69	<LOD	43	39	89	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	250	<LOD	11	<LOD	<LOD	<LOD	11,197	122,640	417	27,799	68	504	158	<LOD
382	3/27/2024	14:02:44	34.7333552	-112.0146352	0327#128, 0327#128(CrVI)	#128	4,444	126	<LOD	112	63	64	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	477	<LOD	<LOD	<LOD	<LOD	1,302	11,267	230,689	744	46,075	21	712	135	<LOD
383	3/27/2024	15:07:19	34.732119	-112.0143287		#132	3,023	53	<LOD	88	65	118	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	300	<LOD	16	<LOD	1,961	<LOD	8,479	87,640	760	24,503	18	381	127	<LOD
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385	3/27/2024	15:12:33	34.7322475	-112.0138734		#137	3,601	<LOD		<LOD	<LOD	175	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	33						292	25,572	18	544	151	<LOD
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387	3/27/2024	15:15:45	34.7321659	-112.0136756	0327#139, 0327#139(CrVI)	#139	5,998	108	<LOD	44	130	183	13	<LOD	<LOD	<LOD	<LOD	<LOD	362	<LOD	32	<LOD	<LOD	<LOD	17,588	76,117	637	43,063	42	266	292	<LOD
388	3/27/2024	15:19:41	34.7322544	-112.0134738		#140	4,486	85	<LOD	75	195	329	15	<LOD	<LOD	<LOD	<LOD	<LOD	292	<LOD	31	<LOD	2,558	<LOD	14,785	137,209	524	37,249	38	435	200	<LOD
389	3/27/2024	15:21:31	34.7322514	-112.0132669		#141	4,156	82	<LOD	52	148	180	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	302	<LOD	35	<LOD	2,113	<LOD	11,522	88,239	439	29,021	30	333	214	<LOD
390	3/27/2024	15:23:34	34.7321657	-112.0130855		#143	3,757	42	<LOD	47	141	519	18	<LOD	19	<LOD	<LOD	<LOD	305	<LOD	21	<LOD	4,319	<LOD	10,949	92,325	342	36,603	37	428	350	<LOD
391	3/27/2024	15:25:44	34.7322555	-112.0129065		#144	5,293	81	<LOD	59	132	249	15	<LOD	<LOD	<LOD	<LOD	<LOD	286	<LOD	25	<LOD	<LOD	<LOD	12,958	100,779	477	33,376	30	391	262	<LOD
392	3/27/2024	15:27:35	34.732258	-112.0126379		#145	3,488	63	<LOD	51	81	200	16	<LOD	<LOD	<LOD	<LOD	<LOD	207	<LOD	16	<LOD	<LOD	<LOD	9,725	181,416	306	26,433	26	405	197	<LOD
393	3/27/2024	15:29:12	34.7321615	-112.0125135		#146	4,082	70	<LOD	58	93	205	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	230	<LOD	25	<LOD	<LOD	<LOD	13,654	96,211	325	26,042	32	348	324	<LOD
394	3/27/2024	15:30:45	34.7322508	-112.012312		#147	5,889	89	<LOD	85	81	146	13	<LOD	<LOD	<LOD	<LOD	<LOD	651	<LOD	14	19,422	4,930	<LOD	14,456	111,631	505	43,551	29	522	241	<LOD
395	3/27/2024	15:32:42	34.7322478	-112.0121511		#148	3,895	74	<LOD	47	38	244	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	288	<LOD	19	<LOD	9,934	631	10,769	140,262	341	27,440	27	476	153	<LOD
396	3/27/2024	15:34:27	34.7321232	-112.0121196		#149	7,571	133	<LOD	93	63	118	11	<LOD	<LOD	<LOD	<LOD	<LOD	405	<LOD	24	16,241	<LOD	<LOD	16,102	71,807	658	55,956	44	306	327	<LOD
397	3/27/2024	15:35:43	34.7321293	-112.0121189		#150	6,382	99	<LOD	70	42	95	11	<LOD	<LOD	<LOD	<LOD	<LOD	374	<LOD	18	<LOD	<LOD	<LOD	17,452	80,898	566	50,338	50	284	357	<LOD
398	3/27/2024	15:36:58	34.7321194	-112.0121431	0327#151, 0327#151(CrVI)	#151	6,901	147	<LOD	51	64	132	13	<LOD	<LOD	<LOD	<LOD	<LOD	342	<LOD	26	<LOD	<LOD	<LOD	15,103	93,385	605	47,858	41	345	327	<LOD
399	3/27/2024	15:40:52	34.7319386	-112.0121075		#152	7,248	111	<LOD	100	60	106	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	328	<LOD	26	<LOD	1,984	<LOD	14,458	75,614	650	56,165	51	278	319	<LOD
400	3/27/2024	15:43:25	34.7317788	-112.0121119		#154	5,490	88	<LOD	84	82	158	14	<LOD	<LOD	<LOD	<LOD	<LOD	360	<LOD	23	<LOD	<LOD	<LOD	17,645	71,963	644	48,863	49	251	237	<LOD
401	3/27/2024	15:45:09	34.7317788	-112.0121119		#155	5,901	91	<LOD	65	72	85	17	<LOD	<LOD	<LOD	<LOD	<LOD	283	<LOD	<LOD	<LOD	<LOD	<LOD	16,002	104,396	584	47,202	44	264	327	<LOD
402	3/27/2024	15:46:46	34.7314349	-112.0121253		#156	7,246	107	<LOD	94	56	118	15	<LOD	<LOD	<LOD	<LOD	<LOD	356	<LOD	17	<LOD	<LOD	<LOD	17,171	83,251	748	51,236	43	333	229	<LOD
403	3/27/2024	15:48:11	34.7314275	-112.0121109		#157	3,921	59	<LOD	37	33	110	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	256	<LOD	18	<LOD	3,498	<LOD	10,858	72,187	487	32,699	31	309	150	<LOD
404	3/27/2024	15:52:08	34.7321654	-112.0119087		#158	4,943	109	<LOD	54	72	197	11	<LOD	<LOD	<LOD	<LOD	<LOD	379	<LOD	24	<LOD	2,716	<LOD	14,905	92,811	508	38,028	51	257	450	<LOD
405	3/27/2024	15:53:45	34.732163	-112.011934		#159	3,653	60	<LOD	34	76	234	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	290	<LOD	23	15,160	7,791	<LOD	14,646	81,049	355	28,108	64	406	182	<LOD
406	3/27/2024	15:55:51	34.7322616	-112.0117488		#160	5,163	108	<LOD	74	68	253	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	284	<LOD	25	<LOD	2,008	<LOD	13,933	88,311	538	37,870	37	356	265	<LOD
407	3/27/2024	15:58:47	34.7321574	-112.0115563		#163	4,985	91	<LOD	86	24	55	12	<LOD	<LOD	<LOD	<LOD	<LOD	337	<LOD	<LOD	52,120	<LOD	<LOD	12,540	45,584	573	31,371	37	254	289	<LOD
408	3/27/2024	16:01:19	34.7322784	-112.0113917		#165	5,290	93	<LOD	55	70	265	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	309	<LOD	30	<LOD	<LOD	<LOD	14,090	91,112	495	38,222	34	453	316	<LOD
409	3/27/2024	16:04:20	34.7323398	-112.0111604		#170	5,544	79	<LOD	56	88	296	11	<LOD	<LOD	<LOD	<LOD	<LOD	280	<LOD	19	<LOD	2,664	<LOD	12,057	122,719	457	39,534	30	558	233	<LOD
410	3/27/2024	16:05:46	34.7322687	-112.0110333		#171	4,627	65	<LOD	<LOD	69	264	11	<LOD	<LOD	<LOD	<LOD	<LOD	284	<LOD	23	<LOD	2,422	<LOD	11,847	130,109	442	33,266	31	416	182	<LOD
411	3/27/2024	16:08:00	34.732304	-112.0108499		#172	6,240	124	<LOD	76	98	422	14	<LOD	<LOD	<LOD	<LOD	<LOD	349	<LOD	45	<LOD	3,278	<LOD	15,310	132,919	607	40,951	31	530	245	<LOD
412	3/27/2024	16:09:02	34.732304	-112.0108499		#173	5,123	83	<LOD	75	49	318	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	350	<LOD	27	20,927	2,249	<LOD	12,282	124,036	495	40,013	25	431	202	<LOD
413	3/27/2024	16:13:06	34.7323401	-112.010691	0327#174, 0327#174 (CrVI)	#174	6,652	144	<LOD	75	91	314	17	<LOD	<LOD	<LOD	<LOD	<LOD	404	<LOD	25	<LOD	<LOD	<LOD	15,998	95,716	659	52,582	33	344	340	<LOD

Table 4a
March XRF Results
6th St and Birch St PI Report

March Location ID	Date	Time	Latitude	Longitude	Lab Sample ID	XRFNo	Ti	Cr*	Co	Ni	Cu	Zn	As	Se	Mo	Ag	Cd	Sb	Ba	Hg	Pb	P	S	Cl	K	Ca	Mn	Fe	Rb	Sr	Zr	Sn
414	3/27/2024	16:14:23	34.732333	-112.010694		#175	6,461	134	<LOD	63	107	258	12	<LOD	<LOD	<LOD	<LOD	<LOD	319	<LOD	30	<LOD	<LOD	<LOD	14,800	97,100	532	44,858	33	330	234	<LOD
415	3/27/2024	16:18:13	34.7323483	-112.0104747		#176	5,070	94	<LOD	43	60	169	10	<LOD	<LOD	<LOD	<LOD	<LOD	252	<LOD	19	<LOD	<LOD	<LOD	12,071	80,484	537	40,507	30	291	294	<LOD
416	3/27/2024	16:20:21	34.7324481	-112.0103282		#177	5,345	87	<LOD	72	88	283	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	339	<LOD	30	19,789	1,717	<LOD	12,751	91,895	480	38,136	33	367	256	<LOD
417	3/27/2024	16:22:10	34.7324732	-112.0100245		#178	5,393	89	<LOD	67	63	121	10	<LOD	<LOD	<LOD	<LOD	<LOD	308	<LOD	17	<LOD	<LOD	<LOD	14,371	121,566	557	37,508	36	340	238	<LOD
418	3/27/2024	16:24:08	34.7322908	-112.0099574		#179	4,819	54	<LOD	115	86	148	16	<LOD	<LOD	<LOD	<LOD	<LOD	331	<LOD	25	<LOD	<LOD	<LOD	13,112	89,579	547	46,140	38	279	242	<LOD
419	3/27/2024	16:58:03	34.7399718	-112.0175142		#181	4,810	100	<LOD	<LOD	189	600	30	<LOD	34	<LOD	<LOD	<LOD	364	<LOD	22	21,190	4,367	1,694	19,884	96,964	532	49,131	57	346	256	<LOD
420	3/27/2024	17:01:16	34.7398773	-112.0175145		#182	4,129	77	<LOD	<LOD	79	286	17	<LOD	<LOD	<LOD	<LOD	<LOD	272	<LOD	16	<LOD	<LOD	<LOD	16,672	99,295	455	31,321	47	352	264	<LOD
421	3/27/2024	17:03:09	34.7396677	-112.0174978		#184	2,098	72	<LOD	<LOD	134	379	19	<LOD	13	<LOD	<LOD	<LOD	286	<LOD	15	<LOD	2,548	<LOD	14,617	41,972	310	27,120	58	235	215	<LOD
422	3/27/2024	17:04:47	34.73966	-112.0173593		#185	4,280	120	<LOD	<LOD	48	1,295	16	<LOD	<LOD	<LOD	<LOD	<LOD	601	<LOD	19	12,235	<LOD	<LOD	27,480	43,479	645	36,223	102	160	392	<LOD
423	3/27/2024	17:06:03	34.7396693	-112.0173566		#186	5,491	77	<LOD	<LOD	55	571	17	<LOD	<LOD	<LOD	<LOD	<LOD	513	<LOD	14	17,430	<LOD	<LOD	18,386	51,486	495	34,432	67	190	308	<LOD
424	3/27/2024	17:07:03	34.739667	-112.017361	0327#187	#187	4,031	78	<LOD	<LOD	35	1,281	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	444	<LOD	15	<LOD	<LOD	<LOD	21,302	40,884	494	31,524	91	164	316	<LOD
425	3/27/2024	17:10:10	34.7398597	-112.0173539		#188	2,281	66	<LOD	<LOD	78	242	13	<LOD	11	<LOD	<LOD	<LOD	342	<LOD	17	<LOD	<LOD	<LOD	20,636	44,408	309	24,790	74	192	345	<LOD
426	3/27/2024	17:13:38	34.7399633	-112.0179386		#189	3,984	80	<LOD	39	90	409	21	<LOD	<LOD	<LOD	<LOD	<LOD	463	<LOD	28	<LOD	<LOD	<LOD	18,067	55,200	500	34,851	71	200	454	<LOD
427	3/27/2024	17:16:06	34.7401884	-112.0182099		#190	2,689	60	<LOD	58	59	178	16	<LOD	<LOD	<LOD	<LOD	<LOD	283	<LOD	29	<LOD	<LOD	<LOD	15,645	111,255	342	24,360	62	418	259	<LOD
428	3/27/2024	17:17:58	34.7401738	-112.0184583		#191	2,798	41	<LOD	42	60	151	14	<LOD	<LOD	<LOD	<LOD	<LOD	176	<LOD	15	<LOD	<LOD	<LOD	9,315	104,912	283	19,994	28	414	187	<LOD
429	3/27/2024	17:20:45	34.7396167	-112.0182018		#192	3,455	51	<LOD	59	68	307	14	<LOD	<LOD	<LOD	<LOD	<LOD	248	<LOD	15	<LOD	<LOD	<LOD	12,746	122,465	438	26,447	59	337	240	<LOD
430	3/27/2024	17:23:40	34.7394519	-112.0181103		#193	4,020	69	<LOD	66	85	366	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	324	<LOD	16	<LOD	<LOD	<LOD	13,777	188,778	418	34,585	21	857	197	<LOD
431	3/27/2024	17:25:38	34.739409	-112.0181133	0327#194 (CrVI)	#194	7,623	175	<LOD	156	79	143	19	<LOD	<LOD	<LOD	<LOD	<LOD	1,032	<LOD	<LOD	<LOD	<LOD	<LOD	13,336	139,840	1,859	59,642	24	508	174	<LOD
432	3/27/2024	17:27:08	34.739417	-112.0181086		#195	7,887	112	<LOD	117	88	213	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	539	<LOD	<LOD	<LOD	<LOD	<LOD	10,655	145,212	756	56,964	11	562	194	<LOD
433	3/28/2024	7:19:44	34.7287004	-112.0219254		#5	4,389	61	<LOD	<LOD	86	297	23	<LOD	<LOD	<LOD	<LOD	<LOD	170	<LOD	<LOD	<LOD	2,526	<LOD	12,617	66,373	496	31,067	35	299	260	<LOD
434	3/28/2024	7:24:33	34.728707	-112.0217806		#7	2,976	39	<LOD	<LOD	62	160	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	263	<LOD	<LOD	<LOD	<LOD	<LOD	9,596	111,530	351	22,528	21	522	152	<LOD
435	3/28/2024	7:26:35	34.728569	-112.0215472		#8	3,056	40	<LOD	<LOD	89	370	14	<LOD	<LOD	<LOD	<LOD	<LOD	192	<LOD	17	<LOD	2,566	<LOD	6,659	56,562	405	33,235	22	278	191	<LOD
436	3/28/2024	7:28:31	34.728569	-112.0212931		#9	5,229	68	<LOD	<LOD	108	216	14	<LOD	<LOD	<LOD	<LOD	<LOD	156	<LOD	22	<LOD	2,332	921	10,082	56,090	753	43,571	27	239	190	<LOD
437	3/28/2024	7:30:59	34.7285795	-112.0211385		#11	7,340	94	<LOD	52	105	307	17	<LOD	<LOD	<LOD	<LOD	<LOD	438	<LOD	16	22,233	<LOD	<LOD	11,319	74,729	857	71,051	21	320	218	<LOD
438	3/28/2024	7:33:24	34.7287189	-112.0209615		#12	5,103	91	<LOD	57	168	287	15	<LOD	<LOD	<LOD	<LOD	<LOD	303	<LOD	41	<LOD	<LOD	<LOD	15,802	84,681	620	42,008	44	297	289	<LOD
439	3/28/2024	7:35:12	34.728653	-112.0205994		#13	3,742	40	<LOD	<LOD	78	372	13	<LOD	<LOD	<LOD	<LOD	<LOD	232	<LOD	19	<LOD	2,444	<LOD	9,543	82,138	370	28,538	28	349	191	<LOD
440	3/28/2024	7:51:45	34.7285742	-112.0221443		#14	2,787	40	<LOD	42	97	121	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	200	<LOD	17	<LOD	<LOD	<LOD	10,993	46,142	359	24,020	34	310	170	<LOD
441	3/28/2024	7:53:47	34.7287032	-112.022364	0328#15	#15	4,742	104	<LOD	<LOD	359	265	20	<LOD	<LOD	<LOD	<LOD	<LOD	274	<LOD	76	<LOD	<LOD	<LOD	16,567	33,765	546	31,967	50	169	242	<LOD
442	3/28/2024	7:59:19	34.7285759	-112.0226328		#16	3,892	51	<LOD	41	122	128	14	<LOD	<LOD	<LOD	<LOD	<LOD	265	<LOD	23	<LOD	<LOD	<LOD	12,778	63,060	474	29,882	49	257	210	<LOD
443	3/28/2024	8:02:09	34.7285941	-112.0229829		#17	5,488	106	<LOD	64	101	180	15	<LOD	<LOD	<LOD	<LOD	<LOD	279	<LOD	40	<LOD	<LOD	<LOD	18,488	81,408	627	50,448	44	261	307	<LOD
444	3/28/2024	8:05:06	34.728583	-112.022972		#21	4,812	80	<LOD	52	90	193	12	<LOD	<LOD	<LOD	<LOD	<LOD	286	<LOD	24	<LOD	<LOD	<LOD	14,844	78,266	406	32,632	43	316	315	<LOD
445	3/28/2024	8:06:32	34.7285698	-112.0229416		#22	4,712	110	<LOD	48	147	227	17	<LOD	<LOD	<LOD	<LOD	<LOD	340	<LOD	44	<LOD	<LOD	<LOD	15,946	90,115	497	34,501	42	305	300	<LOD
446	3/28/2024	8:07:53	34.7285654	-112.0229534		#23	3,620	46	<LOD	57	179	237	14	<LOD	<LOD	<LOD	<LOD	<LOD	249	<LOD	40	<LOD	<LOD	<LOD	15,244	71,586	420	29,469	47	267	279	<LOD
447	3/28/2024	8:10:00	34.7286117	-112.0231586		#24	4,383	90	<LOD	48	66	137	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	278	<LOD	15	<LOD	1,932	<LOD	15,916	68,499	411	32,055	47	604	252	<LOD
448	3/28/2024	8:11:40	34.7286048	-112.0233611		#25	4,532	109	<LOD	62	58	136	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	347	<LOD	16	<LOD	4,447	735	11,348	153,928	407	36,625	28	521	216	<LOD
449	3/28/2024	8:12:50	34.7286048	-112.0233611	0328#26 (CrVI)	#26	5,562	100	<LOD	<LOD	67	162	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	395	<LOD	19	<LOD	6,038	736	14,432	163,735	500	37,775	32	646	250	<LOD
450	3/28/2024	8:18:09	34.7286054	-112.0235371		#28	3,799	51	<LOD	67	34	186	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	315	<LOD	16	<LOD	5,497	<LOD	11,261	115,381	391	27,426	27	545	128	<LOD
451	3/28/2024	8:20:11	34.7287032	-112.0237416		#29	2,935	47	<LOD	34	36	106	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	232	<LOD	14	<LOD	2,885	<LOD	10,577	67,345	361	23,339	25	476	167	<LOD
452	3/28/2024	8:22:11	34.72804	-112.0239052		#30	4,871	109	<LOD	61	112	213	10	<LOD	9	<LOD	<LOD	<LOD	319	<LOD	16	<LOD	<LOD	<LOD	15,510	76,708	501	31,014	32	405	246	<LOD
453	3/28/2024	8:23:35	34.728604	-112.0239052		#31	4,308	79	<LOD	35	114	212	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	233	<LOD	22	<LOD	<LOD	<LOD	14,800	67,386	496	27,929	39	328	211	<LOD
454	3/28/2024	8:27:42	34.72872	-112.0241567		#32	7,242	138	<LOD	66	146	321	14	<LOD	<LOD	<LOD	<LOD	<LOD	376	<LOD	47	<LOD	<LOD	<LOD	19,109	65,731	593	38,868	54	261	326	<LOD
455	3/28/2024	8:29:00	34.7287219	-112.0241617	0328#33	#33	6,545	140	<LOD	42	179	324	12	<LOD	<LOD	<LOD	<LOD	<LOD	389	<LOD	48	<LOD	<LOD	<LOD	17,684	61,278	587	38,294	52	278	408	<LOD
456	3/28/2024	8:42:40	34.7286933	-112.024555		#36	3,130	45	<LOD	<LOD	56	181	16	<LOD	<LOD	<LOD	<LOD	<LOD	353	<LOD	20	<LOD	7,326	<LOD	13,223	68,677	552	30,735	36	430	175	<LOD
457	3/28/2024	8:44:24	34.7286037	-112.0246844		#37	3,467	62	<LOD	63	62	152	11	<LOD	<LOD	<LOD	59	<LOD	237	<LOD	22	<LOD	4,133	<LOD	10,651	106,176	597	28,558	22	590	175	<LOD
458	3/28/2024	8:46:55	34.7286955	-112.0248668		#38	3,919	69	<LOD	51	66	203	18	<LOD	<LOD	<LOD	<LOD	<LOD	257	<LOD	<LOD	<LOD	6,224	<LOD	11,277	115,400	409	28,550	26	483	133	<LOD
459	3/28/2024	8:48:23	34.7286315	-112.025011		#39	5,157	86	<LOD	<LOD	77	217	44	<LOD	<LOD	<LOD	<LOD	<LOD	277	<LOD	16	<LOD	2,568	<LOD	14,955	77,864	590	42,513	39	346	200	<LOD
460	3/28/2024	8:50:07	34.7287109	-112.0252524	0328#40, 0328#40 (CrVI)	#40	6,737	144	<LOD	65	343	359	20	<LOD	<LOD	<LOD	<LOD	<LOD	359	<LOD	62	<LOD	<LOD	<LOD	17,573	68,456	644	42,387	41	314	393	<LOD
461	3/28/2024	8:51:12	34.728722	-112.02525		#41	5,888	140	<LOD	52	267	289	25	7	<LOD	<LOD	<LOD	<LOD	363	<LOD	39	<LOD	<LOD	<LOD	18,112	66,242	656	39,653	43	285	327	<LOD
462	3/28/2024	8:56:30	34.7285916	-112.0254176		#42	3,678	37	<LOD	<LOD	40	105	8	<LOD	<LOD	<LOD	<LOD	<LOD	344	<LOD	13	<LOD	<LOD	<LOD	16,489	26,488	908	35,752	48	363	169	<LOD
463	3/28/2024	8:58:16	34.7286948	-112.0255887		#43	4,369	62	<LOD	38	104	188	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	257	<LOD	22	<LOD	2,151	<LOD	15,407	91,295	538	28,819	38	462	229	<LOD
464	3/28/2024	8:59:56	34.728596	-112.0258545		#44	5,013	56	<LOD	58	53	114	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	273	<LOD	16	<LOD	<LOD	<LOD	14,448	31,046	838	39,857	41	371	170	<LOD
465	3/28/2024	9:01:42	34.7287214	-112.0260222		#45	2,830	49	<LOD	62	71	157	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	289	<LOD	21	<LOD	<LOD	<LOD	13,588	81,677	338	25,280	51	485	259	<LOD
466	3/28/2024	9:03:20	34.7286065	-112.0262431		#46	6,097	97	<LOD	46	90	151	17	<LOD	<LOD	<LOD	<LOD	<LOD	396	<LOD	30	<LOD	<LOD	<LOD	16,713	82,232	631	36,348	57	347	315	<LOD
467	3/28/2024	9:05:05	34.7287335	-112.0264312		#47	5,768	84	<LOD	47	145	256	20	<LOD	<LOD	<LOD	<LOD	<LOD	371	<LOD	31	<LOD	<LOD	<LOD	19,447	67,256	583	36,490	63	281	380	<LOD
468	3/28/2024	9:06:32	34.7286156	-112.0266246		#48	8,035	113	<LOD	47	78	162	103	<LOD	<LOD	<LOD	<LOD	<LOD	588	<LOD	18	27,848	<LOD	<LOD	11,413	79,317	2,597	82,329	30	309	243	<LOD
469	3/28/2024	9:07:37	34.728611	-112.026639		#49	6,838	99	<LOD	<LOD	84	151	95	<LOD	<LOD	<LOD	<LOD	<LOD	462	<LOD	17	23,956	<LOD	<LOD	11,802	88,671	1,690	61,399	36	348	294	<LOD
470	3/28/2024	9:09:17	34.7286111	-112.0267517		#50	5,736	96	<LOD	53	99	166	39	<LOD	<LOD	<LOD	<LOD	<LOD	286	<LOD	14	<LOD	<LOD	<LOD	11,490	100,076	1,401	47,475	28	415	563	<LOD
471	3/28/2024	9:11:34	34.728712	-112.026914		#51	3,315	48	<LOD	<LOD	56	135	10	<LOD	<LOD	<LOD	<LOD	<LOD	173	<LOD	13	<LOD	<LOD	<LOD	11,647	72,525	271	21,908	32	323	267	<LOD
472	3/28/2024	9:13:05	34.7286117	-112.0271993	0328#52	#52	5,204	108	<LOD	57	77	141	113	<LOD	<LOD	<LOD	<LOD	<LOD	283	<LOD	13	15,738	<LOD	<LOD	12,218	67,951	1,361	49,957	33	368	244	<LOD

Table 4a
March XRF Results
6th St and Birch St PI Report

March Location ID	Date	Time	Latitude	Longitude	Lab Sample ID	XRFNo	Ti	Cr*	Co	Ni	Cu	Zn	As	Se	Mo	Ag	Cd	Sb	Ba	Hg	Pb	P	S	Cl	K	Ca	Mn	Fe	Rb	Sr	Zr	Sn
473	3/28/2024	9:14:13	34.7286117	-112.0271993		#53	6,494	150	<LOD	86	118	169	107	<LOD	<LOD	<LOD	<LOD	<LOD	408	<LOD	12	15,695	<LOD	<LOD	14,646	73,438	1,151	52,483	33	439	214	<LOD
474	3/28/2024	9:17:32	34.7287178	-112.0273649		#54	4,618	36	<LOD	<LOD	27	109	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	172	<LOD	<LOD	<LOD	2,055	<LOD	11,489	68,768	313	19,904	22	314	145	<LOD
475	3/28/2024	9:19:14	34.7287037	-112.0276107		#55	1,706	37	<LOD	40	42	811	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	197	<LOD	22	<LOD	22,393	<LOD	7,488	94,444	234	15,598	23	383	138	<LOD
476	3/28/2024	9:21:02	34.7287095	-112.0278182		#56	2,122	<LOD	<LOD	<LOD	31	105	<LOD	<LOD	<LOD	<LOD	<LOD	76	151	<LOD	19	<LOD	1,940	<LOD	9,495	79,497	179	15,290	32	394	159	<LOD
477	3/28/2024	9:23:05	34.7287079	-112.0279792		#57	4,036	109	<LOD	<LOD	93	162	13	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	21						363	22,774	31	289	297	<LOD
478	3/28/2024	9:26:01	34.728722	-112.027972		#60	3,576	70	<LOD	52	110	190	16	<LOD	<LOD	<LOD	<LOD	<LOD	230	<LOD	23	<LOD	<LOD	<LOD	12,221	128,927	332	22,316	33	299	243	<LOD
479	3/28/2024	9:28:04	34.7286147	-112.028176		#61	4,431	<LOD	<LOD	58	30	119	11	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD						401	25,686	15	709	148	<LOD
480	3/28/2024	9:30:07	34.7286161	-112.0285106		#62	2,708	68	<LOD	68	52	82	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	151	<LOD	15	<LOD	<LOD	<LOD	11,344	62,679	259	20,107	33	305	241	<LOD
481	3/28/2024	9:32:17	34.7287362	-112.0288888		#63	2,253	33	<LOD	<LOD	38	77	10	<LOD	<LOD	<LOD	<LOD	<LOD	268	<LOD	16	<LOD	<LOD	<LOD	13,687	160,097	225	17,638	39	465	219	<LOD
482	3/28/2024	9:34:09	34.7287349	-112.0291218		#64	4,105	90	<LOD	59	61	111	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	293	<LOD	16	<LOD	2,474	<LOD	13,798	113,030	459	28,700	34	565	186	<LOD
483	3/28/2024	9:52:39	34.7362978	-112.0241369		#65	3,560	136	<LOD	<LOD	84	227	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	270	<LOD	33	<LOD	<LOD	<LOD	16,753	117,212	386	25,863	59	257	256	<LOD
484	3/28/2024	9:54:10	34.7363003	-112.0241614		#66	1,810	517	<LOD	<LOD	119	305	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	139	<LOD	19	<LOD	<LOD	<LOD	8,118	40,204	224	13,632	35	217	94	<LOD
485	3/28/2024	9:55:22	34.7363041	-112.0242019		#67	1,900	500	<LOD	<LOD	56	333	12	<LOD	<LOD	<LOD	<LOD	<LOD	157	<LOD	28	<LOD	<LOD	<LOD	14,539	20,081	167	12,058	84	223	136	<LOD
486	3/28/2024	9:56:33	34.7363066	-112.0241801	0328#68, 0328#68 (CrVI)	#68	1,175	679	<LOD	<LOD	95	571	7	<LOD	<LOD	<LOD	<LOD	<LOD	115	<LOD	17	<LOD	1,015	<LOD	7,874	19,609	133	10,421	45	214	84	<LOD
487	3/28/2024	10:00:59	34.7363006	-112.0243122		#69	3,253	915	<LOD	<LOD	155	909	16	<LOD	<LOD	<LOD	<LOD	<LOD	200	<LOD	41	<LOD	2,701	<LOD	14,428	54,311	320	28,699	53	269	254	<LOD
488	3/28/2024	10:22:22	34.7302542	-112.0089868		#73	1,552	25	<LOD	<LOD	<LOD	120	<LOD	<LOD	13	<LOD	<LOD	<LOD	440	<LOD	146	<LOD	2,618	<LOD	29,229	38,170	461	11,931	156	140	636	<LOD
489	3/28/2024	10:25:09	34.7302515	-112.0091628		#74	5,053	116	<LOD	94	91	178	16	<LOD	<LOD	<LOD	<LOD	<LOD	329	<LOD	32	<LOD	<LOD	<LOD	14,877	77,798	617	45,201	53	272	284	<LOD
490	3/28/2024	10:26:53	34.7302526	-112.0093308		#75	4,646	73	<LOD	<LOD	51	71	11	<LOD	<LOD	<LOD	<LOD	<LOD	285	<LOD	37	12,289	<LOD	<LOD	13,769	39,805	600	33,051	44	341	284	<LOD
491	3/28/2024	10:28:35	34.7302292	-112.0095209		#76	3,190	45	<LOD	47	63	180	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	288	<LOD	29	<LOD	2,383	<LOD	13,054	139,658	459	25,430	60	430	108	<LOD
492	3/28/2024	10:30:07	34.7303832	-112.0095702		#77	4,865	85	<LOD	50	73	252	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	382	<LOD	61	17,759	2,385	<LOD	14,549	94,891	526	37,082	43	411	321	<LOD
493	3/28/2024	10:32:09	34.7305583	-112.0093978		#78	5,466	148	<LOD	60	70	259	67	<LOD	10	<LOD	<LOD	<LOD	477	<LOD	<LOD	31,050	8,584	<LOD	6,714	32,409	1,712	87,487	17	228	120	<LOD
494	3/28/2024	10:33:43	34.7305576	-112.0093857	0328#79	#79	3,596	80	<LOD	75	247	737	37	<LOD	22	<LOD	<LOD	<LOD	318	<LOD	28	21,072	13,600	<LOD	8,676	65,266	619	90,674	20	240	184	<LOD
495	3/28/2024	10:36:50	34.7306295	-112.0091122		#80	6,899	183	<LOD	128	77	168	97	<LOD	<LOD	<LOD	<LOD	<LOD	393	<LOD	<LOD	<LOD	2,843	<LOD	7,551	46,739	1,140	72,962	19	216	194	<LOD
496	3/28/2024	10:38:51	34.7307111	-112.0089372		#81	7,023	154	<LOD	77	87	202	11	<LOD	13	<LOD	<LOD	<LOD	374	<LOD	30	<LOD	<LOD	<LOD	17,959	132,155	673	44,986	37	436	262	<LOD
497	3/28/2024	10:54:00	34.7361496	-112.0120569		#85	6,816	151	<LOD	80	55	225	12	<LOD	<LOD	<LOD	<LOD	<LOD	332	<LOD	27	<LOD	<LOD	<LOD	13,270	114,298	522	41,531	28	437	272	<LOD
498	3/28/2024	10:55:16	34.7361667	-112.0120542	0328#86	#86	6,810	164	<LOD	93	70	259	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	476	<LOD	29	<LOD	3,170	<LOD	15,382	108,588	601	47,562	29	821	347	<LOD
499	3/28/2024	10:59:09	34.7366709	-112.0120616		#87	3,774	53	<LOD	<LOD	54	146	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	225	<LOD	20	<LOD	2,904	<LOD	10,763	102,588	407	33,657	20	421	211	<LOD
500	3/28/2024	11:01:02	34.7372511	-112.0120653		#88	3,019	58	<LOD	<LOD	33	88	21	<LOD	<LOD	<LOD	<LOD	<LOD	256	<LOD	16	15,468	<LOD	<LOD	10,373	40,215	468	54,457	32	523	136	<LOD
501	3/28/2024	11:03:41	34.7377727	-112.0120619		#89	4,849	112	<LOD	<LOD	72	116	10	<LOD	<LOD	<LOD	<LOD	<LOD	298	<LOD	<LOD	26,691	9,190	<LOD	13,208	108,096	837	54,592	20	389	202	<LOD
502	3/28/2024	11:05:41	34.7383287	-112.0120676		#90	3,492	48	<LOD	44	25	127	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	272	<LOD	17	<LOD	3,467	<LOD	8,869	131,250	358	24,105	27	515	170	<LOD
503	3/28/2024	11:07:40	34.7388734	-112.0120696		#91	6,692	140	<LOD	65	33	142	10	<LOD	<LOD	<LOD	<LOD	<LOD	343	<LOD	<LOD	<LOD	5,731	2,336	11,610	198,700	496	40,537	20	559	259	<LOD
504	3/28/2024	11:09:33	34.7391304	-112.0121699		#92	5,427	103	<LOD	58	41	85	17	<LOD	<LOD	<LOD	<LOD	<LOD	212	<LOD	16	<LOD	<LOD	<LOD	12,130	113,406	435	36,033	23	336	250	<LOD
505	3/28/2024	11:11:38	34.7393966	-112.0120716		#94	4,124	91	<LOD	68	65	101	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	318	<LOD	18	<LOD	2,363	<LOD	14,095	112,646	488	33,815	38	417	278	<LOD
506	3/28/2024	11:14:22	34.7386064	-112.0122155		#96	4,257	71	<LOD	47	50	121	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	338	<LOD	16	<LOD	<LOD	<LOD	13,199	105,964	500	30,569	28	491	216	<LOD
507	3/28/2024	11:16:25	34.7380799	-112.0122108		#97	4,357	66	<LOD	98	52	95	13	<LOD	<LOD	<LOD	<LOD	<LOD	341	<LOD	24	<LOD	3,620	<LOD	13,013	71,576	741	32,614	32	298	239	<LOD
508	3/28/2024	11:18:34	34.7375321	-112.0121877		#98	2,718	44	<LOD	52	26	125	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	188	<LOD	<LOD	<LOD	3,305	<LOD	10,075	65,521	294	20,504	30	434	110	<LOD
509	3/28/2024	11:20:49	34.7367329	-112.0121853		#99	4,007	46	<LOD	43	41	121	11	<LOD	<LOD	<LOD	<LOD	<LOD	257	<LOD	17	<LOD	3,329	<LOD	12,691	77,014	470	28,694	44	298	216	<LOD
510	3/28/2024	11:23:40	34.7361948	-112.0121991		#100	3,697	45	<LOD	<LOD	42	156	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	233	<LOD	30	<LOD	<LOD	<LOD	12,704	69,241	392	28,802	41	336	220	<LOD
511	3/28/2024	11:28:07	34.7361454	-112.012071	0328#107	#107	4,744	77	<LOD	68	51	184	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	314	<LOD	25	<LOD	3,791	<LOD	13,119	118,634	429	33,598	27	469	191	<LOD
512	3/28/2024	12:05:54	34.7396883	-112.0140283		#114	3,736	73	<LOD	61	56	235	14	<LOD	<LOD	<LOD	<LOD	<LOD	187	<LOD	20	<LOD	<LOD	<LOD	11,407	109,563	475	32,613	24	410	229	<LOD
513	3/28/2024	12:09:01	34.7402311	-112.0140588		#115	4,268	82	<LOD	47	71	105	<LOD	7	<LOD	<LOD	<LOD	<LOD	363	<LOD	24	18,361	22,996	6,536	14,287	108,805	481	29,690	37	427	295	<LOD
514	3/28/2024	12:11:25	34.740778	-112.0140397		#116	3,929	55	<LOD	54	49	193	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	186	<LOD	20	<LOD	4,457	<LOD	11,631	130,479	345	28,143	32	452	209	<LOD
515	3/28/2024	12:13:23	34.7410681	-112.0141839		#117	4,295	59	<LOD	<LOD	53	177	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	366	<LOD	30	<LOD	3,419	<LOD	10,228	81,012	431	34,461	24	498	172	<LOD
516	3/28/2024	12:16:01	34.7405209	-112.0141678		#118	3,419	60	<LOD	54	48	720	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	256	<LOD	26	<LOD	7,331	<LOD	10,892	93,555	335	25,737	32	455	229	<LOD
517	3/28/2024	12:18:08	34.7404515	-112.0139686		#119	1,993	41	<LOD	65	43	635	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	322	<LOD	19	<LOD	26,535	<LOD	8,067	55,975	369	20,234	29	392	144	<LOD
518	3/28/2024	12:20:27	34.7404062	-112.0133343		#120	3,182	58	<LOD	<LOD	43	103	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	273	<LOD	24	<LOD	4,141	<LOD	10,848	88,952	309	23,989	30	390	190	<LOD
519	3/28/2024	12:22:34	34.7404369	-112.0126976		#121	2,537	37	<LOD	44	43	140	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	212	<LOD	27	<LOD	2,554	<LOD	11,009	94,953	295	21,642	33	272	134	<LOD
520	3/28/2024	12:24:36	34.7404388	-112.0120301		#122	3,676	97	<LOD	135	56	394	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	246	<LOD	23	<LOD	19,002	<LOD	12,733	85,833	498	34,887	32	500	144	<LOD
521	3/28/2024	12:27:39	34.7404391	-112.0113726		#123	4,384	109	<LOD	103	66	289	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	331	<LOD	31	<LOD	5,050	<LOD	12,617	81,896	525	31,367	28	492	160	<LOD
522	3/28/2024	12:29:49	34.7404372	-112.0113508	0328#126	#126	4,146	89	<LOD	90	67	292	15	<LOD	<LOD	<LOD	<LOD	<LOD	285	<LOD	41	<LOD	4,570	<LOD	10,769	68,178	471	36,128	27	650	224	<LOD
523	3/28/2024	12:33:49	34.740443	-112.0107825		#127	4,112	57	<LOD	<LOD	50	163	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	289	<LOD	25	18,401	3,023	<LOD	13,757	82,835	355	29,320	35	295	247	<LOD
524	3/28/2024	12:35:36	34.7404402	-112.0104043		#128	4,137	81	<LOD	53	46	463	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	381	<LOD	19	<LOD	9,275	<LOD	12,697	106,250	469	28,585	29	683	226	<LOD
525	3/28/2024	12:37:13	34.7404683	-112.0099286		#129	3,647	74	<LOD	47	44	162	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	253	<LOD	24	<LOD	2,984	<LOD	13,879	94,719	466	29,823	32	455	181	<LOD
526	3/28/2024	12:40:16	34.7399886	-112.0108868		#130	3,593	78	<LOD	51	41	111	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	243	<LOD	24	<LOD	16,243	5,403	12,155	137,740	352	26,009	32	525	196	<LOD
527	3/28/2024	12:43:19	34.7399743	-112.0112445		#131	3,731	71	<LOD	48	34	188	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	222	<LOD	46	<LOD	<LOD	<LOD	13,408	67,056	410	28,633	37	227	271	<LOD
528	3/28/2024	12:44:56	34.739968	-112.0115785		#132	4,024	70	<LOD	58	98	480	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	227	<LOD	127	27,311	2,743	<LOD	16,928	107,108	575	32,797	43	244	251	<LOD
529	3/28/2024	12:46:49	34.7399101	-112.0119181		#133	4,697	78	<LOD	45	26	96	11	<LOD	<LOD	<LOD	<LOD	<LOD	213	<LOD	<LOD	<LOD	<LOD	<LOD	9,837	112,965	346	29,313	20	316	355	<LOD
530	3/28/2024	12:48:34	34.7400939	-112.0121518		#134	3,732	74	<LOD	67	72	341	12	<LOD	<LOD	<LOD	<LOD	<LOD	373	<LOD	20	19,113	16,611	<LOD	11,767	97,080	662	31,864	27	435	142	<LOD
531	3/28/2024	12:50:40	34.7399768	-112.0126111		#135	4,820	89	<LOD	47	93	417	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	270	<LOD	104	24,373	<LOD	1,906	16,308	89,124	452	34,781	38	287	269	<LOD

Table 4a
March XRF Results
6th St and Birch St PI Report

March Location ID	Date	Time	Latitude	Longitude	Lab Sample ID	XRFNo	Ti	Cr*	Co	Ni	Cu	Zn	As	Se	Mo	Ag	Cd	Sb	Ba	Hg	Pb	P	S	Cl	K	Ca	Mn	Fe	Rb	Sr	Zr	Sn
532	3/28/2024	12:54:41	34.7400151	-112.0129896		#136	3,960	71	<LOD	42	61	261	14	<LOD	<LOD	<LOD	<LOD	<LOD	238	<LOD	30	<LOD	<LOD	<LOD	15,239	140,916	345	28,753	42	307	370	<LOD
533	3/28/2024	12:56:31	34.739974	-112.0133075		#137	7,209	124	<LOD	44	114	493	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	396	<LOD	142	<LOD	<LOD	<LOD	16,347	111,808	441	34,800	34	255	470	<LOD
534	3/28/2024	12:57:42	34.739972	-112.013306	0328#138, 0328#138 (CrVI	#138	6,109	116	<LOD	<LOD	98	421	20	<LOD	<LOD	<LOD	<LOD	<LOD	231	<LOD	107	<LOD	<LOD	<LOD	14,462	90,436	433	37,399	36	240	458	<LOD
535	3/28/2024	13:02:07	34.7400101	-112.0136371		#140	4,410	88	<LOD	<LOD	127	225	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	325	<LOD	58	18,135	2,279	<LOD	17,926	89,338	583	30,447	52	227	284	<LOD
536	3/28/2024	13:04:21	34.7399446	-112.0141758		#141	2,650	49	<LOD	<LOD	66	270	10	<LOD	11	<LOD	<LOD	<LOD	213	<LOD	29	<LOD	2,985	<LOD	9,028	74,563	269	25,892	24	410	155	<LOD
537	3/28/2024	13:22:44	34.733665	-112.007308		#143	2,798	27	<LOD	49	31	127	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	290	<LOD	28	<LOD	4,200	<LOD	11,303	124,855	375	24,040	24	396	157	<LOD
538	3/28/2024	13:24:52	34.733588	-112.0069309		#144	3,352	41	<LOD	<LOD	50	132	9	<LOD	<LOD	<LOD	<LOD	<LOD	274	<LOD	<LOD	<LOD	2,831	<LOD	10,305	101,454	507	28,686	23	381	187	<LOD
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540	3/28/2024	13:27:42	34.7335894	-112.0064511		#146	4,427	57	<LOD	60	42	105	14	6	<LOD	<LOD	<LOD	<LOD	405	<LOD	23	<LOD	<LOD	<LOD	14,279	91,040	589	46,181	32	400	167	<LOD
541	3/28/2024	13:30:14	34.7336654	-112.0061148		#147	3,445	111	<LOD	202	45	98	11	<LOD	<LOD	<LOD	<LOD	<LOD	252	<LOD	14	<LOD	2,453	<LOD	11,919	144,515	501	37,545	25	550	176	<LOD
542	3/28/2024	13:31:36	34.7336602	-112.0061078		#148	4,738	88	<LOD	55	39	96	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	300	<LOD	13	<LOD	<LOD	<LOD	10,679	106,341	432	35,019	21	408	206	<LOD
543	3/28/2024	13:34:19	34.7335624	-112.0058674		#151	5,067	74	<LOD	<LOD	68	163	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	311	<LOD	26	<LOD	<LOD	<LOD	11,492	120,707	521	36,023	27	573	190	<LOD
544	3/28/2024	13:37:13	34.7335684	-112.0054526		#153	4,561	81	<LOD	42	41	101	13	<LOD	<LOD	<LOD	<LOD	<LOD	308	<LOD	<LOD	<LOD	<LOD	<LOD	12,479	76,457	598	38,719	29	296	202	<LOD
545	3/28/2024	13:39:09	34.7336682	-112.0052337	0328#155	#155	5,852	102	<LOD	69	49	75	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	289	<LOD	19	<LOD	<LOD	<LOD	12,648	116,513	493	38,166	24	475	258	<LOD
546	3/28/2024	14:38:37	34.7374903	-112.0151448		#158	2,575	28	<LOD	50	61	2,494	9	<LOD	<LOD	<LOD	<LOD	<LOD	180	<LOD	17	<LOD	20,516	<LOD	6,766	63,618	314	20,364	24	346	140	<LOD
547	3/28/2024	14:40:33	34.737498	-112.0154586		#159	5,273	113	<LOD	86	68	196	21	<LOD	<LOD	<LOD	<LOD	<LOD	393	<LOD	14	<LOD	<LOD	<LOD	10,708	128,206	449	37,521	25	406	285	<LOD
548	3/28/2024	14:42:06	34.7375098	-112.0154583		#161	5,614	104	<LOD	52	56	205	12	<LOD	<LOD	<LOD	<LOD	<LOD	257	<LOD	19	<LOD	3,077	<LOD	12,348	123,912	424	35,908	31	301	292	<LOD
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550	3/28/2024	14:45:41	34.7374087	-112.0161536	0328#163	#163	6,109	67	<LOD	55	91	465	13	<LOD	<LOD	<LOD	<LOD	<LOD	331	<LOD	24	<LOD	4,334	<LOD	12,079	111,157	449	39,314	26	529	224	<LOD
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554	3/28/2024	14:56:32	34.7369007	-112.0168594		#173	4,173	79	<LOD	58	84	376	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	317	<LOD	28	<LOD	5,191	<LOD	10,914	147,033	488	35,543	23	455	221	<LOD
555	3/28/2024	14:58:26	34.7366717	-112.016972		#174	5,429	92	<LOD	<LOD	98	252	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	311	<LOD	32	<LOD	3,385	<LOD	15,053	49,612	635	39,997	47	237	406	<LOD
556	3/28/2024	15:00:15	34.7363631	-112.0168658		#175	5,533	120	<LOD	52	111	736	16	<LOD	<LOD	<LOD	<LOD	<LOD	368	<LOD	17	<LOD	13,952	<LOD	10,945	177,049	592	47,698	17	635	170	<LOD
557	3/28/2024	15:03:11	34.7363604	-112.0168648	0328#176, 0328#176 (CrVI	#176	6,851	132	<LOD	52	66	328	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	646	<LOD	14	<LOD	6,435	<LOD	18,481	243,247	592	38,105	41	829	170	<LOD
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561	3/28/2024	15:13:18	34.7362187	-112.0166555		#180	4,989	90	<LOD	59	142	516	15	<LOD	<LOD	<LOD	<LOD	<LOD	326	<LOD	36	<LOD	<LOD	<LOD	14,634	132,511	522	39,001	37	486	293	<LOD
562	3/28/2024	15:14:59	34.7363105	-112.0163424		#181	6,605	114	<LOD	86	156	786	23	<LOD	<LOD	<LOD	<LOD	<LOD	391	<LOD	28	<LOD	5,123	<LOD	13,550	122,301	583	58,816	28	516	257	<LOD
563	3/28/2024	15:16:24	34.7362386	-112.0163337		#182	4,192	82	<LOD	66	70	285	14	<LOD	<LOD	<LOD	<LOD	<LOD	321	<LOD	<LOD	<LOD	3,651	<LOD	12,698	188,545	429	33,757	20	736	174	<LOD
564	3/28/2024	15:18:19	34.7363223	-112.0160189		#183	4,272	76	<LOD	<LOD	104	835	24	<LOD	<LOD	<LOD	<LOD	<LOD	613	<LOD	21	<LOD	11,224	<LOD	11,374	158,501	473	46,141	17	643	173	<LOD
565	3/28/2024	15:19:52	34.7362449	-112.0159176		#184	5,665	80	<LOD	67	71	754	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	470	<LOD	22	<LOD	3,899	<LOD	12,684	167,576	541	43,883	28	590	181	<LOD
566	3/28/2024	15:21:18	34.7363816	-112.0158878		#185	1,278	22	<LOD	47	101	2,280	8	<LOD	<LOD	<LOD	<LOD	<LOD	139	<LOD	9	<LOD	13,280	<LOD	5,255	62,243	243	14,744	15	270	88	<LOD
567	3/28/2024	15:23:06	34.7366196	-112.0158955		#186	3,816	65	<LOD	<LOD	74	413	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	297	<LOD	21	<LOD	7,096	<LOD	12,285	92,785	356	30,798	29	398	233	<LOD
568	3/28/2024	15:25:02	34.7369238	-112.0160078		#187	4,385	92	<LOD	<LOD	79	248	12	<LOD	<LOD	<LOD	<LOD	<LOD	279	<LOD	27	<LOD	<LOD	<LOD	13,170	140,452	427	32,183	24	574	258	<LOD
569	3/28/2024	15:27:05	34.7369224	-112.0160182		#189	3,960	100	<LOD	<LOD	71	235	12	<LOD	<LOD	<LOD	<LOD	<LOD	248	<LOD	18	<LOD	<LOD	<LOD	12,154	132,603	375	35,137	28	495	246	<LOD
570	3/28/2024	15:30:51	34.7369224	-112.0160182	0328#191 (CrVI)	#191	4,900	94	<LOD	<LOD	62	289	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	329	<LOD	24	<LOD	<LOD	<LOD	12,825	154,981	414	29,543	23	400	260	<LOD
571	3/28/2024	15:34:31	34.7370875	-112.0159082	0328#192	#192	4,703	89	<LOD	93	92	387	10	<LOD	<LOD	<LOD	<LOD	<LOD	386	<LOD	16	23,037	8,985	<LOD	12,269	121,610	648	40,792	31	485	183	<LOD
572	3/28/2024	15:38:36	34.7374015	-112.0158723		#193	2,377	56	<LOD	51	76	2,181	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	226	<LOD	14	<LOD	37,391	<LOD	7,638	80,290	366	22,011	26	480	119	<LOD
573	3/28/2024	15:55:31	34.7341165	-112.0151109		#194	5,269	101	<LOD	46	58	255	17	<LOD	<LOD	<LOD	<LOD	<LOD	285	<LOD	16	14,259	<LOD	<LOD	16,438	33,587	398	34,030	52	227	625	<LOD
574	3/28/2024	15:57:35	34.7341145	-112.0150043		#195	3,601	53	<LOD	41	74	320	11	<LOD	<LOD	<LOD	<LOD	<LOD	167	<LOD	19	<LOD	2,424	<LOD	11,955	109,723	370	28,709	29	541	153	<LOD
575	3/28/2024	15:58:57	34.7343595	-112.0150093		#196	1,639	30	<LOD	45	88	2,908	8	<LOD	<LOD	<LOD	<LOD	<LOD	193	<LOD	11	<LOD	24,508	<LOD	5,741	37,048	252	14,576	25	202	91	<LOD
576	3/28/2024	16:01:32	34.7344567	-112.01524		#197	6,299	127	<LOD	88	119	258	19	<LOD	<LOD	<LOD	<LOD	<LOD	314	<LOD	30	24,738	<LOD	<LOD	17,548	67,445	561	48,485	52	235	357	<LOD
577	3/28/2024	16:02:38	34.7344567	-112.01524	0328#198 (CrVI)	#198	5,624	127	<LOD	55	105	228	23	<LOD	<LOD	<LOD	<LOD	<LOD	367	<LOD	23	21,033	<LOD	<LOD	17,115	64,515	613	48,875	57	271	341	<LOD
578	3/28/2024	16:05:28	34.7344724	-112.0155324		#199	5,672	114	<LOD	53	95	273	18	<LOD	<LOD	<LOD	<LOD	<LOD	246	<LOD	22	21,934	<LOD	<LOD	19,447	135,705	621	39,109	41	322	318	<LOD
579	3/28/2024	16:07:01	34.7345278	-112.0158023		#200	971	20	<LOD	62	77	4,369	9	<LOD	<LOD	<LOD	<LOD	<LOD	165	<LOD	12	<LOD	40,235	<LOD	2,966	26,189	169	12,002	21	248	111	<LOD
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581	3/28/2024	16:11:31	34.7349731	-112.0156826		#202	3,456	100	<LOD	<LOD	62	313	10	<LOD	<LOD	<LOD	<LOD	<LOD	190	<LOD	13	18,284	4,145	<LOD	11,707	84,608	384	40,457	30	394	267	<LOD
582	3/28/2024	16:13:11	34.7350508	-112.0154003		#203	2,186	52	<LOD	77	126	2,198	11	<LOD	<LOD	<LOD	<LOD	<LOD	274	<LOD	31	<LOD	30,732	<LOD	6,882	55,012	322	20,312	25	311	121	<LOD
583	3/28/2024	16:14:46	34.7350907	-112.0151113		#204	5,241	98	<LOD	<LOD	112	395	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	351	<LOD	49	<LOD	2,960	<LOD	17,737	60,091	596	38,168	44	226	296	<LOD
584	3/28/2024	16:16:39	34.734719	-112.0150087		#205	2,580	55	<LOD	82	234	1,633	19	<LOD	<LOD	<LOD	<LOD	<LOD	284	<LOD	29	<LOD	27,713	<LOD	10,583	64,386	491	29,299	30	440	185	<LOD
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586	3/29/2024	10:54:07	34.736514	-112.014069		#4	2,651	32	<LOD	<LOD	100	369	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	210	<LOD	19	<LOD	4,211	<LOD	8,532	57,560	361	24,926	31	296	206	<LOD
587	3/29/2024	10:57:34	34.737038	-112.014087		#7	3,662	74	<LOD	<LOD	121	562	14	<LOD	<LOD	<LOD	<LOD	<LOD	210	<LOD	21	<LOD	3,044	<LOD	10,872	91,515	405	34,178	25	461	211	<LOD
588	3/29/2024	11:00:25	34.737633	-112.014018		#8	6,744	157	<LOD	48	53	187	17	<LOD	<LOD	<LOD	<LOD	<LOD	403	<LOD	16	<LOD	<LOD	<LOD	14,991	94,043	684	49,623	32	374	318	<LOD
589	3/29/2024	11:02:19	34.737633	-112.014018	0329#9 (CrVI)	#9	8,308	202	<LOD	80	70	171	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	327	<LOD	21	<LOD	<LOD	<LOD	17,525	87,364	717	54,582	41	373	378	<LOD
590	3/29/2024	11:06:57	34.738117	-112.014049		#10	6,410	173	<LOD	52	118	493	20	<LOD	<LOD	<LOD	<LOD	<LOD	300	<LOD	21	<LOD	3,718	<LOD	15,768	67,111	566	45,959	44	293	293	<LOD

Table 4a
March XRF Results
6th St and Birch St PI Report

March Location ID	Date	Time	Latitude	Longitude	Lab Sample ID	XRFNo	Ti	Cr*	Co	Ni	Cu	Zn	As	Se	Mo	Ag	Cd	Sb	Ba	Hg	Pb	P	S	Cl	K	Ca	Mn	Fe	Rb	Sr	Zr	Sn
591	3/29/2024	11:09:50	34.738699	-112.014069		#11	2,915	29	<LOD	<LOD	49	131	10	<LOD	<LOD	<LOD	<LOD	<LOD	203	<LOD	23	<LOD	<LOD	<LOD	9,527	66,779	313	18,278	27	237	136	<LOD
592	3/29/2024	11:12:19	34.739253	-112.014107		#12	3,921	89	<LOD	<LOD	44	69	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	309	<LOD	14	<LOD	<LOD	<LOD	15,864	30,179	717	52,404	38	261	138	<LOD
593	3/29/2024	11:18:02	34.739034	-112.014186		#13	4,598	54	<LOD	48	110	320	17	<LOD	<LOD	<LOD	<LOD	<LOD	275	<LOD	29	<LOD	2,231	<LOD	15,713	88,548	469	33,510	59	340	248	<LOD
594	3/29/2024	11:21:51	34.738453	-112.014206		#14	4,238	78	<LOD	42	69	225	11	<LOD	<LOD	<LOD	<LOD	<LOD	272	<LOD	16	<LOD	<LOD	<LOD	15,137	113,073	410	29,259	50	267	292	<LOD
595	3/29/2024	11:24:11	34.73787	-112.014214		#15	3,198	89	<LOD	<LOD	41	237	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	281	<LOD	18	<LOD	<LOD	<LOD	22,940	41,772	392	20,494	86	134	221	<LOD
596	3/29/2024	11:27:03	34.73704	-112.014226		#16	3,296	62	<LOD	<LOD	64	239	13	<LOD	10	<LOD	<LOD	<LOD	211	<LOD	21	<LOD	3,683	<LOD	12,088	91,660	427	28,202	30	320	226	<LOD
597	3/29/2024	11:29:59	34.736549	-112.01418		#18	4,028	81	<LOD	42	110	484	16	<LOD	<LOD	<LOD	<LOD	<LOD	276	<LOD	30	<LOD	3,175	<LOD	16,645	67,100	506	35,224	53	302	244	<LOD
598	3/29/2024	11:32:25	34.735958	-112.014252		#20	4,824	93	<LOD	45	75	368	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	365	14	32	<LOD	4,837	<LOD	15,174	88,888	442	34,050	31	343	263	<LOD
599	3/29/2024	11:43:49	34.7394	-112.013281		#23	3,046	45	<LOD	53	29	76	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	237	<LOD	15	<LOD	<LOD	<LOD	10,362	71,503	437	24,859	36	263	183	<LOD
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602	3/29/2024	11:53:33	34.736911	-112.013331		#26	1,398	<LOD	<LOD	<LOD	51	320	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	142	<LOD	13	<LOD	2,870	<LOD	8,260	80,279	252	11,427	21	402	65	<LOD
603	3/29/2024	11:55:45	34.736315	-112.013291		#27	3,969	54	<LOD	<LOD	57	127	10	<LOD	<LOD	<LOD	<LOD	<LOD	238	<LOD	25	<LOD	<LOD	<LOD	14,211	50,547	493	30,745	36	226	263	<LOD
604	3/29/2024	11:57:59	34.736315	-112.013291		#28	3,689	66	<LOD	<LOD	50	188	10	<LOD	<LOD	<LOD	<LOD	<LOD	247	<LOD	17	<LOD	9,804	<LOD	13,670	35,752	393	29,416	55	321	263	<LOD
605	3/29/2024	12:00:51	34.735796	-112.013247		#30	2,974	45	<LOD	45	40	115	9	<LOD	<LOD	<LOD	<LOD	<LOD	204	<LOD	<LOD	<LOD	8,037	<LOD	10,240	56,779	348	20,531	26	515	180	<LOD
606	3/29/2024	12:03:19	34.735241	-112.0133		#31	1,296	40	<LOD	<LOD	41	65	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	215	<LOD	<LOD	<LOD	<LOD	<LOD	10,114	48,243	357	23,123	31	502	116	<LOD
607	3/29/2024	12:05:30	34.734701	-112.013297		#32	4,323	91	<LOD	81	52	108	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	258	<LOD	22	<LOD	<LOD	<LOD	12,085	127,226	385	29,868	28	390	231	<LOD
608	3/29/2024	12:08:24	34.734155	-112.0133		#33	5,623	89	<LOD	51	57	215	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	292	<LOD	26	22,674	<LOD	<LOD	14,005	93,334	505	39,927	38	387	185	<LOD
609	3/29/2024	12:12:44	34.735973	-112.01312		#34	6,261	99	<LOD	47	80	252	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	419	<LOD	29	29,525	<LOD	<LOD	16,931	57,697	562	40,900	38	383	249	<LOD
610	3/29/2024	12:15:29	34.736498	-112.013221	0329#35, 0329#35 (CrVI)	#35	5,623	122	<LOD	73	108	204	16	<LOD	<LOD	<LOD	<LOD	<LOD	376	<LOD	28	<LOD	6,680	<LOD	14,302	148,789	556	39,527	32	400	365	<LOD
611	3/29/2024	12:21:34	34.736778	-112.013162		#36	5,417	107	<LOD	64	66	230	11	<LOD	<LOD	<LOD	<LOD	<LOD	331	<LOD	25	26,145	7,005	<LOD	11,739	99,040	508	36,771	25	405	245	<LOD
612	3/29/2024	12:23:53	34.737009	-112.013153		#37	3,296	91	<LOD	40	46	145	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	193	<LOD	15	<LOD	17,234	812	8,747	144,526	328	24,158	20	388	149	<LOD
613	3/29/2024	12:28:53	34.737564	-112.013156		#41	3,767	76	<LOD	64	44	174	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	317	<LOD	17	<LOD	5,555	<LOD	17,852	93,399	666	35,057	58	336	259	<LOD
614	3/29/2024	12:30:36	34.73778	-112.013169		#42	4,880	79	<LOD	65	46	172	11	<LOD	<LOD	<LOD	<LOD	<LOD	334	<LOD	24	<LOD	3,731	<LOD	14,117	87,230	427	31,965	36	295	226	<LOD
615	3/29/2024	12:32:27	34.738088	-112.013163		#43	6,177	125	<LOD	43	76	218	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	329	<LOD	37	<LOD	<LOD	<LOD	15,792	107,269	576	31,162	32	342	260	<LOD
616	3/29/2024	12:33:37	34.738088	-112.013163		#44	4,065	75	<LOD	34	63	264	8	<LOD	<LOD	<LOD	<LOD	<LOD	268	<LOD	20	<LOD	3,596	<LOD	11,413	79,208	446	25,717	21	307	190	<LOD
617	3/29/2024	12:36:52	34.7386	-112.013145		#45	5,404	93	<LOD	71	57	289	10	<LOD	<LOD	<LOD	<LOD	<LOD	294	<LOD	15	23,114	3,233	<LOD	11,629	161,962	468	35,996	31	588	186	<LOD
618	3/29/2024	12:38:43	34.73884	-112.013168		#46	4,671	106	<LOD	72	60	174	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	436	<LOD	23	<LOD	6,834	<LOD	12,780	164,170	420	30,778	20	569	234	<LOD
619	3/29/2024	12:40:05	34.73884	-112.013168		#47	4,838	83	<LOD	62	59	154	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	329	<LOD	18	<LOD	2,748	<LOD	10,978	163,856	415	34,297	25	476	249	<LOD
620	3/29/2024	12:42:06	34.73916	-112.013162	0329#48 (CrVI)	#48	5,960	116	<LOD	65	59	181	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	324	<LOD	42	<LOD	<LOD	<LOD	14,644	69,603	453	37,515	43	298	370	<LOD
621	3/26/2024	13:48:59	34.7370288	-112.0217474		#105	3,318	68	<LOD	39	86	329	14	<LOD	<LOD	<LOD	<LOD	<LOD	246	<LOD	23	<LOD	<LOD	<LOD	13,560	86,555	341	26,035	40	162	236	<LOD
Residential SRL							310,000	120,000	900	1,600	3,100	23,000	10	390	390	390	39	31	15,000	23	400	NE	NE	NE	NE	NE	3,300	NE	NE	47,000	NE	47,000
Non-residential SRL							1,000,000	1,000,000	13,000	20,000	41,000	310,000	10	5,100	5,100	5,100	510	410	170,000	310	800	NE	NE	NE	NE	NE	32,000	NE	NE	610,000	NE	640,000
Screening Level (based on 95% upper confidence limit of XRF background samples)							NE	NE	NE	NE	NE	NE	57	NE	NE	NE	NE	NE	NE	NE	282	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE

Notes:
All concentrations in milligrams per kilogram (mg/kg)
<LOD = Less than Limit of Detection of the hand-held Olympus Vanta C Series XRF analyzer
SRL = Soil Remediation Level
NE = Not established
Above most concervative residential SRL
Above non-residential SRL
Above calculated screening level
Background sample set
Blank cell = no sample analysis
*XRF analysis is for total chromium. There is no SRL for total chromium, so the SRLs for trivalent chromium are shown for reference
** Processed slag samples

Ti = titanium
Cr = total chromium
Co = cobalt
Ni = nickel
Cu = copper
Zn = zinc
As = arsenic
Se = selenium
Mo = molybdenum
Ag = silver
Cd = cadmium
Sb = antimony
Ba = barium
Hg = mercury
Pb = lead
P = phosphorus
S = Sulfur
Cl = chlorine
K = potassium
Ca = calcium
Mn = manganese
Fe = iron
Rb = rubidium
Sr = strontium
Zr = zirconium
Sn = tin

Table 4b

June XRF Results

6th St and Birch St PI Report

June Location ID	Date	Time	Latitude	Longitude	Lab Sample ID	XRFNo	Ti	Cr*	Co	Ni	Cu	Zn	As	Se	Mo	Ag	Cd	Sb	Ba	Hg	Pb	P	S	Cl	Ca	Mn	Fe	Rb	Sr	Zr	Sn	Tl	U
1	6/4/2024	11:57:43	34.7278947	-112.0250408	Jun 04-6-1	1	5,379	<LOD	138	33	99	114	23	<LOD	<LOD	<LOD	<LOD	<LOD	320	<LOD	21	787	340	<LOD	32,513	429	30,647	51	199	390	<LOD	<LOD	12
2	6/4/2024	12:03:05	34.728006	-112.024781		2	3,450	<LOD	133	51	127	737	13	<LOD	11	12	<LOD	66	872	<LOD	25	1,195	4,323	<LOD	53,676	572	29,752	36	420	152	<LOD	<LOD	<LOD
3	6/4/2024	12:07:55	34.727949	-112.0243588		3	4,432	<LOD	128	42	78	172	18	<LOD	<LOD	<LOD	<LOD	<LOD	336	<LOD	26	1,402	5,948	10,700	40,698	554	27,999	52	230	234	<LOD	<LOD	9
4	6/4/2024	12:11:14	34.7280402	-112.0239595		4	2,123	<LOD	175	32	120	251	9	4	<LOD	<LOD	<LOD	<LOD	262	<LOD	30	3,530	5,698	6,214	26,312	343	17,476	41	199	143	<LOD	<LOD	11
5	6/4/2024	12:14:12	34.727896	-112.0235606		5	4,741	107	199	53	122	272	<LOD	<LOD	12	<LOD	49	<LOD	857	<LOD	39	1,333	342	<LOD	100,904	578	34,142	25	533	150	<LOD	<LOD	<LOD
6	6/4/2024	12:18:13	34.727632	-112.0238616		6	3,575	<LOD	168	55	160	200	9	<LOD	<LOD	<LOD	<LOD	<LOD	488	<LOD	29	1,761	829	<LOD	91,445	466	28,960	34	384	174	<LOD	<LOD	9
7	6/4/2024	12:21:02	34.7273351	-112.0239411		7	3,816	<LOD	<LOD	38	56	209	<LOD	<LOD	11	<LOD	<LOD	<LOD	349	<LOD	14	600	<LOD	<LOD	145,102	397	21,629	25	336	91	<LOD	<LOD	13
8	6/4/2024	12:24:08	34.7274748	-112.0239532		8	3,771	<LOD	<LOD	41	71	206	<LOD	<LOD	16	<LOD	<LOD	<LOD	449	<LOD	19	880	1,684	<LOD	84,822	461	24,240	35	417	140	<LOD	<LOD	<LOD
9	6/4/2024	12:40:27	34.727852	-112.02398		9	1,367	<LOD	254	23	64	300	<LOD	<LOD	<LOD	10	<LOD	<LOD	559	<LOD	28	3,228	3,439	37,844	31,599	411	17,750	36	194	157	<LOD	<LOD	17
10	6/4/2024	12:44:03	34.727913	-112.024741		10	3,000	<LOD	252	60	146	304	138	<LOD	<LOD	<LOD	<LOD	<LOD	373	<LOD	28	1,805	1,966	<LOD	57,904	1,000	39,656	44	240	117	<LOD	<LOD	12
11	6/4/2024	12:47:10	34.727743	-112.0248631		11	2,960	<LOD	134	39	64	162	<LOD	<LOD	13	<LOD	<LOD	<LOD	525	<LOD	12	941	527	<LOD	110,082	540	23,690	19	380	109	<LOD	<LOD	<LOD
12	6/4/2024	12:50:03	34.7275977	-112.0248792		12	3,173	<LOD	<LOD	23	67	215	8	<LOD	13	<LOD	<LOD	<LOD	498	<LOD	17	1,517	2,027	789	56,713	345	19,148	51	293	139	<LOD	<LOD	<LOD
13	6/4/2024	12:52:37	34.7274654	-112.0247471		13	5,118	<LOD	<LOD	61	77	292	8	<LOD	<LOD	<LOD	<LOD	<LOD	1,495	<LOD	19	1,526	2,836	<LOD	61,577	559	35,828	44	452	168	<LOD	<LOD	<LOD
14	6/4/2024	13:04:23	34.727105	-112.0248842		14	3,624	<LOD	<LOD	41	119	131	17	<LOD	10	<LOD	<LOD	<LOD	471	<LOD	25	708	466	<LOD	63,588	509	25,809	48	330	251	<LOD	<LOD	9
15	6/4/2024	13:06:38	34.72683	-112.024746		15	4,424	<LOD	110	39	55	180	13	<LOD	<LOD	13	<LOD	<LOD	598	<LOD	19	1,077	978	<LOD	52,738	442	27,365	57	378	263	<LOD	<LOD	8
16	6/4/2024	13:09:16	34.726731	-112.0252879		16	3,598	<LOD	123	28	93	432	13	<LOD	13	<LOD	<LOD	66	637	<LOD	16	1,764	3,186	<LOD	59,515	431	26,451	34	492	126	<LOD	<LOD	<LOD
17	6/4/2024	13:11:46	34.726645	-112.0249248		17	3,112	<LOD	<LOD	38	72	219	8	<LOD	<LOD	<LOD	<LOD	85	797	<LOD	18	1,052	1,591	<LOD	79,150	354	22,587	40	454	162	<LOD	<LOD	<LOD
18	6/4/2024	13:15:10	34.72671	-112.0245899		18	4,510	<LOD	164	34	91	140	13	<LOD	12	<LOD	<LOD	<LOD	540	<LOD	19	821	592	<LOD	63,878	452	25,129	46	427	156	<LOD	<LOD	8
19	6/4/2024	13:18:10	34.72662	-112.0242559		19	3,886	<LOD	<LOD	34	67	137	<LOD	<LOD	14	16	<LOD	<LOD	618	<LOD	16	1,774	1,163	1,061	44,789	520	29,201	32	477	97	<LOD	<LOD	<LOD
20	6/4/2024	13:22:13	34.726707	-112.0238452		20	3,952	97	<LOD	54	113	219	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	491	<LOD	27	1,777	1,546	<LOD	49,534	482	28,072	28	330	133	<LOD	<LOD	<LOD
21	6/4/2024	13:24:36	34.726596	-112.0235686		21	4,875	99	<LOD	48	167	243	20	<LOD	17	<LOD	<LOD	<LOD	460	<LOD	30	1,036	691	<LOD	62,200	620	36,034	33	269	155	<LOD	<LOD	<LOD
22	6/4/2024	13:26:47	34.726677	-112.0232001	Jun 04-27-2	22	5,406	90	<LOD	50	136	226	18	<LOD	<LOD	19	<LOD	<LOD	746	<LOD	37	1,302	732	<LOD	61,765	660	44,043	38	274	147	<LOD	<LOD	9
23	6/4/2024	14:12:25	34.724885	-112.0268409		1	2,595	<LOD	<LOD	30	28	70	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	767	<LOD	14	1,252	561	<LOD	27,246	488	22,721	59	464	98	<LOD	<LOD	<LOD
24	6/4/2024	14:15:49	34.725117	-112.0269864		2	5,036	333	<LOD	64	157	717	11	<LOD	<LOD	<LOD	<LOD	89	567	<LOD	24	1,060	6,794	447	64,706	509	40,049	35	636	146	<LOD	<LOD	<LOD
25	6/4/2024	14:19:21	34.725431	-112.0270052		3	2,830	<LOD	<LOD	43	22	257	12	<LOD	16	13	<LOD	<LOD	561	<LOD	14	620	226	<LOD	73,645	323	19,799	52	357	154	<LOD	<LOD	<LOD
26	6/4/2024	14:22:21	34.725615	-112.0267467		4	3,139	<LOD	<LOD	24	90	598	12	<LOD	10	<LOD	<LOD	<LOD	493	<LOD	18	918	1,863	<LOD	128,512	398	27,529	37	245	117	<LOD	<LOD	8
27	6/4/2024	14:25:11	34.725835	-112.0269971		5	3,457	<LOD	<LOD	37	66	228	44	<LOD	13	<LOD	<LOD	<LOD	354	<LOD	17	1,214	<LOD	<LOD	57,988	701	27,865	61	304	130	<LOD	<LOD	<LOD
28	6/4/2024	14:28:19	34.726128	-112.026855		6	2,909	<LOD	<LOD	52	60	230	<LOD	<LOD	13	<LOD	<LOD	<LOD	263	<LOD	24	1,431	934	<LOD	46,167	400	24,714	48	360	135	<LOD	<LOD	9
29	6/4/2024	14:31:27	34.72627	-112.027064		7	1,829	<LOD	<LOD	<LOD	<LOD	35	19	<LOD	18	<LOD	<LOD	<LOD	70	<LOD	<LOD	705	1,054	1,058	5,003	199	8,667	<LOD	229	56	<LOD	<LOD	<LOD
30	6/4/2024	14:34:28	34.726362	-112.0268801		8	5,147	<LOD	204	64	51	98	10	<LOD	<LOD	<LOD	<LOD	<LOD	587	<LOD	14	1,180	<LOD	<LOD	76,205	501	37,861	35	507	152	<LOD	<LOD	<LOD
31	6/4/2024	14:37:18	34.726232	-112.026624		9	4,032	<LOD	118	57	45	88	7	<LOD	12	12	<LOD	<LOD	471	<LOD	20	1,310	<LOD	<LOD	62,176	429	27,030	51	393	166	<LOD	<LOD	<LOD
32	6/4/2024	14:39:32	34.7263505	-112.0263075		10	3,579	<LOD	<LOD	38	75	282	12	<LOD	10	<LOD	<LOD	<LOD	381	<LOD	17	914	476	<LOD	48,179	439	26,078	42	371	160	<LOD	<LOD	<LOD
33	6/4/2024	14:42:18	34.7262328	-112.0260758		11	6,355	586	195	289	233	845	27	<LOD	13	<LOD	<LOD	<LOD	818	<LOD	27	1,421	4,990	<LOD	53,702	998	71,442	24	670	126	<LOD	<LOD	<LOD
34	6/4/2024	14:45:22	34.726235	-112.0258066	Jun 04-44-1	12	2,077	<LOD	413	40	294	2,334	39	<LOD	<LOD	10	<LOD	<LOD	259	<LOD	47	3,540	4,349	9,221	34,966	245	42,019	22	337	87	<LOD	<LOD	19
35	6/4/2024	14:52:38	34.726403	-112.0255404		1	5,231	<LOD	<LOD	32	35	96	<LOD	<LOD	15	<LOD	<LOD	<LOD	512	<LOD	18	990	<LOD	<LOD	64,151	513	31,336	52	451	225	<LOD	<LOD	<LOD
36	6/4/2024	14:55:15	34.726354	-112.0253161		2	3,836	<LOD	<LOD	38	47	97	29	<LOD	<LOD	<LOD	<LOD	<LOD	457	<LOD	14	552	<LOD	<LOD	83,410	601	26,774	48	325	173	<LOD	<LOD	<LOD
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39	6/4/2024	15:07:49	34.725726	-112.0248041		5	3,751	<LOD	<LOD	42	89	248	13	<LOD	10	<LOD	<LOD	<LOD	414	<LOD	21	1,170	565	<LOD	62,300	435	26,560	56	428	158	<LOD	<LOD	<LOD
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41	6/4/2024	15:13:42	34.726037	-112.024416		7	4,540	<LOD	200	57	71	147	9	<LOD	<LOD	15	<LOD	<LOD	761	<LOD	20	1,323	1,784	<LOD	87,881	602	36,992	43	458	170	<LOD	<LOD	<LOD
42	6/4/2024	15:15:55	34.726175	-112.024115		8	4,368	<LOD	<LOD	28	76	135	9	<LOD	9	<LOD	<LOD	<LOD	744	<LOD	14	1,134	545	<LOD	33,160	1,066	35,728	43	444	101	<LOD	<LOD	<LOD
43	6/4/2024	15:18:07	34.726162	-112.023683		9	5,413	124	184	70	94	223	22	5	14	<LOD	<LOD	<LOD	906	<LOD	24	1,270	672	<LOD	59,612	680	40,086	63	702	193	<LOD	<LOD	<LOD
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46	6/4/2024	15:32:09	34.725818	-112.022985		12	6,195	132	209	68	153	431	17	<LOD	10	<LOD	<LOD	<LOD	530	<LOD	42	1,305	729	<LOD	51,550	764	45,258	37	292	207	<LOD	<LOD	<LOD
47	6/4/2024	15:35:31	34.726258	-112.023283		13	6,823	191	168	80	110	222	18	<LOD	<LOD	<LOD	<LOD	<LOD	912	<LOD	26	1,166	<LOD	<LOD	46,513	983	53,656	54	783	202	<LOD	<LOD	<LOD
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49	6/4/2024	15:41:48	34.726031	-112.02473		15	3,491	<LOD	<LOD	36	108	111	310	<LOD	<LOD	19	<LOD	<LOD	549	<LOD	22	923	<LOD	<LOD	40,062	1,695	71,971	56	473	215	<LOD	<LOD	10
50	6/4/2024	16:08:39	34.724998	-112.0261599		16	3,602	<LOD	<LOD	43	70	153	10	<LOD	<LOD	16	<LOD	<LOD	337	<LOD	17	1,081	725	<LOD	75,696	493	28,385	42	566	130	<LOD	<LOD	<LOD
51	6/4/2024	16:10:32	34.72525	-112.026078		17	4,530	<LOD	142	60	97	411	9	<LOD	<LOD	11	<LOD	<LOD	352	<LOD	22	1,163	701	<LOD	66,933	507	35,454	24	578	137	<LOD	<LOD	<LOD
52	6/4/2024	16:12:25	34.725555	-112.0260332		18	4,064	<LOD	<LOD	38	63	99	12	<LOD	11	<LOD	<LOD	<LOD	577	<LOD	15	587	<LOD	<LOD	73,237	439	28,324	62	289	186	<LOD	<LOD	<LOD
53	6/4/2024	16:14:39	34.725713	-112.0260587		19	2,902	<LOD	<LOD	27	66	292	9	<LOD	<LOD	<LOD	<LOD	<LOD	257	<LOD	22	933	824	<LOD	51,618	457	23,194	40	475	127	<LOD	<LOD	<LOD
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55	6/4/2024	16:18:56	34.725518	-112.0264332		21	3,899	96	173	34	73	122	9	<LOD	11	<LOD	<LOD	<LOD	652	<LOD	15	894	<LOD	<LOD	70,835	474	24,237	48	439	178	<LOD	<LOD	<LOD
56	6/4/2024	16:20:34	34.725426	-112.0262501		22	3,531	<LOD	<LOD	42	56	183	8	<LOD	12	<LOD	<LOD	<LOD	510	<LOD	23	849	422	<LOD	84,437	403	24,513	67	383	152	<LOD	<LOD	<LOD
57	6/4/2024	16:22:17	34.725259	-112.0262713		23	3,256	<LOD	<LOD	26	81	248	9	<LOD	<LOD	<LOD	<LOD	<LOD	371	<LOD	17	622	<LOD	<LOD	67,173	406	24,087	68	481	132	<LOD	<LOD	<LOD
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59	6/5/2024	7:50:37	34.7392729	-112.0271983		1	5,932	228	<LOD	61	75	186	24	<LOD	<LOD	<LOD	<LOD	<LOD	519	<LOD	19	797	<LOD	<LOD	47,303	663	46,263	69	199	318	<LOD	<LOD	9
60	6/5/2024	7:53:36	34.7389883	-112.0274206		2	7,063	<LOD	204	70	131	327	20	<LOD	<LOD	<LOD	<LOD	<LOD	591	<LOD	32	908	656	<LOD	91,150	696	44,747	30	503	199	<LOD	<LOD	<LOD
61	6/5/2024	7:56:04	34.7387238	-112.0272687	Jun 05-4-1	3	6,518	174	<LOD	64	170	493	18	5	14	<LOD	<LOD	71	530	<LOD	38	866	1,519	<LOD	76,669	575	45,315	31	419	212	<LOD	<LOD	10
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63	6/5/2024	8:04:39	34.7381598	-112.0272654		5	4,620	<LOD	<LOD	41	125	299	11	<LOD	12	<LOD	<LOD	<LOD	447	<LOD	35	778	2,293	<LOD	64,451	589	33,865	28	329	151	<LOD	<LOD	<LOD
64	6/5/2024	8:07:13	34.7378829	-112.0274223		6	5,261	138	198	48	75	244	10	<LOD	<LOD	<LOD	<LOD	<LOD	561	<LOD	15	920	2,822	<LOD	95,805	542	35,025	32	515	135	<LOD	<LOD	<LOD
65	6/5/2024	8:09:18	34.7375517	-112.0272724		7	4,572	107	<LOD	41	62	174	11	<LOD	<LOD	<LOD	<LOD	92	597	<LOD	23	854	1,682	<LOD	72,957	492	33,779	31	358	116	<LOD	<LOD	<LOD
66	6/5/2024	8:11:49	34.7372164	-112.027442	Jun 05-9-2	8	10,812	<LOD	418	107	162	351	113	<LOD	<LOD	<LOD	<LOD	83	313	<LOD	<LOD	1,418	889	<LOD	50,546	4,455	157,106	47	103	206	<LOD	25	<LOD

Table 4b

June XRF Results

6th St and Birch St PI Report

June Location ID	Date	Time	Latitude	Longitude	Lab Sample ID	XRFNo	Ti	Cr*	Co	Ni	Cu	Zn	As	Se	Mo	Ag	Cd	Sb	Ba	Hg	Pb	P	S	Cl	Ca	Mn	Fe	Rb	Sr	Zr	Sn	Tl	U
67	6/5/2024	8:18:38	34.7369618	-112.0272791		9	5,415	125	<LOD	41	302	347	19	<LOD	12	11	<LOD	<LOD	546	<LOD	66	1,071	879	<LOD	30,293	621	39,469	63	180	299	<LOD	<LOD	<LOD
68	6/5/2024	8:21:04	34.7366604	-112.0274394		10	6,040	<LOD	216	107	156	406	98	<LOD	15	13	<LOD	<LOD	328	<LOD	18	865	2,281	4,630	36,845	1,283	67,163	21	190	95	<LOD	<LOD	<LOD
69	6/5/2024	8:23:32	34.7362683	-112.0272623		11	3,087	<LOD	<LOD	28	55	93	9	<LOD	13	<LOD	<LOD	<LOD	159	<LOD	14	736	<LOD	<LOD	124,369	482	13,866	11	111	21	62	<LOD	11
70	6/5/2024	8:25:54	34.7360137	-112.0274457		12	6,659	159	<LOD	77	176	639	114	<LOD	10	<LOD	<LOD	<LOD	577	<LOD	25	1,220	3,824	<LOD	54,160	1,019	59,381	25	354	165	<LOD	<LOD	<LOD
71	6/5/2024	8:28:48	34.7357399	-112.0272878		13	4,830	181	<LOD	75	233	484	23	<LOD	13	<LOD	<LOD	<LOD	287	<LOD	49	1,523	2,182	<LOD	58,669	630	39,313	29	363	130	54	<LOD	10
72	6/5/2024	8:31:26	34.7354442	-112.0274571		14	8,840	153	274	123	157	394	97	5	16	187	<LOD	<LOD	<LOD	<LOD	14	1,456	1,876	<LOD	38,607	1,739	107,196	24	210	155	<LOD	<LOD	<LOD
73	6/5/2024	8:33:27	34.7350695	-112.0272865		15	4,655	132	<LOD	63	96	180	8	<LOD	11	<LOD	<LOD	<LOD	556	<LOD	13	1,246	2,602	<LOD	78,555	632	42,809	31	352	125	<LOD	<LOD	<LOD
74	6/5/2024	8:36:13	34.7348284	-112.0274689		16	5,051	<LOD	<LOD	76	163	505	73	<LOD	18	<LOD	<LOD	<LOD	179	<LOD	<LOD	1,128	2,125	1,181	35,311	2,654	79,562	35	159	119	<LOD	<LOD	<LOD
75	6/5/2024	8:39:04	34.7345438	-112.0272908	Jun 05-19-3	17	4,378	100	<LOD	47	232	239	16	<LOD	<LOD	<LOD	<LOD	<LOD	561	<LOD	35	1,564	812	<LOD	76,927	600	33,062	51	221	154	42	<LOD	8
76	6/5/2024	8:46:41	34.7342225	-112.0274705		18	4,022	<LOD	<LOD	48	140	581	9	<LOD	10	<LOD	<LOD	<LOD	273	<LOD	18	1,187	4,916	<LOD	68,356	437	29,745	25	254	165	<LOD	<LOD	12
77	6/5/2024	8:48:57	34.7339093	-112.0272861		19	762	<LOD	179	<LOD	106	324	<LOD	8	<LOD	<LOD	<LOD	62	166	<LOD	24	1,133	14,885	45,032	74,090	397	7,647	32	232	50	<LOD	<LOD	23
78	6/5/2024	8:52:45	34.733691	-112.0274752		20	1,456	<LOD	94	<LOD	99	465	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	90	<LOD	20	1,303	4,853	22,367	41,950	238	12,110	6	183	29	<LOD	<LOD	28
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80	6/5/2024	8:56:58	34.7332703	-112.0274937		22	4,499	<LOD	<LOD	49	150	242	21	<LOD	11	<LOD	<LOD	<LOD	444	<LOD	25	926	2,191	12,028	68,958	534	32,706	26	224	159	<LOD	<LOD	12
81	6/5/2024	8:59:13	34.733043	-112.0272972		23	5,134	122	<LOD	74	46	171	<LOD	4	11	<LOD	<LOD	<LOD	690	<LOD	10	1,184	10,718	14,189	129,600	580	36,647	16	452	100	<LOD	<LOD	<LOD
82	6/5/2024	9:01:08	34.7328854	-112.0275701		24	2,284	<LOD	294	30	187	297	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	272	<LOD	22	2,363	6,153	21,657	72,167	345	23,620	25	204	122	<LOD	<LOD	22
83	6/5/2024	9:03:46	34.7326589	-112.0274588		25	5,320	<LOD	184	66	106	267	9	<LOD	<LOD	<LOD	<LOD	<LOD	1,074	<LOD	18	1,794	4,005	<LOD	113,731	534	34,944	14	500	92	<LOD	<LOD	<LOD
84	6/5/2024	9:07:10	34.732488	-112.0278005		26	5,321	116	<LOD	64	143	817	19	<LOD	<LOD	<LOD	<LOD	<LOD	332	<LOD	27	1,161	6,073	<LOD	58,919	724	36,247	157	324	133	<LOD	<LOD	<LOD
85	6/5/2024	9:47:55	34.7383072	-112.0311606		1	6,577	154	151	80	78	208	<LOD	<LOD	12	<LOD	<LOD	<LOD	890	<LOD	79	1,681	239	<LOD	102,485	847	44,240	32	512	179	<LOD	<LOD	<LOD
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94	6/5/2024	10:12:52	34.73599	-112.0317356		10	5,696	<LOD	<LOD	66	247	417	23	<LOD	<LOD	<LOD	<LOD	<LOD	561	<LOD	49	1,205	646	<LOD	88,655	642	41,608	53	297	209	<LOD	<LOD	<LOD
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99	6/5/2024	10:59:47	34.729017	-112.05104		2	8,137	<LOD	<LOD	64	63	88	12	<LOD	<LOD	<LOD	<LOD	<LOD	626	<LOD	21	926	<LOD	<LOD	146,129	816	43,610	33	353	236	<LOD	<LOD	<LOD
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101	6/5/2024	11:14:05	34.727066	-112.0499601	Jun 05-51-1	4	5,711	<LOD	146	70	74	96	33	<LOD	10	<LOD	<LOD	<LOD	532	<LOD	20	865	<LOD	<LOD	128,636	766	36,802	51	174	248	<LOD	<LOD	8
102	6/5/2024	11:47:09	34.728166	-112.047536		5	5,454	162	220	74	80	125	14	<LOD	13	<LOD	<LOD	<LOD	596	<LOD	17	1,065	<LOD	<LOD	137,196	661	39,433	24	499	159	<LOD	<LOD	<LOD
103	6/5/2024	11:51:46	34.727226	-112.047524		6	5,322	<LOD	<LOD	37	264	170	20	<LOD	<LOD	<LOD	<LOD	<LOD	421	<LOD	57	963	<LOD	<LOD	120,447	506	27,405	46	207	275	<LOD	<LOD	<LOD
104	6/5/2024	11:57:15	34.725535	-112.047868		7	3,737	<LOD	<LOD	48	111	117	17	<LOD	14	<LOD	<LOD	<LOD	409	<LOD	42	679	<LOD	<LOD	117,816	415	23,287	47	216	226	<LOD	<LOD	<LOD
105	6/5/2024	12:01:46	34.726286	-112.047242		8	4,677	136	123	41	992	721	40	<LOD	<LOD	<LOD	40	<LOD	504	<LOD	263	1,003	<LOD	<LOD	124,773	564	30,059	63	174	259	<LOD	<LOD	<LOD
106	6/5/2024	12:39:48	34.72857	-112.051434	Jun 05-56-2	9	6,251	120	143	59	139	156	31	<LOD	<LOD	<LOD	56	<LOD	485	<LOD	44	818	<LOD	<LOD	195,733	549	31,043	36	210	313	<LOD	<LOD	9
107	6/5/2024	12:44:02	34.728428	-112.051824		10	6,445	135	164	68	63	110	39	<LOD	<LOD	<LOD	<LOD	<LOD	526	<LOD	15	803	<LOD	<LOD	93,718	658	37,450	74	157	273	<LOD	<LOD	12
108	6/5/2024	12:47:21	34.727975	-112.052192		11	6,199	<LOD	<LOD	32	91	91	15	<LOD	<LOD	<LOD	<LOD	<LOD	350	<LOD	25	808	<LOD	<LOD	153,628	455	24,779	33	106	384	<LOD	<LOD	<LOD
109	6/5/2024	13:02:54	34.727037	-112.050187		12	5,403	<LOD	<LOD	59	1,043	754	41	<LOD	<LOD	<LOD	<LOD	75	283	<LOD	303	833	<LOD	<LOD	124,557	716	33,714	47	141	238	<LOD	<LOD	10
110	6/5/2024	13:07:13	34.727139	-112.050474		13	4,155	109	<LOD	49	539	435	31	<LOD	13	<LOD	<LOD	<LOD	301	<LOD	189	702	<LOD	<LOD	109,458	430	24,722	36	120	331	<LOD	<LOD	9
111	6/5/2024	13:09:14	34.7273	-112.050731		14	2,745	<LOD	<LOD	27	118	152	16	<LOD	10	<LOD	<LOD	<LOD	304	<LOD	38	917	735	<LOD	99,486	341	15,916	28	181	145	<LOD	<LOD	17
112	6/5/2024	13:11:45	34.727108	-112.051136		15	1,563	<LOD	<LOD	<LOD	147	241	<LOD	<LOD	15	<LOD	<LOD	<LOD	<LOD	<LOD	87	388	350	<LOD	312,611	421	6,848	11	67	33	<LOD	<LOD	<LOD
113	6/5/2024	13:14:26	34.726831	-112.051605		16	5,450	<LOD	<LOD	44	57	75	33	<LOD	15	<LOD	<LOD	77	322	<LOD	27	587	<LOD	<LOD	149,354	662	28,769	36	115	281	<LOD	<LOD	10
114	6/5/2024	13:16:37	34.727057	-112.051722		17	2,715	140	<LOD	32	42	73	13	<LOD	<LOD	<LOD	<LOD	<LOD	436	<LOD	13	567	<LOD	<LOD	228,235	479	16,173	26	92	110	50	<LOD	<LOD
115	6/5/2024	13:33:49	34.732169	-112.0531195		1	8,191	166	223	82	145	152	20	<LOD	<LOD	<LOD	<LOD	<LOD	599	<LOD	21	1,124	517	<LOD	23,611	1,000	72,091	46	173	230	<LOD	<LOD	<LOD
116	6/5/2024	13:37:02	34.731715	-112.05052		2	6,181	248	161	100	67	179	9	6	12	<LOD	39	<LOD	1,448	<LOD	13	1,663	2,324	<LOD	191,230	680	42,198	17	1,119	120	<LOD	<LOD	<LOD
117	6/5/2024	13:40:37	34.730691	-112.052706		3	5,165	161	<LOD	241	53	95	16	<LOD	12	<LOD	<LOD	<LOD	604	<LOD	33	923	<LOD	<LOD	55,715	5,456	50,168	21	319	127	<LOD	<LOD	<LOD
118	6/5/2024	13:44:35	34.7288141	-112.0527463		4	6,811	236	<LOD	135	99	99	303	<LOD	14	<LOD	<LOD	<LOD	357	<LOD	<LOD	611	<LOD	<LOD	37,031	2,121	81,339	23	91	85	<LOD	<LOD	<LOD
119	6/5/2024	13:47:43	34.7307932	-112.0488662		5	8,965	238	256	142	104	386	15	<LOD	<LOD	24	64	<LOD	1,906	<LOD	17	2,367	1,770	<LOD	105,847	881	64,880	17	962	148	<LOD	<LOD	<LOD
120	6/5/2024	13:53:01	34.728836	-112.048253	Jun 05-71-1	6	7,231	210	283	98	100	135	19	<LOD	12	<LOD	<LOD	96	676	<LOD	27	1,167	<LOD	<LOD	81,550	919	53,844	35	591	182	49	<LOD	<LOD
121	6/5/2024	14:01:59	34.727994	-112.046005	Jun 05-72-2	7	4,141	<LOD	455	61	267	1,266	65	<LOD	18	<LOD	<LOD	84	286	<LOD	28	1,215	2,543	<LOD	65,309	815	60,217	31	309	148	<LOD	<LOD	15
122	6/5/2024	14:09:00	34.7286596	-112.0456764		8	4,890	<LOD	151	52	106	459	23	<LOD	<LOD	13	<LOD	<LOD	333	<LOD	18	1,078	891	<LOD	82,414	691	36,443	34	283	143	<LOD	<LOD	<LOD
123	6/5/2024	14:12:49	34.7268639	-112.0458789		9	5,080	107	<LOD	72	66	96	19	<LOD	10	<LOD	<LOD	<LOD	689	<LOD	14	1,043	<LOD	<LOD	94,022	531	33,096	69	355	176	<LOD	<LOD	<LOD
124	6/5/2024	14:17:13	34.7253119	-112.0467429		10	3,774	<LOD	<LOD	49	106	131	17	<LOD	<LOD	<LOD	<LOD	<LOD	416	<LOD	38	841	650	<LOD	112,816	483	28,103	40	232	208	<LOD	<LOD	<LOD
125	6/5/2024	14:23:23	34.729724	-112.047959		1	7,016	206	<LOD	101	84	140	17	<LOD	19	<LOD	<LOD	<LOD	562	<LOD	15	1,212	<LOD	<LOD	82,177	1,539	58,985	31	546	139	<LOD	<LOD	<LOD
126	6/5/2024	14:25:49	34.730148	-112.047698	Jun 05-77-1	2	8,736	199	247	118	77	152	17	<LOD	<LOD	<LOD	<LOD	<LOD	964	<LOD	21	1,370	<LOD	<LOD	87,580	1,089	70,504	21	546	176	<LOD	<LOD	12
127	6/5/2024	14:31:18	34.72981	-112.049363		3	5,110	138	<LOD	80	42	83	<LOD	<LOD	16	14	<LOD	<LOD	699	<LOD	17	713	<LOD	<LOD	207,157	580	28,239	15	532	88	<LOD	<LOD	<LOD
128	6/6/2024	7:48:39	34.727296	-112.029041		1	6,842	156	248	67	115	194	10	<LOD	<LOD	<LOD	<LOD	<LOD	1,117	<LOD	32	2,075	656	<LOD	88,126	759	43,563	36	583	207	<LOD	<LOD	<LOD
129	6/6/2024	7:52:13	34.727927	-112.0292116	Jun 06-3-1	2	1,266	<LOD	151	16	31	111	<LOD	<LOD	10	8	<LOD	<LOD	315	<LOD	11	1,208	1,668	10,228	59,451	441	11,562	33	373	68	<LOD	<LOD	13
130	6/6/2024	7:58:11	34.728416	-112.029055		3	3,331	<LOD	150	37	75	115	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	498	<LOD	22	947	342	1,407	47,439	363	20,240	29	594	106	<LOD	<LOD	17
131	6/6/2024	8:04:13	34.72765	-112.029482		4	6,564	114	199	81	95	283	<LOD	<LOD	11	<LOD	<LOD	<LOD	785	<LOD	18	1,656	1,687	<LOD	105,942	740	44,640	30	778	147	<LOD	<LOD	<LOD
132	6/6/2024	8:07:18	34.727784	-112.029844		5	4,883	141	<LOD	53	75	146	8	<LOD	<LOD	<LOD	<LOD	<LOD	582	<LOD	20	871	334	<LOD	93,170	526	33,188	37	358	186	<LOD	<LOD	11

Table 4b

June XRF Results

6th St and Birch St PI Report

June Location ID	Date	Time	Latitude	Longitude	Lab Sample ID	XRFNo	Ti	Cr*	Co	Ni	Cu	Zn	As	Se	Mo	Ag	Cd	Sb	Ba	Hg	Pb	P	S	Cl	Ca	Mn	Fe	Rb	Sr	Zr	Sn	Tl	U
133	6/6/2024	8:11:08	34.727658	-112.030296		6	7,434	128	<LOD	94	83	247	16	<LOD	<LOD	<LOD	<LOD	<LOD	981	<LOD	24	1,514	352	<LOD	62,833	1,041	52,599	43	461	207	<LOD	<LOD	<LOD
134	6/6/2024	8:14:21	34.727779	-112.030935		7	4,902	109	210	69	70	221	11	5	12	<LOD	<LOD	<LOD	449	<LOD	17	1,440	1,020	<LOD	59,740	684	40,043	37	446	182	<LOD	<LOD	<LOD
135	6/6/2024	8:21:11	34.727058	-112.030967		8	8,130	158	207	90	105	363	<LOD	<LOD	13	<LOD	<LOD	<LOD	835	<LOD	16	1,690	<LOD	<LOD	47,203	1,075	57,735	52	517	139	<LOD	<LOD	<LOD
136	6/6/2024	8:26:55	34.726552	-112.030342		9	2,625	136	<LOD	<LOD	87	188	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	320	<LOD	42	539	1,433	<LOD	25,059	539	28,643	67	198	206	<LOD	<LOD	16
137	6/6/2024	8:29:47	34.726937	-112.030684		10	6,305	103	<LOD	60	161	267	17	<LOD	<LOD	<LOD	<LOD	<LOD	650	<LOD	27	765	<LOD	<LOD	57,010	667	41,662	50	279	258	<LOD	<LOD	<LOD
138	6/6/2024	8:32:27	34.727552	-112.030924		11	4,055	<LOD	<LOD	47	53	78	<LOD	<LOD	10	<LOD	<LOD	79	383	<LOD	14	715	<LOD	<LOD	95,804	362	23,532	34	238	153	<LOD	<LOD	12
139	6/6/2024	8:35:17	34.728068	-112.03118		12	4,557	<LOD	<LOD	43	86	110	7	<LOD	<LOD	<LOD	<LOD	<LOD	541	<LOD	11	1,340	<LOD	<LOD	99,139	522	34,136	48	234	124	<LOD	<LOD	9
140	6/6/2024	8:37:51	34.7276	-112.031272		13	5,236	144	151	55	91	294	16	<LOD	15	<LOD	<LOD	<LOD	522	<LOD	17	964	571	<LOD	58,621	651	37,785	49	344	185	<LOD	<LOD	8
141	6/6/2024	8:55:40	34.726583	-112.022996		1	6,444	<LOD	150	43	196	352	22	<LOD	<LOD	14	<LOD	<LOD	531	<LOD	51	1,714	1,929	<LOD	51,352	736	46,204	38	273	213	<LOD	<LOD	<LOD
142	6/6/2024	8:58:51	34.727006	-112.022952	Jun 06-16-1	2	4,645	<LOD	189	35	159	247	20	<LOD	<LOD	<LOD	<LOD	60	418	<LOD	33	1,527	2,049	863	39,144	444	30,297	40	259	211	<LOD	<LOD	13
143	6/6/2024	9:03:13	34.727457	-112.022947		3	4,742	<LOD	<LOD	44	159	191	9	<LOD	<LOD	<LOD	<LOD	<LOD	657	<LOD	67	1,004	417	<LOD	66,441	463	28,846	49	330	168	<LOD	<LOD	7
144	6/6/2024	9:05:32	34.727896	-112.022944		4	5,383	125	<LOD	50	99	210	12	<LOD	<LOD	<LOD	<LOD	<LOD	460	<LOD	57	1,062	409	<LOD	75,855	553	34,518	34	247	214	<LOD	<LOD	<LOD
145	6/6/2024	9:08:04	34.728344	-112.022931		5	5,510	107	192	55	121	409	21	<LOD	11	<LOD	<LOD	<LOD	471	<LOD	39	1,047	3,190	<LOD	54,840	550	38,485	33	387	187	<LOD	<LOD	<LOD
146	6/6/2024	9:10:13	34.728071	-112.022781		6	4,403	<LOD	<LOD	45	129	531	10	<LOD	17	<LOD	<LOD	<LOD	531	<LOD	33	1,180	3,720	<LOD	39,319	556	31,967	47	270	235	<LOD	<LOD	9
147	6/6/2024	9:12:36	34.727773	-112.02278		7	5,590	111	177	69	124	181	26	<LOD	<LOD	<LOD	<LOD	<LOD	1,183	<LOD	38	1,994	1,686	<LOD	68,054	680	37,171	63	388	183	<LOD	<LOD	9
148	6/6/2024	9:15:20	34.727243	-112.022792		8	2,973	<LOD	<LOD	<LOD	77	165	<LOD	<LOD	15	<LOD	<LOD	<LOD	360	<LOD	15	1,076	1,478	<LOD	22,504	390	20,181	52	121	83	<LOD	<LOD	<LOD
149	6/6/2024	9:17:48	34.726763	-112.0228		9	5,164	96	143	47	97	348	13	<LOD	9	<LOD	<LOD	<LOD	706	<LOD	25	1,254	3,422	<LOD	53,331	533	35,428	45	309	195	<LOD	<LOD	8
150	6/6/2024	9:20:37	34.726146	-112.022799		10	5,266	84	<LOD	45	133	433	19	<LOD	16	15	<LOD	<LOD	546	<LOD	23	2,637	1,255	1,399	37,183	578	44,659	29	236	124	<LOD	<LOD	<LOD
Residential SRL							310,000	120,000	900	1,600	3,100	23,000	10	390	390	390	39	31	15,000	23	400	NE	NE	NE	NE	3,300	NE	NE	47,000	NE	47,000	5.2	16
Non-residential SRL							1,000,000	1,000,000	13,000	20,000	41,000	310,000	10	5,100	5,100	5,100	510	410	170,000	310	800	NE	NE	NE	NE	32,000	NE	NE	610,000	NE	610,000	67	200
Screening Level (based on 95% upper confidence limit of XRF background samples)							NE	NE	NE	NE	NE	NE	57	NE	NE	NE	NE	NE	NE	NE	282	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE

Notes:

All concentrations in milligrams per kilogram (mg/kg)

<LOD = Less than Limit of Detection of the hand-held Olympus Delta Professional XRF Analyzer

SRL = Soil Remediation Level

NE = Not established

Above most concervative residential SRL

Above non-residential SRL

Above calculated screening level

Background sample set

Blank cell = no sample analysis

XRF Instrument used: Olympus Vanta C Series XRF analyzer

*XRF analysis is for total chromium. There is no SRL for total chromium, so the SRLs for trivalent chromium are shown for reference

Ti = titanium
Cr = total chromium
Co = cobalt
Ni = nickel
Cu = copper
Zn = zinc
As = arsenic
Se = selenium
Mo = molybdenum
Ag = silver
Cd = cadmium
Sb = antimony
Ba = barium
Hg = mercury
Pb = lead
P = phosphorus
S = Sulfur
Cl = chlorine
Ca = calcium
Mn = manganese
Fe = iron
Rb = rubidium
Sr = strontium
Zr = zirconium
Sn = tin
Tl = thallium
U = uranium

Table 5

Groundwater Results

6th St and Birch St PI Report

ADWR No.	Well Type	Depth (ft bgs)	Depth to Groundwater (ft btc)	Sample Method	Sample ID	Date	Sb	As	Ba	Cd	Cu	Fe	Pb	Mn	Ni	Ag	Zn
55-600512	Private	405	~	Spigot	315 S Willard St-2	3/22/2024	<4.30	22.8	471	<0.479	5.83	<18.0	<2.99	<0.934	<1.61	<1.54	365
55-221659	Private	490	~	Spigot	333 S Willard St-3	3/21/2024	<4.30	<4.40	47.2	<0.479	<3.68	<18.0	<2.99	5.35	5.22	<1.54	36.2
55-910099	Private	300	~	Bailer	333 S Willard St-4	3/21/2024	<4.30	21.6	295	<0.479	12.1	<18.0	<2.99	<0.934	<1.61	<1.54	36.3
55-633416	School - Irrigation	400	~	Spigot	1924 N Willard St-1	3/21/2024	<4.30	21.6	295	<0.479	12.1	<18.0	<2.99	<0.934	<1.61	<1.54	36.3
55-609075	City - Municipal	630	~	Spigot	595 E Cherry St-1	3/22/2024	<4.30	15.3	403	<0.479	17.8	<18.0	<2.99	<0.934	<1.61	<1.54	98.5
55-227884	City - Other	800	135.56	Hydrasleeve	350 S 12th St-1	3/20/2024	<4.30	<4.40	67.2	<0.479	13.5	45.9	<2.99	30.9	<1.61	<1.54	22.2
55-604220	City - Irrigation	375		Spigot	350 S 12th St-2	3/20/2024	<4.30	16.9	553	<0.479	<3.68	<18.0	<2.99	1.1	<1.61	<1.54	52.3
55-510421	Private	200	~	Spigot	15 E Aspen St-1	3/21/2024	<4.30	<4.40	128	<0.479	8.17	<18.0	<2.99	<0.934	<1.61	<1.54	77.7
55-609078	City - Municipal	1250	~	Spigot	609 E Cherry St-1	3/22/2024	<4.30	<4.40	128	<0.479	8.17	<18.0	<2.99	<0.934	<1.61	<1.54	77.7
55-560414	City - Municipal	1025	~	Spigot	193 E State Route 89A-1	3/22/2024	<4.30	21.7	258	<0.479	11.8	<18.0	<2.99	<0.934	<1.61	<1.54	53.7
55-810066	Private	500	~	Spigot	820 AZ-89A	3/26/2024	<4.30	<4.40	312	0.503	<3.68	<18.0	<2.99	<0.934	<1.61	<1.54	52.3
55-225609	Private	550	173.57	Hydrasleeve	D&O Well	3/27/2024	<4.30	<4.40	376	0.532	<3.68	<18.0	<2.99	19.4	<1.61	<1.54	21.1
55-921575	Monitoring	85	70.02	Hydrasleeve	NW-2S	3/29/2024	<4.30	<4.40	128	0.759	<3.68	<18.0	<2.99	<0.934	<1.61	<1.54	10.6
55-921576	Monitoring	100	65.42	Hydrasleeve	NW-3S	3/29/2024	<4.30	<4.40	15.9	<0.479	<3.68	<18.0	<2.99	<0.934	2.2	<1.54	136
55-921578	Monitoring	85	72.07	Hydrasleeve	NW-4S	3/29/2024	<4.30	6.56	267	0.509	<3.68	<18.0	<2.99	<0.934	3.01	<1.54	31.8
55-921788	Monitoring	178	83.85	Hydrasleeve	NW-5D	3/29/2024	<4.30	16.9	539	0.714	<3.68	46.9	<2.99	15.1	<1.61	<1.54	12.1
55-924424	Monitoring	130	65.35	Hydrasleeve	NW-8D	3/29/2024	6.94	7.08	700	<0.479	<3.68	<18.0	<2.99	16.4	69.4	<1.54	22.8
						AWQS	**6**	**50**	**2000**	**5**	**NE**	**NE**	**50**	**NE**	**100**	**NE**	**NE**

Notes:

Sb = antimony
As = arsenic
Ba = barium
Cd = cadmium
Cu = copper
Fe = iron
Pb = lead
Mn = manganese
Ni = nickel
Ag = silver
Zn = zinc

ADWR = Arizona Department of Water Resources
µg/L = micrograms per liter
All results in µg/L
ft bgs = feet below ground surface
ft btc = feet below top of casing
~ = Not measured
AWQS = Aquifer Water Quality Standard
Above AWQS
NE = Not Established

Table 6

Labratory Sample Results

6th St and Birch St PI Report

Lab Sample ID	Location	Date	Latitude	Longitude	Sb	As	Ba	Cd	Cu	Fe	Pb	Mn	Ni	Ag	Tl	Zn	U	CrVI
326 Beech-1 (CrVI)	March ID 1	3/20/2024	34.735273	-112.024166	~	~	~	~	~	~	~	~	~	~	~	~	~	<0.255
18 E Beech-1	March ID 5	3/20/2024	34.7357421	-112.0268138	1.11	8.26	120	0.875	50.9	11,200	20.1	221	25.1	0.210	<2.00	284	0.375	~
508 Cottonwood DE	March ID 13	3/20/2024	34.7269102	-112.0235873	2.05	16.2	154	1.55	109	27,100	25.8	473	30.9	0.306	0.971	129	0.401	~
500 Cherry-1 (CrVI)	March ID 14	3/20/2024	34.733489	-112.022982	~	~	~	~	~	~	~	~	~	~	~	~	~	<0.255
500 Cherry-2	March ID 18	3/20/2024	34.733075	-112.023666	1.94	11.80	111	0.582	291	19,000	23.4	305	23.3	0.341	0.474	248	0.425	~
692 2nd Dr-1	March ID 22	3/20/2024	34.72714	-112.0264616	2.44	133	128	<0.500	107	71,300	16.1	1,260	105	0.229	0.525	99.0	0.435	~
692 2nd Dr-2 (CrVI)	March ID 23	3/20/2024	34.72701	-112.026541	~	~	~	~	~	~	~	~	~	~	~	~	~	0.286
S. 8th Place-1	March ID 25	3/20/2024	34.735958	-112.018374	0.88	8.80	170	0.479	63.5	18,500	11.0	375	25.5	<1.00	<2.00	126	0.574	~
S. 8th Place-2 (CrVI)	March ID 27	3/20/2024	34.7368894	-112.0185295	~	~	~	~	~	~	~	~	~	~	~	~	~	<0.255
S. 8th Place-3	March ID 29	3/20/2024	34.738124	-112.01846	0.597	8.57	89.7	<0.500	29.5	15,300	8.05	287	8.93	<1.00	<2.00	101	0.851	~
985 E Mingus -1	March ID 32	3/20/2024	34.738734	-112.017669	0.906	9.81	97.2	1.89	147	16,700	13.1	280	25.5	<1.00	<2.00	552	0.314	~
985 E Mingus -2	March ID 33	3/20/2024	34.738857	-112.018048	<2.00	9.33	284	<0.500	601	30,500	15.3	200	21.6	0.379	0.566	598	0.680	~
950 E Mingus-1	March ID 37	3/20/2024	34.739654	-112.018311	1.62	8.65	106	0.367	35.2	16,600	8.07	315	32.3	0.184	<2.00	70.0	0.452	~
525 12th St-2	March ID 46	3/21/2024	34.730831	-112.013527	<2.00	6.22	102	<0.500	21.5	13,900	7.26	290	7.77	<1.00	0.454	76.0	0.961	~
525 12th St-1	March ID 48	3/21/2024	34.731264	-112.013213	2.12	11.5	133	0.849	103	24,700	22.2	422	42.3	0.236	1.16	93.8	0.399	~
525 12th St-3	March ID 51	3/21/2024	34.73034	-112.013155	2.33	4.22	202	0.168	280	25,900	14.6	417	74.4	0.228	0.740	317	0.509	~
319 6th St-1	March ID 54	3/21/2024	34.734389	-112.021652	<2.00	89.2	111	4.58	1,140	43,900	60.2	199	21.6	1.01	<2.00	5,110	0.971	~
319 6th St-2	March ID 57	3/21/2024	34.734393	-112.021096	<2.00	35.7	125	3.85	13,700	32,200	102	326	32.6	7.80	<2.00	1,260	0.408	~
319 6th St-4 (CrVI)	March ID 60	3/21/2024	34.734108	-112.02082	~	~	~	~	~	~	~	~	~	~	~	~	~	<0.255
319 6th St-3	March ID 64	3/21/2024	34.734093	-112.021463	1.62	42.2	221	5.17	1,930	36,200	98.6	421	40.1	1.58	1.11	1,370	0.585	~
57 E Aspen S-1	March ID 73	3/21/2024	34.73622	-112.026257	<2.00	18.9	162	3.33	317	20,600	50.7	403	37.4	1.23	<2.00	277	0.431	~
705 E. Aspen St-1	March ID 75	3/21/2024	34.734586	-112.019561	<2.00	12.0	187	3.97	236	18,400	19.6	310	43.3	1.10	<2.00	496	0.382	~
705 E. Aspen St-2	March ID 81	3/21/2024	34.73507	-112.019509	<2.00	10.5	164	0.448	53.3	33,900	15.2	475	48.5	0.161	<2.00	96.8	0.430	~
751 E Aspen St-1	March ID 85	3/21/2024	34.735753	-112.01932	<2.00	17.8	266	6.91	205	28,200	26.8	607	43.2	0.527	<2.00	241	0.436	~
333 Willard-1	March ID 88	3/21/2024	34.733265	-112.026434	<2.00	25.5	242	7.24	925	18,500	174	310	27.8	1.43	<2.00	494	0.356	~
333 Willard-2	March ID 89	3/21/2024	34.733377	-112.026339	<2.00	17.9	174	4.85	559	13,800	67.6	238	20.2	1.20	<2.00	271	0.364	~
MRI-1 (CrVI)*; MRI-2*	March ID 91*	3/21/2024	34.734027	-112.020105	<2.00	172	86.2	3.67	1,900	51,100	101	35.3	0.586	0.839	1.08	4,620	1.63	<0.255
MRI-3*	March ID 93*	3/21/2024	34.733976	-112.019464	<2.00	184	84.7	3.13	1,650	45,500	101	31.5	0.515	0.685	0.875	4,050	1.61	~
315 Willard St-1	March ID 102	3/22/2024	34.734015	-112.026881	1.52	15.0	165	4.72	589	17,100	62.0	336	29.3	0.869	<2.00	275	0.352	~
497 Willard St-1	March ID 113	3/22/2024	34.73074	-112.025906	4.74	1,680	231	87.9	1,830	19,500	651	207	17.1	5.29	2.89	1,320	0.860	~
497 Willard St-2	March ID 137	3/22/2024	34.730158	-112.026215	1.08	35.7	169	2.81	167	19,400	19.2	321	38.4	0.552	<2.00	94.5	0.415	~
497 Willard St-3	March ID 141	3/22/2024	34.729753	-112.026876	1.79	28.6	142	11.5	533	19,600	70.5	391	29.9	0.732	0.500	259	0.335	~
350 S 12th St-1	March ID 146	3/22/2024	34.73352	-112.015639	2.03	3.16	109	<0.500	24.9	11,800	5.30	258	42.4	0.200	<2.00	35.2	0.520	~
350 S 12th St-2	March ID 149	3/22/2024	34.733347	-112.014652	1.98	29.6	152	3.71	333	24,400	62.2	460	36.6	0.499	<2.00	183	0.402	~
0325#24, 0325#24 (CrVI)	March ID 176	3/25/2024	34.7321888	-112.0403844	1.18	24.5	167	3.11	175	32,400	51.2	541	43.3	0.298	<2.00	144	0.461	1.11
0325#33 (CrVI)	March ID 181	3/25/2024	34.7324591	-112.0409352	~	~	~	~	~	~	~	~	~	~	~	~	~	0.311

Table 6

Labratory Sample Results

6th St and Birch St PI Report

Lab Sample ID	Location	Date	Latitude	Longitude	Sb	As	Ba	Cd	Cu	Fe	Pb	Mn	Ni	Ag	Tl	Zn	U	CrVI
0325#44	March ID 188	3/25/2024	34.7321219	-112.0413617	<2.00	14.90	159	0.757	50.5	23,000	13.4	416	46.4	0.855	<2.00	88.3	0.381	~
0326#26	March ID 213	3/26/2024	34.729058	-112.019891	<2.00	16.9	180	0.240	39.5	15,600	8.34	365	30.7	0.456	<2.00	138	0.256	~
0326#31 (CrVI)	March ID 217	3/26/2024	34.7340376	-112.0216619	~	~	~	~	~	~	~	~	~	~	~	~	~	<1.00
0326#32	March ID 218	3/26/2024	34.7374919	-112.0249211	0.960	20.1	200	1.75	171	24,700	26.3	482	49.7	0.772	<2.00	115	0.399	~
0326#52 (CrVI)	March ID 232	3/26/2024	34.7366585	-112.024326	~	~	~	~	~	~	~	~	~	~	~	~	~	<1.00
0326#74	March ID 244	3/26/2024	34.737379	-112.0244209	<2.00	10.7	153	0.464	138	15,900	9.83	245	42.8	1.26	<2.00	366	0.372	~
0326#88	March ID 254	3/26/2024	34.7372591	-112.0228917	0.617	18.3	196	1.92	112	25,000	17.8	440	47.0	0.975	<2.00	97.2	0.397	~
0326#93	March ID 259	3/26/2024	34.7370778	-112.0224759	1.36	17.3	188	0.662	263	18,100	16.2	1,080	28.9	0.897	<2.00	706	0.509	~
0326#109, 0326#109 (CrVI)	March ID 271	3/26/2024	34.7374112	-112.0200958	0.742	17.1	147	4.21	218	24,100	40.7	404	38.5	0.814	<2.00	396	0.374	<1.00
0326#124	March ID 281	3/26/2024	34.7361005	-112.0226385	0.639	12.2	90.3	0.449	90.9	16,600	13.7	278	13.2	<1.00	<2.00	288	0.873	~
0326#137, 0326#137 (CrVI)	March ID 291	3/26/2024	34.73871	-112.024373	0.771	24.4	227	3.27	243	23,800	51.1	466	42.1	0.935	<2.00	173	0.384	0.275
0327#28 (CrVI)	March ID 313	3/27/2024	34.73685	-112.0211633	~	~	~	~	~	~	~	~	~	~	~	~	~	1.37
0327#29	March ID 314	3/27/2024	34.7368552	-112.0211536	4.09	155	205	0.321	165	79,700	12.4	2,760	157	<5.00	<10.0	276	0.338	~
0327#35, 0327#35 (CrVI)	March ID 315	3/27/2024	34.7369974	-112.0212264	5.68	169	175	0.489	192	75,500	15.5	2,650	129	0.741	<10.0	368	0.378	0.276
0327#58	March ID 333	3/27/2024	34.7357952	-112.0196583	<2.00	28.0	177	5.78	276	27,800	30.8	508	41.4	0.568	<2.00	509	0.446	~
0327#81	March ID 346	3/27/2024	34.7373878	-112.0185918	0.818	21.5	146	0.989	396	23,800	19.9	226	27.3	0.627	<2.00	884	0.661	~
0327#87 (CrVI)	March ID 352	3/27/2024	34.7357096	-112.0185995	~	~	~	~	~	~	~	~	~	~	~	~	~	<1.00
0327#94, 0327#94(CrVI)	March ID 357	3/27/2024	34.7345937	-112.0204207	4.31	89.4	91.5	4.71	1,190	62,700	75.0	209	20.5	0.653	<10.0	4,800	0.924	<1.00
0327#110, 0327#110(CrVI)	March ID 366	3/27/2024	34.7297988	-112.0196764	<10.0	44.9	190	4.51	738	63,500	37.4	338	33.0	1.07	<10.0	4,350	0.621	<1.00
0327#128, 0327#128 (CrVI)	March ID 382	3/27/2024	34.7333552	-112.0146352	<2.00	5.28	663	0.0959	48.6	22,400	4.12	422	69.8	0.706	<2.00	39.8	0.421	1.38
0327#139, 0327#139(CrVI)	March ID 387	3/27/2024	34.7321659	-112.0136756	0.825	14.8	176	1.33	118	24,500	19.3	460	41.2	0.428	<2.00	130	0.436	0.472
0327#151, 0327#151 (CrVI)	March ID 398	3/27/2024	34.7321194	-112.0121431	<2.00	13.2	184	0.413	54.5	28,400	11.8	481	56.1	0.517	<2.00	77.7	0.377	0.378
0327#174, 0327#174(CrVI)	March ID 413	3/27/2024	34.7323401	-112.010691	<2.00	14.2	161	3.41	93.9	27,900	23.0	439	52.5	0.694	<2.00	222.0	0.316	<1.00
0327#187	March ID 424	3/27/2024	34.739667	-112.017361	<2.00	9.26	87.0	0.187	21.5	12,600	7.19	261	11.2	0.173	<2.00	822	0.797	~
0327#194 (CrVI)	March ID 431	3/27/2024	34.739409	-112.0181133	~	~	~	~	~	~	~	~	~	~	~	~	~	0.592
0328#15	March ID 441	3/28/2024	34.7287032	-112.022364	1.42	27.7	154	5.10	393	24,800	62.3	511	35.0	0.539	<2.00	230	0.320	~
0328#26 (CrVI)	March ID 449	3/28/2024	34.7286048	-112.0233611	~	~	~	~	~	~	~	~	~	~	~	~	~	0.279
0328#33	March ID 455	3/28/2024	34.7287219	-112.0241617	1.08	15.3	153	2.49	181	25,600	38.8	470	42.0	0.692	<2.00	237.0	0.461	~
0328#40, 0328#40 (CrVI)	March ID 460	3/28/2024	34.7287109	-112.0252524	1.53	24.6	148	3.95	321	26,200	42.6	486	48.9	0.611	<2.00	229	0.401	<1.00
0328#52	March ID 472	3/28/2024	34.7286117	-112.0271993	8.01	345	253	0.714	114	59,500	14.6	4,840	75.0	<5.00	<10.0	101	0.553	~
0328#68, 0328#68 (CrVI)	March ID 486	3/28/2024	34.7363066	-112.0241801	0.664	8.07	67.7	0.936	91.5	11,100	22.6	177	18.6	0.370	<2.00	598	0.353	<1.00
0328#79	March ID 494	3/28/2024	34.7305576	-112.0093857	1.69	18.1	136	0.334	211	28,000	13.0	368	50.0	0.515	<2.00	448	0.420	~
0328#86 (CrVI)	March ID 498	3/28/2024	34.7361667	-112.0120542	~	~	~	~	~	~	~	~	~	~	~	~	~	0.879
0328#107	March ID 511	3/28/2024	34.7361454	-112.012071	0.626	6.09	140	0.428	35.5	18,100	19.1	301	38.1	0.690	<2.00	82.3	0.603	~
0328#126	March ID 522	3/28/2024	34.7404372	-112.0113508	0.911	7.88	248	0.686	56.6	18,800	29.4	376	55.7	1.000	<2.00	205	0.390	~
0328#138, 0328#138(CrVI)	March ID 534	3/28/2024	34.739972	-112.013306	0.586	13.2	207	2.27	113	22,300	112	451	37.4	1.18	<2.00	467	0.365	0.944

Table 6

Labratory Sample Results

6th St and Birch St PI Report

Lab Sample ID	Location	Date	Latitude	Longitude	Sb	As	Ba	Cd	Cu	Fe	Pb	Mn	Ni	Ag	Tl	Zn	U	CrVI
0328#155	March ID 545	3/28/2024	34.7336682	-112.0052337	0.931	7.31	165	0.263	37.0	22,300	12.3	390	41.0	0.662	<2.00	64.0	0.349	~
0328#163	March ID 550	3/28/2024	34.7374087	-112.0161536	1.35	8.15	208	0.568	75.7	19,900	15.8	352	51.0	0.851	<2.00	203	0.386	~
0328#176, 0328#176(CrVI)	March ID 557	3/28/2024	34.7363604	-112.0168648	<2.00	6.70	173	0.235	78.0	16,200	8.51	304	54.0	0.689	<2.00	230	0.341	0.541
0328#191 (CrVI)	March ID 570	3/28/2024	34.7369224	-112.0160182	~	~	~	~	~	~	~	~	~	~	~	~	~	0.460
0328#192	March ID 571	3/28/2024	34.7370875	-112.0159082	1.01	10.7	192	0.645	74.1	20,200	12.5	345	49.2	1.02	<2.00	192	0.400	~
0328#198 (CrVI)	March ID 577	3/28/2024	34.7344567	-112.01524	~	~	~	~	~	~	~	~	~	~	~	~	~	<1.00
0328#201	March ID 580	3/28/2024	34.7348764	-112.0158911	<2.00	14.8	146	0.768	117	17,900	35.2	302	28.4	0.673	<2.00	318	0.431	~
0329#9 (CrVI)	March ID 589	3/29/2024	34.737633	-112.014018	~	~	~	~	~	~	~	~	~	~	~	~	~	0.98
0329#24	March ID 600	3/29/2024	34.738802	-112.013288	0.75	6.78	144	0.370	39.9	18,700	10.9	324	41.5	0.821	<2.00	64.2	0.329	~
0329#35, 0329#35(CrVI)	March ID 610	3/29/2024	34.736498	-112.013221	1.28	11.4	119	1.46	73.2	22,900	22.8	423	40.9	0.306	<2.00	91.6	0.336	0.85
0329#48 (CrVI)	March ID 620	3/29/2024	34.73916	-112.013162	~	~	~	~	~	~	~	~	~	~	~	~	~	0.26
Jun 04-6-1	June ID 1	6/4/2024	34.7278947	-112.0250408	1.71	11.6	107	0.675	64.0	8,930	16.2	252	17.9	<0.127	0.13	60.2	0.202	~
Jun 04-27-2	June ID 22	6/4/2024	34.726677	-112.0232001	0.853	10.8	97.1	2.04	107	8,690	23.6	273	18.0	<0.127	0.072	136	0.208	~
Jun 04-44-1	June ID 34	6/4/2024	34.726235	-112.0258066	2.03	8.24	106	0.461	145	10,700	10.3	198	21.2	<0.127	<0.065	568	0.493	~
Jun 04-48-1	June ID 38	6/4/2024	34.7257842	-112.0253248	1.13	2.96	74.8	0.306	24.3	5,150	6.95	175	12.1	<0.127	<0.065	35.9	0.524	~
Jun 04-55-2	June ID 45	6/4/2024	34.726106	-112.0231468	1.35	2.82	83.6	0.278	23.0	4,700	6.31	169	10.9	<0.127	<0.065	48.6	0.382	~
Jun 05-4-1	June ID 61	6/5/2024	34.7387238	-112.0272687	2.07	6.83	122	1.08	90.9	11,300	19.8	245	27.4	<0.127	<0.065	154	0.227	~
Jun 05-9-2	June ID 66	6/5/2024	34.7372164	-112.027442	1.48	24.5	133	<0.0471	52.9	15,800	9.05	1,520	38.0	<0.127	<0.065	138	0.198	~
Jun 05-19-3	June ID 75	6/5/2024	34.7345438	-112.0272908	1.50	9.57	129	1.28	138	10,100	22.7	268	23.7	<0.127	<0.065	102	0.275	~
Jun 05-45-1	June ID 96	6/5/2024	34.7356151	-112.0316789	3.50	11.5	229	2.88	202	17,400	35.8	425	44.2	<0.127	0.0955	434	0.435	~
Jun 05-51-1	June ID 101	6/5/2024	34.727066	-112.0499601	1.19	17.4	103	0.504	37.9	9,280	14.2	333	29.5	<0.127	0.0680	44.5	0.292	~
Jun 05-56-2	June ID 106	6/5/2024	34.72857	-112.051434	0.884	19.0	109	0.314	32.0	7,810	10.5	235	24.7	<0.127	<0.065	31.2	0.217	~
Jun 05-71-1	June ID 120	6/5/2024	34.728836	-112.048253	0.830	7.30	119	0.468	36.2	9,770	12.7	318	31.1	<0.127	<0.065	43.1	0.240	~
Jun 05-72-2	June ID 121	6/5/2024	34.727994	-112.046005	0.955	7.40	130	0.0846	77.8	10,400	7.47	445	22.0	<0.127	<0.065	108	0.265	~
Jun 05-77-1	June ID 126	6/5/2024	34.730148	-112.047698	1.80	13.3	130	1.25	82.2	15,400	25.2	459	39.3	<0.127	0.075	80.2	0.209	~
Jun 06-3-1	June ID 129	6/6/2024	34.727927	-112.0292116	2.11	4.12	127	0.549	33.3	9,580	10.6	256	28.6	<0.127	<0.065	60.0	0.356	~
Jun 06-16-1	June ID 142	6/6/2024	34.727006	-112.022952	1.83	13.9	115	1.78	146	11,600	29.7	304	24.8	<0.127	0.102	<0.127	0.385	~
Residential SRL					31	10	15,000	39	3,100	NE	400	3,300	1,600	390	5	23,000	16	35
Non-residential SRL					410	10	170,000	510	41,000	NE	800	32,000	20,000	5,100	67	310,000	200	65
Screening Level (based on 95% upper confidence limit of XRF background samples)					NE	57	NE	NE	NE	NE	282	NE	NE	NE	NE	NE	NE	NE

Notes: All concentrations in milligrams per kilogram (mg/kg)

NE = Not established

~ Not Analyzed for in sample

Above most concervative residential SRL

Above non-residential SRL

Above calculated screening level

Background sample set

* Processed slag samples

Sb = antimony
As = arsenic
Ba = barium
Cd = cadmium
Cu = copper
Fe = iron
Pb = lead
Mn = manganese
Ni = nickel
Ag = silver
Tl = thallium
Zn = zinc
U = uranium
CrVI = hexavalent chromium

Table 7

XRF and Labratory Result Comparison

6th St and Birch St PI Report

Location ID	Date	Latitude	Longitude	Lab Sample ID	Sample type	Sb	As	Ba	Cd	Cu	Fe	Pb	Mn	Ni	Ag	Tl	Zn	U	Cr/CrVI*
March 1	3/20/2024	34.735273	-112.024166	326 Beech-1 (CrVI)	XRF result	<LOD	<LOD	177	<LOD	50	18,607	17	284	<LOD	<LOD	~	273	~	39
					Lab result	~	~	~	~	~	~	~	~	~	~	~	~	~	<0.255
March 5	3/20/2024	34.7357421	-112.0268138	18 E Beech-1	XRF result	<LOD	10	202	<LOD	93	23,164	33	340	44	<LOD	~	689	~	67
					Lab result	1.11	8.26	120	0.875	50.9	11,200	20.1	221	25.1	0.210	<2.00	284	0.375	~
March 13	3/20/2024	34.72691019	-112.0235873	508 Cottonwood DE	XRF result	<LOD	13	209	<LOD	101	30,584	24	444	<LOD	<LOD	~	207	~	66
					Lab result	2.05	16.2	154	1.55	109	27,100	25.8	473	30.9	0.306	0.971	129	0.401	~
March 14	3/20/2024	34.733489	-112.022982	500 Cherry-1 (CrVI)	XRF result	<LOD	32	206	<LOD	770	33,288	86	419	<LOD	<LOD	~	819	~	42
					Lab result	~	~	~	~	~	~	~	~	~	~	~	~	~	<0.255
March 18	3/20/2024	34.733075	-112.023666	500 Cherry-2	XRF result	<LOD	<LOD	<LOD	<LOD	74	15,215	20	202	<LOD	<LOD	~	197	~	<LOD
					Lab result	1.94	11.80	111	0.582	291	19,000	23.4	305	23.3	0.341	0.474	248	0.425	~
March 22	3/20/2024	34.72714001	-112.0264616	692 2nd Dr-1	XRF result	<LOD	133	506	<LOD	55	53,433	12	1,286	112	<LOD	~	72	~	260
					Lab result	2.44	133	128	<0.500	107	71,300	16.1	1,260	105	0.229	0.525	99.0	0.435	~
March 23	3/20/2024	34.72701	-112.026541	692 2nd Dr-2 (CrVI)	XRF result	<LOD	165	420	<LOD	88	66,563	<LOD	1,200	232	<LOD	~	101	~	493
					Lab result	~	~	~	~	~	~	~	~	~	~	~	~	~	0.286
March 25	3/20/2024	34.735958	-112.018374	S. 8th Place-1	XRF result	<LOD	16	250	<LOD	153	46,062	22	957	<LOD	<LOD	~	408	~	34
					Lab result	0.88	8.80	170	0.479	63.5	18,500	11.0	375	25.5	<1.00	<2.00	126	0.574	~
March 27	3/20/2024	34.73688939	-112.0185295	S. 8th Place-2 (CrVI)	XRF result	<LOD	40	102	<LOD	434	49,554	48	322	<LOD	<LOD	~	1,974	~	36
					Lab result	~	~	~	~	~	~	~	~	~	~	~	~	~	<0.255
March 29	3/20/2024	34.738124	-112.01846	S. 8th Place-3	XRF result	<LOD	20	420	<LOD	138	45,030	20	681	<LOD	<LOD	~	612	~	83
					Lab result	0.597	8.57	89.7	<0.500	29.5	15,300	8.05	287	8.93	<1.00	<2.00	101	0.851	~
March 32	3/20/2024	34.738734	-112.017669	985 E Mingus -1	XRF result	<LOD	10	285	<LOD	173	27,109	18	400	45	<LOD	~	710	~	55
					Lab result	0.906	9.81	97.2	1.89	147	16,700	13.1	280	25.5	<1.00	<2.00	552	0.314	~
March 33	3/20/2024	34.738857	-112.018048	985 E Mingus -2	XRF result	<LOD	24	290	<LOD	1,461	44,925	26	305	37	<LOD	~	1,364	~	79
					Lab result	<2.00	9.33	284	<0.500	601	30,500	15.3	200	21.6	0.379	0.566	598	0.680	~
March 37	3/20/2024	34.739654	-112.018311	950 E Mingus-1	XRF result	<LOD	19	267	<LOD	92	35,747	15	399	42	<LOD	~	422	~	78
					Lab result	1.62	8.65	106	0.367	35.2	16,600	8.07	315	32.3	0.184	<2.00	70.0	0.452	~
March 46	3/21/2024	34.730831	-112.013527	525 12th St-2	XRF result	<LOD	17	359	<LOD	55	47,659	11	474	37	<LOD	~	163	~	99
					Lab result	<2.00	6.22	102	<0.500	21.5	13,900	7.26	290	7.77	<1.00	0.454	76.0	0.961	~
March 48	3/21/2024	34.731264	-112.013213	525 12th St-1	XRF result	<LOD	10	221	<LOD	171	25,368	11	310	55	<LOD	~	330	~	41
					Lab result	2.12	11.5	133	0.849	103	24,700	22.2	422	42.3	0.236	1.16	93.8	0.399	~
March 51	3/21/2024	34.73034	-112.013155	525 12th St-3	XRF result	<LOD	15	236	<LOD	61	44,188	<LOD	452	65	<LOD	~	131	~	88
					Lab result	2.33	4.22	202	0.168	280	25,900	14.6	417	74.4	0.228	0.740	317	0.509	~
March 54	3/21/2024	34.734389	-112.021652	319 6th St-1	XRF result	<LOD	422	<LOD	<LOD	2,394	463,709	270	349	<LOD	<LOD	~	16,803	~	196
					Lab result	<2.00	89.2	111	4.58	1,140	43,900	60.2	199	21.6	1.01	<2.00	5,110	0.971	~
March 57	3/21/2024	34.734393	-112.021096	319 6th St-2	XRF result	<LOD	361	<LOD	<LOD	2,488	377,613	244	401	<LOD	<LOD	~	16,117	~	131
					Lab result	<2.00	35.7	125	3.85	13,700	32,200	102	326	32.6	7.80	<2.00	1,260	0.408	~

Table 7

XRF and Labratory Result Comparison

6th St and Birch St PI Report

Location ID	Date	Latitude	Longitude	Lab Sample ID	Sample type	Sb	As	Ba	Cd	Cu	Fe	Pb	Mn	Ni	Ag	Tl	Zn	U	Cr/CrVI*
March 60	3/21/2024	34.734108	-112.02082	319 6th St-4 (CrVI)	XRF result	<LOD	459	<LOD	<LOD	2,833	540,646	342	423	<LOD	<LOD	~	24,079	~	148
					Lab result	~	~	~	~	~	~	~	~	~	~	~	~	~	<0.255
March 64	3/21/2024	34.734093	-112.021463	319 6th St-3	XRF result	<LOD	368	<LOD	<LOD	7,100	395,073	275	534	<LOD	<LOD	~	17,285	~	227
					Lab result	1.62	42.2	221	5.17	1,930	36,200	98.6	421	40.1	1.58	1.11	1,370	0.585	~
March 73	3/21/2024	34.73622	-112.026257	57 E Aspen S-1	XRF result	<LOD	<LOD	243	<LOD	62	21,778	41	528	43	<LOD	~	100	~	43
					Lab result	<2.00	18.9	162	3.33	317	20,600	50.7	403	37.4	1.23	<2.00	277	0.431	~
March 75	3/21/2024	34.734586	-112.019561	705 E. Aspen St-1	XRF result	<LOD	204	<LOD	<LOD	1,593	254,545	172	418	<LOD	<LOD	~	9,888	~	155
					Lab result	<2.00	12.0	187	3.97	236	18,400	19.6	310	43.3	1.10	<2.00	496	0.382	~
March 81	3/21/2024	34.73507	-112.019509	705 E. Aspen St-2	XRF result	<LOD	37	207	<LOD	282	41,731	27	323	50	<LOD	~	1,290	~	92
					Lab result	<2.00	10.5	164	0.448	53.3	33,900	15.2	475	48.5	0.161	<2.00	96.8	0.430	~
March 85	3/21/2024	34.735753	-112.01932	751 E Aspen St-1	XRF result	<LOD	61	287	<LOD	671	80,972	64	635	71	<LOD	~	4,114	~	105
					Lab result	<2.00	17.8	266	6.91	205	28,200	26.8	607	43.2	0.527	<2.00	241	0.436	~
March 88	3/21/2024	34.733265	-112.026434	333 Willard-1	XRF result	<LOD	36	270	<LOD	2,071	25,388	221	321	<LOD	<LOD	~	2,073	~	26
					Lab result	<2.00	25.5	242	7.24	925	18,500	174	310	27.8	1.43	<2.00	494	0.356	~
March 89	3/21/2024	34.733377	-112.026339	333 Willard-2	XRF result	<LOD	23	239	<LOD	783	33,048	105	342	51	<LOD	~	455	~	57
					Lab result	<2.00	17.9	174	4.85	559	13,800	67.6	238	20.2	1.20	<2.00	271	0.364	~
March 91**	3/21/2024	34.734027	-112.020105	MRI-2, MRI-1 (CrVI)	XRF result	<LOD	506	<LOD	<LOD	3,602	753,526	365	215	<LOD	<LOD	~	23,820	~	128
					Lab result	<2.00	172	86.2	3.67	1,900	51,100	101	35.3	0.586	0.839	1.08	4,620	1.63	<0.255
March 93	3/21/2024	34.733976	-112.019464	MRI-3	XRF result	<LOD	537	<LOD	<LOD	3,252	620,159	310	189	<LOD	<LOD	~	19,772	~	195
					Lab result	<2.00	184	84.7	3.13	1,650	45,500	101	31.5	0.515	0.685	0.875	4,050	1.61	~
March 102	3/22/2024	34.734015	-112.026881	315 Willard St-1	XRF result	<LOD	26	1,153	<LOD	912	30,437	103	571	73	<LOD	~	466	~	<LOD
					Lab result	1.52	15.0	165	4.72	589	17,100	62.0	336	29.3	0.869	<2.00	275	0.352	~
March 113	3/22/2024	34.73074	-112.025906	497 Willard St-1	XRF result	101	6,266	567	428	18,934	71,840	3,537	254	73	<LOD	~	12,284	~	265
					Lab result	4.74	1,680	231	87.9	1,830	19,500	651	207	17.1	5.29	2.89	1,320	0.860	~
March 137	3/22/2024	34.730158	-112.026215	497 Willard St-2	XRF result	<LOD	34	229	<LOD	285	24,212	36	473	<LOD	<LOD	~	219	~	61
					Lab result	1.08	35.7	169	2.81	167	19,400	19.2	321	38.4	0.552	<2.00	94.5	0.415	~
March 141	3/22/2024	34.729753	-112.026876	497 Willard St-3	XRF result	<LOD	22	370	<LOD	110	51,516	28	618	71	<LOD	~	263	~	115
					Lab result	1.79	28.6	142	11.5	533	19,600	70.5	391	29.9	0.732	0.500	259	0.335	~
March 146	3/22/2024	34.73352	-112.015639	350 S 12th St-1	XRF result	<LOD	18	226	<LOD	75	34,768	23	531	106	<LOD	~	165	~	66
					Lab result	2.03	3.16	109	<0.500	24.9	11,800	5.30	258	42.4	0.200	<2.00	35.2	0.520	~
March 149	3/22/2024	34.733347	-112.014652	350 S 12th St-2	XRF result	<LOD	10	296	<LOD	67	29,500	13	417	62	<LOD	~	76	~	70
					Lab result	1.98	29.6	152	3.71	333	24,400	62.2	460	36.6	0.499	<2.00	183	0.402	~
March 176	3/25/2024	34.7321888	-112.0403844	0325#24, 0325#24 (CrVI)	XRF result	<LOD	24	341	<LOD	154	39,412	55	526	57	<LOD	~	196	~	114
					Lab result	1.18	24.5	167	3.11	175	32,400	51.2	541	43.3	0.298	<2.00	144	0.461	1.11
March 181	3/25/2024	34.7324591	-112.0409352	0325#33 (CrVI)	XRF result	<LOD	13	770	<LOD	119	73,831	17	982	123	<LOD	~	244	~	160
					Lab result	~	~	~	~	~	~	~	~	~	~	~	~	~	0.311

Table 7

XRF and Labratory Result Comparison

6th St and Birch St PI Report

Location ID	Date	Latitude	Longitude	Lab Sample ID	Sample type	Sb	As	Ba	Cd	Cu	Fe	Pb	Mn	Ni	Ag	Tl	Zn	U	Cr/CrVI*
March 188	3/25/2024	34.7321219	-112.0413617	0325#44	XRF result	<LOD	<LOD	233	<LOD	50	30,517	30	403	50	<LOD	~	97.0	~	100
					Lab result	<2.00	14.90	159	0.757	50.5	23,000	13.4	416	46.4	0.855	<2.00	88.3	0.381	~
March 213	3/26/2024	34.729058	-112.019891	0326#26	XRF result	<LOD	11	245	<LOD	39	28,324	19	1,049	52	<LOD	~	136	~	51
					Lab result	<2.00	16.9	180	0.240	39.5	15,600	8.34	365	30.7	0.456	<2.00	138	0.256	~
March 217	3/26/2024	34.7340376	-112.0216619	0326#31 (CrVI)	XRF result	<LOD	281	<LOD	<LOD	2,790	306,148	221	393	<LOD	<LOD	~	12,645	~	129
					Lab result	~	~	~	~	~	~	~	~	~	~	~	~	~	<1.00
March 218	3/26/2024	34.7374919	-112.0249211	0326#32	XRF result	<LOD	20	328	<LOD	200	33,492	28	463	<LOD	<LOD	~	281	~	78
					Lab result	0.960	20.1	200	1.75	171	24,700	26.3	482	49.7	0.772	<2.00	115	0.399	~
March 232	3/26/2024	34.7366585	-112.024326	0326#52 (CrVI)	XRF result	<LOD	22	265	<LOD	195	32,863	28	325	40	<LOD	~	1,405	~	2,659
					Lab result	~	~	~	~	~	~	~	~	~	~	~	~	~	<1.00
March 244	3/26/2024	34.737379	-112.0244209	0326#74	XRF result	<LOD	26	261	<LOD	194	41,519	21	359	53	<LOD	~	1,003	~	64
					Lab result	<2.00	10.7	153	0.464	138	15,900	9.83	245	42.8	1.26	<2.00	366	0.372	~
March 254	3/26/2024	34.7372591	-112.0228917	0326#88	XRF result	<LOD	19	270	<LOD	107	30,025	29	458	<LOD	<LOD	~	117	~	64
					Lab result	0.617	18.3	196	1.92	112	25,000	17.8	440	47.0	0.975	<2.00	97.2	0.397	~
March 259	3/26/2024	34.7370778	-112.0224759	0326#93	XRF result	<LOD	33	210	<LOD	289	44,957	23	324	46	<LOD	~	1,337	~	61
					Lab result	1.36	17.3	188	0.662	263	18,100	16.2	1,080	28.9	0.897	<2.00	706	0.509	~
March 271	3/26/2024	34.7374112	-112.0200958	0326#109, 0326#109 (CrVI)	XRF result	<LOD	20	399	<LOD	272	38,927	58	515	40	<LOD	~	909	~	94
					Lab result	0.742	17.1	147	4.21	218	24,100	40.7	404	38.5	0.814	<2.00	396	0.374	<1.00
March 281	3/26/2024	34.7361005	-112.0226385	0326#124	XRF result	<LOD	35	383	<LOD	249	49,451	39	398	40	<LOD	~	1,395	~	88
					Lab result	0.639	12.2	90.3	0.449	90.9	16,600	13.7	278	13.2	<1.00	<2.00	288	0.873	~
March 291	3/26/2024	34.73871	-112.024373	0326#137, 0326#137 (CrVI)	XRF result	<LOD	23	293	<LOD	161	35,317	49	481	65	<LOD	~	234	~	111
					Lab result	0.771	24.4	227	3.27	243	23,800	51.1	466	42.1	0.935	<2.00	173	0.384	0.275
March 313	3/27/2024	34.73685	-112.0211633	0327#28 (CrVI)	XRF result	<LOD	176	443	<LOD	197	111,128	<LOD	2,476	148	<LOD	~	532	~	324
					Lab result	~	~	~	~	~	~	~	~	~	~	~	~	~	1.37
March 314	3/27/2024	34.7368552	-112.0211536	0327#29	XRF result	<LOD	145	467	<LOD	201	101,832	20	2,066	131	<LOD	~	705	~	250
					Lab result	4.09	155	205	0.321	165	79,700	12.4	2,760	157	<5.00	<10.0	276	0.338	~
March 315	3/27/2024	34.7369974	-112.0212264	0327#35, 0327#35 (CrVI)	XRF result	<LOD	161	708	<LOD	433	176,276	33	3,248	270	<LOD	~	1,693	~	728
					Lab result	5.68	169	175	0.489	192	75,500	15.5	2,650	129	0.741	<10.0	368	0.378	0.276
March 333	3/27/2024	34.7357952	-112.0196583	0327#58	XRF result	<LOD	67	301	<LOD	534	79,255	77	642	<LOD	<LOD	~	2,412	~	115
					Lab result	<2.00	28.0	177	5.78	276	27,800	30.8	508	41.4	0.568	<2.00	509	0.446	~
March 346	3/27/2024	34.7373878	-112.0185918	0327#81	XRF result	<LOD	41	260	<LOD	391	50,848	41	298	<LOD	<LOD	~	1,714	~	55
					Lab result	0.818	21.5	146	0.989	396	23,800	19.9	226	27.3	0.627	<2.00	884	0.661	~
March 352	3/27/2024	34.7357096	-112.0185995	0327#87 (CrVI)	XRF result	<LOD	43	358	<LOD	318	54,645	37	634	57	<LOD	~	1,563	~	114
					Lab result	~	~	~	~	~	~	~	~	~	~	~	~	~	<1.00
March 357	3/27/2024	34.7345937	-112.0204207	0327#94, 0327#94 (CrVI)	XRF result	<LOD	336	<LOD	<LOD	2,325	419,632	288	332	<LOD	<LOD	~	14,278	~	115
					Lab result	4.31	89.4	91.5	4.71	1,190	62,700	75.0	209	20.5	0.653	<10.0	4,800	0.924	<1.00

Table 7

XRF and Labratory Result Comparison

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Location ID	Date	Latitude	Longitude	Lab Sample ID	Sample type	Sb	As	Ba	Cd	Cu	Fe	Pb	Mn	Ni	Ag	Tl	Zn	U	Cr/CrVI*
March 366	3/27/2024	34.7297988	-112.0196764	0327#110, 0327#110 (CrVI)	XRF result	<LOD	86	341	<LOD	487	104,439	95	528	<LOD	<LOD	~	3,956	~	107
					Lab result	<10.0	44.9	190	4.51	738	63,500	37.4	338	33.0	1.07	<10.0	4,350	0.621	<1.00
March 382	3/27/2024	34.7333552	-112.0146352	0327#128, 0327#128 (CrVI)	XRF result	<LOD	<LOD	477	<LOD	63	46,075	<LOD	744	112	<LOD	~	64	~	126
					Lab result	<2.00	5.28	663	0.0959	48.6	22,400	4.12	422	69.8	0.706	<2.00	39.8	0.421	1.38
March 387	3/27/2024	34.7321659	-112.0136756	0327#139, 0327#139 (CrVI)	XRF result	<LOD	13	362	<LOD	130	43,063	32	637	44	<LOD	~	183	~	108
					Lab result	0.825	14.8	176	1.33	118	24,500	19.3	460	41.2	0.428	<2.00	130	0.436	0.472
March 398	3/27/2024	34.7321194	-112.0121431	0327#151, 0327#151 (CrVI)	XRF result	<LOD	13	342	<LOD	64	47,858	26	605	51	<LOD	~	132	~	147
					Lab result	<2.00	13.2	184	0.413	54.5	28,400	11.8	481	56.1	0.517	<2.00	77.7	0.377	0.378
March 413	3/27/2024	34.7323401	-112.010691	0327#174, 0327#174 (CrVI)	XRF result	<LOD	17	404	<LOD	91	52,582	25	659	75	<LOD	~	314	~	144
					Lab result	<2.00	14.2	161	3.41	93.9	27,900	23.0	439	52.5	0.694	<2.00	222.0	0.316	<1.00
March 424	3/27/2024	34.739667	-112.017361	0327#187	XRF result	<LOD	<LOD	444	<LOD	35	31,524	15	494	<LOD	<LOD	~	1,281	~	78
					Lab result	<2.00	9.26	87.0	0.187	21.5	12,600	7.19	261	11.2	0.173	<2.00	822	0.797	~
March 431	3/27/2024	34.739409	-112.0181133	0327#194, 0327#194 (CrVI)	XRF result	<LOD	19	1,032	<LOD	79	59,642	<LOD	1,859	156	<LOD	~	143	~	175
					Lab result	~	~	~	~	~	~	~	~	~	~	~	~	~	0.592
March 441	3/28/2024	34.7287032	-112.022364	0328#15	XRF result	<LOD	20	274	<LOD	359	31,967	76	546	<LOD	<LOD	~	265	~	104
					Lab result	1.42	27.7	154	5.10	393	24,800	62.3	511	35.0	0.539	<2.00	230	0.320	~
March 449	3/28/2024	34.7286048	-112.0233611	0328#26 (CrVI)	XRF result	<LOD	<LOD	395	<LOD	67	37,775	19	500	<LOD	<LOD	~	162	~	100
					Lab result	~	~	~	~	~	~	~	~	~	~	~	~	~	0.279
March 455	3/28/2024	34.7287219	-112.0241617	0328#33	XRF result	<LOD	12	389	<LOD	179	38,294	48	587	42	<LOD	~	324	~	140
					Lab result	1.08	15.3	153	2.49	181	25,600	38.8	470	42.0	0.692	<2.00	237.0	0.461	~
March 460	3/28/2024	34.7287109	-112.0252524	0328#40, 0328#40 (CrVI)	XRF result	<LOD	20	359	<LOD	343	42,387	62	644	65	<LOD	~	359	~	144
					Lab result	1.53	24.6	148	3.95	321	26,200	42.6	486	48.9	0.611	<2.00	229	0.401	<1.00
March 472	3/28/2024	34.7286117	-112.0271993	0328#52	XRF result	<LOD	113	283	<LOD	77	49,957	13	1,361	57	<LOD	~	141	~	108
					Lab result	8.01	345	253	0.714	114	59,500	14.6	4,840	75.0	<5.00	<10.0	101	0.553	~
March 486	3/28/2024	34.7363066	-112.0241801	0328#68, 0328#68 (CrVI)	XRF result	<LOD	7	115	<LOD	95	10,421	17	133	<LOD	<LOD	~	571	~	679
					Lab result	0.664	8.07	67.7	0.936	91.5	11,100	22.6	177	18.6	0.370	<2.00	598	0.353	<1.00
March 494	3/28/2024	34.7305576	-112.0093857	0328#79	XRF result	<LOD	37	318	<LOD	247	90,674	28	619	75	<LOD	~	737	~	80
					Lab result	1.69	18.1	136	0.334	211	28,000	13.0	368	50.0	0.515	<2.00	448	0.420	~
March 498	3/28/2024	34.7361667	-112.0120542	0328#86 (CrVI)	XRF result	<LOD	<LOD	476	<LOD	70	47,562	29	601	93	<LOD	~	259	~	164
					Lab result	~	~	~	~	~	~	~	~	~	~	~	~	~	0.879
March 511	3/28/2024	34.7361454	-112.012071	0328#107	XRF result	<LOD	<LOD	314	<LOD	51	33,598	25	429	68	<LOD	~	184	~	77
					Lab result	0.626	6.09	140	0.428	35.5	18,100	19.1	301	38.1	0.690	<2.00	82.3	0.603	~
March 522	3/28/2024	34.7404372	-112.0113508	0328#126	XRF result	<LOD	15	285	<LOD	67	36,128	41	471	90	<LOD	~	292	~	89
					Lab result	0.911	7.88	248	0.686	56.6	18,800	29.4	376	55.7	1.000	<2.00	205	0.390	~
March 534	3/28/2024	34.739972	-112.013306	0328#138, 0328#138 (CrVI)	XRF result	<LOD	20	231	<LOD	98	37,399	107	433	<LOD	<LOD	~	421	~	116
					Lab result	0.586	13.2	207	2.27	113	22,300	112	451	37.4	1.18	<2.00	467	0.365	0.944

Table 7

XRF and Labratory Result Comparison

6th St and Birch St PI Report

Location ID	Date	Latitude	Longitude	Lab Sample ID	Sample type	Sb	As	Ba	Cd	Cu	Fe	Pb	Mn	Ni	Ag	Tl	Zn	U	Cr/CrVI*
March 545	3/28/2024	34.7336682	-112.0052337	0328#155	XRF result	<LOD	<LOD	289	<LOD	49	38,166	19	493	69	<LOD	~	75	~	102
					Lab result	0.931	7.31	165	0.263	37.0	22,300	12.3	390	41.0	0.662	<2.00	64.0	0.349	~
March 550	3/28/2024	34.7374087	-112.0161536	0328#163	XRF result	<LOD	13	331	<LOD	91	39,314	24	449	55	<LOD	~	465	~	67
					Lab result	1.35	8.15	208	0.568	75.7	19,900	15.8	352	51.0	0.851	<2.00	203	0.386	~
March 557	3/28/2024	34.7363604	-112.0168648	0328#176, 0328#176 (CrVI)	XRF result	<LOD	<LOD	646	<LOD	66	38,105	14	592	52	<LOD	~	328	~	132
					Lab result	<2.00	6.70	173	0.235	78.0	16,200	8.51	304	54.0	0.689	<2.00	230	0.341	0.541
March 570	3/28/2024	34.7369224	-112.0160182	0328#191 (CrVI)	XRF result	<LOD	<LOD	329	<LOD	62	29,543	24	414	<LOD	<LOD	~	289	~	94
					Lab result	~	~	~	~	~	~	~	~	~	~	~	~	~	0.460
March 571	3/28/2024	34.7370875	-112.0159082	0328#192	XRF result	<LOD	10	386	<LOD	92	40,792	16	648	93	<LOD	~	387	~	89
					Lab result	1.01	10.7	192	0.645	74.1	20,200	12.5	345	49.2	1.02	<2.00	192	0.400	~
March 577	3/28/2024	34.7344567	-112.01524	0328#198 (CrVI)	XRF result	<LOD	23	367	<LOD	105	48,875	23	613	55	<LOD	~	228	~	127
					Lab result	~	~	~	~	~	~	~	~	~	~	~	~	~	<1.00
March 580	3/28/2024	34.7348764	-112.0158911	0328#201	XRF result	<LOD	23	473	<LOD	124	52,551	38	693	74	<LOD	~	639	~	147
					Lab result	<2.00	14.8	146	0.768	117	17,900	35.2	302	28.4	0.673	<2.00	318	0.431	~
March 589	3/29/2024	34.737633	-112.014018	0329#9 (CrVI)	XRF result	<LOD	<LOD	327	<LOD	70	54,582	21	717	80	<LOD	~	171	~	202
					Lab result	~	~	~	~	~	~	~	~	~	~	~	~	~	0.98
March 600	3/29/2024	34.738802	-112.013288	0329#24	XRF result	<LOD	<LOD	259	<LOD	41	37,483	21	415	<LOD	<LOD	~	115	~	97
					Lab result	0.75	6.78	144	0.370	39.9	18,700	10.9	324	41.5	0.821	<2.00	64.2	0.329	~
March 610	3/29/2024	34.736498	-112.013221	0329#35, 0329#35 (CrVI)	XRF result	<LOD	16	376	<LOD	108	39,527	28	556	73	<LOD	~	204	~	122
					Lab result	1.28	11.4	119	1.46	73.2	22,900	22.8	423	40.9	0.306	<2.00	91.6	0.336	0.85
March 620	3/29/2024	34.73916	-112.013162	0329#48 (CrVI)	XRF result	<LOD	<LOD	324	<LOD	59	37,515	42	453	65	<LOD	~	181	~	116
					Lab result	~	~	~	~	~	~	~	~	~	~	~	~	~	0.26
June 1	6/4/2024	34.7278947	-112.0250408	Jun 04-6-1	XRF result	<LOD	23	320	<LOD	99	30,647	21	429	33	<LOD	<LOD	114	12	<LOD
					Lab result	1.71	11.6	107	0.675	64.0	8,930	16.2	252	17.9	<0.127	0.13	60.2	0.202	~
June 22	6/4/2024	34.726677	-112.0232001	Jun 04-27-2	XRF result	<LOD	18	746	<LOD	136	44,043	37	660	50	19	<LOD	226	9	90
					Lab result	0.853	10.8	97.1	2.04	107	8,690	23.6	273	18.0	<0.127	0.072	136	0.208	~
June 34	6/4/2024	34.726235	-112.0258066	Jun 04-44-1	XRF result	<LOD	39	259	<LOD	294	42,019	47	245	40	10	<LOD	2,334	19	<LOD
					Lab result	2.03	8.24	106	0.461	145	10,700	10.3	198	21.2	<0.127	<0.065	568	0.493	~
June 38	6/4/2024	34.7257842	-112.0253248	Jun 04-48-1	XRF result	<LOD	9	703	<LOD	66	24,647	22	415	42	<LOD	<LOD	126	11	90
					Lab result	1.13	2.96	74.8	0.306	24.3	5,150	6.95	175	12.1	<0.127	<0.065	35.9	0.524	~
June 45	6/4/2024	34.726106	-112.0231468	Jun 04-55-2	XRF result	<LOD	17	576	<LOD	139	34,599	22	522	46	<LOD	<LOD	633	9	<LOD
					Lab result	1.35	2.82	83.6	0.278	23.0	4,700	6.31	169	10.9	<0.127	<0.065	48.6	0.382	~
June 61	6/5/2024	34.7387238	-112.0272687	Jun 05-4-1	XRF result	71	18	530	<LOD	170	45,315	38	575	64	<LOD	<LOD	493	10	174
					Lab result	2.07	6.83	122	1.08	90.9	11,300	19.8	245	27.4	<0.127	<0.065	154	0.227	~
June 66	6/5/2024	34.7372164	-112.027442	Jun 05-9-2	XRF result	83	113	313	<LOD	162	157,106	<LOD	4,455	107	<LOD		351	<LOD	<LOD
					Lab result	1.48	24.5	133	<0.0471	52.9	15,800	9.05	1,520	38.0	<0.127	<0.065	138	0.198	~

Table 7

XRF and Labratory Result Comparison

6th St and Birch St PI Report

Location ID	Date	Latitude	Longitude	Lab Sample ID	Sample type	Sb	As	Ba	Cd	Cu	Fe	Pb	Mn	Ni	Ag	Tl	Zn	U	Cr/CrVI*
June 75	6/5/2024	34.7345438	-112.0272908	Jun 05-19-3	XRF result	<LOD	16	561	<LOD	232	33,062	35	600	47	<LOD	<LOD	239	8	100
					Lab result	1.50	9.57	129	1.28	138	10,100	22.7	268	23.7	<0.127	<0.065	102	0.275	~
June 96	6/5/2024	34.7356151	-112.0316789	Jun 05-45-1	XRF result	<LOD	12	534	<LOD	198	39,412	37	608	66	<LOD	<LOD	603	9	<LOD
					Lab result	3.50	11.5	229	2.88	202	17,400	35.8	425	44.2	<0.127	0.0955	434	0.435	~
June 101	6/5/2024	34.727066	-112.0499601	Jun 05-51-1	XRF result	<LOD	33	532	<LOD	74	36,802	20	766	70	<LOD	<LOD	96	8	<LOD
					Lab result	1.19	17.4	103	0.504	37.9	9,280	14.2	333	29.5	<0.127	0.0680	44.5	0.292	~
June 106	6/5/2024	34.72857	-112.051434	Jun 05-56-2	XRF result	<LOD	31	485	56	139	31,043	44	549	59	<LOD	<LOD	156	9	120
					Lab result	0.884	19.0	109	0.314	32.0	7,810	10.5	235	24.7	<0.127	<0.065	31.2	0.217	~
June 120	6/5/2024	34.728836	-112.048253	Jun 05-71-1	XRF result	96	19	676	<LOD	100	53,844	27	919	98	<LOD	<LOD	135	<LOD	210
					Lab result	0.830	7.30	119	0.468	36.2	9,770	12.7	318	31.1	<0.127	<0.065	43.1	0.240	~
June 121	6/5/2024	34.727994	-112.046005	Jun 05-72-2	XRF result	84	65	286	<LOD	267	60,217	28	815	61	<LOD	<LOD	1,266	15	<LOD
					Lab result	0.955	7.40	130	0.0846	77.8	10,400	7.47	445	22.0	<0.127	<0.065	108	0.265	~
June 126	6/5/2024	34.730148	-112.047698	Jun 05-77-1	XRF result	<LOD	17	964	<LOD	77	70,504	21	1,089	118	<LOD	<LOD	152	12	199
					Lab result	1.80	13.3	130	1.25	82.2	15,400	25.2	459	39.3	<0.127	0.075	80.2	0.209	~
June 129	6/6/2024	34.727927	-112.0292116	Jun 06-3-1	XRF result	<LOD	<LOD	315	<LOD	31	11,562	11	441	16	8	<LOD	111	13	<LOD
					Lab result	2.11	4.12	127	0.549	33.3	9,580	10.6	256	28.6	<0.127	<0.065	60.0	0.356	~
June 142	6/6/2024	34.727006	-112.022952	Jun 06-16-1	XRF result	60	20	418	<LOD	159	30,297	33	444	35	<LOD	<LOD	247	13	<LOD
					Lab result	1.83	13.9	115	1.78	146	11,600	29.7	304	24.8	<0.127	0.102	<0.127	0.385	~
Residential SRL						31	10	15,000	39	3,100	NE	400	3,300	1,600	390	5	23,000	16	120,000/30
Non-residential SRL						410	10	170,000	510	41,000	NE	800	32,000	20,000	5,100	67	310,000	200	1,000,000/65
Screening Level (based on 95% upper confidence limit of XRF background samples)						NE	57	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE

Notes: All concentrations in milligrams per kilogram (mg/kg)

*XRF analysis is for total chromium. There is no SRL for total chromium, so the SRLs for trivalent chromium are shown for reference. Lab results were for hexavalent chromium

** Processed slag samples

<LOD = Less than Limit of Detection

NE = Not established

Above most concervative residential SRL

Above non-residential SRL

Above calculated screening level

Background sample set

Sb = antimony
As = arsenic
Ba = barium
Cd = cadmium
Cu = copper
Fe = iron
Pb = lead
Mn = manganese
Ni = nickel
Ag = silver
Tl = thallium
Zn = zinc
U = uranium
Cr = total chromium
CrVI = hexavalent chromium

APPENDICES

Appendix A

External Laboratory Reports

MRI Provided Laboratory Reports

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mike Vick
Minerals Research Inc.
4620 South Coach Drive
Tucson, Arizona 85714

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JOB DESCRIPTION

Sharpshot Cottonwood Plant (6)

JOB NUMBER

570-147655-1

Eurofins Calscience
2841 Dow Avenue, Suite 100
Tustin CA 92780

See page two for job notes and contact information.

Job Notes

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

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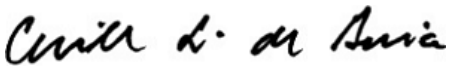

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Authorized for release by
Cecile de Guia, Project Manager I
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Table of Contents

Definitions/Glossary

Client: Minerals Research Inc. Job ID: 570-147655-1
Project/Site: Sharpshot Cottonwood Plant (6)

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Minerals Research Inc. Job ID: 570-147655-1
Project/Site: Sharpshot Cottonwood Plant (6)

Job ID: 570-147655-1

Laboratory: Eurofins Calscience

Narrative

Job Narrative
570-147655-1

Comments
No additional comments.

Receipt
The sample was received on 8/7/2023 11:00 AM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 26.9º C.

Receipt Exceptions

The Chain-of-Custody (COC) was incomplete as received ,COC not relinquished and no relinquished date/time listed on COC.

Metals
Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 570-352815 and analytical batch 570-353149 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Detection Summary

Client: Minerals Research Inc.
Project/Site: Sharpshot Cottonwood Plant (6)

Job ID: 570-147655-1

Client Sample ID: Coarse

Lab Sample ID: 570-147655-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Arsenic	129		2.99		mg/Kg	5		6010B	Total/NA
Barium	51.8		2.99		mg/Kg	5		6010B	Total/NA
Cadmium	2.75		0.498		mg/Kg	5		6010B	Total/NA
Chromium	7.82		0.995		mg/Kg	5		6010B	Total/NA
Cobalt	14.0		0.995		mg/Kg	5		6010B	Total/NA
Copper	1400		1.99		mg/Kg	5		6010B	Total/NA
Lead	73.8		1.99		mg/Kg	5		6010B	Total/NA
Molybdenum	3.62		1.99		mg/Kg	5		6010B	Total/NA
Vanadium	13.6		0.995		mg/Kg	5		6010B	Total/NA
Zinc	3090		4.98		mg/Kg	5		6010B	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Minerals Research Inc. Job ID: 570-147655-1
Project/Site: Sharpshot Cottonwood Plant (6)

Method: SW846 6010B - Metals (ICP)

Client Sample ID: Coarse **Lab Sample ID: 570-147655-1**
Date Collected: 08/01/23 08:00 **Matrix: Solid**
Date Received: 08/07/23 11:00

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		9.95		mg/Kg		08/08/23 07:32	08/08/23 20:52	5
Arsenic	**129**		2.99		mg/Kg		08/08/23 07:32	08/08/23 20:52	5
Barium	**51.8**		2.99		mg/Kg		08/08/23 07:32	08/08/23 20:52	5
Beryllium	ND		0.498		mg/Kg		08/08/23 07:32	08/08/23 20:52	5
Cadmium	**2.75**		0.498		mg/Kg		08/08/23 07:32	08/08/23 20:52	5
Chromium	**7.82**		0.995		mg/Kg		08/08/23 07:32	08/08/23 20:52	5
Cobalt	**14.0**		0.995		mg/Kg		08/08/23 07:32	08/08/23 20:52	5
Copper	**1400**		1.99		mg/Kg		08/08/23 07:32	08/08/23 20:52	5
Lead	**73.8**		1.99		mg/Kg		08/08/23 07:32	08/08/23 20:52	5
Molybdenum	**3.62**		1.99		mg/Kg		08/08/23 07:32	08/08/23 20:52	5
Nickel	ND		1.99		mg/Kg		08/08/23 07:32	08/08/23 20:52	5
Selenium	ND		2.99		mg/Kg		08/08/23 07:32	08/09/23 12:07	5
Silver	ND		1.49		mg/Kg		08/08/23 07:32	08/08/23 20:52	5
Thallium	ND		9.95		mg/Kg		08/08/23 07:32	08/08/23 20:52	5
Vanadium	**13.6**		0.995		mg/Kg		08/08/23 07:32	08/08/23 20:52	5
Zinc	**3090**		4.98		mg/Kg		08/08/23 07:32	08/08/23 20:52	5

Client Sample Results

Client: Minerals Research Inc. Job ID: 570-147655-1
Project/Site: Sharpshot Cottonwood Plant (6)

Method: SW846 7471A - Mercury (CVAA)

Client Sample ID: Coarse **Lab Sample ID: 570-147655-1**
Date Collected: 08/01/23 08:00 **Matrix: Solid**
Date Received: 08/07/23 11:00

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0786		mg/Kg		08/08/23 15:49	08/10/23 11:07	1

Client: Minerals Research Inc. Job ID: 570-147655-1
Project/Site: Sharpshot Cottonwood Plant (6)

General Chemistry

Client Sample ID: Coarse **Lab Sample ID: 570-147655-1**
Date Collected: 08/01/23 08:00 **Matrix: Solid**
Date Received: 08/07/23 11:00

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized (None Homogenization)	yes				NONE			08/07/23 15:43	1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 570-352815/1-A ^5
Matrix: Solid
Analysis Batch: 353149

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 352815

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		9.85		mg/Kg		08/08/23 07:32	08/08/23 17:14	5
Arsenic	ND		2.96		mg/Kg		08/08/23 07:32	08/08/23 17:14	5
Barium	ND		2.96		mg/Kg		08/08/23 07:32	08/08/23 17:14	5
Beryllium	ND		0.493		mg/Kg		08/08/23 07:32	08/08/23 17:14	5
Cadmium	ND		0.493		mg/Kg		08/08/23 07:32	08/08/23 17:14	5
Chromium	ND		0.985		mg/Kg		08/08/23 07:32	08/08/23 17:14	5
Cobalt	ND		0.985		mg/Kg		08/08/23 07:32	08/08/23 17:14	5
Copper	ND		1.97		mg/Kg		08/08/23 07:32	08/08/23 17:14	5
Lead	ND		1.97		mg/Kg		08/08/23 07:32	08/08/23 17:14	5
Molybdenum	ND		1.97		mg/Kg		08/08/23 07:32	08/08/23 17:14	5
Nickel	ND		1.97		mg/Kg		08/08/23 07:32	08/08/23 17:14	5
Selenium	ND		2.96		mg/Kg		08/08/23 07:32	08/08/23 17:14	5
Silver	ND		1.48		mg/Kg		08/08/23 07:32	08/08/23 17:14	5
Thallium	ND		9.85		mg/Kg		08/08/23 07:32	08/08/23 17:14	5
Vanadium	ND		0.985		mg/Kg		08/08/23 07:32	08/08/23 17:14	5
Zinc	ND		4.93		mg/Kg		08/08/23 07:32	08/08/23 17:14	5

Lab Sample ID: LCS 570-352815/2-A ^5
Matrix: Solid
Analysis Batch: 353149

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 352815

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony			49.8	47.38		mg/Kg		95	80 - 120		
Arsenic			49.8	45.02		mg/Kg		90	80 - 120		
Barium			49.8	45.27		mg/Kg		91	80 - 120		
Beryllium			49.8	45.07		mg/Kg		91	80 - 120		
Cadmium			49.8	45.31		mg/Kg		91	80 - 120		
Chromium			49.8	45.66		mg/Kg		92	80 - 120		
Cobalt			49.8	45.11		mg/Kg		91	80 - 120		
Copper			49.8	45.10		mg/Kg		91	80 - 120		
Lead			49.8	45.39		mg/Kg		91	80 - 120		
Molybdenum			49.8	46.29		mg/Kg		93	80 - 120		
Nickel			49.8	45.29		mg/Kg		91	80 - 120		
Selenium			49.8	43.31		mg/Kg		87	80 - 120		
Silver			24.9	22.26		mg/Kg		89	80 - 120		
Thallium			49.8	45.12		mg/Kg		91	80 - 120		
Vanadium			49.8	44.83		mg/Kg		90	80 - 120		
Zinc			49.8	45.05		mg/Kg		91	80 - 120		

Lab Sample ID: LCSD 570-352815/3-A ^5
Matrix: Solid
Analysis Batch: 353149

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 352815

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony			49.8	47.13		mg/Kg		95	80 - 120	1	20
Arsenic			49.8	44.54		mg/Kg		90	80 - 120	1	20
Barium			49.8	44.78		mg/Kg		90	80 - 120	1	20
Beryllium			49.8	44.54		mg/Kg		90	80 - 120	1	20
Cadmium			49.8	44.85		mg/Kg		90	80 - 120	1	20

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

Lab Sample ID: LCSD 570-352815/3-A ^5
Matrix: Solid
Analysis Batch: 353149

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 352815

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium			49.8	45.10		mg/Kg		91	80 - 120	1	20
Cobalt			49.8	44.50		mg/Kg		89	80 - 120	1	20
Copper			49.8	44.71		mg/Kg		90	80 - 120	1	20
Lead			49.8	44.50		mg/Kg		89	80 - 120	2	20
Molybdenum			49.8	46.29		mg/Kg		93	80 - 120	0	20
Nickel			49.8	44.53		mg/Kg		89	80 - 120	2	20
Selenium			49.8	42.23		mg/Kg		85	80 - 120	3	20
Silver			24.9	22.08		mg/Kg		89	80 - 120	1	20
Thallium			49.8	44.53		mg/Kg		89	80 - 120	1	20
Vanadium			49.8	44.37		mg/Kg		89	80 - 120	1	20
Zinc			49.8	44.32		mg/Kg		89	80 - 120	2	20

QC Association Summary

Client: Minerals Research Inc.
Project/Site: Sharpshot Cottonwood Plant (6)

Job ID: 570-147655-1

Metals

Prep Batch: 352815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-147655-1	Coarse	Total/NA	Solid	3050B	
MB 570-352815/1-A ^5	Method Blank	Total/NA	Solid	3050B	
LCS 570-352815/2-A ^5	Lab Control Sample	Total/NA	Solid	3050B	
LCSD 570-352815/3-A ^5	Lab Control Sample Dup	Total/NA	Solid	3050B	

Prep Batch: 353075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-147655-1	Coarse	Total/NA	Solid	7471A	

Analysis Batch: 353149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 570-352815/1-A ^5	Method Blank	Total/NA	Solid	6010B	352815
LCS 570-352815/2-A ^5	Lab Control Sample	Total/NA	Solid	6010B	352815
LCSD 570-352815/3-A ^5	Lab Control Sample Dup	Total/NA	Solid	6010B	352815

Analysis Batch: 353216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-147655-1	Coarse	Total/NA	Solid	6010B	352815

Analysis Batch: 353424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-147655-1	Coarse	Total/NA	Solid	6010B	352815

Analysis Batch: 353846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-147655-1	Coarse	Total/NA	Solid	7471A	353075

General Chemistry

Analysis Batch: 352669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-147655-1	Coarse	Total/NA	Solid	Homogenization	

Lab Chronicle

Client: Minerals Research Inc.
Job ID: 570-147655-1
Project/Site: Sharpshot Cottonwood Plant (6)

Client Sample ID: Coarse
Lab Sample ID: 570-147655-1
Date Collected: 08/01/23 08:00
Matrix: Solid
Date Received: 08/07/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			2.01 g	50 mL	352815	08/08/23 07:32	TL	EET CAL 4
Total/NA	Analysis	6010B		5			353424	08/09/23 12:07	P1R	EET CAL 4
	Instrument ID: ICP10									
Total/NA	Prep	3050B			2.01 g	50 mL	352815	08/08/23 07:32	TL	EET CAL 4
Total/NA	Analysis	6010B		5			353216	08/08/23 20:52	VZ0K	EET CAL 4
	Instrument ID: ICP11									
Total/NA	Prep	7471A			0.53 g	50 mL	353075	08/08/23 15:49	EV3M	EET CAL 4
Total/NA	Analysis	7471A		1			353846	08/10/23 11:07	C0YH	EET CAL 4
	Instrument ID: HG8									
Total/NA	Analysis	Homogenization		1			352669	08/07/23 15:43	KZX6	EET CAL 4
	Instrument ID: NOEQUIP									

Laboratory References:

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

Accreditation/Certification Summary

Client: Minerals Research Inc. Job ID: 570-147655-1
Project/Site: Sharpshot Cottonwood Plant (6)

Laboratory: Eurofins Calscience

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

Authority	Program	Identification Number	Expiration Date
California	State	3082	07-31-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Homogenization		Solid	Sample Homogenized

Method Summary

Client: Minerals Research Inc.
Project/Site: Sharpshot Cottonwood Plant (6)

Job ID: 570-147655-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	EET CAL 4
7471A	Mercury (CVAA)	SW846	EET CAL 4
Homogenization	Homogenization	None	EET CAL 4
3050B	Preparation, Metals	SW846	EET CAL 4
7471A	Preparation, Mercury	SW846	EET CAL 4

Protocol References:

None = None

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

Laboratory References:

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

Sample Summary

Client: Minerals Research Inc.
Project/Site: Sharpshot Cottonwood Plant (6)

Job ID: 570-147655-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
570-147655-1	Coarse	Solid	08/01/23 08:00	08/07/23 11:00

Loc: 570
147655

Eurofins Environmental Testing Southwe

Chain of Custody Record

Attn: Cecil Le de Guia
2841 Dow Avenue, Suite 100
Tustin, CA 92780

Regulatory Program:

Client Contact [2]	**Mike Vick [3]**	**Chelsea Wagner [4]**	8/4/2023	COC No:
Minerals Research, Inc.	**520-748-9364**	**[5]**	**Fedex**	______ of ______ COCs
4620 S. Coach Dr.	**Analysis Turnaround Time**			Sampler:
Tucson, Arizona 85714				**For Lab Use Only:**
520-748-9362	TAT if different from Below ______			Walk-in Client:
520-748-9364				Lab Sampling:
Sharpshot Cottonwood Plant [6]				
Cottonwood, Arizona [7]				Job / SDG No.:
P O # [8]				

Sample Identification [9]	Sample Date [10]	Sample Time [11]	Sample Type (C=Comp, G=Grab)	atrix [1	# of Cont. [13]	m/	MLC		Sample Specific Notes:
Coarse	08/01/23	8:00 AM	C	Granu	1	N	N	X	Full TTLC Metals

570-147655 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ______

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Please email results to Mike Vick at mikevick@mineralsresearch.com; please archive for 1 month, then dispose

Custody Seals Intact:	Custody Seal No.:		Cooler Temp. (oC): Obs'd:______ Corr'd:______ Therm ID No.:______		
Chelsea Wagner (signature)	Minerals Research, Inc.	8/1/2023	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time: 8/7/23 11:05

ISUZ 268/269

Form No. CA-C-WI-002, Rev. 4.6, dated 09/02/2015

FROM:
Chelsea Wagner
Minerals Research, Inc
705 E Birch St
COTTONWOOD AZ 86326
US

(928) 862-0192

SHIP DATE: 04AUG23
ACTWGT: 1.00 LB
CAD: 113916558/INET4535
DIMMED: 9 X 7 X 1 IN

BILL SENDER

TO Cecile L de Guia
Eurofins Environmental Testing
2841 Dow Avenue
Suite 100
Tustin CA 92780
(928) 862-0192

REF:
INV:
PO:
DEPT:

(US) 583J3/A140/9AE3

FedEx Ground

J233123072501uv

TRK# 7729 5634 2950

92780

9622 0019 0 (000 000 0000) 0 00 7729 5634 2950

147655

570-147655 Waybill

After printing this label:
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Login Sample Receipt Checklist

Client: Minerals Research Inc. Job Number: 570-147655-1

Login Number: 147655 **List Source: Eurofins Calscience**
List Number: 1
Creator: Vitente, Precy

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

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ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-77321-1
Client Project/Site: sharpshot Cottonwood Plant (6)

For:
Minerals Research Inc.
4620 South Coach Drive
Tucson, Arizona 85714

Attn: Mike Vick

Authorized for release by:
8/13/2021 9:22:57 AM

Afsaneh Salimpour, Senior Project Manager
(925)484-1919
Afsaneh.Salimpour@Eurofinset.com

Table of Contents

Definitions/Glossary

Client: Minerals Research Inc. Job ID: 320-77321-1
Project/Site: sharpshot Cottonwood Plant (6)

Qualifiers

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Minerals Research Inc. Job ID: 320-77321-1
Project/Site: sharpshot Cottonwood Plant (6)

Job ID: 320-77321-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-77321-1

Comments
No additional comments.

Receipt
The sample was received on 8/6/2021 10:15 AM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 22.0º C.

Receipt Exceptions

The following sample was received at the laboratory outside the required temperature criteria: Coarse (20x50) (320-77321-1). There was no cooling media present in the cooler. Temp recorded at 22.0 C.

Metals
Method 6010B: The continuing calibration verification (CCV) associated with batch 320-515299 recovered above the upper control limit for Thallium. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: Coarse (20x50) (320-77321-1) and (CCV 320-515299/45).

Method 6010B: The following sample was diluted to bring the concentration of target analytes within the calibration range: Coarse (20x50) (320-77321-1). Elevated reporting limits (RLs) are provided.

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

Detection Summary

Client: Minerals Research Inc.
Project/Site: sharpshot Cottonwood Plant (6)

Job ID: 320-77321-1

Client Sample ID: Coarse (20x50)

Lab Sample ID: 320-77321-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silver	0.53		0.48		mg/Kg	1		6010B	Total/NA
Arsenic	73		1.9		mg/Kg	1		6010B	Total/NA
Barium	43		0.96		mg/Kg	1		6010B	Total/NA
Beryllium	0.20		0.19		mg/Kg	1		6010B	Total/NA
Cadmium	2.5		0.19		mg/Kg	1		6010B	Total/NA
Cobalt	17		0.48		mg/Kg	1		6010B	Total/NA
Chromium	9.1		0.48		mg/Kg	1		6010B	Total/NA
Copper	1200		1.4		mg/Kg	1		6010B	Total/NA
Molybdenum	2.6		1.9		mg/Kg	1		6010B	Total/NA
Nickel	1.3		0.96		mg/Kg	1		6010B	Total/NA
Lead	44		0.96		mg/Kg	1		6010B	Total/NA
Selenium	3.6		1.9		mg/Kg	1		6010B	Total/NA
Antimony	3.4		1.9		mg/Kg	1		6010B	Total/NA
Vanadium	14		0.48		mg/Kg	1		6010B	Total/NA
Zinc	3100		19		mg/Kg	10		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: Coarse (20x50)
Lab Sample ID: 320-77321-1

Date Collected: 07/31/21 08:00
Matrix: Solid
Date Received: 08/06/21 10:15

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.53		0.48		mg/Kg		08/10/21 14:48	08/11/21 12:45	1
Arsenic	73		1.9		mg/Kg		08/10/21 14:48	08/11/21 12:45	1
Barium	43		0.96		mg/Kg		08/10/21 14:48	08/11/21 12:45	1
Beryllium	0.20		0.19		mg/Kg		08/10/21 14:48	08/11/21 12:45	1
Cadmium	2.5		0.19		mg/Kg		08/10/21 14:48	08/11/21 12:45	1
Cobalt	17		0.48		mg/Kg		08/10/21 14:48	08/11/21 12:45	1
Chromium	9.1		0.48		mg/Kg		08/10/21 14:48	08/11/21 12:45	1
Copper	1200		1.4		mg/Kg		08/10/21 14:48	08/11/21 12:45	1
Molybdenum	2.6		1.9		mg/Kg		08/10/21 14:48	08/11/21 12:45	1
Nickel	1.3		0.96		mg/Kg		08/10/21 14:48	08/11/21 12:45	1
Lead	44		0.96		mg/Kg		08/10/21 14:48	08/11/21 12:45	1
Selenium	3.6		1.9		mg/Kg		08/10/21 14:48	08/11/21 12:45	1
Antimony	3.4		1.9		mg/Kg		08/10/21 14:48	08/11/21 12:45	1
Thallium	ND	^+	1.9		mg/Kg		08/10/21 14:48	08/11/21 12:45	1
Vanadium	14		0.48		mg/Kg		08/10/21 14:48	08/11/21 12:45	1
Zinc	3100		19		mg/Kg		08/10/21 14:48	08/11/21 15:10	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.038		mg/Kg		08/10/21 06:30	08/10/21 09:31	1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 320-514922/1-A
Matrix: Solid
Analysis Batch: 515299

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 514922

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.50		mg/Kg		08/10/21 14:48	08/11/21 11:00	1
Arsenic	ND		2.0		mg/Kg		08/10/21 14:48	08/11/21 11:00	1
Barium	ND		1.0		mg/Kg		08/10/21 14:48	08/11/21 11:00	1
Beryllium	ND		0.20		mg/Kg		08/10/21 14:48	08/11/21 11:00	1
Cadmium	ND		0.20		mg/Kg		08/10/21 14:48	08/11/21 11:00	1
Cobalt	ND		0.50		mg/Kg		08/10/21 14:48	08/11/21 11:00	1
Chromium	ND		0.50		mg/Kg		08/10/21 14:48	08/11/21 11:00	1
Copper	ND		1.5		mg/Kg		08/10/21 14:48	08/11/21 11:00	1
Molybdenum	ND		2.0		mg/Kg		08/10/21 14:48	08/11/21 11:00	1
Nickel	ND		1.0		mg/Kg		08/10/21 14:48	08/11/21 11:00	1
Lead	ND		1.0		mg/Kg		08/10/21 14:48	08/11/21 11:00	1
Selenium	ND		2.0		mg/Kg		08/10/21 14:48	08/11/21 11:00	1
Antimony	ND		2.0		mg/Kg		08/10/21 14:48	08/11/21 11:00	1
Thallium	ND		2.0		mg/Kg		08/10/21 14:48	08/11/21 11:00	1
Vanadium	ND		0.50		mg/Kg		08/10/21 14:48	08/11/21 11:00	1
Zinc	ND		2.0		mg/Kg		08/10/21 14:48	08/11/21 11:00	1

Lab Sample ID: LCS 320-514922/2-A
Matrix: Solid
Analysis Batch: 515299

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 514922

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	5.05	4.66		mg/Kg		92	80 - 120
Arsenic	50.0	44.1		mg/Kg		88	80 - 120
Barium	50.0	45.7		mg/Kg		91	80 - 120
Beryllium	25.0	23.3		mg/Kg		93	80 - 120
Cadmium	25.0	23.0		mg/Kg		92	80 - 120
Cobalt	25.0	23.4		mg/Kg		94	80 - 120
Chromium	25.0	23.6		mg/Kg		94	80 - 120
Copper	25.0	23.1		mg/Kg		93	80 - 120
Molybdenum	25.0	23.1		mg/Kg		92	80 - 120
Nickel	25.0	22.9		mg/Kg		92	80 - 120
Lead	25.0	23.3		mg/Kg		93	80 - 120
Selenium	50.0	44.0		mg/Kg		88	80 - 120
Antimony	50.0	43.6		mg/Kg		87	80 - 120
Thallium	50.0	47.5		mg/Kg		95	80 - 120
Vanadium	25.0	23.0		mg/Kg		92	80 - 120
Zinc	50.0	49.2		mg/Kg		98	80 - 120

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 320-514506/11-A
Matrix: Solid
Analysis Batch: 514811

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 514506

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.040		mg/Kg		08/10/21 06:30	08/10/21 08:42	1

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

Lab Sample ID: LCS 320-514506/12-A
Matrix: Solid
Analysis Batch: 514811

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 514506

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.167	0.169		mg/Kg		101	86 - 114		

Lab Sample ID: LCSD 320-514506/13-A
Matrix: Solid
Analysis Batch: 514811

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 514506

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			0.167	0.169		mg/Kg		102	86 - 114	0	17

Metals

Prep Batch: 514506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-77321-1	Coarse (20x50)	Total/NA	Solid	7471A	
MB 320-514506/11-A	Method Blank	Total/NA	Solid	7471A	
LCS 320-514506/12-A	Lab Control Sample	Total/NA	Solid	7471A	
LCSD 320-514506/13-A	Lab Control Sample Dup	Total/NA	Solid	7471A	

Analysis Batch: 514811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-77321-1	Coarse (20x50)	Total/NA	Solid	7471A	514506
MB 320-514506/11-A	Method Blank	Total/NA	Solid	7471A	514506
LCS 320-514506/12-A	Lab Control Sample	Total/NA	Solid	7471A	514506
LCSD 320-514506/13-A	Lab Control Sample Dup	Total/NA	Solid	7471A	514506

Prep Batch: 514922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-77321-1	Coarse (20x50)	Total/NA	Solid	3050B	
MB 320-514922/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 320-514922/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 515299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-77321-1	Coarse (20x50)	Total/NA	Solid	6010B	514922
MB 320-514922/1-A	Method Blank	Total/NA	Solid	6010B	514922
LCS 320-514922/2-A	Lab Control Sample	Total/NA	Solid	6010B	514922

Analysis Batch: 515503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-77321-1	Coarse (20x50)	Total/NA	Solid	6010B	514922

Lab Chronicle

Client: Minerals Research Inc.
Job ID: 320-77321-1
Project/Site: sharpshot Cottonwood Plant (6)

Client Sample ID: Coarse (20x50)
Lab Sample ID: 320-77321-1
Date Collected: 07/31/21 08:00
Matrix: Solid
Date Received: 08/06/21 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.04 g	100 mL	514922	08/10/21 14:48	JP	TAL SAC
Total/NA	Analysis	6010B		1			515299	08/11/21 12:45	SP	TAL SAC
Total/NA	Prep	3050B			1.04 g	100 mL	514922	08/10/21 14:48	JP	TAL SAC
Total/NA	Analysis	6010B		10			515503	08/11/21 15:10	GSH	TAL SAC
Total/NA	Prep	7471A			0.64 g	50 mL	514506	08/10/21 06:30	IM	TAL SAC
Total/NA	Analysis	7471A		1			514811	08/10/21 09:31	IM	TAL SAC

Laboratory References:
TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Minerals Research Inc. Job ID: 320-77321-1
Project/Site: sharpshot Cottonwood Plant (6)

Laboratory: Eurofins TestAmerica, Sacramento

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2897	01-31-22

Method Summary

Client: Minerals Research Inc.
Project/Site: sharpshot Cottonwood Plant (6)

Job ID: 320-77321-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL SAC
7471A	Mercury (CVAA)	SW846	TAL SAC
3050B	Preparation, Metals	SW846	TAL SAC
7471A	Preparation, Mercury	SW846	TAL SAC

Protocol References:

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

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Minerals Research Inc.
Project/Site: sharpshot Cottonwood Plant (6)

Job ID: 320-77321-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-77321-1	Coarse (20x50)	Solid	07/31/21 08:00	08/06/21 10:15

TestAmerica Sacramento [1]
880 Riverside Parkway
West Sacramento, CA 95605-1500
phone 916.373.5600 fax 303.467.7248

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Regulatory Program:

Client Contact [2]	**Mike Vick [3]**	**Audrey Elliott [4]**	**8/2/2021**	COC No:
Minerals Research, Inc.	**520-748-9364**	**[5]**	**Fedex**	_____ of _____ COCs
4620 S. Coach Dr.	**Analysis Turnaround Time**			Sampler:
Tucson, Arizona 85714				**For Lab Use Only:**
520-748-9362	TAT if different from Below _____			Walk-in Client:
520-748-9364				Lab Sampling:
Sharpshot Cottonwood Plant [6]				
Cottonwood, Arizona [7]				Job / SDG No.:
P O # [8]				

Sample Identification [9]	Sample Date [10]	Sample Time [11]	Sample Type (C=Comp, G=Grab)	atrix [1	# of Cont. [13]	m/ MLC	Sample Specific Notes:
Coarse (20x50)	07/31/21	8:00 AM	C	Granul	1	N N X	Full TTLC Metals

320-77321 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Please email results to Mike Vick at mikevick@mineralsresearch.com; please archive for 1 month, then dispose

Custody Seals Intact:	Custody Seal No.:		Cooler Temp. (oC): Obs'd: 22.0	Corr'd: 22.0	Therm ID No.: 1-05	
Audrey Elliott	Minerals Research, Inc.	8/2/2021	Received by:	Company: ETASAC	Date/Time: 8-6-21/0010	NCB-6-21 10:15
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:	
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:	

* List Plant Grab Coarse 7/30/21 DH 8/6/21

Login Sample Receipt Checklist

Client: Minerals Research Inc. Job Number: 320-77321-1

Login Number: 77321 **List Source: Eurofins TestAmerica, Sacramento**
List Number: 1
Creator: Her, David A

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

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-90739-1
Client Project/Site: Sharpshot Cottonwood Plant (6)

For:
Minerals Research Inc.
4620 South Coach Drive
Tucson, Arizona 85714

Attn: Mike Vick

Authorized for release by:
8/12/2022 6:20:21 PM
Criselda Caparas, Project Manager I
(925)484-1919
Criselda.Caparas@et.eurofinsus.com

Designee for

Afsaneh Salimpour, Senior Project Manager
(925)484-1919
Afsaneh.Salimpour@et.eurofinsus.com

Table of Contents

Definitions/Glossary

Client: Minerals Research Inc. Job ID: 320-90739-1
Project/Site: Sharpshot Cottonwood Plant (6)

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Minerals Research Inc.
Project/Site: Sharpshot Cottonwood Plant (6)

Job ID: 320-90739-1

Job ID: 320-90739-1

Laboratory: Eurofins Sacramento

Narrative

Job Narrative
320-90739-1

Comments
No additional comments.

Receipt
The sample was received on 8/5/2022 9:40 AM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 19.6º C.

Receipt Exceptions

The following sample was received at the laboratory outside the required temperature criteria: Coarse (320-90739-1). Sample was received out of temp at 19.6C. No cooling agent.

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): Coarse (320-90739-1). Sample 1, Sample container does not have time and date. Sample logged in and labeled according to COC.

Metals
Method 6010B: The following sample was diluted to bring the concentration of target analytes within the calibration range: Coarse (320-90739-1). Elevated reporting limits (RLs) are provided.

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

Detection Summary

Client: Minerals Research Inc.
Project/Site: Sharpshot Cottonwood Plant (6)

Job ID: 320-90739-1

Client Sample ID: Coarse

Lab Sample ID: 320-90739-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silver	0.66		0.48		mg/Kg	1		6010B	Total/NA
Arsenic	110		1.9		mg/Kg	1		6010B	Total/NA
Barium	59		0.95		mg/Kg	1		6010B	Total/NA
Cadmium	3.2		0.19		mg/Kg	1		6010B	Total/NA
Cobalt	16		0.48		mg/Kg	1		6010B	Total/NA
Chromium	8.4		0.48		mg/Kg	1		6010B	Total/NA
Copper	1800		1.4		mg/Kg	1		6010B	Total/NA
Molybdenum	3.6		1.9		mg/Kg	1		6010B	Total/NA
Nickel	1.0		0.95		mg/Kg	1		6010B	Total/NA
Lead	77		0.95		mg/Kg	1		6010B	Total/NA
Selenium	4.7		1.9		mg/Kg	1		6010B	Total/NA
Vanadium	17		0.48		mg/Kg	1		6010B	Total/NA
Zinc	3200		19		mg/Kg	10		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Minerals Research Inc.
Project/Site: Sharpshot Cottonwood Plant (6)

Job ID: 320-90739-1

Client Sample ID: Coarse

Date Collected: 08/01/22 08:00
Date Received: 08/05/22 09:40

Lab Sample ID: 320-90739-1

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	**0.66**		0.48		mg/Kg		08/09/22 16:05	08/10/22 17:13	1
Arsenic	**110**		1.9		mg/Kg		08/09/22 16:05	08/10/22 17:13	1
Barium	**59**		0.95		mg/Kg		08/09/22 16:05	08/10/22 17:13	1
Beryllium	ND		0.19		mg/Kg		08/09/22 16:05	08/10/22 17:13	1
Cadmium	**3.2**		0.19		mg/Kg		08/09/22 16:05	08/10/22 17:13	1
Cobalt	**16**		0.48		mg/Kg		08/09/22 16:05	08/10/22 17:13	1
Chromium	**8.4**		0.48		mg/Kg		08/09/22 16:05	08/10/22 17:13	1
Copper	**1800**		1.4		mg/Kg		08/09/22 16:05	08/10/22 17:13	1
Molybdenum	**3.6**		1.9		mg/Kg		08/09/22 16:05	08/10/22 17:13	1
Nickel	**1.0**		0.95		mg/Kg		08/09/22 16:05	08/10/22 17:13	1
Lead	**77**		0.95		mg/Kg		08/09/22 16:05	08/10/22 17:13	1
Selenium	**4.7**		1.9		mg/Kg		08/09/22 16:05	08/10/22 17:13	1
Antimony	ND		1.9		mg/Kg		08/09/22 16:05	08/10/22 17:13	1
Thallium	ND		1.9		mg/Kg		08/09/22 16:05	08/10/22 17:13	1
Vanadium	**17**		0.48		mg/Kg		08/09/22 16:05	08/10/22 17:13	1
Zinc	**3200**		19		mg/Kg		08/09/22 16:05	08/11/22 14:17	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.038		mg/Kg		08/10/22 16:37	08/10/22 20:01	1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 320-608382/1-A
Matrix: Solid
Analysis Batch: 608795

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 608382

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.50		mg/Kg		08/09/22 16:05	08/10/22 15:32	1
Arsenic	ND		2.0		mg/Kg		08/09/22 16:05	08/10/22 15:32	1
Barium	ND		1.0		mg/Kg		08/09/22 16:05	08/10/22 15:32	1
Beryllium	ND		0.20		mg/Kg		08/09/22 16:05	08/10/22 15:32	1
Cadmium	ND		0.20		mg/Kg		08/09/22 16:05	08/10/22 15:32	1
Cobalt	ND		0.50		mg/Kg		08/09/22 16:05	08/10/22 15:32	1
Chromium	ND		0.50		mg/Kg		08/09/22 16:05	08/10/22 15:32	1
Copper	ND		1.5		mg/Kg		08/09/22 16:05	08/10/22 15:32	1
Molybdenum	ND		2.0		mg/Kg		08/09/22 16:05	08/10/22 15:32	1
Nickel	ND		1.0		mg/Kg		08/09/22 16:05	08/10/22 15:32	1
Lead	ND		1.0		mg/Kg		08/09/22 16:05	08/10/22 15:32	1
Selenium	ND		2.0		mg/Kg		08/09/22 16:05	08/10/22 15:32	1
Antimony	ND		2.0		mg/Kg		08/09/22 16:05	08/10/22 15:32	1
Thallium	ND		2.0		mg/Kg		08/09/22 16:05	08/10/22 15:32	1
Vanadium	ND		0.50		mg/Kg		08/09/22 16:05	08/10/22 15:32	1
Zinc	ND		2.0		mg/Kg		08/09/22 16:05	08/10/22 15:32	1

Lab Sample ID: LCS 320-608382/2-A
Matrix: Solid
Analysis Batch: 608795

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 608382

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	5.05	4.30		mg/Kg		85	80 - 120
Arsenic	50.0	42.5		mg/Kg		85	80 - 120
Barium	50.0	42.8		mg/Kg		86	80 - 120
Beryllium	25.0	22.3		mg/Kg		89	80 - 120
Cadmium	25.0	21.7		mg/Kg		87	80 - 120
Cobalt	25.0	21.7		mg/Kg		87	80 - 120
Chromium	25.0	22.7		mg/Kg		91	80 - 120
Copper	25.0	21.6		mg/Kg		86	80 - 120
Molybdenum	25.0	21.8		mg/Kg		87	80 - 120
Nickel	25.0	21.9		mg/Kg		88	80 - 120
Lead	25.0	22.1		mg/Kg		88	80 - 120
Selenium	50.0	41.4		mg/Kg		83	80 - 120
Antimony	50.1	45.5		mg/Kg		91	80 - 120
Thallium	50.0	43.5		mg/Kg		87	80 - 120
Vanadium	25.0	22.4		mg/Kg		90	80 - 120
Zinc	49.9	45.3		mg/Kg		91	80 - 120

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 320-608656/11-A
Matrix: Solid
Analysis Batch: 608775

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 608656

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.040		mg/Kg		08/10/22 16:37	08/10/22 19:30	1

Client: Minerals Research Inc.
Project/Site: Sharpshot Cottonwood Plant (6)

Job ID: 320-90739-1

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

Lab Sample ID: LCS 320-608656/12-A
Matrix: Solid
Analysis Batch: 608775

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 608656

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.167	0.165		mg/Kg		99	86 - 114

Lab Sample ID: LCSD 320-608656/13-A
Matrix: Solid
Analysis Batch: 608775

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 608656

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.167	0.168		mg/Kg		100	86 - 114	2	17

QC Association Summary

Client: Minerals Research Inc.
Project/Site: Sharpshot Cottonwood Plant (6)

Job ID: 320-90739-1

Metals

Prep Batch: 608382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-90739-1	Coarse	Total/NA	Solid	3050B	
MB 320-608382/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 320-608382/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 608656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-90739-1	Coarse	Total/NA	Solid	7471A	
MB 320-608656/11-A	Method Blank	Total/NA	Solid	7471A	
LCS 320-608656/12-A	Lab Control Sample	Total/NA	Solid	7471A	
LCSD 320-608656/13-A	Lab Control Sample Dup	Total/NA	Solid	7471A	

Analysis Batch: 608775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-90739-1	Coarse	Total/NA	Solid	7471A	608656
MB 320-608656/11-A	Method Blank	Total/NA	Solid	7471A	608656
LCS 320-608656/12-A	Lab Control Sample	Total/NA	Solid	7471A	608656
LCSD 320-608656/13-A	Lab Control Sample Dup	Total/NA	Solid	7471A	608656

Analysis Batch: 608795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-90739-1	Coarse	Total/NA	Solid	6010B	608382
MB 320-608382/1-A	Method Blank	Total/NA	Solid	6010B	608382
LCS 320-608382/2-A	Lab Control Sample	Total/NA	Solid	6010B	608382

Analysis Batch: 608910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-90739-1	Coarse	Total/NA	Solid	6010B	608382

Lab Chronicle

Client: Minerals Research Inc.
Job ID: 320-90739-1
Project/Site: Sharpshot Cottonwood Plant (6)

Client Sample ID: Coarse
Lab Sample ID: 320-90739-1
Date Collected: 08/01/22 08:00
Matrix: Solid
Date Received: 08/05/22 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	100 mL	608382	08/09/22 16:05	JP	EET SAC
Total/NA	Analysis	6010B		1			608795	08/10/22 17:13	SP	EET SAC
Total/NA	Prep	3050B			1.05 g	100 mL	608382	08/09/22 16:05	JP	EET SAC
Total/NA	Analysis	6010B		10			608910	08/11/22 14:17	SP	EET SAC
Total/NA	Prep	7471A			0.64 g	50 mL	608656	08/10/22 16:37	JAP	EET SAC
Total/NA	Analysis	7471A		1			608775	08/10/22 20:01	JP	EET SAC

Laboratory References:
EET SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Minerals Research Inc. Job ID: 320-90739-1
Project/Site: Sharpshot Cottonwood Plant (6)

Laboratory: Eurofins Sacramento

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2897	01-31-23

Method Summary

Client: Minerals Research Inc.
Project/Site: Sharpshot Cottonwood Plant (6)

Job ID: 320-90739-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	EET SAC
7471A	Mercury (CVAA)	SW846	EET SAC
3050B	Preparation, Metals	SW846	EET SAC
7471A	Preparation, Mercury	SW846	EET SAC

Protocol References:

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

Laboratory References:

EET SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Minerals Research Inc.
Project/Site: Sharpshot Cottonwood Plant (6)

Job ID: 320-90739-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-90739-1	Coarse	Solid	08/01/22 08:00	08/05/22 09:40

TestAmerica Sacramento [1]
880 Riverside Parkway
West Sacramento, CA 95605-1500
phone 916.373.5600 fax 303.467.7248

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Regulatory Program:

Client Contact [2]	Mike Vick [3]	Mariah VanderVoort [4]	8/1/2022	COC No:
Minerals Research, Inc.	520-748-9364	[5]	Fedex	_____ of _____ COCs
4620 S. Coach Dr.	**Analysis Turnaround Time**			Sampler:
Tucson, Arizona 85714				**For Lab Use Only:**
520-748-9362	TAT if different from Below _____			Walk-in Client:
520-748-9364				Lab Sampling:
Sharpshot Cottonwood Plant [6]				
Cottonwood, Arizona [7]				Job / SDG No.:
P O # [8]				

Sample Identification [9]	Sample Date [10]	Sample Time [11]	Sample Type (C=Comp, G=Grab)	atrix [1	# of Cont. [13]	m/ MLC	Sample Specific Notes:
Coarse	08/01/22	8:00 AM	C	Granul	1	N N X	Full TTLC Metals

320-90739 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Please email results to Mike Vick at mikevick@mineralsresearch.com; please archive for 1 month, then dispose

Custody Seals Intact:	Custody Seal No.:		Cooler Temp. (oC): Obs'd: 19.6 Corr'd: 19.6		Therm ID No.: N/a
Mariah VanderVoort	Minerals Research, Inc.	8/1/2022	Received by:	Company: EETSac	Date/Time: 8.5.22 0940
Relinquished by: Mariah VanderVoort	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 4.6, dated 09/02/2015

• No time; date 5.8.5.22

Login Sample Receipt Checklist

Client: Minerals Research Inc.

Job Number: 320-90739-1

Login Number: 90739
List Number: 1
Creator: Oropeza, Salvador

List Source: Eurofins Sacramento

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

Community Provided Laboratory Reports

Informational Water Quality Report

CityCheck Deluxe

Client:

Ordered By:
Sina, Shaida 702 S Main St Cottonwood , AZ 86326 ATTN: Shaida Sina

National Testing Laboratories, Ltd.
Quality Water Analysis
6571 Wilson Mills Rd
Cleveland, Ohio 44143
1-800-458-3330

Sample Number: 952313

Location:	Bathroom Sink
Type of Water:	City Water
Collection Date and Time:	8/22/2023 10:59 AM
Received Date and Time:	8/25/2023 11:12 AM
Date Completed:	9/13/2023

Time Sampled has been changed to EST.

Definition and Legend

This informational water quality report compares the actual test result to national standards as defined in the EPA's Primary and Secondary Drinking Water Regulations.

Primary Standards:	Are expressed as the maximum contaminant level (MCL) which is the highest level of contaminant that is allowed in drinking water. MCLs are enforceable standards.
Secondary standards:	Are non-enforceable guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor,or color) in drinking water. Individual states may choose to adopt them as enforceable standards.
Action levels:	Are defined in treatment techniques which are required processes intended to reduce the level of a contaminant in drinking water.
mg/L (ppm):	Unless otherwise indicated, results and standards are expressed as an amount in milligrams per liter or parts per million.
Minimum Detection Level (MDL):	The lowest level that the laboratory can detect a contaminant.
ND:	The contaminant was not detected above the minimum detection level.
NA:	The contaminant was not analyzed.


The contaminant was not detected in the sample above the minimum detection level.


The contaminant was detected at or above the minimum detection level, but not above the referenced standard.


The contaminant was detected above the standard, which is not an EPA enforceable MCL.


The contaminant was detected above the EPA enforceable MCL.


These results may be invalid.

Status	Contaminant	Results	Units	National Standards		Min. Detection Level
			Inorganic Analytes - Metals			
✓	Aluminum	ND	mg/L	0.2	EPA Secondary	0.1
●	Arsenic	0.006	mg/L	0.010	EPA Primary	0.005
✓	Barium	ND	mg/L	2	EPA Primary	0.30
✓	Cadmium	ND	mg/L	0.005	EPA Primary	0.002
●	Calcium	29.9	mg/L	--		2.0
●	Chromium	0.011	mg/L	0.1	EPA Primary	0.010
●	Copper	0.062	mg/L	1.3	EPA Action Level	0.004
●	Iron	0.028	mg/L	0.3	EPA Secondary	0.020
✓	Lead	ND	mg/L	0.015	EPA Action Level	0.002
●	Lithium	0.030	mg/L	--		0.001
●	Magnesium	22.40	mg/L	--		0.10
✓	Manganese	ND	mg/L	0.05	EPA Secondary	0.004
✓	Mercury	ND	mg/L	0.002	EPA Primary	0.001
✓	Nickel	ND	mg/L	--		0.020
✓	Selenium	ND	mg/L	0.05	EPA Primary	0.020
✓	Silver	ND	mg/L	0.100	EPA Secondary	0.002
●	Sodium	46	mg/L	--		1
●	Strontium	0.473	mg/L	--		0.001
●	Uranium	0.003	mg/L	0.030	EPA Primary	0.001
●	Zinc	0.016	mg/L	5	EPA Secondary	0.004
			Physical Factors			
●	Alkalinity (Total as CaCO3)	210	mg/L	--		20
▲	Hardness	170	mg/L	100	NTL Internal	10
✓	pH	7.5	pH Units	6.5 to 8.5	EPA Secondary	
●	Total Dissolved Solids	260	mg/L	500	EPA Secondary	20
			Inorganic Analytes - Other			
✓	Bromate	ND	mg/L	0.010	EPA Primary	0.005

Status	Contaminant	Results	Units	National Standards		Min. Detection Level
✓	Bromide	ND	mg/L	--		0.5
✓	Chloramine as Cl2	ND	mg/L	--		0.1
●	Chloride	25.0	mg/L	250	EPA Secondary	5.0
●	Chlorine-Free	0.20	mg/L	--		0.05
●	Chlorine-Total	0.2	mg/L	--		0.1
✓	Chlorite	ND	mg/L	1.0	EPA Primary	0.005
●	Fluoride	0.6	mg/L	4.0	EPA Primary	0.5
✓	Nitrate as N	ND	mg/L	10	EPA Primary	0.5
✓	Nitrite as N	ND	mg/L	1	EPA Primary	0.5
✓	Ortho Phosphate	ND	mg/L	--		2.0
●	Sulfate	10.0	mg/L	250	EPA Secondary	5.0
	Organic Analytes - Trihalomethanes					
✓	Bromodichloromethane	ND	mg/L	--		0.002
✓	Bromoform	ND	mg/L	--		0.004
✓	Chloroform	ND	mg/L	--		0.002
✓	Dibromochloromethane	ND	mg/L	--		0.004
✓	Total THMs	ND	mg/L	0.080	EPA Primary	0.002
	Organic Analytes - Haloacetic Acids					
✓	Dibromoacetic Acid	ND	mg/L	--		0.001
✓	Dichloroacetic Acid	ND	mg/L	--		0.001
✓	Monobromoacetic Acid	ND	mg/L	--		0.001
✓	Monochloroacetic Acid	ND	mg/L	--		0.001
✓	Trichloroacetic Acid	ND	mg/L	--		0.001
✓	Total HAAs	ND	mg/L	0.060	EPA Primary	0.001
	Organic Analytes - Volatiles					
✓	1,1,1,2-Tetrachloroethane	ND	mg/L	--		0.002
✓	1,1,1-Trichloroethane	ND	mg/L	0.2	EPA Primary	0.001
✓	1,1,2,2-Tetrachloroethane	ND	mg/L	--		0.002

Status	Contaminant	Results	Units	National Standards		Min. Detection Level
✓	1,1,2-Trichloroethane	ND	mg/L	0.005	EPA Primary	0.002
✓	1,1-Dichloroethane	ND	mg/L	--		0.002
✓	1,1-Dichloroethene	ND	mg/L	0.007	EPA Primary	0.001
✓	1,1-Dichloropropene	ND	mg/L	--		0.002
✓	1,2,3-Trichlorobenzene	ND	mg/L	--		0.002
✓	1,2,3-Trichloropropane	ND	mg/L	--		0.002
✓	1,2,4-Trichlorobenzene	ND	mg/L	0.07	EPA Primary	0.002
✓	1,2-Dichlorobenzene	ND	mg/L	0.6	EPA Primary	0.001
✓	1,2-Dichloroethane	ND	mg/L	0.005	EPA Primary	0.001
✓	1,2-Dichloropropane	ND	mg/L	0.005	EPA Primary	0.002
✓	1,3-Dichlorobenzene	ND	mg/L	--		0.001
✓	1,3-Dichloropropane	ND	mg/L	--		0.002
✓	1,4-Dichlorobenzene	ND	mg/L	0.075	EPA Primary	0.001
✓	2,2-Dichloropropane	ND	mg/L	--		0.002
✓	2-Chlorotoluene	ND	mg/L	--		0.001
✓	4-Chlorotoluene	ND	mg/L	--		0.001
✓	Acetone	ND	mg/L	--		0.01
✓	Benzene	ND	mg/L	0.005	EPA Primary	0.001
✓	Bromobenzene	ND	mg/L	--		0.002
✓	Bromomethane	ND	mg/L	--		0.002
✓	Carbon Tetrachloride	ND	mg/L	0.005	EPA Primary	0.001
✓	Chlorobenzene	ND	mg/L	0.1	EPA Primary	0.001
✓	Chloroethane	ND	mg/L	--		0.002
✓	Chloromethane	ND	mg/L	--		0.002
✓	cis-1,2-Dichloroethene	ND	mg/L	0.07	EPA Primary	0.002
✓	cis-1,3-Dichloropropene	ND	mg/L	--		0.002
✓	DBCP	ND	mg/L	--		0.001
✓	Dibromomethane	ND	mg/L	--		0.002

Status	Contaminant	Results	Units	National Standards		Min. Detection Level
✓	Dichlorodifluoromethane	ND	mg/L	--		0.002
✓	Dichloromethane	ND	mg/L	0.005	EPA Primary	0.002
✓	EDB	ND	mg/L	--		0.001
✓	Ethylbenzene	ND	mg/L	0.7	EPA Primary	0.001
✓	Methyl Tert Butyl Ether	ND	mg/L	--		0.004
✓	Methyl-Ethyl Ketone	ND	mg/L	--		0.01
✓	Styrene	ND	mg/L	0.1	EPA Primary	0.001
✓	Tetrachloroethene	ND	mg/L	0.005	EPA Primary	0.002
✓	Tetrahydrofuran	ND	mg/L	--		0.01
✓	Toluene	ND	mg/L	1	EPA Primary	0.001
✓	trans-1,2-Dichloroethene	ND	mg/L	0.1	EPA Primary	0.002
✓	trans-1,3-Dichloropropene	ND	mg/L	--		0.002
✓	Trichloroethene	ND	mg/L	0.005	EPA Primary	0.001
✓	Trichlorofluoromethane	ND	mg/L	--		0.002
✓	Vinyl Chloride	ND	mg/L	0.002	EPA Primary	0.001
✓	Xylenes (Total)	ND	mg/L	10	EPA Primary	0.001
			Organic Analytes - Others			
✓	2,4-D	ND	mg/L	0.07	EPA Primary	0.010
✓	Alachlor	ND	mg/L	0.002	EPA Primary	0.001
✓	Aldrin	ND	mg/L	--		0.002
✓	Atrazine	ND	mg/L	0.003	EPA Primary	0.002
✓	Chlordane	ND	mg/L	0.002	EPA Primary	0.001
✓	Dichloran	ND	mg/L	--		0.002
✓	Dieldrin	ND	mg/L	--		0.001
✓	Endrin	ND	mg/L	0.002	EPA Primary	0.0001
✓	Heptachlor	ND	mg/L	0.0004	EPA Primary	0.0004
✓	Heptachlor Epoxide	ND	mg/L	0.0002	EPA Primary	0.0001
✓	Hexachlorobenzene	ND	mg/L	0.001	EPA Primary	0.0005

Status	Contaminant	Results	Units	National Standards		Min. Detection Level
✓	Hexachlorocyclopentadiene	ND	mg/L	0.05	EPA Primary	0.001
✓	Lindane	ND	mg/L	0.0002	EPA Primary	0.0002
✓	Methoxychlor	ND	mg/L	0.04	EPA Primary	0.002
✓	Pentachloronitrobenzene	ND	mg/L	--		0.002
✓	Silvex 2,4,5-TP	ND	mg/L	0.05	EPA Primary	0.005
✓	Simazine	ND	mg/L	0.004	EPA Primary	0.002
✓	Total PCBs	ND	mg/L	0.0005	EPA Primary	0.0005
✓	Toxaphene	ND	mg/L	0.003	EPA Primary	0.001
✓	Trifluralin	ND	mg/L	--		0.002

We certify that the analyses performed for this report are accurate, and that the laboratory tests were conducted by methods approved by the U.S. Environmental Protection Agency or variations of these EPA methods.

These test results are intended to be used for informational purposes only and may not be used for regulatory compliance.

National Testing Laboratories, Ltd.

556 South Mansfield Street • Ypsilanti • Michigan •

FOR RESEARCH USE ONLY.
NOT FOR USE IN DIAGNOSTIC PROCEDURES.

Client: Sina Shaida, NMD
Breakthrough Medicine

Account Number: 25227

July 13, 2023

Sample: **Slag Pile Dust**
Lab Number: **U230622-2093**

Element	Results (ng/g)
Aluminum	3,500,000
Antimony	8,100
Arsenic	200,000
Barium	72,000
Beryllium	<detection limit
Bismuth	724
Boron	<detection limit
Cadmium	5,000
Cesium	174
Chromium	5,400
Cobalt	28,000
Copper	2,200,000
Gadolinium	302
Iron	51,000,000
Lead	120,000
Lithium	4,000
Manganese	65,000
Mercury	<detection limit
Molybdenum	3,600
Nickel	2,300
Palladium	<detection limit
Platinum	<detection limit
Selenium	5,000
Strontium	53,000
Tellurium	263
Thallium	337
Thorium	720
Tin	7,500
Tungsten	701
Uranium	1,500
Vanadium	8,770
Zinc	6,100,000

Analysis performed by Inductively Coupled Plasma - Mass Spectrometry (ICP-MS)
10 mg of sample digested in 2.5mL nitric acid, diluted to 50mL; run in triplicate

3755 Illinois Avenue, St. Charles, IL 60174-2420
630.377.8139 - FAX: 630.587.7860 - inquiries@doctorsdata.com - www.doctorsdata.com

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Rachael Collins
Partners in Prosperity
751 Aspen St. Suite L
Cottonwood, Arizona 86326

Generated 12/20/2022 11:05:59 AM

JOB DESCRIPTION

MRI Slag Analysis
SDG NUMBER Cottonwood, AZ 86326

JOB NUMBER

550-194739-1

Eurofins Phoenix
4625 East Cotton Center Boulevard
Suite #189
Phoenix AZ 85040

See page two for job notes and contact information.

myEOL

Job Notes

This report is issued solely for the use of the person or company to whom it is addressed. Any use, copying or disclosure other than by the intended recipient is unauthorized. If you have received this report in error, please notify the sender and destroy this report immediately. This report shall not be reproduced except in full, without prior express written approval by the laboratory.

The data in the report relate to the field sample(s) as received by the laboratory and associated QC. All results have been reviewed and have been found to be compliant with laboratory and accreditation requirements, with the exception of the noted deviation(s). For questions, please contact the Project Manager.

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

Authorization

Generated
12/20/2022 11:05:59 AM

Authorized for release by
Carlene McCutcheon, Project Manager II
Carlene.McCutcheon@et.eurofinsus.com
Designee for
Rachel Sester, Project Manager I
Rachel.Sester@et.eurofinsus.com
(602)659-7615

Table of Contents

Definitions/Glossary

Client: Partners in Prosperity
Project/Site: MRI Slag Analysis

Job ID: 550-194739-1
SDG: Cottonwood, AZ 86326

Qualifiers

Metals

Qualifier	Qualifier Description
B1	Target analyte detected in method blank at or above the method reporting limit.
B7	Target analyte detected in method blank at or above method reporting limit. Concentration found in the sample was 10 times above the concentration found in the blank.
D2	Sample required dilution due to high concentration of analyte.
T5	Laboratory not licensed for this parameter

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Partners in Prosperity
Project/Site: MRI Slag Analysis

Job ID: 550-194739-1
SDG: Cottonwood, AZ 86326

Job ID: 550-194739-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-194739-1

Comments
No additional comments.

Receipt
The sample was received on 12/8/2022 1:03 PM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 23.7º C.

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

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

Sample Summary

Client: Partners in Prosperity
Project/Site: MRI Slag Analysis

Job ID: 550-194739-1
SDG: Cottonwood, AZ 86326

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-194739-1	MRI Slag Powder	Solid	11/21/22 11:00	12/08/22 13:03

Detection Summary

Client: Partners in Prosperity
Project/Site: MRI Slag Analysis

Job ID: 550-194739-1
SDG: Cottonwood, AZ 86326

Client Sample ID: MRI Slag Powder — Lab Sample ID: 550-194739-1

Sample Analysis Not Complete.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Partners in Prosperity
Project/Site: MRI Slag Analysis

Job ID: 550-194739-1
SDG: Cottonwood, AZ 86326

Client Sample ID: MRI Slag Powder

Date Collected: 11/21/22 11:00
Date Received: 12/08/22 13:03

Lab Sample ID: 550-194739-1

Matrix: Solid

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**5700**		10		mg/Kg		12/10/22 08:49	12/12/22 22:01	1
Arsenic	**230**	**D2**	50		mg/Kg		12/10/22 08:49	12/15/22 00:20	20
Barium	**120**		5.0		mg/Kg		12/10/22 08:49	12/12/22 22:01	1
Cadmium	**6.3**		0.10		mg/Kg		12/10/22 08:49	12/12/22 22:01	1
Copper	**2700**	**B7 D2**	5.0		mg/Kg		12/10/22 08:49	12/15/22 00:20	20
Lead	**130**		0.50		mg/Kg		12/10/22 08:49	12/12/22 22:01	1
Manganese	**82**		2.0		mg/Kg		12/10/22 08:49	12/12/22 22:01	1
Selenium	**7.3**		0.50		mg/Kg		12/10/22 08:49	12/12/22 22:01	1
Uranium	ND	T5	100		mg/Kg		12/10/22 08:49	12/15/22 00:20	20
Zinc	**8800**	**D2**	100		mg/Kg		12/10/22 08:49	12/15/22 00:20	20

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.095		mg/Kg		12/12/22 14:45	12/12/22 20:49	1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 550-290481/1-A
Matrix: Solid
Analysis Batch: 290638

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 290481

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		9.8		mg/Kg		12/10/22 08:49	12/12/22 21:29	1
Barium	ND		4.9		mg/Kg		12/10/22 08:49	12/12/22 21:29	1
Cadmium	ND		0.098		mg/Kg		12/10/22 08:49	12/12/22 21:29	1
Lead	ND		0.49		mg/Kg		12/10/22 08:49	12/12/22 21:29	1
Manganese	ND		2.0		mg/Kg		12/10/22 08:49	12/12/22 21:29	1
Selenium	ND		0.49		mg/Kg		12/10/22 08:49	12/12/22 21:29	1

Lab Sample ID: MB 550-290481/1-A
Matrix: Solid
Analysis Batch: 290759

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 290481

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.5		mg/Kg		12/10/22 08:49	12/13/22 15:47	1
Copper	1.72	B1	0.25		mg/Kg		12/10/22 08:49	12/13/22 15:47	1
Zinc	ND		4.9		mg/Kg		12/10/22 08:49	12/13/22 15:47	1

Lab Sample ID: LCS 550-290481/2-A
Matrix: Solid
Analysis Batch: 290638

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 290481

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	994	1010		mg/Kg		102	83 - 116
Barium	49.7	53.1		mg/Kg		107	85 - 110
Cadmium	49.7	48.9		mg/Kg		98	83 - 110
Lead	49.7	49.5		mg/Kg		100	83 - 110
Manganese	49.7	48.2		mg/Kg		97	80 - 110
Selenium	49.7	49.4		mg/Kg		99	80 - 110

Lab Sample ID: LCS 550-290481/2-A
Matrix: Solid
Analysis Batch: 290759

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 290481

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	49.7	47.0		mg/Kg		95	80 - 110
Copper	49.7	50.6		mg/Kg		102	81 - 111
Zinc	49.7	48.0		mg/Kg		97	81 - 110

Lab Sample ID: LCSD 550-290481/3-A
Matrix: Solid
Analysis Batch: 290638

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 290481

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	990	1030		mg/Kg		104	83 - 116	2	20
Barium	49.5	54.0		mg/Kg		109	85 - 110	2	20
Cadmium	49.5	49.3		mg/Kg		100	83 - 110	1	20
Lead	49.5	49.9		mg/Kg		101	83 - 110	1	20
Manganese	49.5	48.7		mg/Kg		98	80 - 110	1	20
Selenium	49.5	49.8		mg/Kg		101	80 - 110	1	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSD 550-290481/3-A
Matrix: Solid
Analysis Batch: 290759

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 290481

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic			49.5	47.0		mg/Kg		95	80 - 110	0	20
Copper			49.5	50.7		mg/Kg		102	81 - 111	0	20
Zinc			49.5	48.6		mg/Kg		98	81 - 110	1	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 550-290569/1-A
Matrix: Solid
Analysis Batch: 290611

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 290569

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.098		mg/Kg		12/12/22 14:45	12/12/22 20:30	1

Lab Sample ID: LCS 550-290569/2-A
Matrix: Solid
Analysis Batch: 290611

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 290569

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.901	0.914		mg/Kg		101	80 - 120		

Lab Sample ID: LCSD 550-290569/3-A
Matrix: Solid
Analysis Batch: 290611

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 290569

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.959	0.970		mg/Kg		101	80 - 120	6	20

QC Association Summary

Client: Partners in Prosperity
Project/Site: MRI Slag Analysis

Job ID: 550-194739-1
SDG: Cottonwood, AZ 86326

Metals

Prep Batch: 290481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-194739-1	MRI Slag Powder	Total/NA	Solid	3050B	
MB 550-290481/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 550-290481/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCSD 550-290481/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	

Prep Batch: 290569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-194739-1	MRI Slag Powder	Total/NA	Solid	7471B	
MB 550-290569/1-A	Method Blank	Total/NA	Solid	7471B	
LCS 550-290569/2-A	Lab Control Sample	Total/NA	Solid	7471B	
LCSD 550-290569/3-A	Lab Control Sample Dup	Total/NA	Solid	7471B	

Analysis Batch: 290611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-194739-1	MRI Slag Powder	Total/NA	Solid	7471B	290569
MB 550-290569/1-A	Method Blank	Total/NA	Solid	7471B	290569
LCS 550-290569/2-A	Lab Control Sample	Total/NA	Solid	7471B	290569
LCSD 550-290569/3-A	Lab Control Sample Dup	Total/NA	Solid	7471B	290569

Analysis Batch: 290638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-194739-1	MRI Slag Powder	Total/NA	Solid	6010C	290481
MB 550-290481/1-A	Method Blank	Total/NA	Solid	6010C	290481
LCS 550-290481/2-A	Lab Control Sample	Total/NA	Solid	6010C	290481
LCSD 550-290481/3-A	Lab Control Sample Dup	Total/NA	Solid	6010C	290481

Analysis Batch: 290759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 550-290481/1-A	Method Blank	Total/NA	Solid	6010C	290481
LCS 550-290481/2-A	Lab Control Sample	Total/NA	Solid	6010C	290481
LCSD 550-290481/3-A	Lab Control Sample Dup	Total/NA	Solid	6010C	290481

Analysis Batch: 290849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-194739-1	MRI Slag Powder	Total/NA	Solid	6010C	290481

Lab Chronicle

Client: Partners in Prosperity
Project/Site: MRI Slag Analysis

Job ID: 550-194739-1
SDG: Cottonwood, AZ 86326

Client Sample ID: MRI Slag Powder

Date Collected: 11/21/22 11:00
Date Received: 12/08/22 13:03

Lab Sample ID: 550-194739-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			290481	ABA	EET PHX	12/10/22 08:49
Total/NA	Analysis	6010C		1	290638	CHS	EET PHX	12/12/22 22:01
Total/NA	Prep	3050B			290481	ABA	EET PHX	12/10/22 08:49
Total/NA	Analysis	6010C		20	290849	CHS	EET PHX	12/15/22 00:20
Total/NA	Prep	7471B			290569	SRR	EET PHX	12/12/22 14:45
Total/NA	Analysis	7471B		1	290611	SRR	EET PHX	12/12/22 20:49

Laboratory References:

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

Accreditation/Certification Summary

Client: Partners in Prosperity
Project/Site: MRI Slag Analysis

Job ID: 550-194739-1
SDG: Cottonwood, AZ 86326

Laboratory: Eurofins Phoenix

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

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6010C	3050B	Solid	Uranium

Laboratory: Eurofins J3 Resources, Inc.

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
N/A	N/A	None on record.	

Method Summary

Client: Partners in Prosperity
Project/Site: MRI Slag Analysis

Job ID: 550-194739-1
SDG: Cottonwood, AZ 86326

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	EET PHX
7471B	Mercury (CVAA)	SW846	EET PHX
3050B	Preparation, Metals	SW846	EET PHX
7471B	Preparation, Mercury	SW846	EET PHX

Protocol References:

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

Laboratory References:

EET PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Suite #189, Phoenix, AZ 85040, TEL (602)437-3340

Eurofins Phoenix
4625 East Cotton Center Boulevard
Suite 189
Phoenix, AZ 85040-4807
phone 602.437.3340

Chain of Custody Record

eurofins | Environment Testing America

12/20/2022

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☐Other:

194739

Eurofins Environment Testing America

Client Contact	Project Manager: Rachael Collins	Site Contact:	Date:	COC No:
Company Name: Partners in Prosperity	Email: RC@transformerbusiness.com	Lab Contact:	Carrier:	____ of ____ COCs
Address: 751 Aspen St. Ste. L1	Tel/Fax: 480 647-5221			TALS Project #:
City/State/Zip: Cottonwood, AZ 86326	**Analysis Turnaround Time**			Sampler:
Phone: 480-647-5221	☐ CALENDAR DAYS ☐ WORKING DAYS			**For Lab Use Only:**
FAX	TAT if different from Below: Standard			Walk-in Client:
Project Name: MRI Slag Analysis	☐ 2 weeks			Lab Sampling:
Site: Cottonwood, AZ 86326	☐ 1 week			
P O #	☐ 2 days			Job / SDG No.:
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	6010 metals	crystalline silica	Sample Specific Notes:
MRI Slag powder -1	11/21/22	11 AM	G	S	2			XX		Report Metals in ppm

550-194739 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 23.7°C Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Rachael Collins	Partners in Prosperity	1:03 pm			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Rachel Gan	Company: ETA-PHX	Date/Time: 12/8/22 1:03

Eurofins Phoenix
4625 East Cotton Center Boulevard
Suite 189
Phoenix, AZ 85040-4807
phone 602.437.3340

Chain of Custody Record

eurofins | Environment Testing America

12/20/2022

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☐Other:

194739

Eurofins Environment Testing America

Client Contact	Project Manager: Rachael Collins		COC No:
Company Name: Partners in Prosperity	Email: RC@transformer business.com	Site Contact:	Date: 12/8/22 — of 1 COCs
Address: 757 Aspen St. Ste. L	Tel/Fax: 480 647-5221	Lab Contact:	Carrier: — TALS Project #:
City/State/Zip: Cottonwood, AZ 86326	**Analysis Turnaround Time**		Sampler:
Phone: 480-647-5221	☐ CALENDAR DAYS ☐ WORKING DAYS		For Lab Use Only:
FAX	TAT if different from Below: Standard		Walk-in Client:
Project Name: MRI Slag Analysis	☐ 2 weeks		Lab Sampling:
Site: Cottonwood, AZ 86326	☐ 1 week		
PO#	☐ 2 days		Job / SDG No.:
	☐ 1 day		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	6010 metals	crystaline silica	7471B Mercury	Sample Specific Notes:
MRI Slag powder -1	11/24/22	11 AM	G	S	2			X	X	X	Report Metals in ppm

550-194739 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: 23.7°	Corr'd:	Therm ID No.:
Relinquished by: Rachael Collins	Company: Partners in Prosperity	Date/Time: 1:03 pm	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: ETA-PHX	Date/Time: 12/8/22 1:03

Login Sample Receipt Checklist

Client: Partners in Prosperity

Job Number: 550-194739-1
SDG Number: Cottonwood, AZ 86326

Login Number: 194739
List Number: 1
Creator: Maycock, Lisa

List Source: Eurofins Phoenix

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

Appendix B

Site Photos

Photo 1

Field-filtering of groundwater sample collected via bailer from well 55-227884.

03/20/2024

Photo 2

Private well and sample spigot location.

03/21/2024

Photo 3

Private well 55-600512 well location

03/22/2024

Photo 4

Private well 55-600512 sample location

03/22/2024

Photo 5

XRF sample collection in stormwater retention basin. Sample ID March 33

03/20/2024

Photo 6

Soil sample collection for laboratory analysis in stormwater retention basin. Sample ID March 33

03/20/2024

Photo 7

MRI Facility

03/21/2024

Photo 8

MRI Facility from near sample location IDs March 62/63

03/21/2024

Photo 9

Black gravel against native soils near Sample ID March 66

03/21/2024

Photo 10

Slag chuck observed near Sample ID March 57

03/21/2024

Photo 11

XRF sample collection on VFW property near residences. Sample location ID March 75. 03/21/2024

Photo 12

Gravel staining compared to original gravel color, VFW property between sample location IDs March 75 and 76. 03/21/2024

Photo 13

Crushed black chunks observed on VFW property near Sample ID March 77

03/21/2024

Photo 14

Close up of crushed black chunks observed on VFW property near Sample ID March 77

03/21/2024

Photo 15

MRI facility, observable dust, taken from VFW property near Sample ID March 79

03/21/2024

Photo 16

Stormwater pathway from MRI facility to VFW property, near Sample ID March 357

03/21/2024

Photo 17

Soil sample for laboratory analysis being collected near former smelter stack, Sample ID March 113

03/22/2024

Photo 18

Bicycle tracks and footprints observed on hillslope near former smelter stack location, near Sample ID March 129

03/22/2024

Photo 19

Former smelter stack debris near sample location ID March 114. 03/22/2024

Photo 20

Former smelter stack debris near sample location ID March 114. 03/22/2024

Photo 21

Former smelter stack debris near sample location ID March 120. 03/22/2024

Photo 22

No access barriers between Highway 89A and former smelter hill 03/22/2024

Photos 23 and 24

XRF sample collection, Cottonwood Kids Park, location id March 145. 03/22/2024

Appendix C

Confirmation Sampling and Groundwater Laboratory Reports

ANALYTICAL REPORT

March 28, 2024

Revised Report

Hydro Geo Chem - Tucson, AZ

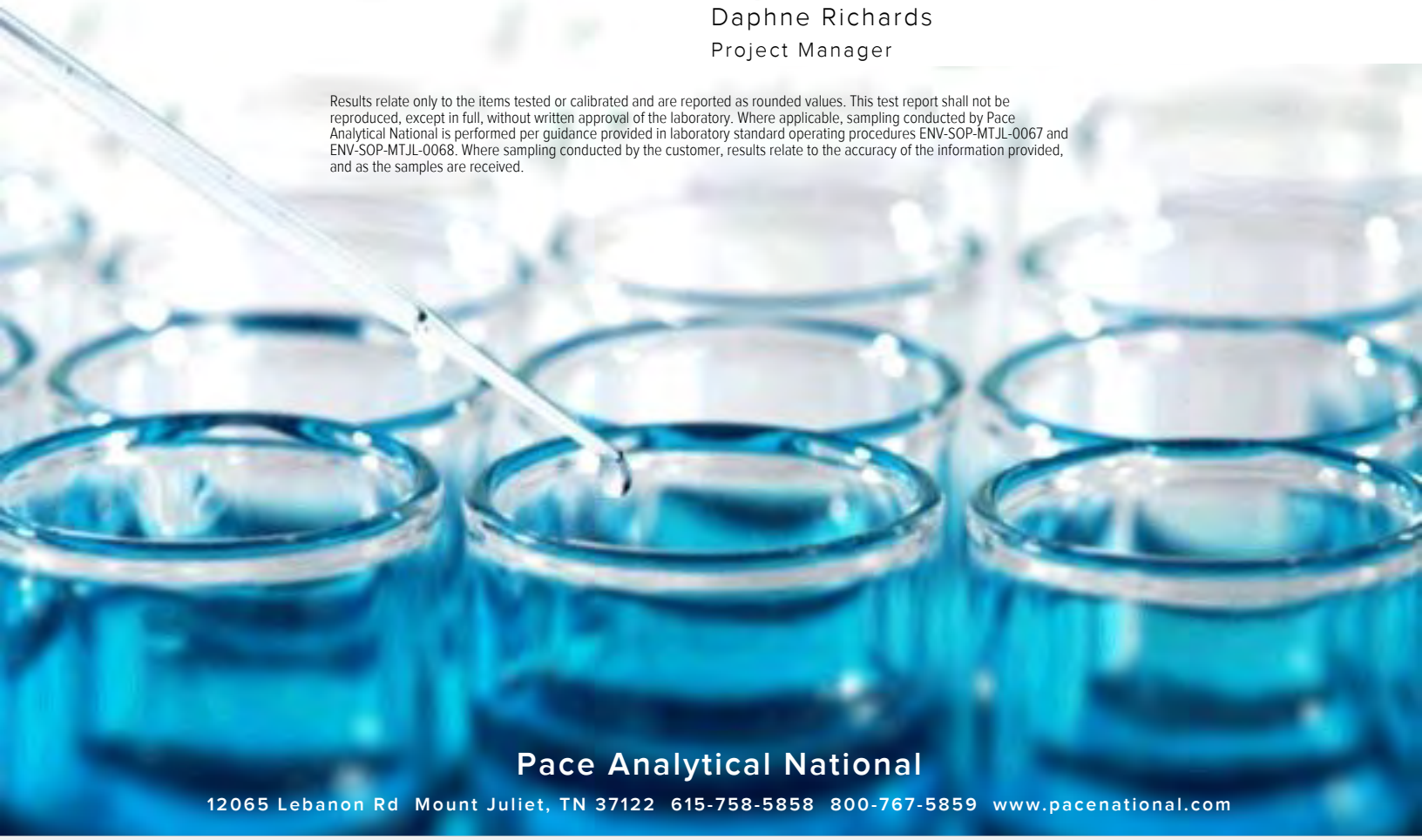
Sample Delivery Group:	L1718398
Samples Received:	03/23/2024
Project Number:	2024007
Description:	6th & Birch

Report To: Abra Bentley
51 West Wetmore, Ste 101
Tucson, AZ 85705-1678

Entire Report Reviewed By:

Daphne R Richards

Daphne Richards
Project Manager



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

TABLE OF CONTENTS

333 S WILLARD ST-3 L1718398-01 GW

Collected by: Luis Montijo | Collected date/time: 03/21/24 14:08 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2254245	1	03/27/24 04:19	03/27/24 12:39	DJS	Mt. Juliet, TN

315 S WILLARD ST-2 L1718398-02 GW

Collected by: Luis Montijo | Collected date/time: 03/22/24 10:25 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2254245	1	03/27/24 04:19	03/27/24 12:42	DJS	Mt. Juliet, TN

333 S WILLARD ST-4 L1718398-03 GW

Collected by: Luis Montijo | Collected date/time: 03/21/24 14:09 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2254245	1	03/27/24 04:19	03/27/24 12:45	DJS	Mt. Juliet, TN

1924 N WILLARD ST-1 L1718398-04 GW

Collected by: Luis Montijo | Collected date/time: 03/21/24 13:41 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2254245	1	03/27/24 04:19	03/27/24 12:47	DJS	Mt. Juliet, TN

595 E. CHERRY ST-1 L1718398-05 GW

Collected by: Luis Montijo | Collected date/time: 03/22/24 09:31 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2254245	1	03/27/24 04:19	03/27/24 12:50	DJS	Mt. Juliet, TN

350 S 12TH-2 L1718398-06 GW

Collected by: Luis Montijo | Collected date/time: 03/20/24 12:03 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2254245	1	03/27/24 04:19	03/27/24 12:53	DJS	Mt. Juliet, TN

350 S 12TH-1 L1718398-07 GW

Collected by: Luis Montijo | Collected date/time: 03/20/24 11:43 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2254245	1	03/27/24 04:19	03/27/24 12:56	DJS	Mt. Juliet, TN

15E ASPEN ST-1 L1718398-08 GW

Collected by: Luis Montijo | Collected date/time: 03/21/24 11:04 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2254245	1	03/27/24 04:19	03/27/24 12:58	DJS	Mt. Juliet, TN

609 E CHERRY ST-1 L1718398-09 GW

Collected by: Luis Montijo
Collected date/time: 03/22/24 09:48
Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2254245	1	03/27/24 04:19	03/27/24 13:01	DJS	Mt. Juliet, TN

193 E STATE ROUTE 89A-1 L1718398-10 GW

Collected by: Luis Montijo
Collected date/time: 03/22/24 09:03
Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2254245	1	03/27/24 04:19	03/27/24 13:09	DJS	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.

Daphne Richards
Project Manager

Report Revision History

Level II Report - Version 1: 03/27/24 15:42

Project Narrative

Sample id update

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony,Dissolved	U		4.30	10.0	1	03/27/2024 12:39	WG2254245
Arsenic,Dissolved	U		4.40	10.0	1	03/27/2024 12:39	WG2254245
Barium,Dissolved	47.2		0.736	5.00	1	03/27/2024 12:39	WG2254245
Cadmium,Dissolved	U		0.479	2.00	1	03/27/2024 12:39	WG2254245
Copper,Dissolved	U		3.68	10.0	1	03/27/2024 12:39	WG2254245
Iron,Dissolved	U		18.0	100	1	03/27/2024 12:39	WG2254245
Lead,Dissolved	U		2.99	6.00	1	03/27/2024 12:39	WG2254245
Manganese,Dissolved	5.35	E4	0.934	10.0	1	03/27/2024 12:39	WG2254245
Nickel,Dissolved	5.22	E4	1.61	10.0	1	03/27/2024 12:39	WG2254245
Silver,Dissolved	U		1.54	5.00	1	03/27/2024 12:39	WG2254245
Zinc,Dissolved	36.2	E4	6.52	50.0	1	03/27/2024 12:39	WG2254245

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony,Dissolved	U		4.30	10.0	1	03/27/2024 12:42	WG2254245
Arsenic,Dissolved	22.8		4.40	10.0	1	03/27/2024 12:42	WG2254245
Barium,Dissolved	471		0.736	5.00	1	03/27/2024 12:42	WG2254245
Cadmium,Dissolved	U		0.479	2.00	1	03/27/2024 12:42	WG2254245
Copper,Dissolved	5.83	E4	3.68	10.0	1	03/27/2024 12:42	WG2254245
Iron,Dissolved	U		18.0	100	1	03/27/2024 12:42	WG2254245
Lead,Dissolved	U		2.99	6.00	1	03/27/2024 12:42	WG2254245
Manganese,Dissolved	U		0.934	10.0	1	03/27/2024 12:42	WG2254245
Nickel,Dissolved	U		1.61	10.0	1	03/27/2024 12:42	WG2254245
Silver,Dissolved	U		1.54	5.00	1	03/27/2024 12:42	WG2254245
Zinc,Dissolved	365		6.52	50.0	1	03/27/2024 12:42	WG2254245

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony,Dissolved	U		4.30	10.0	1	03/27/2024 12:45	WG2254245
Arsenic,Dissolved	21.6		4.40	10.0	1	03/27/2024 12:45	WG2254245
Barium,Dissolved	295		0.736	5.00	1	03/27/2024 12:45	WG2254245
Cadmium,Dissolved	U		0.479	2.00	1	03/27/2024 12:45	WG2254245
Copper,Dissolved	12.1		3.68	10.0	1	03/27/2024 12:45	WG2254245
Iron,Dissolved	U		18.0	100	1	03/27/2024 12:45	WG2254245
Lead,Dissolved	U		2.99	6.00	1	03/27/2024 12:45	WG2254245
Manganese,Dissolved	U		0.934	10.0	1	03/27/2024 12:45	WG2254245
Nickel,Dissolved	U		1.61	10.0	1	03/27/2024 12:45	WG2254245
Silver,Dissolved	U		1.54	5.00	1	03/27/2024 12:45	WG2254245
Zinc,Dissolved	36.3	E4	6.52	50.0	1	03/27/2024 12:45	WG2254245

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony,Dissolved	U		4.30	10.0	1	03/27/2024 12:47	WG2254245
Arsenic,Dissolved	6.43	E4	4.40	10.0	1	03/27/2024 12:47	WG2254245
Barium,Dissolved	100		0.736	5.00	1	03/27/2024 12:47	WG2254245
Cadmium,Dissolved	U		0.479	2.00	1	03/27/2024 12:47	WG2254245
Copper,Dissolved	U		3.68	10.0	1	03/27/2024 12:47	WG2254245
Iron,Dissolved	U		18.0	100	1	03/27/2024 12:47	WG2254245
Lead,Dissolved	U		2.99	6.00	1	03/27/2024 12:47	WG2254245
Manganese,Dissolved	2.12	E4	0.934	10.0	1	03/27/2024 12:47	WG2254245
Nickel,Dissolved	U		1.61	10.0	1	03/27/2024 12:47	WG2254245
Silver,Dissolved	U		1.54	5.00	1	03/27/2024 12:47	WG2254245
Zinc,Dissolved	7.96	E4	6.52	50.0	1	03/27/2024 12:47	WG2254245

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony,Dissolved	U		4.30	10.0	1	03/27/2024 12:50	WG2254245
Arsenic,Dissolved	15.3		4.40	10.0	1	03/27/2024 12:50	WG2254245
Barium,Dissolved	403		0.736	5.00	1	03/27/2024 12:50	WG2254245
Cadmium,Dissolved	U		0.479	2.00	1	03/27/2024 12:50	WG2254245
Copper,Dissolved	17.8		3.68	10.0	1	03/27/2024 12:50	WG2254245
Iron,Dissolved	U		18.0	100	1	03/27/2024 12:50	WG2254245
Lead,Dissolved	U		2.99	6.00	1	03/27/2024 12:50	WG2254245
Manganese,Dissolved	U		0.934	10.0	1	03/27/2024 12:50	WG2254245
Nickel,Dissolved	U		1.61	10.0	1	03/27/2024 12:50	WG2254245
Silver,Dissolved	U		1.54	5.00	1	03/27/2024 12:50	WG2254245
Zinc,Dissolved	98.5		6.52	50.0	1	03/27/2024 12:50	WG2254245

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony,Dissolved	U		4.30	10.0	1	03/27/2024 12:53	WG2254245
Arsenic,Dissolved	16.9		4.40	10.0	1	03/27/2024 12:53	WG2254245
Barium,Dissolved	553		0.736	5.00	1	03/27/2024 12:53	WG2254245
Cadmium,Dissolved	U		0.479	2.00	1	03/27/2024 12:53	WG2254245
Copper,Dissolved	U		3.68	10.0	1	03/27/2024 12:53	WG2254245
Iron,Dissolved	U		18.0	100	1	03/27/2024 12:53	WG2254245
Lead,Dissolved	U		2.99	6.00	1	03/27/2024 12:53	WG2254245
Manganese,Dissolved	1.10	E4	0.934	10.0	1	03/27/2024 12:53	WG2254245
Nickel,Dissolved	U		1.61	10.0	1	03/27/2024 12:53	WG2254245
Silver,Dissolved	U		1.54	5.00	1	03/27/2024 12:53	WG2254245
Zinc,Dissolved	52.3		6.52	50.0	1	03/27/2024 12:53	WG2254245

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony,Dissolved	U		4.30	10.0	1	03/27/2024 12:56	WG2254245
Arsenic,Dissolved	U		4.40	10.0	1	03/27/2024 12:56	WG2254245
Barium,Dissolved	67.2		0.736	5.00	1	03/27/2024 12:56	WG2254245
Cadmium,Dissolved	U		0.479	2.00	1	03/27/2024 12:56	WG2254245
Copper,Dissolved	13.5		3.68	10.0	1	03/27/2024 12:56	WG2254245
Iron,Dissolved	45.9	E4	18.0	100	1	03/27/2024 12:56	WG2254245
Lead,Dissolved	U		2.99	6.00	1	03/27/2024 12:56	WG2254245
Manganese,Dissolved	30.9		0.934	10.0	1	03/27/2024 12:56	WG2254245
Nickel,Dissolved	U		1.61	10.0	1	03/27/2024 12:56	WG2254245
Silver,Dissolved	U		1.54	5.00	1	03/27/2024 12:56	WG2254245
Zinc,Dissolved	22.2	E4	6.52	50.0	1	03/27/2024 12:56	WG2254245

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony,Dissolved	U		4.30	10.0	1	03/27/2024 12:58	WG2254245
Arsenic,Dissolved	U		4.40	10.0	1	03/27/2024 12:58	WG2254245
Barium,Dissolved	128		0.736	5.00	1	03/27/2024 12:58	WG2254245
Cadmium,Dissolved	U		0.479	2.00	1	03/27/2024 12:58	WG2254245
Copper,Dissolved	8.17	E4	3.68	10.0	1	03/27/2024 12:58	WG2254245
Iron,Dissolved	U		18.0	100	1	03/27/2024 12:58	WG2254245
Lead,Dissolved	U		2.99	6.00	1	03/27/2024 12:58	WG2254245
Manganese,Dissolved	8.17	E4	0.934	10.0	1	03/27/2024 12:58	WG2254245
Nickel,Dissolved	U		1.61	10.0	1	03/27/2024 12:58	WG2254245
Silver,Dissolved	U		1.54	5.00	1	03/27/2024 12:58	WG2254245
Zinc,Dissolved	77.7		6.52	50.0	1	03/27/2024 12:58	WG2254245

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony,Dissolved	U		4.30	10.0	1	03/27/2024 13:01	WG2254245
Arsenic,Dissolved	17.6		4.40	10.0	1	03/27/2024 13:01	WG2254245
Barium,Dissolved	397		0.736	5.00	1	03/27/2024 13:01	WG2254245
Cadmium,Dissolved	U		0.479	2.00	1	03/27/2024 13:01	WG2254245
Copper,Dissolved	6.11	E4	3.68	10.0	1	03/27/2024 13:01	WG2254245
Iron,Dissolved	U		18.0	100	1	03/27/2024 13:01	WG2254245
Lead,Dissolved	U		2.99	6.00	1	03/27/2024 13:01	WG2254245
Manganese,Dissolved	U		0.934	10.0	1	03/27/2024 13:01	WG2254245
Nickel,Dissolved	U		1.61	10.0	1	03/27/2024 13:01	WG2254245
Silver,Dissolved	U		1.54	5.00	1	03/27/2024 13:01	WG2254245
Zinc,Dissolved	39.2	E4	6.52	50.0	1	03/27/2024 13:01	WG2254245

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony,Dissolved	U		4.30	10.0	1	03/27/2024 13:09	WG2254245
Arsenic,Dissolved	21.7		4.40	10.0	1	03/27/2024 13:09	WG2254245
Barium,Dissolved	258		0.736	5.00	1	03/27/2024 13:09	WG2254245
Cadmium,Dissolved	U		0.479	2.00	1	03/27/2024 13:09	WG2254245
Copper,Dissolved	11.8		3.68	10.0	1	03/27/2024 13:09	WG2254245
Iron,Dissolved	U		18.0	100	1	03/27/2024 13:09	WG2254245
Lead,Dissolved	U		2.99	6.00	1	03/27/2024 13:09	WG2254245
Manganese,Dissolved	U		0.934	10.0	1	03/27/2024 13:09	WG2254245
Nickel,Dissolved	U		1.61	10.0	1	03/27/2024 13:09	WG2254245
Silver,Dissolved	U		1.54	5.00	1	03/27/2024 13:09	WG2254245
Zinc,Dissolved	53.7		6.52	50.0	1	03/27/2024 13:09	WG2254245

Method Blank (MB)

(MB) R4050554-1 03/27/24 12:05

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Antimony,Dissolved	U		4.30	10.0
Arsenic,Dissolved	U		4.40	10.0
Barium,Dissolved	U		0.736	5.00
Cadmium,Dissolved	U		0.479	2.00
Copper,Dissolved	U		3.68	10.0
Iron,Dissolved	U		18.0	100
Lead,Dissolved	U		2.99	6.00
Manganese,Dissolved	U		0.934	10.0
Nickel,Dissolved	U		1.61	10.0
Silver,Dissolved	U		1.54	5.00
Zinc,Dissolved	U		6.52	50.0

Laboratory Control Sample (LCS)

(LCS) R4050554-2 03/27/24 12:07

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony,Dissolved	1000	947	94.7	80.0-120	
Arsenic,Dissolved	1000	980	98.0	80.0-120	
Barium,Dissolved	1000	1020	102	80.0-120	
Cadmium,Dissolved	1000	961	96.1	80.0-120	
Copper,Dissolved	1000	1010	101	80.0-120	
Iron,Dissolved	10000	9980	99.8	80.0-120	
Lead,Dissolved	1000	971	97.1	80.0-120	
Manganese,Dissolved	1000	1060	106	80.0-120	
Nickel,Dissolved	1000	949	94.9	80.0-120	
Silver,Dissolved	200	198	99.1	80.0-120	
Zinc,Dissolved	1000	1020	102	80.0-120	

L1718396-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1718396-11 03/27/24 12:10 • (MS) R4050554-4 03/27/24 12:15 • (MSD) R4050554-5 03/27/24 12:18

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony,Dissolved	1000	U	996	986	99.6	98.6	1	75.0-125			1.02	20
Arsenic,Dissolved	1000	U	1020	1010	102	101	1	75.0-125			1.20	20
Barium,Dissolved	1000	4.73	1040	1030	103	103	1	75.0-125			0.638	20
Cadmium,Dissolved	1000	U	987	984	98.7	98.4	1	75.0-125			0.306	20
Copper,Dissolved	1000	U	1000	1020	100	102	1	75.0-125			1.37	20

L1718396-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1718396-11 03/27/24 12:10 • (MS) R4050554-4 03/27/24 12:15 • (MSD) R4050554-5 03/27/24 12:18

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Iron,Dissolved	10000	49.3	10100	10200	100	102	1	75.0-125			1.40	20
Lead,Dissolved	1000	U	1000	998	100	99.8	1	75.0-125			0.325	20
Manganese,Dissolved	1000	148	1190	1210	104	106	1	75.0-125			1.49	20
Nickel,Dissolved	1000	U	972	966	97.2	96.6	1	75.0-125			0.642	20
Silver,Dissolved	200	U	197	201	98.7	100	1	75.0-125			1.77	20
Zinc,Dissolved	1000	10.3	1050	1040	104	103	1	75.0-125			0.778	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

MDL	Method Detection Limit.
RDL	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
E4	Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL) but above MDL.

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:
Hydro Geo Chem - Tucson, AZ

51 West Wetmore, Ste 101
Tucson, AZ 85705-1678

Billing Information:
Tanya Bentley
51 West Wetmore, Ste 101
Tucson, AZ 85705-1678

Pres Chk

Report to:
Abra Bentley

Email To: **abrab@hgcinc.com**

Project Description:
6th & Birch

City/State Collected: Cottonwood, AZ

Please Circle: PT (MT) CT ET

Phone: **520-293-1500**

Client Project # 202607

Lab Project # **HYDGEOTAZ-6TH&BIRCH**

Collected by (print): Luis Montijo

Site/Facility ID #

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 #

Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Dissolved Metals 250mlHDPE-NoPres									Remarks	Sample # (lab only)
333 S willard st-3	Grab	GW		3/21/24	1408	1	X										-01
315 S willard st-2		GW		3/22/24	1025	1	X										-02
333 S willard st-4		GW		3/21/24	1409	1	X										-03
924 N willard st-1		GW		3/21/24	1341	1	X										-04
525 E Cherry st-1		GW		3/22/24	0931	1	X										-05
350 S 12th -2		GW		3/20/24	1203	1	X										-06
350 S 12th -1		GW		3/20/24	1143	1	X										-07
15 E Aspen st-1		GW		3/21/24	1104	1	X										-08
609 E Cherry st-1		GW		3/22/24	0948	1	X										-09
193 E State Route 89A-1	↓	GW		3/22/24	0903	1	X										-10

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
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 # L1718398

F065

Acctnum: **HYDGEOTAZ**
Template: **T248641**
Prelogin: **P1061538**
PM: **288 - Daphne Richards**
PB:
Shipped Via: **FedEX Ground**

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

Remarks:Metals = Cu, Pb, Zn, Ni, Fe, Ag, Mn, Ba, Cd, Sb and As
Filtered Sampled

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS ✓FedEx __ Courier _____

Tracking # 6727 1909 1604

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
	3/22/24	1611 ~~1330~~ LM		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: TLA1 °C Bottles Received:
	3/22/24	1800		2.0+0=2.0 10
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:
				3/23/24 900

If preservation required by Login: Date/Time

Hold:

Condition: NCF / (OK)

PNPF2

ANALYTICAL REPORT

April 10, 2024

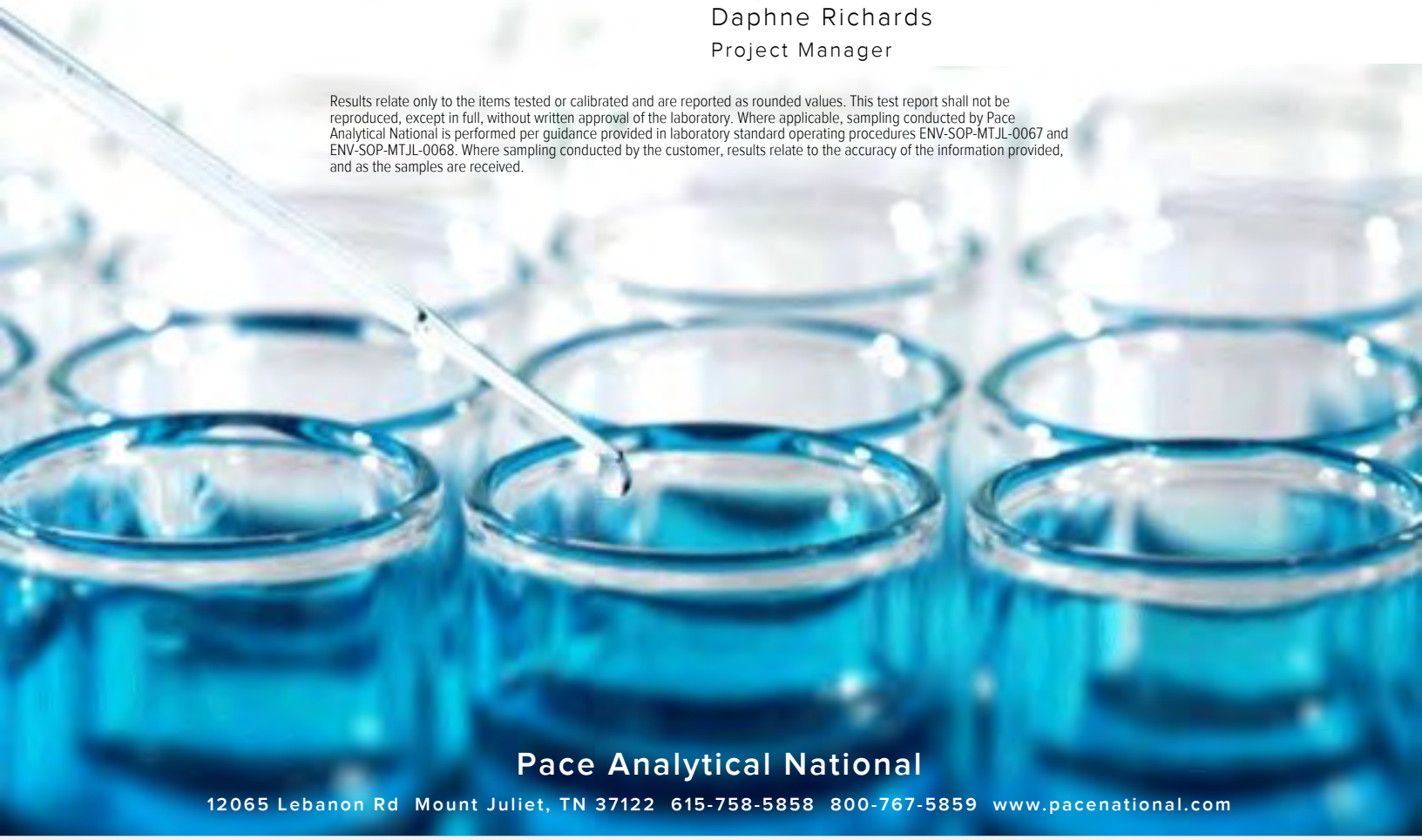
Hydro Geo Chem - Tucson, AZ

Sample Delivery Group:	L1721303
Samples Received:	04/02/2024
Project Number:	2024007
Description:	6th & Birch

Report To: Abra Bentley
51 West Wetmore, Ste 101
Tucson, AZ 85705-1678

Entire Report Reviewed By: Daphne R Richards

Daphne Richards
Project Manager



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

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03225 #33 L1721303-01 Solid

Collected by: Carley Schwartz | Collected date/time: 03/25/24 16:19 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2258882	1	04/02/24 23:15	04/03/24 10:49	SET	Mt. Juliet, TN

03225 #24 L1721303-02 Solid

Collected by: Carley Schwartz | Collected date/time: 03/25/24 16:00 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2258882	1	04/02/24 23:15	04/03/24 10:55	SET	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2259316	1	04/03/24 12:38	04/06/24 17:45	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259315	5	04/03/24 12:37	04/06/24 20:08	LD	Mt. Juliet, TN

0325 #44 L1721303-03 Solid

Collected by: Carley Schwartz | Collected date/time: 03/25/24 16:35 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2259316	1	04/03/24 12:38	04/06/24 17:47	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259315	5	04/03/24 12:37	04/06/24 20:11	LD	Mt. Juliet, TN

0326 #26 L1721303-04 Solid

Collected by: Carley Schwartz | Collected date/time: 03/26/24 09:38 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2259316	1	04/03/24 12:38	04/06/24 17:48	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259315	5	04/03/24 12:37	04/06/24 20:15	LD	Mt. Juliet, TN

0326 #31 L1721303-05 Solid

Collected by: Carley Schwartz | Collected date/time: 03/26/24 10:23 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2258882	1	04/02/24 23:15	04/03/24 11:38	SET	Mt. Juliet, TN

0326 #32 L1721303-06 Solid

Collected by: Carley Schwartz | Collected date/time: 03/26/24 10:50 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2259316	1	04/03/24 12:38	04/06/24 17:54	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259315	5	04/03/24 12:37	04/06/24 20:25	LD	Mt. Juliet, TN

0326 #52 L1721303-07 Solid

Collected by: Carley Schwartz | Collected date/time: 03/26/24 11:20 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2258882	1	04/02/24 23:15	04/03/24 11:45	SET	Mt. Juliet, TN

0326 #74 L1721303-08 Solid

Collected by: Carley Schwartz | Collected date/time: 03/26/24 11:55 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2259316	1	04/03/24 12:38	04/06/24 17:56	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259315	5	04/03/24 12:37	04/06/24 20:28	LD	Mt. Juliet, TN

0326 #88 L1721303-09 Solid

Collected by: Carley Schwartz | Collected date/time: 03/26/24 13:00 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2259316	1	04/03/24 12:38	04/06/24 17:58	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259315	5	04/03/24 12:37	04/06/24 20:31	LD	Mt. Juliet, TN

0326 #93 L1721303-10 Solid

Collected by: Carley Schwartz | Collected date/time: 03/26/24 13:26 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2259320	1	04/03/24 13:04	04/04/24 22:31	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259322	5	04/03/24 13:05	04/09/24 17:24	LD	Mt. Juliet, TN

0326 #109 L1721303-11 Solid

Collected by: Carley Schwartz | Collected date/time: 03/26/24 14:10 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2258882	1	04/02/24 23:15	04/03/24 11:51	SET	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2259320	1	04/03/24 13:04	04/04/24 22:32	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259322	5	04/03/24 13:05	04/09/24 17:27	LD	Mt. Juliet, TN

0326 #124 L1721303-12 Solid

Collected by: Carley Schwartz | Collected date/time: 03/26/24 15:35 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2259320	1	04/03/24 13:04	04/04/24 22:34	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259322	5	04/03/24 13:05	04/09/24 17:31	LD	Mt. Juliet, TN

0326 #137 L1721303-13 Solid

Collected by: Carley Schwartz | Collected date/time: 03/26/24 16:00 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2258882	1	04/02/24 23:15	04/03/24 11:57	SET	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2259320	1	04/03/24 13:04	04/04/24 22:39	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259322	5	04/03/24 13:05	04/09/24 17:34	LD	Mt. Juliet, TN

0327 #28 L1721303-14 Solid

Collected by: Carley Schwartz | Collected date/time: 03/27/24 08:03 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2258882	1	04/02/24 23:15	04/03/24 12:03	SET	Mt. Juliet, TN

0327 #29 L1721303-15 Solid

Collected by: Carley Schwartz | Collected date/time: 03/27/24 08:05 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2259316	5	04/03/24 12:38	04/06/24 18:00	RDS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259315	5	04/03/24 12:37	04/06/24 20:34	LD	Mt. Juliet, TN

0327 #35 L1721303-16 Solid

Collected by: Carley Schwartz | Collected date/time: 03/27/24 08:12 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2259494	1	04/03/24 10:51	04/04/24 05:34	SET	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2259316	5	04/03/24 12:38	04/06/24 18:03	RDS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259315	5	04/03/24 12:37	04/06/24 20:38	LD	Mt. Juliet, TN

0327 #58 L1721303-17 Solid

Collected by: Carley Schwartz | Collected date/time: 03/27/24 09:28 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2259316	1	04/03/24 12:38	04/06/24 18:06	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259315	5	04/03/24 12:37	04/06/24 20:41	LD	Mt. Juliet, TN

0327 #81 L1721303-18 Solid

Collected by: Carley Schwartz | Collected date/time: 03/27/24 10:10 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2259316	1	04/03/24 12:38	04/06/24 17:36	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259315	5	04/03/24 12:37	04/06/24 19:52	LD	Mt. Juliet, TN

0327 #87 L1721303-19 Solid

Collected by: Carley Schwartz | Collected date/time: 03/27/24 10:30 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2258882	1	04/02/24 23:15	04/03/24 12:09	SET	Mt. Juliet, TN

0327 #94 L1721303-20 Solid

Collected by: Carley Schwartz | Collected date/time: 03/27/24 11:05 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2258882	1	04/02/24 23:15	04/03/24 12:34	SET	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2259316	5	04/03/24 12:38	04/06/24 18:08	RDS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259315	5	04/03/24 12:37	04/06/24 20:44	LD	Mt. Juliet, TN

0327 #110 L1721303-21 Solid

Collected by: Carley Schwartz | Collected date/time: 03/27/24 13:10 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2258882	1	04/02/24 23:15	04/03/24 12:40	SET	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2259316	5	04/03/24 12:38	04/06/24 18:15	RDS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259315	5	04/03/24 12:37	04/06/24 20:47	LD	Mt. Juliet, TN

0327 #128 L1721303-22 Solid

Collected by: Carley Schwartz | Collected date/time: 03/27/24 14:05 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2258882	1	04/02/24 23:15	04/03/24 12:46	SET	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2259316	1	04/03/24 12:38	04/06/24 18:19	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259315	5	04/03/24 12:37	04/06/24 20:51	LD	Mt. Juliet, TN

0327 #139 L1721303-23 Solid

Collected by: Carley Schwartz | Collected date/time: 03/27/24 15:18 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2258882	1	04/02/24 23:15	04/03/24 12:53	SET	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2259316	1	04/03/24 12:38	04/06/24 18:20	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259315	5	04/03/24 12:37	04/06/24 20:54	LD	Mt. Juliet, TN

0327 #151 L1721303-24 Solid

Collected by: Carley Schwartz | Collected date/time: 03/27/24 15:40 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2258882	1	04/02/24 23:15	04/03/24 12:59	SET	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2259316	1	04/03/24 12:38	04/06/24 18:22	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259315	5	04/03/24 12:37	04/06/24 21:17	LD	Mt. Juliet, TN

0327 #174 L1721303-25 Solid

Collected by: Carley Schwartz | Collected date/time: 03/27/24 16:17 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2258882	1	04/02/24 23:15	04/03/24 13:11	SET	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2259316	1	04/03/24 12:38	04/06/24 18:24	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259315	5	04/03/24 12:37	04/06/24 21:20	LD	Mt. Juliet, TN

0327 #187 L1721303-26 Solid

Collected by: Carley Schwartz | Collected date/time: 03/27/24 17:10 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2259316	1	04/03/24 12:38	04/06/24 18:26	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259315	5	04/03/24 12:37	04/06/24 21:24	LD	Mt. Juliet, TN

0327 #194 L1721303-27 Solid

Collected by: Carley Schwartz | Collected date/time: 03/27/24 17:30 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2258882	1	04/02/24 23:15	04/03/24 13:17	SET	Mt. Juliet, TN

0328 #15 L1721303-28 Solid

Collected by: Carley Schwartz | Collected date/time: 03/28/24 07:58 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2259316	1	04/03/24 12:38	04/06/24 18:27	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259315	5	04/03/24 12:37	04/06/24 21:27	LD	Mt. Juliet, TN

0328 #26 L1721303-29 Solid

Collected by: Carley Schwartz | Collected date/time: 03/28/24 08:16 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2258882	1	04/02/24 23:15	04/03/24 13:24	SET	Mt. Juliet, TN

0328 #33 L1721303-30 Solid

Collected by: Carley Schwartz | Collected date/time: 03/28/24 08:31 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2259320	1	04/03/24 13:04	04/04/24 22:41	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259322	5	04/03/24 13:05	04/09/24 17:37	LD	Mt. Juliet, TN

0328 #40 L1721303-31 Solid

Collected by: Carley Schwartz | Collected date/time: 03/28/24 08:54 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2258882	1	04/02/24 23:15	04/03/24 13:42	SET	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2259320	1	04/03/24 13:04	04/04/24 22:43	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259322	5	04/03/24 13:05	04/09/24 17:41	LD	Mt. Juliet, TN

0328 #52 L1721303-32 Solid

Collected by: Carley Schwartz | Collected date/time: 03/28/24 09:17 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2259320	5	04/03/24 13:04	04/08/24 12:52	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259322	5	04/03/24 13:05	04/09/24 17:44	LD	Mt. Juliet, TN

0328 #68 L1721303-33 Solid

Collected by: Carley Schwartz | Collected date/time: 03/28/24 09:58 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2258882	1	04/02/24 23:15	04/03/24 14:09	SET	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2259320	1	04/03/24 13:04	04/04/24 22:46	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259322	5	04/03/24 13:05	04/09/24 17:47	LD	Mt. Juliet, TN

0328 #79 L1721303-34 Solid

Collected by: Carley Schwartz | Collected date/time: 03/28/24 10:36 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2259320	1	04/03/24 13:04	04/04/24 22:48	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259322	5	04/03/24 13:05	04/09/24 17:51	LD	Mt. Juliet, TN

0328 #86 L1721303-35 Solid

Collected by: Carley Schwartz | Collected date/time: 03/28/24 10:58 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2259148	1	04/03/24 00:02	04/03/24 23:08	SET	Mt. Juliet, TN

0328 #107 L1721303-36 Solid

Collected by: Carley Schwartz | Collected date/time: 03/28/24 11:30 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2259320	1	04/03/24 13:04	04/04/24 22:49	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259322	5	04/03/24 13:05	04/09/24 17:54	LD	Mt. Juliet, TN

0328 #126 L1721303-37 Solid

Collected by: Carley Schwartz | Collected date/time: 03/28/24 12:32 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2259320	1	04/03/24 13:04	04/04/24 22:51	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259322	5	04/03/24 13:05	04/09/24 18:07	LD	Mt. Juliet, TN

0328 #138 L1721303-38 Solid

Collected by: Carley Schwartz | Collected date/time: 03/28/24 13:00 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2259148	1	04/03/24 00:02	04/03/24 23:14	SET	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2259320	1	04/03/24 13:04	04/04/24 22:53	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259322	5	04/03/24 13:05	04/09/24 18:10	LD	Mt. Juliet, TN

0328 #155 L1721303-39 Solid

Collected by: Carley Schwartz | Collected date/time: 03/28/24 13:42 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2259320	1	04/03/24 13:04	04/04/24 22:55	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259322	5	04/03/24 13:05	04/09/24 18:14	LD	Mt. Juliet, TN

0328 #163 L1721303-40 Solid

Collected by: Carley Schwartz | Collected date/time: 03/28/24 14:47 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2259320	1	04/03/24 13:04	04/04/24 23:00	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259322	5	04/03/24 13:05	04/09/24 18:17	LD	Mt. Juliet, TN

0328 #176 L1721303-41 Solid

Collected by: Carley Schwartz | Collected date/time: 03/28/24 15:06 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2259148	1	04/03/24 00:02	04/03/24 23:20	SET	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2259320	1	04/03/24 13:04	04/04/24 23:02	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259322	5	04/03/24 13:05	04/09/24 18:20	LD	Mt. Juliet, TN

0328 #191 L1721303-42 Solid

Collected by: Carley Schwartz | Collected date/time: 03/28/24 15:33 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2259148	1	04/03/24 00:02	04/03/24 23:26	SET	Mt. Juliet, TN

0328 #192 L1721303-43 Solid

Collected by: Carley Schwartz | Collected date/time: 03/28/24 15:36 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2259320	1	04/03/24 13:04	04/04/24 22:22	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259322	5	04/03/24 13:05	04/09/24 16:34	LD	Mt. Juliet, TN

0328 #198 L1721303-44 Solid

Collected by: Carley Schwartz | Collected date/time: 03/28/24 16:04 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2259148	1	04/03/24 00:02	04/03/24 23:32	SET	Mt. Juliet, TN

0328 #201 L1721303-45 Solid

Collected by: Carley Schwartz | Collected date/time: 03/28/24 16:10 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2259320	1	04/03/24 13:04	04/04/24 23:03	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259322	5	04/03/24 13:05	04/09/24 18:24	LD	Mt. Juliet, TN

0329 #9 L1721303-46 Solid

Collected by: Carley Schwartz | Collected date/time: 03/29/24 11:05 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2259148	1	04/03/24 00:02	04/03/24 23:45	SET	Mt. Juliet, TN

0329 #24 L1721303-47 Solid

Collected by: Carley Schwartz | Collected date/time: 03/29/24 11:49 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2259320	1	04/03/24 13:04	04/04/24 23:05	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259322	5	04/03/24 13:05	04/09/24 18:27	LD	Mt. Juliet, TN

0329 #35 L1721303-48 Solid

Collected by: Carley Schwartz | Collected date/time: 03/29/24 12:18 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2259148	1	04/03/24 00:02	04/03/24 23:51	SET	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2259320	1	04/03/24 13:04	04/04/24 23:07	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2259322	5	04/03/24 13:05	04/09/24 18:30	LD	Mt. Juliet, TN

0329 #48 L1721303-49 Solid

Collected by: Carley Schwartz | Collected date/time: 03/29/24 12:45 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2259148	1	04/03/24 00:02	04/04/24 00:10	SET	Mt. Juliet, TN

820AZ89A L1721303-50 GW

Collected by: Carley Schwartz | Collected date/time: 03/26/24 08:20 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2259669	1	04/07/24 10:03	04/07/24 19:20	DJS	Mt. Juliet, TN

O&D WELL L1721303-51 GW

Collected by: Carley Schwartz | Collected date/time: 03/27/24 12:59 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2259669	1	04/07/24 10:03	04/07/24 19:21	DJS	Mt. Juliet, TN

MW-2S L1721303-52 GW

Collected by: Carley Schwartz | Collected date/time: 03/29/24 09:52 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2259669	1	04/07/24 10:03	04/07/24 19:23	DJS	Mt. Juliet, TN

MW-3S L1721303-53 GW

Collected by: Carley Schwartz | Collected date/time: 03/29/24 10:05 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2259669	1	04/07/24 10:03	04/07/24 19:24	DJS	Mt. Juliet, TN

MW-4 L1721303-54 GW

Collected by: Carley Schwartz | Collected date/time: 03/29/24 09:13 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2259671	1	04/04/24 08:25	04/04/24 13:33	JTM	Mt. Juliet, TN

MW-5 L1721303-55 GW

Collected by: Carley Schwartz | Collected date/time: 03/29/24 09:32 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2259671	1	04/04/24 08:25	04/04/24 13:27	JTM	Mt. Juliet, TN

MW-8 L1721303-56 GW

Collected by: Carley Schwartz | Collected date/time: 03/29/24 10:19 | Received date/time: 04/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2259671	1	04/04/24 08:25	04/04/24 13:35	JTM	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.

Daphne Richards
Project Manager

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	0.311	E4	0.255	1.00	1	04/03/2024 10:49	WG2258882

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	1.11		0.255	1.00	1	04/03/2024 10:55	WG2258882

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	1.18	E4	0.544	2.00	1	04/06/2024 17:45	WG2259316
Arsenic	24.5		0.518	2.00	1	04/06/2024 17:45	WG2259316
Barium	167		0.0852	0.500	1	04/06/2024 17:45	WG2259316
Cadmium	3.11		0.0471	0.500	1	04/06/2024 17:45	WG2259316
Copper	175		0.400	2.00	1	04/06/2024 17:45	WG2259316
Iron	32400		2.24	10.0	1	04/06/2024 17:45	WG2259316
Lead	51.2		0.208	0.500	1	04/06/2024 17:45	WG2259316
Manganese	541		0.133	1.00	1	04/06/2024 17:45	WG2259316
Nickel	43.3		0.132	2.00	1	04/06/2024 17:45	WG2259316
Silver	0.298	E4	0.127	1.00	1	04/06/2024 17:45	WG2259316
Thallium	U		0.394	2.00	1	04/06/2024 17:45	WG2259316
Zinc	144		0.832	5.00	1	04/06/2024 17:45	WG2259316

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.461	E4	0.0478	15.0	5	04/06/2024 20:08	WG2259315

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	U		0.544	2.00	1	04/06/2024 17:47	WG2259316
Arsenic	14.9		0.518	2.00	1	04/06/2024 17:47	WG2259316
Barium	159		0.0852	0.500	1	04/06/2024 17:47	WG2259316
Cadmium	0.757		0.0471	0.500	1	04/06/2024 17:47	WG2259316
Copper	50.5		0.400	2.00	1	04/06/2024 17:47	WG2259316
Iron	23000		2.24	10.0	1	04/06/2024 17:47	WG2259316
Lead	13.4		0.208	0.500	1	04/06/2024 17:47	WG2259316
Manganese	416		0.133	1.00	1	04/06/2024 17:47	WG2259316
Nickel	46.4		0.132	2.00	1	04/06/2024 17:47	WG2259316
Silver	0.855	E4	0.127	1.00	1	04/06/2024 17:47	WG2259316
Thallium	U		0.394	2.00	1	04/06/2024 17:47	WG2259316
Zinc	88.3		0.832	5.00	1	04/06/2024 17:47	WG2259316

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.381	E4	0.0478	15.0	5	04/06/2024 20:11	WG2259315

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	U		0.544	2.00	1	04/06/2024 17:48	WG2259316
Arsenic	16.9		0.518	2.00	1	04/06/2024 17:48	WG2259316
Barium	180		0.0852	0.500	1	04/06/2024 17:48	WG2259316
Cadmium	0.240	E4	0.0471	0.500	1	04/06/2024 17:48	WG2259316
Copper	39.5		0.400	2.00	1	04/06/2024 17:48	WG2259316
Iron	15600		2.24	10.0	1	04/06/2024 17:48	WG2259316
Lead	8.34		0.208	0.500	1	04/06/2024 17:48	WG2259316
Manganese	365		0.133	1.00	1	04/06/2024 17:48	WG2259316
Nickel	30.7		0.132	2.00	1	04/06/2024 17:48	WG2259316
Silver	0.456	E4	0.127	1.00	1	04/06/2024 17:48	WG2259316
Thallium	U		0.394	2.00	1	04/06/2024 17:48	WG2259316
Zinc	138		0.832	5.00	1	04/06/2024 17:48	WG2259316

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.256	E4	0.0478	15.0	5	04/06/2024 20:15	WG2259315

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Hexavalent Chromium	U		0.255	1.00	1	04/03/2024 11:38	WG2258882

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	0.960	E4	0.544	2.00	1	04/06/2024 17:54	WG2259316
Arsenic	20.1		0.518	2.00	1	04/06/2024 17:54	WG2259316
Barium	200		0.0852	0.500	1	04/06/2024 17:54	WG2259316
Cadmium	1.75		0.0471	0.500	1	04/06/2024 17:54	WG2259316
Copper	171		0.400	2.00	1	04/06/2024 17:54	WG2259316
Iron	24700		2.24	10.0	1	04/06/2024 17:54	WG2259316
Lead	26.3		0.208	0.500	1	04/06/2024 17:54	WG2259316
Manganese	482		0.133	1.00	1	04/06/2024 17:54	WG2259316
Nickel	49.7		0.132	2.00	1	04/06/2024 17:54	WG2259316
Silver	0.772	E4	0.127	1.00	1	04/06/2024 17:54	WG2259316
Thallium	U		0.394	2.00	1	04/06/2024 17:54	WG2259316
Zinc	115		0.832	5.00	1	04/06/2024 17:54	WG2259316

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.399	E4	0.0478	15.0	5	04/06/2024 20:25	WG2259315

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Hexavalent Chromium	U		0.255	1.00	1	04/03/2024 11:45	WG2258882

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	U		0.544	2.00	1	04/06/2024 17:56	WG2259316
Arsenic	10.7		0.518	2.00	1	04/06/2024 17:56	WG2259316
Barium	153		0.0852	0.500	1	04/06/2024 17:56	WG2259316
Cadmium	0.464	E4	0.0471	0.500	1	04/06/2024 17:56	WG2259316
Copper	138		0.400	2.00	1	04/06/2024 17:56	WG2259316
Iron	15900		2.24	10.0	1	04/06/2024 17:56	WG2259316
Lead	9.83		0.208	0.500	1	04/06/2024 17:56	WG2259316
Manganese	245		0.133	1.00	1	04/06/2024 17:56	WG2259316
Nickel	42.8		0.132	2.00	1	04/06/2024 17:56	WG2259316
Silver	1.26		0.127	1.00	1	04/06/2024 17:56	WG2259316
Thallium	U		0.394	2.00	1	04/06/2024 17:56	WG2259316
Zinc	366		0.832	5.00	1	04/06/2024 17:56	WG2259316

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.372	E4	0.0478	15.0	5	04/06/2024 20:28	WG2259315

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	0.617	E4	0.544	2.00	1	04/06/2024 17:58	WG2259316
Arsenic	18.3		0.518	2.00	1	04/06/2024 17:58	WG2259316
Barium	196		0.0852	0.500	1	04/06/2024 17:58	WG2259316
Cadmium	1.92		0.0471	0.500	1	04/06/2024 17:58	WG2259316
Copper	112		0.400	2.00	1	04/06/2024 17:58	WG2259316
Iron	25000		2.24	10.0	1	04/06/2024 17:58	WG2259316
Lead	17.8		0.208	0.500	1	04/06/2024 17:58	WG2259316
Manganese	440		0.133	1.00	1	04/06/2024 17:58	WG2259316
Nickel	47.0		0.132	2.00	1	04/06/2024 17:58	WG2259316
Silver	0.975	E4	0.127	1.00	1	04/06/2024 17:58	WG2259316
Thallium	U		0.394	2.00	1	04/06/2024 17:58	WG2259316
Zinc	97.2		0.832	5.00	1	04/06/2024 17:58	WG2259316

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.397	E4	0.0478	15.0	5	04/06/2024 20:31	WG2259315

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	1.36	E4	0.544	2.00	1	04/04/2024 22:31	WG2259320
Arsenic	17.3		0.518	2.00	1	04/04/2024 22:31	WG2259320
Barium	188		0.0852	0.500	1	04/04/2024 22:31	WG2259320
Cadmium	0.662		0.0471	0.500	1	04/04/2024 22:31	WG2259320
Copper	263		0.400	2.00	1	04/04/2024 22:31	WG2259320
Iron	18100		2.24	10.0	1	04/04/2024 22:31	WG2259320
Lead	16.2		0.208	0.500	1	04/04/2024 22:31	WG2259320
Manganese	1080		0.133	1.00	1	04/04/2024 22:31	WG2259320
Nickel	28.9		0.132	2.00	1	04/04/2024 22:31	WG2259320
Silver	0.897	E4	0.127	1.00	1	04/04/2024 22:31	WG2259320
Thallium	U		0.394	2.00	1	04/04/2024 22:31	WG2259320
Zinc	706		0.832	5.00	1	04/04/2024 22:31	WG2259320

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.509	E4	0.0478	15.0	5	04/09/2024 17:24	WG2259322

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	04/03/2024 11:51	WG2258882

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	0.742	E4	0.544	2.00	1	04/04/2024 22:32	WG2259320
Arsenic	17.1		0.518	2.00	1	04/04/2024 22:32	WG2259320
Barium	147		0.0852	0.500	1	04/04/2024 22:32	WG2259320
Cadmium	4.21		0.0471	0.500	1	04/04/2024 22:32	WG2259320
Copper	218		0.400	2.00	1	04/04/2024 22:32	WG2259320
Iron	24100		2.24	10.0	1	04/04/2024 22:32	WG2259320
Lead	40.7		0.208	0.500	1	04/04/2024 22:32	WG2259320
Manganese	404		0.133	1.00	1	04/04/2024 22:32	WG2259320
Nickel	38.5		0.132	2.00	1	04/04/2024 22:32	WG2259320
Silver	0.814	E4	0.127	1.00	1	04/04/2024 22:32	WG2259320
Thallium	U		0.394	2.00	1	04/04/2024 22:32	WG2259320
Zinc	396		0.832	5.00	1	04/04/2024 22:32	WG2259320

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.374	E4	0.0478	15.0	5	04/09/2024 17:27	WG2259322

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	0.639	E4	0.544	2.00	1	04/04/2024 22:34	WG2259320
Arsenic	12.2		0.518	2.00	1	04/04/2024 22:34	WG2259320
Barium	90.3		0.0852	0.500	1	04/04/2024 22:34	WG2259320
Cadmium	0.449	E4	0.0471	0.500	1	04/04/2024 22:34	WG2259320
Copper	90.9		0.400	2.00	1	04/04/2024 22:34	WG2259320
Iron	16600		2.24	10.0	1	04/04/2024 22:34	WG2259320
Lead	13.7		0.208	0.500	1	04/04/2024 22:34	WG2259320
Manganese	278		0.133	1.00	1	04/04/2024 22:34	WG2259320
Nickel	13.2		0.132	2.00	1	04/04/2024 22:34	WG2259320
Silver	U		0.127	1.00	1	04/04/2024 22:34	WG2259320
Thallium	U		0.394	2.00	1	04/04/2024 22:34	WG2259320
Zinc	288		0.832	5.00	1	04/04/2024 22:34	WG2259320

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.873	E4	0.0478	15.0	5	04/09/2024 17:31	WG2259322

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	0.275	E4	0.255	1.00	1	04/03/2024 11:57	WG2258882

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	0.771	E4	0.544	2.00	1	04/04/2024 22:39	WG2259320
Arsenic	24.4		0.518	2.00	1	04/04/2024 22:39	WG2259320
Barium	227		0.0852	0.500	1	04/04/2024 22:39	WG2259320
Cadmium	3.27		0.0471	0.500	1	04/04/2024 22:39	WG2259320
Copper	243		0.400	2.00	1	04/04/2024 22:39	WG2259320
Iron	23800		2.24	10.0	1	04/04/2024 22:39	WG2259320
Lead	51.1		0.208	0.500	1	04/04/2024 22:39	WG2259320
Manganese	466		0.133	1.00	1	04/04/2024 22:39	WG2259320
Nickel	42.1		0.132	2.00	1	04/04/2024 22:39	WG2259320
Silver	0.935	E4	0.127	1.00	1	04/04/2024 22:39	WG2259320
Thallium	U		0.394	2.00	1	04/04/2024 22:39	WG2259320
Zinc	173		0.832	5.00	1	04/04/2024 22:39	WG2259320

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.384	E4	0.0478	15.0	5	04/09/2024 17:34	WG2259322

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Hexavalent Chromium	1.37		0.255	1.00	1	04/03/2024 12:03	WG2258882

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	4.09	E4	2.72	10.0	5	04/06/2024 18:00	WG2259316
Arsenic	155		2.59	10.0	5	04/06/2024 18:00	WG2259316
Barium	205		0.426	2.50	5	04/06/2024 18:00	WG2259316
Cadmium	0.321	E4	0.236	2.50	5	04/06/2024 18:00	WG2259316
Copper	165		2.00	10.0	5	04/06/2024 18:00	WG2259316
Iron	79700		11.2	50.0	5	04/06/2024 18:00	WG2259316
Lead	12.4		1.04	2.50	5	04/06/2024 18:00	WG2259316
Manganese	2760		0.665	5.00	5	04/06/2024 18:00	WG2259316
Nickel	157		0.660	10.0	5	04/06/2024 18:00	WG2259316
Silver	U		0.635	5.00	5	04/06/2024 18:00	WG2259316
Thallium	U		1.97	10.0	5	04/06/2024 18:00	WG2259316
Zinc	276		4.16	25.0	5	04/06/2024 18:00	WG2259316

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.338	E4	0.0478	15.0	5	04/06/2024 20:34	WG2259315

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	0.276	E4 M2	0.255	1.00	1	04/04/2024 05:34	WG2259494

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	5.68	E4	2.72	10.0	5	04/06/2024 18:03	WG2259316
Arsenic	169		2.59	10.0	5	04/06/2024 18:03	WG2259316
Barium	175		0.426	2.50	5	04/06/2024 18:03	WG2259316
Cadmium	0.489	E4	0.236	2.50	5	04/06/2024 18:03	WG2259316
Copper	192		2.00	10.0	5	04/06/2024 18:03	WG2259316
Iron	75500		11.2	50.0	5	04/06/2024 18:03	WG2259316
Lead	15.5		1.04	2.50	5	04/06/2024 18:03	WG2259316
Manganese	2650		0.665	5.00	5	04/06/2024 18:03	WG2259316
Nickel	129		0.660	10.0	5	04/06/2024 18:03	WG2259316
Silver	0.741	E4	0.635	5.00	5	04/06/2024 18:03	WG2259316
Thallium	U		1.97	10.0	5	04/06/2024 18:03	WG2259316
Zinc	368		4.16	25.0	5	04/06/2024 18:03	WG2259316

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.378	E4	0.0478	15.0	5	04/06/2024 20:38	WG2259315

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	U		0.544	2.00	1	04/06/2024 18:06	WG2259316
Arsenic	28.0		0.518	2.00	1	04/06/2024 18:06	WG2259316
Barium	177		0.0852	0.500	1	04/06/2024 18:06	WG2259316
Cadmium	5.78		0.0471	0.500	1	04/06/2024 18:06	WG2259316
Copper	276		0.400	2.00	1	04/06/2024 18:06	WG2259316
Iron	27800		2.24	10.0	1	04/06/2024 18:06	WG2259316
Lead	30.8		0.208	0.500	1	04/06/2024 18:06	WG2259316
Manganese	508		0.133	1.00	1	04/06/2024 18:06	WG2259316
Nickel	41.4		0.132	2.00	1	04/06/2024 18:06	WG2259316
Silver	0.568	E4	0.127	1.00	1	04/06/2024 18:06	WG2259316
Thallium	U		0.394	2.00	1	04/06/2024 18:06	WG2259316
Zinc	509		0.832	5.00	1	04/06/2024 18:06	WG2259316

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.446	E4	0.0478	15.0	5	04/06/2024 20:41	WG2259315

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	0.818	E4 M2	0.544	2.00	1	04/06/2024 17:36	WG2259316
Arsenic	21.5		0.518	2.00	1	04/06/2024 17:36	WG2259316
Barium	146	M2	0.0852	0.500	1	04/06/2024 17:36	WG2259316
Cadmium	0.989		0.0471	0.500	1	04/06/2024 17:36	WG2259316
Copper	396	M2	0.400	2.00	1	04/06/2024 17:36	WG2259316
Iron	23800	M3 R5	2.24	10.0	1	04/06/2024 17:36	WG2259316
Lead	19.9		0.208	0.500	1	04/06/2024 17:36	WG2259316
Manganese	226	M2	0.133	1.00	1	04/06/2024 17:36	WG2259316
Nickel	27.3		0.132	2.00	1	04/06/2024 17:36	WG2259316
Silver	0.627	E4	0.127	1.00	1	04/06/2024 17:36	WG2259316
Thallium	U		0.394	2.00	1	04/06/2024 17:36	WG2259316
Zinc	884	M3	0.832	5.00	1	04/06/2024 17:36	WG2259316

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.661	E4	0.0478	15.0	5	04/06/2024 19:52	WG2259315

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Hexavalent Chromium	U		0.255	1.00	1	04/03/2024 12:09	WG2258882

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	04/03/2024 12:34	WG2258882

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	4.31	E4	2.72	10.0	5	04/06/2024 18:08	WG2259316
Arsenic	89.4		2.59	10.0	5	04/06/2024 18:08	WG2259316
Barium	91.5		0.426	2.50	5	04/06/2024 18:08	WG2259316
Cadmium	4.71		0.236	2.50	5	04/06/2024 18:08	WG2259316
Copper	1190		2.00	10.0	5	04/06/2024 18:08	WG2259316
Iron	62700		11.2	50.0	5	04/06/2024 18:08	WG2259316
Lead	75.0		1.04	2.50	5	04/06/2024 18:08	WG2259316
Manganese	209		0.665	5.00	5	04/06/2024 18:08	WG2259316
Nickel	20.5		0.660	10.0	5	04/06/2024 18:08	WG2259316
Silver	0.653	E4	0.635	5.00	5	04/06/2024 18:08	WG2259316
Thallium	U		1.97	10.0	5	04/06/2024 18:08	WG2259316
Zinc	4800		4.16	25.0	5	04/06/2024 18:08	WG2259316

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.924	E4	0.0478	15.0	5	04/06/2024 20:44	WG2259315

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	04/03/2024 12:40	WG2258882

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	U		2.72	10.0	5	04/06/2024 18:15	WG2259316
Arsenic	44.9		2.59	10.0	5	04/06/2024 18:15	WG2259316
Barium	190		0.426	2.50	5	04/06/2024 18:15	WG2259316
Cadmium	4.51		0.236	2.50	5	04/06/2024 18:15	WG2259316
Copper	738		2.00	10.0	5	04/06/2024 18:15	WG2259316
Iron	63500		11.2	50.0	5	04/06/2024 18:15	WG2259316
Lead	37.4		1.04	2.50	5	04/06/2024 18:15	WG2259316
Manganese	338		0.665	5.00	5	04/06/2024 18:15	WG2259316
Nickel	33.0		0.660	10.0	5	04/06/2024 18:15	WG2259316
Silver	1.07	E4	0.635	5.00	5	04/06/2024 18:15	WG2259316
Thallium	U		1.97	10.0	5	04/06/2024 18:15	WG2259316
Zinc	4350		4.16	25.0	5	04/06/2024 18:15	WG2259316

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.621	E4	0.0478	15.0	5	04/06/2024 20:47	WG2259315

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	1.38		0.255	1.00	1	04/03/2024 12:46	WG2258882

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	U		0.544	2.00	1	04/06/2024 18:19	WG2259316
Arsenic	5.28		0.518	2.00	1	04/06/2024 18:19	WG2259316
Barium	663		0.0852	0.500	1	04/06/2024 18:19	WG2259316
Cadmium	0.0959	E4	0.0471	0.500	1	04/06/2024 18:19	WG2259316
Copper	48.6		0.400	2.00	1	04/06/2024 18:19	WG2259316
Iron	22400		2.24	10.0	1	04/06/2024 18:19	WG2259316
Lead	4.12		0.208	0.500	1	04/06/2024 18:19	WG2259316
Manganese	422		0.133	1.00	1	04/06/2024 18:19	WG2259316
Nickel	69.8		0.132	2.00	1	04/06/2024 18:19	WG2259316
Silver	0.706	E4	0.127	1.00	1	04/06/2024 18:19	WG2259316
Thallium	U		0.394	2.00	1	04/06/2024 18:19	WG2259316
Zinc	39.8		0.832	5.00	1	04/06/2024 18:19	WG2259316

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.421	E4	0.0478	15.0	5	04/06/2024 20:51	WG2259315

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	0.472	E4	0.255	1.00	1	04/03/2024 12:53	WG2258882

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	0.825	E4	0.544	2.00	1	04/06/2024 18:20	WG2259316
Arsenic	14.8		0.518	2.00	1	04/06/2024 18:20	WG2259316
Barium	176		0.0852	0.500	1	04/06/2024 18:20	WG2259316
Cadmium	1.33		0.0471	0.500	1	04/06/2024 18:20	WG2259316
Copper	118		0.400	2.00	1	04/06/2024 18:20	WG2259316
Iron	24500		2.24	10.0	1	04/06/2024 18:20	WG2259316
Lead	19.3		0.208	0.500	1	04/06/2024 18:20	WG2259316
Manganese	460		0.133	1.00	1	04/06/2024 18:20	WG2259316
Nickel	41.2		0.132	2.00	1	04/06/2024 18:20	WG2259316
Silver	0.428	E4	0.127	1.00	1	04/06/2024 18:20	WG2259316
Thallium	U		0.394	2.00	1	04/06/2024 18:20	WG2259316
Zinc	130		0.832	5.00	1	04/06/2024 18:20	WG2259316

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.436	E4	0.0478	15.0	5	04/06/2024 20:54	WG2259315

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	0.378	E4	0.255	1.00	1	04/03/2024 12:59	WG2258882

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	U		0.544	2.00	1	04/06/2024 18:22	WG2259316
Arsenic	13.2		0.518	2.00	1	04/06/2024 18:22	WG2259316
Barium	184		0.0852	0.500	1	04/06/2024 18:22	WG2259316
Cadmium	0.413	E4	0.0471	0.500	1	04/06/2024 18:22	WG2259316
Copper	54.5		0.400	2.00	1	04/06/2024 18:22	WG2259316
Iron	28400		2.24	10.0	1	04/06/2024 18:22	WG2259316
Lead	11.8		0.208	0.500	1	04/06/2024 18:22	WG2259316
Manganese	481		0.133	1.00	1	04/06/2024 18:22	WG2259316
Nickel	56.1		0.132	2.00	1	04/06/2024 18:22	WG2259316
Silver	0.517	E4	0.127	1.00	1	04/06/2024 18:22	WG2259316
Thallium	U		0.394	2.00	1	04/06/2024 18:22	WG2259316
Zinc	77.7		0.832	5.00	1	04/06/2024 18:22	WG2259316

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.377	E4	0.0478	15.0	5	04/06/2024 21:17	WG2259315

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	04/03/2024 13:11	WG2258882

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	U		0.544	2.00	1	04/06/2024 18:24	WG2259316
Arsenic	14.2		0.518	2.00	1	04/06/2024 18:24	WG2259316
Barium	161		0.0852	0.500	1	04/06/2024 18:24	WG2259316
Cadmium	3.41		0.0471	0.500	1	04/06/2024 18:24	WG2259316
Copper	93.9		0.400	2.00	1	04/06/2024 18:24	WG2259316
Iron	27900		2.24	10.0	1	04/06/2024 18:24	WG2259316
Lead	23.0		0.208	0.500	1	04/06/2024 18:24	WG2259316
Manganese	439		0.133	1.00	1	04/06/2024 18:24	WG2259316
Nickel	52.5		0.132	2.00	1	04/06/2024 18:24	WG2259316
Silver	0.694	E4	0.127	1.00	1	04/06/2024 18:24	WG2259316
Thallium	U		0.394	2.00	1	04/06/2024 18:24	WG2259316
Zinc	222		0.832	5.00	1	04/06/2024 18:24	WG2259316

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.316	E4	0.0478	15.0	5	04/06/2024 21:20	WG2259315

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	U		0.544	2.00	1	04/06/2024 18:26	WG2259316
Arsenic	9.26		0.518	2.00	1	04/06/2024 18:26	WG2259316
Barium	87.0		0.0852	0.500	1	04/06/2024 18:26	WG2259316
Cadmium	0.187	E4	0.0471	0.500	1	04/06/2024 18:26	WG2259316
Copper	21.5		0.400	2.00	1	04/06/2024 18:26	WG2259316
Iron	12600		2.24	10.0	1	04/06/2024 18:26	WG2259316
Lead	7.19		0.208	0.500	1	04/06/2024 18:26	WG2259316
Manganese	261		0.133	1.00	1	04/06/2024 18:26	WG2259316
Nickel	11.2		0.132	2.00	1	04/06/2024 18:26	WG2259316
Silver	0.173	E4	0.127	1.00	1	04/06/2024 18:26	WG2259316
Thallium	U		0.394	2.00	1	04/06/2024 18:26	WG2259316
Zinc	822		0.832	5.00	1	04/06/2024 18:26	WG2259316

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.797	E4	0.0478	15.0	5	04/06/2024 21:24	WG2259315

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	0.592	E4	0.255	1.00	1	04/03/2024 13:17	WG2258882

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	1.42	E4	0.544	2.00	1	04/06/2024 18:27	WG2259316
Arsenic	27.7		0.518	2.00	1	04/06/2024 18:27	WG2259316
Barium	154		0.0852	0.500	1	04/06/2024 18:27	WG2259316
Cadmium	5.10		0.0471	0.500	1	04/06/2024 18:27	WG2259316
Copper	393		0.400	2.00	1	04/06/2024 18:27	WG2259316
Iron	24800		2.24	10.0	1	04/06/2024 18:27	WG2259316
Lead	62.3		0.208	0.500	1	04/06/2024 18:27	WG2259316
Manganese	511		0.133	1.00	1	04/06/2024 18:27	WG2259316
Nickel	35.0		0.132	2.00	1	04/06/2024 18:27	WG2259316
Silver	0.539	E4	0.127	1.00	1	04/06/2024 18:27	WG2259316
Thallium	U		0.394	2.00	1	04/06/2024 18:27	WG2259316
Zinc	230		0.832	5.00	1	04/06/2024 18:27	WG2259316

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.320	E4	0.0478	15.0	5	04/06/2024 21:27	WG2259315

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	0.279	E4	0.255	1.00	1	04/03/2024 13:24	WG2258882

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	1.08	E4	0.544	2.00	1	04/04/2024 22:41	WG2259320
Arsenic	15.3		0.518	2.00	1	04/04/2024 22:41	WG2259320
Barium	153		0.0852	0.500	1	04/04/2024 22:41	WG2259320
Cadmium	2.49		0.0471	0.500	1	04/04/2024 22:41	WG2259320
Copper	181		0.400	2.00	1	04/04/2024 22:41	WG2259320
Iron	25600		2.24	10.0	1	04/04/2024 22:41	WG2259320
Lead	38.8		0.208	0.500	1	04/04/2024 22:41	WG2259320
Manganese	470		0.133	1.00	1	04/04/2024 22:41	WG2259320
Nickel	42.0		0.132	2.00	1	04/04/2024 22:41	WG2259320
Silver	0.692	E4	0.127	1.00	1	04/04/2024 22:41	WG2259320
Thallium	U		0.394	2.00	1	04/04/2024 22:41	WG2259320
Zinc	237		0.832	5.00	1	04/04/2024 22:41	WG2259320

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.461	E4	0.0478	15.0	5	04/09/2024 17:37	WG2259322

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	04/03/2024 13:42	WG2258882

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	1.53	E4	0.544	2.00	1	04/04/2024 22:43	WG2259320
Arsenic	24.6		0.518	2.00	1	04/04/2024 22:43	WG2259320
Barium	148		0.0852	0.500	1	04/04/2024 22:43	WG2259320
Cadmium	3.95		0.0471	0.500	1	04/04/2024 22:43	WG2259320
Copper	321		0.400	2.00	1	04/04/2024 22:43	WG2259320
Iron	26200		2.24	10.0	1	04/04/2024 22:43	WG2259320
Lead	42.6		0.208	0.500	1	04/04/2024 22:43	WG2259320
Manganese	486		0.133	1.00	1	04/04/2024 22:43	WG2259320
Nickel	48.9		0.132	2.00	1	04/04/2024 22:43	WG2259320
Silver	0.611	E4	0.127	1.00	1	04/04/2024 22:43	WG2259320
Thallium	U		0.394	2.00	1	04/04/2024 22:43	WG2259320
Zinc	229		0.832	5.00	1	04/04/2024 22:43	WG2259320

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.401	E4	0.0478	15.0	5	04/09/2024 17:41	WG2259322

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	8.01	E4	2.72	10.0	5	04/08/2024 12:52	WG2259320
Arsenic	345		2.59	10.0	5	04/08/2024 12:52	WG2259320
Barium	253		0.426	2.50	5	04/08/2024 12:52	WG2259320
Cadmium	0.714	E4	0.236	2.50	5	04/08/2024 12:52	WG2259320
Copper	114		2.00	10.0	5	04/08/2024 12:52	WG2259320
Iron	59500		11.2	50.0	5	04/08/2024 12:52	WG2259320
Lead	14.6		1.04	2.50	5	04/08/2024 12:52	WG2259320
Manganese	4840		0.665	5.00	5	04/08/2024 12:52	WG2259320
Nickel	75.0		0.660	10.0	5	04/08/2024 12:52	WG2259320
Silver	U		0.635	5.00	5	04/08/2024 12:52	WG2259320
Thallium	U		1.97	10.0	5	04/08/2024 12:52	WG2259320
Zinc	101		4.16	25.0	5	04/08/2024 12:52	WG2259320

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.553	E4	0.0478	15.0	5	04/09/2024 17:44	WG2259322

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	04/03/2024 14:09	WG2258882

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	0.664	E4	0.544	2.00	1	04/04/2024 22:46	WG2259320
Arsenic	8.07		0.518	2.00	1	04/04/2024 22:46	WG2259320
Barium	67.7		0.0852	0.500	1	04/04/2024 22:46	WG2259320
Cadmium	0.936		0.0471	0.500	1	04/04/2024 22:46	WG2259320
Copper	91.5		0.400	2.00	1	04/04/2024 22:46	WG2259320
Iron	11100		2.24	10.0	1	04/04/2024 22:46	WG2259320
Lead	22.6		0.208	0.500	1	04/04/2024 22:46	WG2259320
Manganese	177		0.133	1.00	1	04/04/2024 22:46	WG2259320
Nickel	18.6		0.132	2.00	1	04/04/2024 22:46	WG2259320
Silver	0.370	E4	0.127	1.00	1	04/04/2024 22:46	WG2259320
Thallium	U		0.394	2.00	1	04/04/2024 22:46	WG2259320
Zinc	598		0.832	5.00	1	04/04/2024 22:46	WG2259320

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.353	E4	0.0478	15.0	5	04/09/2024 17:47	WG2259322

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	1.69	E4	0.544	2.00	1	04/04/2024 22:48	WG2259320
Arsenic	18.1		0.518	2.00	1	04/04/2024 22:48	WG2259320
Barium	136		0.0852	0.500	1	04/04/2024 22:48	WG2259320
Cadmium	0.334	E4	0.0471	0.500	1	04/04/2024 22:48	WG2259320
Copper	211		0.400	2.00	1	04/04/2024 22:48	WG2259320
Iron	28000		2.24	10.0	1	04/04/2024 22:48	WG2259320
Lead	13.0		0.208	0.500	1	04/04/2024 22:48	WG2259320
Manganese	368		0.133	1.00	1	04/04/2024 22:48	WG2259320
Nickel	50.0		0.132	2.00	1	04/04/2024 22:48	WG2259320
Silver	0.515	E4	0.127	1.00	1	04/04/2024 22:48	WG2259320
Thallium	U		0.394	2.00	1	04/04/2024 22:48	WG2259320
Zinc	448		0.832	5.00	1	04/04/2024 22:48	WG2259320

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.420	E4	0.0478	15.0	5	04/09/2024 17:51	WG2259322

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	0.879	E4	0.255	1.00	1	04/03/2024 23:08	WG2259148

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	0.626	E4	0.544	2.00	1	04/04/2024 22:49	WG2259320
Arsenic	6.09		0.518	2.00	1	04/04/2024 22:49	WG2259320
Barium	140		0.0852	0.500	1	04/04/2024 22:49	WG2259320
Cadmium	0.428	E4	0.0471	0.500	1	04/04/2024 22:49	WG2259320
Copper	35.5		0.400	2.00	1	04/04/2024 22:49	WG2259320
Iron	18100		2.24	10.0	1	04/04/2024 22:49	WG2259320
Lead	19.1		0.208	0.500	1	04/04/2024 22:49	WG2259320
Manganese	301		0.133	1.00	1	04/04/2024 22:49	WG2259320
Nickel	38.1		0.132	2.00	1	04/04/2024 22:49	WG2259320
Silver	0.690	E4	0.127	1.00	1	04/04/2024 22:49	WG2259320
Thallium	U		0.394	2.00	1	04/04/2024 22:49	WG2259320
Zinc	82.3		0.832	5.00	1	04/04/2024 22:49	WG2259320

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.603	E4	0.0478	15.0	5	04/09/2024 17:54	WG2259322

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	0.911	E4	0.544	2.00	1	04/04/2024 22:51	WG2259320
Arsenic	7.88		0.518	2.00	1	04/04/2024 22:51	WG2259320
Barium	248		0.0852	0.500	1	04/04/2024 22:51	WG2259320
Cadmium	0.686		0.0471	0.500	1	04/04/2024 22:51	WG2259320
Copper	56.6		0.400	2.00	1	04/04/2024 22:51	WG2259320
Iron	18800		2.24	10.0	1	04/04/2024 22:51	WG2259320
Lead	29.4		0.208	0.500	1	04/04/2024 22:51	WG2259320
Manganese	376		0.133	1.00	1	04/04/2024 22:51	WG2259320
Nickel	55.7		0.132	2.00	1	04/04/2024 22:51	WG2259320
Silver	1.00		0.127	1.00	1	04/04/2024 22:51	WG2259320
Thallium	U		0.394	2.00	1	04/04/2024 22:51	WG2259320
Zinc	205		0.832	5.00	1	04/04/2024 22:51	WG2259320

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.390	E4	0.0478	15.0	5	04/09/2024 18:07	WG2259322

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	0.944	E4	0.255	1.00	1	04/03/2024 23:14	WG2259148

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	0.586	E4	0.544	2.00	1	04/04/2024 22:53	WG2259320
Arsenic	13.2		0.518	2.00	1	04/04/2024 22:53	WG2259320
Barium	207		0.0852	0.500	1	04/04/2024 22:53	WG2259320
Cadmium	2.27		0.0471	0.500	1	04/04/2024 22:53	WG2259320
Copper	113		0.400	2.00	1	04/04/2024 22:53	WG2259320
Iron	22300		2.24	10.0	1	04/04/2024 22:53	WG2259320
Lead	112		0.208	0.500	1	04/04/2024 22:53	WG2259320
Manganese	451		0.133	1.00	1	04/04/2024 22:53	WG2259320
Nickel	37.4		0.132	2.00	1	04/04/2024 22:53	WG2259320
Silver	1.18		0.127	1.00	1	04/04/2024 22:53	WG2259320
Thallium	U		0.394	2.00	1	04/04/2024 22:53	WG2259320
Zinc	467		0.832	5.00	1	04/04/2024 22:53	WG2259320

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.365	E4	0.0478	15.0	5	04/09/2024 18:10	WG2259322

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	0.931	E4	0.544	2.00	1	04/04/2024 22:55	WG2259320
Arsenic	7.31		0.518	2.00	1	04/04/2024 22:55	WG2259320
Barium	165		0.0852	0.500	1	04/04/2024 22:55	WG2259320
Cadmium	0.263	E4	0.0471	0.500	1	04/04/2024 22:55	WG2259320
Copper	37.0		0.400	2.00	1	04/04/2024 22:55	WG2259320
Iron	22300		2.24	10.0	1	04/04/2024 22:55	WG2259320
Lead	12.3		0.208	0.500	1	04/04/2024 22:55	WG2259320
Manganese	390		0.133	1.00	1	04/04/2024 22:55	WG2259320
Nickel	41.0		0.132	2.00	1	04/04/2024 22:55	WG2259320
Silver	0.662	E4	0.127	1.00	1	04/04/2024 22:55	WG2259320
Thallium	U		0.394	2.00	1	04/04/2024 22:55	WG2259320
Zinc	64.0		0.832	5.00	1	04/04/2024 22:55	WG2259320

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.349	E4	0.0478	15.0	5	04/09/2024 18:14	WG2259322

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	1.35	E4	0.544	2.00	1	04/04/2024 23:00	WG2259320
Arsenic	8.15		0.518	2.00	1	04/04/2024 23:00	WG2259320
Barium	208		0.0852	0.500	1	04/04/2024 23:00	WG2259320
Cadmium	0.568		0.0471	0.500	1	04/04/2024 23:00	WG2259320
Copper	75.7		0.400	2.00	1	04/04/2024 23:00	WG2259320
Iron	19900		2.24	10.0	1	04/04/2024 23:00	WG2259320
Lead	15.8		0.208	0.500	1	04/04/2024 23:00	WG2259320
Manganese	352		0.133	1.00	1	04/04/2024 23:00	WG2259320
Nickel	51.0		0.132	2.00	1	04/04/2024 23:00	WG2259320
Silver	0.851	E4	0.127	1.00	1	04/04/2024 23:00	WG2259320
Thallium	U		0.394	2.00	1	04/04/2024 23:00	WG2259320
Zinc	203		0.832	5.00	1	04/04/2024 23:00	WG2259320

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.386	E4	0.0478	15.0	5	04/09/2024 18:17	WG2259322

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	0.541	E4	0.255	1.00	1	04/03/2024 23:20	WG2259148

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	U		0.544	2.00	1	04/04/2024 23:02	WG2259320
Arsenic	6.70		0.518	2.00	1	04/04/2024 23:02	WG2259320
Barium	173		0.0852	0.500	1	04/04/2024 23:02	WG2259320
Cadmium	0.235	E4	0.0471	0.500	1	04/04/2024 23:02	WG2259320
Copper	78.0		0.400	2.00	1	04/04/2024 23:02	WG2259320
Iron	16200		2.24	10.0	1	04/04/2024 23:02	WG2259320
Lead	8.51		0.208	0.500	1	04/04/2024 23:02	WG2259320
Manganese	304		0.133	1.00	1	04/04/2024 23:02	WG2259320
Nickel	54.0		0.132	2.00	1	04/04/2024 23:02	WG2259320
Silver	0.689	E4	0.127	1.00	1	04/04/2024 23:02	WG2259320
Thallium	U		0.394	2.00	1	04/04/2024 23:02	WG2259320
Zinc	230		0.832	5.00	1	04/04/2024 23:02	WG2259320

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.341	E4	0.0478	15.0	5	04/09/2024 18:20	WG2259322

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	0.460	E4	0.255	1.00	1	04/03/2024 23:26	WG2259148

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	1.01	E4 M2	0.544	2.00	1	04/04/2024 22:22	WG2259320
Arsenic	10.7		0.518	2.00	1	04/04/2024 22:22	WG2259320
Barium	192	M2	0.0852	0.500	1	04/04/2024 22:22	WG2259320
Cadmium	0.645		0.0471	0.500	1	04/04/2024 22:22	WG2259320
Copper	74.1		0.400	2.00	1	04/04/2024 22:22	WG2259320
Iron	20200	M3	2.24	10.0	1	04/04/2024 22:22	WG2259320
Lead	12.5		0.208	0.500	1	04/04/2024 22:22	WG2259320
Manganese	345		0.133	1.00	1	04/04/2024 22:22	WG2259320
Nickel	49.2		0.132	2.00	1	04/04/2024 22:22	WG2259320
Silver	1.02		0.127	1.00	1	04/04/2024 22:22	WG2259320
Thallium	U		0.394	2.00	1	04/04/2024 22:22	WG2259320
Zinc	192		0.832	5.00	1	04/04/2024 22:22	WG2259320

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.400	E4	0.0478	15.0	5	04/09/2024 16:34	WG2259322

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Hexavalent Chromium	U		0.255	1.00	1	04/03/2024 23:32	WG2259148

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	U		0.544	2.00	1	04/04/2024 23:03	WG2259320
Arsenic	14.8		0.518	2.00	1	04/04/2024 23:03	WG2259320
Barium	146		0.0852	0.500	1	04/04/2024 23:03	WG2259320
Cadmium	0.768		0.0471	0.500	1	04/04/2024 23:03	WG2259320
Copper	117		0.400	2.00	1	04/04/2024 23:03	WG2259320
Iron	17900		2.24	10.0	1	04/04/2024 23:03	WG2259320
Lead	35.2		0.208	0.500	1	04/04/2024 23:03	WG2259320
Manganese	302		0.133	1.00	1	04/04/2024 23:03	WG2259320
Nickel	28.4		0.132	2.00	1	04/04/2024 23:03	WG2259320
Silver	0.673	E4	0.127	1.00	1	04/04/2024 23:03	WG2259320
Thallium	U		0.394	2.00	1	04/04/2024 23:03	WG2259320
Zinc	318		0.832	5.00	1	04/04/2024 23:03	WG2259320

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.431	E4	0.0478	15.0	5	04/09/2024 18:24	WG2259322

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	0.978	E4	0.255	1.00	1	04/03/2024 23:45	WG2259148

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	0.749	E4	0.544	2.00	1	04/04/2024 23:05	WG2259320
Arsenic	6.78		0.518	2.00	1	04/04/2024 23:05	WG2259320
Barium	144		0.0852	0.500	1	04/04/2024 23:05	WG2259320
Cadmium	0.370	E4	0.0471	0.500	1	04/04/2024 23:05	WG2259320
Copper	39.9		0.400	2.00	1	04/04/2024 23:05	WG2259320
Iron	18700		2.24	10.0	1	04/04/2024 23:05	WG2259320
Lead	10.9		0.208	0.500	1	04/04/2024 23:05	WG2259320
Manganese	324		0.133	1.00	1	04/04/2024 23:05	WG2259320
Nickel	41.5		0.132	2.00	1	04/04/2024 23:05	WG2259320
Silver	0.821	E4	0.127	1.00	1	04/04/2024 23:05	WG2259320
Thallium	U		0.394	2.00	1	04/04/2024 23:05	WG2259320
Zinc	64.2		0.832	5.00	1	04/04/2024 23:05	WG2259320

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.329	E4	0.0478	15.0	5	04/09/2024 18:27	WG2259322

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	0.854	E4	0.255	1.00	1	04/03/2024 23:51	WG2259148

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	1.28	E4	0.544	2.00	1	04/04/2024 23:07	WG2259320
Arsenic	11.4		0.518	2.00	1	04/04/2024 23:07	WG2259320
Barium	119		0.0852	0.500	1	04/04/2024 23:07	WG2259320
Cadmium	1.46		0.0471	0.500	1	04/04/2024 23:07	WG2259320
Copper	73.2		0.400	2.00	1	04/04/2024 23:07	WG2259320
Iron	22900		2.24	10.0	1	04/04/2024 23:07	WG2259320
Lead	22.8		0.208	0.500	1	04/04/2024 23:07	WG2259320
Manganese	423		0.133	1.00	1	04/04/2024 23:07	WG2259320
Nickel	40.9		0.132	2.00	1	04/04/2024 23:07	WG2259320
Silver	0.306	E4	0.127	1.00	1	04/04/2024 23:07	WG2259320
Thallium	U		0.394	2.00	1	04/04/2024 23:07	WG2259320
Zinc	91.6		0.832	5.00	1	04/04/2024 23:07	WG2259320

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.336	E4	0.0478	15.0	5	04/09/2024 18:30	WG2259322

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	0.259	E4	0.255	1.00	1	04/04/2024 00:10	WG2259148

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony,Dissolved	U		4.30	10.0	1	04/07/2024 19:20	WG2259669
Arsenic,Dissolved	U		4.40	10.0	1	04/07/2024 19:20	WG2259669
Barium,Dissolved	312		0.736	5.00	1	04/07/2024 19:20	WG2259669
Cadmium,Dissolved	0.503	E4	0.479	2.00	1	04/07/2024 19:20	WG2259669
Copper,Dissolved	U		3.68	10.0	1	04/07/2024 19:20	WG2259669
Iron,Dissolved	U		18.0	100	1	04/07/2024 19:20	WG2259669
Lead,Dissolved	U		2.99	6.00	1	04/07/2024 19:20	WG2259669
Manganese,Dissolved	U		0.934	10.0	1	04/07/2024 19:20	WG2259669
Nickel,Dissolved	U		1.61	10.0	1	04/07/2024 19:20	WG2259669
Silver,Dissolved	U		1.54	5.00	1	04/07/2024 19:20	WG2259669
Zinc,Dissolved	52.3		6.52	50.0	1	04/07/2024 19:20	WG2259669

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony,Dissolved	U		4.30	10.0	1	04/07/2024 19:21	WG2259669
Arsenic,Dissolved	U		4.40	10.0	1	04/07/2024 19:21	WG2259669
Barium,Dissolved	376		0.736	5.00	1	04/07/2024 19:21	WG2259669
Cadmium,Dissolved	0.532	E4	0.479	2.00	1	04/07/2024 19:21	WG2259669
Copper,Dissolved	U		3.68	10.0	1	04/07/2024 19:21	WG2259669
Iron,Dissolved	U		18.0	100	1	04/07/2024 19:21	WG2259669
Lead,Dissolved	U		2.99	6.00	1	04/07/2024 19:21	WG2259669
Manganese,Dissolved	19.4		0.934	10.0	1	04/07/2024 19:21	WG2259669
Nickel,Dissolved	U		1.61	10.0	1	04/07/2024 19:21	WG2259669
Silver,Dissolved	U		1.54	5.00	1	04/07/2024 19:21	WG2259669
Zinc,Dissolved	21.1	E4	6.52	50.0	1	04/07/2024 19:21	WG2259669

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony,Dissolved	U		4.30	10.0	1	04/07/2024 19:23	WG2259669
Arsenic,Dissolved	U		4.40	10.0	1	04/07/2024 19:23	WG2259669
Barium,Dissolved	128		0.736	5.00	1	04/07/2024 19:23	WG2259669
Cadmium,Dissolved	0.759	E4	0.479	2.00	1	04/07/2024 19:23	WG2259669
Copper,Dissolved	U		3.68	10.0	1	04/07/2024 19:23	WG2259669
Iron,Dissolved	U		18.0	100	1	04/07/2024 19:23	WG2259669
Lead,Dissolved	U		2.99	6.00	1	04/07/2024 19:23	WG2259669
Manganese,Dissolved	U		0.934	10.0	1	04/07/2024 19:23	WG2259669
Nickel,Dissolved	U		1.61	10.0	1	04/07/2024 19:23	WG2259669
Silver,Dissolved	U		1.54	5.00	1	04/07/2024 19:23	WG2259669
Zinc,Dissolved	10.6	E4	6.52	50.0	1	04/07/2024 19:23	WG2259669

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony,Dissolved	U		4.30	10.0	1	04/07/2024 19:24	WG2259669
Arsenic,Dissolved	U		4.40	10.0	1	04/07/2024 19:24	WG2259669
Barium,Dissolved	15.9		0.736	5.00	1	04/07/2024 19:24	WG2259669
Cadmium,Dissolved	U		0.479	2.00	1	04/07/2024 19:24	WG2259669
Copper,Dissolved	U		3.68	10.0	1	04/07/2024 19:24	WG2259669
Iron,Dissolved	U		18.0	100	1	04/07/2024 19:24	WG2259669
Lead,Dissolved	U		2.99	6.00	1	04/07/2024 19:24	WG2259669
Manganese,Dissolved	U		0.934	10.0	1	04/07/2024 19:24	WG2259669
Nickel,Dissolved	2.20	E4	1.61	10.0	1	04/07/2024 19:24	WG2259669
Silver,Dissolved	U		1.54	5.00	1	04/07/2024 19:24	WG2259669
Zinc,Dissolved	136		6.52	50.0	1	04/07/2024 19:24	WG2259669

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony,Dissolved	U		4.30	10.0	1	04/04/2024 13:33	WG2259671
Arsenic,Dissolved	6.56	E4	4.40	10.0	1	04/04/2024 13:33	WG2259671
Barium,Dissolved	267		0.736	5.00	1	04/04/2024 13:33	WG2259671
Cadmium,Dissolved	0.509	E4	0.479	2.00	1	04/04/2024 13:33	WG2259671
Copper,Dissolved	U		3.68	10.0	1	04/04/2024 13:33	WG2259671
Iron,Dissolved	U		18.0	100	1	04/04/2024 13:33	WG2259671
Lead,Dissolved	U		2.99	6.00	1	04/04/2024 13:33	WG2259671
Manganese,Dissolved	U		0.934	10.0	1	04/04/2024 13:33	WG2259671
Nickel,Dissolved	3.01	E4	1.61	10.0	1	04/04/2024 13:33	WG2259671
Silver,Dissolved	U		1.54	5.00	1	04/04/2024 13:33	WG2259671
Zinc,Dissolved	31.8	E4	6.52	50.0	1	04/04/2024 13:33	WG2259671

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony,Dissolved	U		4.30	10.0	1	04/04/2024 13:27	WG2259671
Arsenic,Dissolved	16.9		4.40	10.0	1	04/04/2024 13:27	WG2259671
Barium,Dissolved	539		0.736	5.00	1	04/04/2024 13:27	WG2259671
Cadmium,Dissolved	0.714	E4	0.479	2.00	1	04/04/2024 13:27	WG2259671
Copper,Dissolved	U		3.68	10.0	1	04/04/2024 13:27	WG2259671
Iron,Dissolved	46.9	E4	18.0	100	1	04/04/2024 13:27	WG2259671
Lead,Dissolved	U		2.99	6.00	1	04/04/2024 13:27	WG2259671
Manganese,Dissolved	15.1		0.934	10.0	1	04/04/2024 13:27	WG2259671
Nickel,Dissolved	U		1.61	10.0	1	04/04/2024 13:27	WG2259671
Silver,Dissolved	U		1.54	5.00	1	04/04/2024 13:27	WG2259671
Zinc,Dissolved	12.1	E4	6.52	50.0	1	04/04/2024 13:27	WG2259671

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony,Dissolved	6.94	E4	4.30	10.0	1	04/04/2024 13:35	WG2259671
Arsenic,Dissolved	7.08	E4	4.40	10.0	1	04/04/2024 13:35	WG2259671
Barium,Dissolved	700		0.736	5.00	1	04/04/2024 13:35	WG2259671
Cadmium,Dissolved	U		0.479	2.00	1	04/04/2024 13:35	WG2259671
Copper,Dissolved	U		3.68	10.0	1	04/04/2024 13:35	WG2259671
Iron,Dissolved	U		18.0	100	1	04/04/2024 13:35	WG2259671
Lead,Dissolved	U		2.99	6.00	1	04/04/2024 13:35	WG2259671
Manganese,Dissolved	16.4		0.934	10.0	1	04/04/2024 13:35	WG2259671
Nickel,Dissolved	69.4		1.61	10.0	1	04/04/2024 13:35	WG2259671
Silver,Dissolved	U		1.54	5.00	1	04/04/2024 13:35	WG2259671
Zinc,Dissolved	22.8	E4	6.52	50.0	1	04/04/2024 13:35	WG2259671

Method Blank (MB)

(MB) R4053336-1 04/03/24 09:57

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Hexavalent Chromium	U		0.255	1.00

L1721303-19 Original Sample (OS) • Duplicate (DUP)

(OS) L1721303-19 04/03/24 12:09 • (DUP) R4053336-7 04/03/24 12:28

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	U	U	1	0.000		20

L1721303-24 Original Sample (OS) • Duplicate (DUP)

(OS) L1721303-24 04/03/24 12:59 • (DUP) R4053336-8 04/03/24 13:05

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	0.378	0.352	1	7.11	E4	20

Laboratory Control Sample (LCS)

(LCS) R4053336-2 04/03/24 10:05

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Hexavalent Chromium	10.0	10.3	103	80.0-120	

L1721039-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1721039-01 04/03/24 10:12 • (MS) R4053336-3 04/03/24 10:18 • (MSD) R4053336-4 04/03/24 10:24

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Hexavalent Chromium	20.0	U	12.0	10.4	60.1	52.1	1	75.0-125	M2	M2	14.3	20

L1721039-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1721039-01 04/03/24 10:12 • (MS) R4053336-5 04/03/24 10:30

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	651	U	685	105	50	75.0-125	

L1721303-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1721303-02 04/03/24 10:55 • (MS) R4053336-10 04/03/24 11:14 • (MSD) R4053336-11 04/03/24 11:20

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Hexavalent Chromium	20.0	1.11	20.4	20.0	96.3	94.4	1	75.0-125			1.87	20

L1721303-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1721303-02 04/03/24 10:55 • (MS) R4053336-14 04/03/24 11:26

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	648	1.11	933	144	50	75.0-125	M1

Method Blank (MB)

(MB) R4053540-1 04/03/24 22:53

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Hexavalent Chromium	U		0.255	1.00

L1721303-44 Original Sample (OS) • Duplicate (DUP)

(OS) L1721303-44 04/03/24 23:32 • (DUP) R4053540-3 04/03/24 23:39

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	U	U	1	0.000		20

L1721315-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1721315-05 04/04/24 01:42 • (DUP) R4053540-12 04/04/24 01:49

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	U	U	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R4053540-2 04/03/24 23:01

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Hexavalent Chromium	10.0	10.1	101	80.0-120	

L1721303-49 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1721303-49 04/04/24 00:10 • (MS) R4053540-4 04/04/24 00:16 • (MSD) R4053540-5 04/04/24 00:22

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Hexavalent Chromium	20.0	0.259	17.7	17.8	87.3	87.7	1	75.0-125			0.459	20

L1721315-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1721315-02 04/04/24 00:47 • (MS) R4053540-8 04/04/24 00:53 • (MSD) R4053540-9 04/04/24 00:59

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Hexavalent Chromium	20.0	U	17.1	17.9	85.4	89.7	1	75.0-125			4.92	20

L1721303-49 Original Sample (OS) • Matrix Spike (MS)

(OS) L1721303-49 04/04/24 00:10 • (MS) R4053540-6 04/04/24 00:28

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	641	0.259	590	92.1	50	75.0-125	

L1721315-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1721315-02 04/04/24 00:47 • (MS) R4053540-10 04/04/24 01:05

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	651	U	647	99.4	50	75.0-125	

Method Blank (MB)

(MB) R4053585-1 04/04/24 05:20

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Hexavalent Chromium	U		0.255	1.00

L1721363-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1721363-10 04/04/24 07:51 • (DUP) R4053585-11 04/04/24 07:57

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	0.399	0.323	1	21.1	E4 R8	20

L1721363-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1721363-13 04/04/24 08:15 • (DUP) R4053585-12 04/04/24 08:22

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	0.356	0.305	1	15.4	E4	20

Laboratory Control Sample (LCS)

(LCS) R4053585-2 04/04/24 05:28

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Hexavalent Chromium	10.0	10.2	102	80.0-120	

L1721303-16 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1721303-16 04/04/24 05:34 • (MS) R4053585-4 04/04/24 05:47 • (MSD) R4053585-5 04/04/24 05:53

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Hexavalent Chromium	20.0	0.276	8.21	8.17	39.7	39.5	1	75.0-125	M2	M2	0.537	20

L1721363-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1721363-01 04/04/24 06:05 • (MS) R4053585-8 04/04/24 06:18 • (MSD) R4053585-9 04/04/24 06:36

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Hexavalent Chromium	20.0	0.453	17.0	17.6	82.8	85.9	1	75.0-125			3.62	20

L1721303-16 Original Sample (OS) • Matrix Spike (MS)

(OS) L1721303-16 04/04/24 05:34 • (MS) R4053585-6 04/04/24 05:59

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	638	0.276	556	87.1	50	75.0-125	

L1721363-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1721363-01 04/04/24 06:05 • (MS) R4053585-10 04/04/24 06:43

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	646	0.453	723	112	50	75.0-125	

Method Blank (MB)

(MB) R4054767-1 04/06/24 17:33

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Antimony	U		0.544	2.00
Arsenic	U		0.518	2.00
Barium	U		0.0852	0.500
Cadmium	U		0.0471	0.500
Copper	U		0.400	2.00
Iron	U		2.24	10.0
Lead	0.240	E4	0.208	0.500
Manganese	U		0.133	1.00
Nickel	U		0.132	2.00
Silver	U		0.127	1.00
Thallium	U		0.394	2.00
Zinc	U		0.832	5.00

Laboratory Control Sample (LCS)

(LCS) R4054767-2 04/06/24 17:35

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony	100	99.8	99.8	80.0-120	
Arsenic	100	97.6	97.6	80.0-120	
Barium	100	105	105	80.0-120	
Cadmium	100	97.5	97.5	80.0-120	
Copper	100	103	103	80.0-120	
Iron	1000	1040	104	80.0-120	
Lead	100	100	100	80.0-120	
Manganese	100	104	104	80.0-120	
Nickel	100	100	100	80.0-120	
Silver	20.0	18.6	92.9	80.0-120	
Thallium	100	103	103	80.0-120	
Zinc	100	104	104	80.0-120	

L1721303-18 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1721303-18 04/06/24 17:36 • (MS) R4054767-5 04/06/24 17:41 • (MSD) R4054767-6 04/06/24 17:43

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	100	21.5	104	108	82.8	86.9	1	75.0-125			3.83	20
Barium	100	146	221	202	75.5	55.9	1	75.0-125		M2	9.28	20
Cadmium	100	0.989	89.0	92.9	88.1	91.9	1	75.0-125			4.21	20

L1721303-18 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1721303-18 04/06/24 17:36 • (MS) R4054767-5 04/06/24 17:41 • (MSD) R4054767-6 04/06/24 17:43

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Copper	100	396	418	387	22.1	0.000	1	75.0-125	M2	M2	7.84	20
Iron	1000	23800	25200	20300	134	0.000	1	75.0-125	M3	M3 R5	21.5	20
Lead	100	19.9	105	110	85.6	89.8	1	75.0-125			3.93	20
Manganese	100	226	328	279	102	52.9	1	75.0-125		M2	16.2	20
Nickel	100	27.3	129	122	101	94.7	1	75.0-125			5.20	20
Silver	20.0	0.627	18.0	18.8	86.8	91.0	1	75.0-125			4.63	20
Thallium	100	U	88.0	91.3	88.0	91.3	1	75.0-125			3.74	20
Zinc	100	884	651	702	0.000	0.000	1	75.0-125	M3	M3	7.47	20

Method Blank (MB)

(MB) R4054140-1 04/04/24 22:19

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Antimony	U		0.544	2.00
Arsenic	U		0.518	2.00
Barium	U		0.0852	0.500
Cadmium	U		0.0471	0.500
Copper	U		0.400	2.00
Iron	U		2.24	10.0
Lead	U		0.208	0.500
Manganese	U		0.133	1.00
Nickel	U		0.132	2.00
Silver	U		0.127	1.00
Thallium	U		0.394	2.00
Zinc	U		0.832	5.00

Laboratory Control Sample (LCS)

(LCS) R4054140-2 04/04/24 22:20

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony	100	92.7	92.7	80.0-120	
Arsenic	100	93.1	93.1	80.0-120	
Barium	100	99.3	99.3	80.0-120	
Cadmium	100	92.9	92.9	80.0-120	
Copper	100	99.4	99.4	80.0-120	
Iron	1000	964	96.4	80.0-120	
Lead	100	92.8	92.8	80.0-120	
Manganese	100	99.6	99.6	80.0-120	
Nickel	100	93.3	93.3	80.0-120	
Silver	20.0	17.7	88.4	80.0-120	
Thallium	100	99.2	99.2	80.0-120	
Zinc	100	99.1	99.1	80.0-120	

L1721303-43 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1721303-43 04/04/24 22:22 • (MS) R4054140-5 04/04/24 22:27 • (MSD) R4054140-6 04/04/24 22:29

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	100	10.7	103	108	91.9	97.4	1	75.0-125			5.25	20
Barium	100	192	246	281	54.4	89.2	1	75.0-125	M2		13.2	20
Copper	100	74.1	166	174	91.7	100	1	75.0-125			4.90	20

L1721303-43 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1721303-43 04/04/24 22:22 • (MS) R4054140-5 04/04/24 22:27 • (MSD) R4054140-6 04/04/24 22:29

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Iron	1000	20200	22100	20800	193	58.6	1	75.0-125	M3	M3	6.26	20
Lead	100	12.5	102	109	89.4	96.6	1	75.0-125			6.79	20
Manganese	100	345	466	461	122	116	1	75.0-125			1.19	20
Nickel	100	49.2	137	149	87.4	99.8	1	75.0-125			8.70	20
Silver	20.0	1.02	18.9	20.3	89.3	96.2	1	75.0-125			7.07	20
Thallium	100	U	89.6	96.9	89.6	96.9	1	75.0-125			7.81	20
Zinc	100	192	280	283	87.7	91.1	1	75.0-125			1.20	20

L1721303-43 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1721303-43 04/08/24 12:42 • (MS) R4055066-3 04/08/24 12:45 • (MSD) R4055066-4 04/08/24 12:49

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony	100	2.13	54.4	60.2	52.3	58.0	1	75.0-125	M2	M2	9.97	20
Cadmium	100	0.862	93.7	100	92.8	99.4	1	75.0-125			6.84	20

Method Blank (MB)

(MB) R4054989-1 04/07/24 18:39

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Antimony,Dissolved	U		4.30	10.0
Arsenic,Dissolved	U		4.40	10.0
Barium,Dissolved	U		0.736	5.00
Cadmium,Dissolved	U		0.479	2.00
Copper,Dissolved	U		3.68	10.0
Iron,Dissolved	U		18.0	100
Lead,Dissolved	U		2.99	6.00
Manganese,Dissolved	U		0.934	10.0
Nickel,Dissolved	U		1.61	10.0
Silver,Dissolved	U		1.54	5.00
Zinc,Dissolved	U		6.52	50.0

Laboratory Control Sample (LCS)

(LCS) R4054989-2 04/07/24 18:40

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony,Dissolved	1000	953	95.3	80.0-120	
Arsenic,Dissolved	1000	936	93.6	80.0-120	
Barium,Dissolved	1000	1000	100	80.0-120	
Cadmium,Dissolved	1000	917	91.7	80.0-120	
Copper,Dissolved	1000	971	97.1	80.0-120	
Iron,Dissolved	10000	10000	100	80.0-120	
Lead,Dissolved	1000	942	94.2	80.0-120	
Manganese,Dissolved	1000	972	97.2	80.0-120	
Nickel,Dissolved	1000	972	97.2	80.0-120	
Silver,Dissolved	200	176	87.8	80.0-120	
Zinc,Dissolved	1000	1020	102	80.0-120	

L1721276-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1721276-01 04/07/24 18:42 • (MS) R4054989-4 04/07/24 18:45 • (MSD) R4054989-5 04/07/24 18:47

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony,Dissolved	1000	U	989	1000	98.9	100	1	75.0-125			1.51	20
Arsenic,Dissolved	1000	U	1010	1010	101	101	1	75.0-125			0.0361	20
Barium,Dissolved	1000	21.9	1030	1030	101	101	1	75.0-125			0.00263	20
Copper,Dissolved	1000	U	991	979	99.1	97.9	1	75.0-125			1.29	20
Iron,Dissolved	10000	30.8	9750	9970	97.2	99.3	1	75.0-125			2.23	20

L1721276-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1721276-01 04/07/24 18:42 • (MS) R4054989-4 04/07/24 18:45 • (MSD) R4054989-5 04/07/24 18:47

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Lead,Dissolved	1000	U	948	955	94.8	95.5	1	75.0-125			0.738	20
Manganese,Dissolved	1000	U	980	982	98.0	98.2	1	75.0-125			0.227	20
Nickel,Dissolved	1000	U	985	991	98.5	99.1	1	75.0-125			0.600	20
Silver,Dissolved	200	6.89	193	193	93.2	93.3	1	75.0-125			0.0691	20
Zinc,Dissolved	1000	U	994	1000	99.4	100	1	75.0-125			0.843	20

Method Blank (MB)

(MB) R4053814-1 04/04/24 13:23

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Antimony,Dissolved	U		4.30	10.0
Arsenic,Dissolved	U		4.40	10.0
Barium,Dissolved	U		0.736	5.00
Cadmium,Dissolved	U		0.479	2.00
Copper,Dissolved	U		3.68	10.0
Iron,Dissolved	U		18.0	100
Lead,Dissolved	U		2.99	6.00
Manganese,Dissolved	U		0.934	10.0
Nickel,Dissolved	U		1.61	10.0
Silver,Dissolved	U		1.54	5.00
Zinc,Dissolved	U		6.52	50.0

Laboratory Control Sample (LCS)

(LCS) R4053814-2 04/04/24 13:25

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony,Dissolved	1000	931	93.1	80.0-120	
Arsenic,Dissolved	1000	920	92.0	80.0-120	
Barium,Dissolved	1000	975	97.5	80.0-120	
Cadmium,Dissolved	1000	953	95.3	80.0-120	
Copper,Dissolved	1000	935	93.5	80.0-120	
Iron,Dissolved	10000	9810	98.1	80.0-120	
Lead,Dissolved	1000	937	93.7	80.0-120	
Manganese,Dissolved	1000	960	96.0	80.0-120	
Nickel,Dissolved	1000	928	92.8	80.0-120	
Silver,Dissolved	200	172	85.9	80.0-120	
Zinc,Dissolved	1000	982	98.2	80.0-120	

L1721303-55 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1721303-55 04/04/24 13:27 • (MS) R4053814-4 04/04/24 13:30 • (MSD) R4053814-5 04/04/24 13:31

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony,Dissolved	1000	U	969	956	96.9	95.6	1	75.0-125			1.34	20
Arsenic,Dissolved	1000	16.9	990	973	97.3	95.6	1	75.0-125			1.74	20
Barium,Dissolved	1000	539	1550	1520	101	98.4	1	75.0-125			1.92	20
Cadmium,Dissolved	1000	0.714	998	979	99.7	97.9	1	75.0-125			1.90	20
Copper,Dissolved	1000	U	977	948	97.7	94.8	1	75.0-125			3.01	20

L1721303-55 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1721303-55 04/04/24 13:27 • (MS) R4053814-4 04/04/24 13:30 • (MSD) R4053814-5 04/04/24 13:31

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Iron,Dissolved	10000	46.9	10100	10400	101	104	1	75.0-125			2.68	20
Lead,Dissolved	1000	U	984	964	98.4	96.4	1	75.0-125			2.04	20
Manganese,Dissolved	1000	15.1	1010	998	100	98.3	1	75.0-125			1.65	20
Nickel,Dissolved	1000	U	975	957	97.5	95.7	1	75.0-125			1.81	20
Silver,Dissolved	200	U	183	179	91.4	89.5	1	75.0-125			2.10	20
Zinc,Dissolved	1000	12.1	1020	1000	101	99.0	1	75.0-125			1.83	20

Method Blank (MB)

(MB) R4054763-1 04/06/24 19:45

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Uranium	U		0.0478	15.0

Laboratory Control Sample (LCS)

(LCS) R4054763-2 04/06/24 19:48

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Uranium	100	102	102	80.0-120	

L1721303-18 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1721303-18 04/06/24 19:52 • (MS) R4054763-5 04/06/24 20:02 • (MSD) R4054763-6 04/06/24 20:05

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Uranium	100	0.661	93.6	94.2	93.0	93.5	5	75.0-125			0.583	20

Method Blank (MB)

(MB) R4055688-1 04/09/24 16:27

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Uranium	U		0.0478	15.0

Laboratory Control Sample (LCS)

(LCS) R4055688-2 04/09/24 16:31

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Uranium	100	97.9	97.9	80.0-120	

L1721303-43 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1721303-43 04/09/24 16:34 • (MS) R4055688-5 04/09/24 16:44 • (MSD) R4055688-6 04/09/24 16:47

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Uranium	100	0.400	95.8	106	95.4	105	5	75.0-125			9.71	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

MDL	Method Detection Limit.
RDL	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
E4	Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL) but above MDL.
M1	Matrix spike recovery was high, the method control sample recovery was acceptable.
M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike recovery was acceptable.
R5	MS/MSD RPD exceeded the laboratory acceptance limit. Recovery met acceptance criteria.
R8	Sample RPD exceeded the method acceptance limit.

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.

L1721303

HYDRO GEO CHEM, INC.
Environmental Science & Technology

Chain of Custody

DATE 04/01/24 PAGE 1 OF 7

PROJ. MGR. Abra Bentley
COMPANY Hydro Geo Chem, Inc
ADDRESS 51 W. Wetmore Rd, Suite 101
Tucson, AZ 85705

SAMPLERS (SIGNATURE) Carley Schwartz (PHONE NO.)

A140

ANALYSIS REQUEST

SAMPLE ID.	DATE	TIME	MATRIX	LAB ID.	BASE/NEU/ACID CMPDS. GC/MS/ 625/8270	VOLATILE CMPDS. GC/MS/ 624/8240	PESTICIDES/PCB 608/8080	POLYNUCLEAR AROMATIC 610/8310	PHENOLS, SUB PHENOLS 604/8040	HALOGENATED VOLATILES 601/8010	AROMATIC VOLATILES 602/8020	TOTAL ORGANIC CARBON 415/9060	TOTAL ORGANIC HALIDES 9020	PETROLEUM HYDROCARBONS 418	metals Cr-no preserve	CR6IC Cr-no pres	PRIORITY POLLUTANT METALS (13)	CAM METALS (18) TTLC/STLC	EP TOX METALS (8)	SDWA -INORGANICS PRIMARY/SECONDARY					N OF CONTAINERS
0325#33	3/25/24	1619	S													X							-01		1
0325#24	3/25/24	1600	S												X	X							-02		2
0325#44	3/25/24	1635													X								-03		1
0326#26	3/26/24	0938													X								-04		1
0326#31	3/26/24	1023														X							-05		1
0326#32	3/26/24	1050													X								-06		1
0326#52	3/26/24	1120														X							-07		1
0326#74	3/26/24	1155													X								-08		1
0326#88	3/26/24	1300													X								-09		1

PROJECT INFORMATION

PROJECT: 6th & Birch
PO NO. 2024007
SHIPPING ID. NO.
VIA:

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	
CHAIN OF CUSTODY SEALS	
REC'D GOOD CONDITION/COLD	
CONFORMS TO RECORD	
LAB NO.	

INVOICE TO:

RELINQUISHED BY 2.
Carley Schwartz 1300
(Signature) (Time)
Carley Schwartz 04/01/24
(Printed Name) (Date)
Hydro Geo Chem
(Company)

RECEIVED BY 2.
(Signature) (Time)

RELINQUISHED BY 3.
(Signature) (Time)
(Printed Name) (Date)
(Company)

RECEIVED BY (LABORATORY) 3.
[signature]
(Signature) 4-2-24 9:20 (Time)

SPECIAL INSTRUCTIONS/COMMENTS:
Immediately pack on ice
various container sizes - no preservatives
metals = Cu, Pb, Zn, Ni, Fe, Ag, Mn, Ba, Cd, Sb, As, U and Tl
CR6IC = hexavalent chromium

7R3 3310 3645

Sample Receipt Checklist

		If Applicable	
COC Seal Present/Intact:	✓Y__N	VOA Zero Headspace:	✓Y__N
COC Signed/Accurate:	✓Y__N	Pres. Correct/Check:	✓Y__N
Bottles arrive intact:	✓Y__N		
Correct bottles used:	✓Y__N		
Sufficient volume sent:	✓Y__N		
RA Screen <0.5 mR/hr:	✓Y__N		

DPA7 16.0/7.1~10.1R

DISTRI

HYDRO GEO CHEM, INC.
Environmental Science & Technology

L172 1303

Chain of Custody

DATE 04/01/24 PAGE 2 OF 7

PROJ. MGR. Abra Bentley
COMPANY Hydro Geo Chem Inc.
ADDRESS 510 W. Wetmore Rd, Suite 101 Tucson AZ 85705

SAMPLERS (SIGNATURE) Carley Schwartz (PHONE NO.)

ANALYSIS REQUEST

SAMPLE ID.	DATE	TIME	MATRIX	LAB ID.	BASE/NEU/ACID CMPDS. GC/MS/ 625/8270	VOLATILE CMPDS. GC/MS/ 624/8240	PESTICIDES/PCB 608/8080	POLYNUCLEAR AROMATIC 610/8310	PHENOLS, SUB PHENOLS 604/8040	HALOGENATED VOLATILES 601/8010	AROMATIC VOLATILES 602/8020	TOTAL ORGANIC CARBON 415/9060	TOTAL ORGANIC HALIDES 9020	PETROLEUM HYDROCARBONS 418	metals ctr-ni pres	CRVIC ctr-no pres	PRIORITY POLLUTANT METALS (13)	CAM METALS (18) TTLC/STLC	EP TOX METALS (8)	SDWA -INORGANICS PRIMARY/SECONDARY					NUMBER OF CONTAINERS
0326#93	3/26/24	1326	S												X								-10		1
0326#109	3/26/24	1410													X	X							-11		2
0326#124	3/26/24	1535													X								-12		1
0326#137	3/26/24	1600													X	X							-13		2
0327#28	3/27/24	0803														X							-14		1
0327#29	3/27/24	0805													X								-15		1
0327#35	3/27/24	0812													X	X							-16		2
0327#58	3/27/24	0928													X								-17		1
0327#81	3/27/24	1010	—												X								-18		1

PROJECT INFORMATION

PROJECT: 6th & Birch
PO NO. 2024007
SHIPPING ID. NO.
VIA:

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	
CHAIN OF CUSTODY SEALS	
REC'D GOOD CONDITION/COLD	
CONFORMS TO RECORD	
LAB NO.	

SPECIAL INSTRUCTIONS/COMMENTS:
Immediately pack on ice
various container sizes - no preservatives
metals = Cu, Pb, Zn, Ni, Fe, Ag, Mn, Ba, Cd, Sb, As,
CRVIC = hexavalent chromium

INVOICE TO:

RELINQUISHED BY 2.
Carley Schwartz 1300
(Signature) (Time)
Carley Schwartz 04/01/24
(Printed Name) (Date)
Hydro Geo Chem
(Company)

RECEIVED BY 2.
(Signature) (Time)
(Printed Name) (Date)
(Company)

RELINQUISHED BY 3.
(Signature) (Time)
(Printed Name) (Date)
(Company)

RECEIVED BY (LABORATORY) 3.
(Signature) 4-2-24 9:00 (Time)
(Printed Name)

DISTRIBUTION: WHITE, CANARY - ANALYTICAL LABORTORY • PINK - ORIGINATOR

HYDRO GEO CHEM, INC.
Environmental Science & Technology

4772 1303

Chain of Custody

DATE 04/01/24 PAGE 3 OF 7

PROJ. MGR. Abra Bentley
COMPANY Hydro Geo Chem Inc.
ADDRESS 51 W. Wetmore Rd, Suite 101 Tucson, AZ 85705

SAMPLERS (SIGNATURE) Carley Schwartz (PHONE NO.)

SAMPLE ID.	DATE	TIME	MATRIX	LAB ID.	BASE/NEU/ACID CMPDS. GC/MS/ 625/8270	VOLATILE CMPDS. GC/MS/ 624/8240	PESTICIDES/PCB 608/8080	POLYNUCLEAR AROMATIC 610/8310	PHENOLS, SUB PHENOLS 604/8040	HALOGENATED VOLATILES 601/8010	AROMATIC VOLATILES 602/8020	TOTAL ORGANIC CARBON 415/9060	TOTAL ORGANIC HALIDES 9020	PETROLEUM HYDROCARBONS 418	metals clr-no pres	CR6IC clr-no preps	PRIORITY POLLUTANT METALS (13)	CAM METALS (18) TTLC/STLC	EP TOX METALS (8)	SDWA - INORGANICS PRIMARY/SECONDARY					NUMBER OF CONTAINERS
0327#87	3/27/24	1030	S													X							-19		1
0327#94	3/27/24	1105													X	X							-20		2
0327#110	3/27/24	1310													X	X							-21		2
0327#128	3/27/24	1405													X	X							-22		2
0327#139	3/27/24	1518													X	X							-23		2
0327#151	3/27/24	1540													X	X							-24		2
0327#174	3/27/24	1617													X	X							-25		2
0327#187	3/27/24	1710													X								-26		1
0327#194	3/27/24	1730	↓													X							-27		1

PROJECT INFORMATION
PROJECT: 6th & Birch
PO NO. 2024007
SHIPPING ID. NO.
VIA:

SAMPLE RECEIPT
TOTAL NO. OF CONTAINERS
CHAIN OF CUSTODY SEALS
REC'D GOOD CONDITION/COLD
CONFORMS TO RECORD
LAB NO.

SPECIAL INSTRUCTIONS/COMMENTS:
Immediately pack on ice
various container sizes - no preservatives
metals = Cu, Pb, Zn, Ni, Fe, Ag, Mn, Ba, Cd, Sb, As, U & Tl
CR6IC = hexavalent Chromium

INVOICE TO:

RELINQUISHED BY 2.
Carley Schwartz 1300
(Signature) (Time)
Carley Schwartz 04/01/24
(Printed Name) (Date)
Hydro Geo Chem
(Company)

RECEIVED BY 2.
(Signature) (Time)
(Printed Name) (Date)
(Company)

RELINQUISHED BY 3.
(Signature) (Time)
(Printed Name) (Date)
(Company)

RECEIVED BY (LABORATORY) 3.
(Signature) (Time)
4-2-24 9:00
(Printed Name)

51 West Wetmore Road, Suite 101 Tucson, AZ 85705-1678 (520) 293-1500

DISTRIBUTION: WHITE, CANARY - ANALYTICAL LABORTORY • PINK - ORIGINATOR

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HYDRO GEO CHEM, INC.
Environmental Science & Technology

Chain of Custody

DATE 04/01/24 PAGE 4 OF 7

PROJ. MGR. Abra Bentley
COMPANY Hydro Geo Chem, Inc.
ADDRESS 51W Wetmore Rd, Suite 101 Tucson, AZ 85705

SAMPLERS (SIGNATURE) Carley Schwartz (PHONE NO.)

SAMPLE ID.	DATE	TIME	MATRIX	LAB ID.	BASE/NEU/ACID CMPDS. GC/MS/ 625/8270	VOLATILE CMPDS. GC/MS/ 624/8240	PESTICIDES/PCB 608/8080	POLYNUCLEAR AROMATIC 610/8310	PHENOLS, SUB PHENOLS 604/8040	HALOGENATED VOLATILES 601/8010	AROMATIC VOLATILES 602/8020	TOTAL ORGANIC CARBON 415/9060	TOTAL ORGANIC HALIDES 9020	PETROLEUM HYDROCARBONS 418	metals cr-nd pres	CR6IC cr-nd pres	PRIORITY POLLUTANT METALS (13)	CAM METALS (18) TTLC/STLC	EP TOX METALS (8)	SDWA -INORGANICS PRIMARY/SECONDARY					NUMBER OF CONTAINERS
0328#15	3/28/24	0758	S												X								-28		1
0328#26	3/28/24	0816														X							~~-29~~ -24		1
0328#33	3/28/24	0831													X								-30		1
0328#40	3/28/24	0854													X	X							-31		2
0328#52	3/28/24	0917													X								-32		1
0328#68	3/28/24	0958													X	X							-33		2
0328#79	3/28/24	1036													X								-34		1
0328#86	3/28/24	1058														X							-35		1
0328#107	3/28/24	1130	—												X								-36		1

PROJECT INFORMATION	
PROJECT:	16th & Birch
PO NO.	2024007
SHIPPING ID. NO.	
VIA:	

SAMPLE RECEIPT	
TOTAL NO. OF CONTAINERS	
CHAIN OF CUSTODY SEALS	
REC'D GOOD CONDITION/COLD	
CONFORMS TO RECORD	
LAB NO.	

INVOICE TO:

RELINQUISHED BY 2.	RELINQUISHED BY 3.
Carley Schwartz 1300 (Signature) (Time)	(Signature) (Time)
Carley Schwartz 04/01/24 (Printed Name) (Date)	(Printed Name) (Date)
Hydro Geo Chem (Company)	(Company)
RECEIVED BY 2.	**RECEIVED BY (LABORATORY)** 3.
(Signature) (Time)	(Signature) 4-2-24 9:06 (Time)
(Printed Name) (Date)	(Printed Name)
(Company)	

SPECIAL INSTRUCTIONS/COMMENTS:
Immediately pack on ice
various container sizes-no preservatives
metals=Cu, Pb, Zn, Ni, Fe, Ag, Mn, Ba, Cd, Sb, As, U&Tl
CR6IC= hexavalent chromium

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HYDRO GEO CHEM, INC.
Environmental Science & Technology

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DATE 04/01/24 PAGE 5 OF 7

PROJ. MGR. Abra Bentley
COMPANY Hydro Geo Chem, Inc
ADDRESS 51 W Wetmore Rd, Suite 101
Tucson, AZ 85705

SAMPLERS (SIGNATURE) Carley Schwartz (PHONE NO.)

SAMPLE ID.	DATE	TIME	MATRIX	LAB ID.	BASE/NEU/ACID CMPDS. GC/MS/ 625/8270	VOLATILE CMPDS. GC/MS/ 624/8240	PESTICIDES/PCB 608/8080	POLYNUCLEAR AROMATIC 610/8310	PHENOLS, SUB PHENOLS 604/8040	HALOGENATED VOLATILES 601/8010	AROMATIC VOLATILES 602/8020	TOTAL ORGANIC CARBON 415/9060	TOTAL ORGANIC HALIDES 9020	PETROLEUM HYDROCARBONS 418	metals clr-no pres	CR6IC clr-no pres	PRIORITY POLLUTANT METALS (13)	CAM METALS (18) TTLC/STLC	EP TOX METALS (8)	SDWA -INORGANICS PRIMARY/SECONDARY					NUMBER OF CONTAINERS
0328#126	3/28/24	1232	S												X								-37		1
0328#138	3/28/24	1300													X	X							-38		2
0328#155	3/28/24	1342													X								-39		1
0328#163	3/28/24	1447													X								-40		1
0328#176	3/28/24	1506													X	X							-41		2
0328#191	3/28/24	1533														X							-42		1
0328#192	3/28/24	1536													X								-43		1
0328#198	3/28/24	1604														X							-44		1
0328#201	3/28/24	1610	—												X								-45		1

PROJECT INFORMATION
PROJECT: 6th & Birch
PO NO. 2024007
SHIPPING ID. NO.
VIA:

SAMPLE RECEIPT
TOTAL NO. OF CONTAINERS
CHAIN OF CUSTODY SEALS
REC'D GOOD CONDITION/COLD
CONFORMS TO RECORD
LAB NO.

SPECIAL INSTRUCTIONS/COMMENTS:
Immediately pack on ice
various container sizes-no preservatives
metals= Cu, Pb, Zn, Ni, Fe, Ag, Mn, Ba, Cd, Sb, As, U&T,
CR6IC = hexavalent Chromium

INVOICE TO:

RELINQUISHED BY 2.
Carley Schwartz 1300
(Signature) (Time)
Carley Schwartz 04/01/24
(Printed Name) (Date)
Hydro Geo Chem
(Company)

RECEIVED BY 2.
(Signature) (Time)
(Printed Name) (Date)
(Company)

RELINQUISHED BY 3.
(Signature) (Time)
(Printed Name) (Date)
(Company)

RECEIVED BY (LABORATORY) 3.
(Signature) (Time)
4-2-24 9:00
(Printed Name)

51 West Wetmore Road, Suite 101 Tucson, AZ 85705-1678 (520) 293-1500

DISTRIBUTION: WHITE, CANARY - ANALYTICAL LABORTORY • PINK - ORIGINATOR

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HYDRO GEO CHEM, INC.
Environmental Science & Technology

Chain of Custody

DATE 04/01/24 PAGE 6 OF 7

PROJ. MGR. Abra Bentley
COMPANY Hydro Geo Chem, Inc.
ADDRESS 51 W. Wetmore Rd Suite 101 Tucson, AZ 85705

SAMPLERS (SIGNATURE) Carley Schwartz (PHONE NO.)

ANALYSIS REQUEST

SAMPLE ID.	DATE	TIME	MATRIX	LAB ID.	BASE/NEU/ACID CMPDS. GC/MS/ 625/8270	VOLATILE CMPDS. GC/MS/ 624/8240	PESTICIDES/PCB 608/8080	POLYNUCLEAR AROMATIC 610/8310	PHENOLS, SUB PHENOLS 604/8040	HALOGENATED VOLATILES 601/8010	AROMATIC VOLATILES 602/8020	TOTAL ORGANIC CARBON 415/9060	TOTAL ORGANIC HALIDES 9020	PETROLEUM HYDROCARBONS 418	metals cr-no pres	CR6IC cr-vi	PRIORITY POLLUTANT METALS (13)	CAM METALS (18) TTLC/STLC	EP TOX METALS (8)	SDWA -INORGANICS PRIMARY/SECONDARY					NUMBER OF CONTAINERS
0329#9	3/29/24	1105	S													X							-46		1
0329#24	3/29/24	1149													X								-47		1
0329#35	3/29/24	1218													X	X							-48		2
0329#48	3/29/24	1245														X							-49		1

PROJECT INFORMATION
PROJECT: 6th & Birch
PO NO. 2024007
SHIPPING ID. NO.
VIA:

SAMPLE RECEIPT
TOTAL NO. OF CONTAINERS
CHAIN OF CUSTODY SEALS
REC'D GOOD CONDITION/COLD
CONFORMS TO RECORD
LAB NO.

INVOICE TO:

SPECIAL INSTRUCTIONS/COMMENTS:
Immediately pack on ice
various container sizes - no preservatives
metals = Cu, Pb, Zn, Ni, Fe, Ag, Mn, Ba, Cd, Sb, As, U & Ti
CR6IC = hexavalent chromium

RELINQUISHED BY 2.	RELINQUISHED BY 3.
(Signature) Carley Schwartz (Time) 1300	(Signature) (Time)
(Printed Name) Carley Schwartz (Date) 04/01/24	(Printed Name) (Date)
(Company) Hydro Geo Chem	(Company)
RECEIVED BY 2.	**RECEIVED BY (LABORATORY)** 3.
(Signature) (Time)	(Signature) 4-2-24 9:00 (Time)
(Printed Name) (Date)	(Printed Name)
(Company)	

DISTRIBUTION: WHITE, CANARY - ANALYTICAL LABORTORY • PINK - ORIGINATOR

Company Name/Address:
Hydro Geo Chem, Inc.
51 W Wetmore Road, Suite 101
Tucson, AZ 85705-1678

Billing Information:
Tanya Bentley
51 W Wetmore Rd, Suite 101
Tucson, AZ 85705-1678

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 7 of 7

Pace
PEOPLE ADVANCING SCIENCE

12065 Lebanon Rd Mount 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

Report to: **Abra Bentley**

Email To: **abrab@hgcinc.com**

Project Description: **6th and Birch**

City/State Collected: **Cottonwood, AZ**

Please Circle: PT (MT) CT ET

Phone: **520-293-1500 x115**

Client Project # **2024007**

Lab Project #

SDG # L1721303

Table #

Collected by (print): **C. Schwartz**

Site/Facility ID #

P.O. #

Acctnum:

Template:

Prelogin:

PM:

PB:

Collected by (signature):

Immediately Packed on Ice N ___ Y X

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

Quote #

Date Results Needed

Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Dissolved Metals 250 mL HDPE -No Pres.	Remarks	Sample # (lab only)
820AZ89A	Grab	GW		03/26/24	0820	1	X		-50
D&D Well	Grab	GW		03/27/24	1259	1	X		-51
MW-2s	Grab	GW		03/29/24	0952	1	X		-52
MW-3s	Grab	GW		03/29/24	1005	1	X		-53
MW-4	Grab	GW		03/29/24	0913	1	X		-54
MW-5	Grab	GW		03/29/24	0932	1	X		-55
MW-8	Grab	GW		03/29/24	1019	1	X		-56
	Grab	GW					X		
	Grab	GW					X		
	Grab	GW					X		

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

Remarks:
Metals: Cu, Pb, Zn, Ni, Fe, Ag, Mn, Ba, Cd, Sb and As, Filtered Samples

pH _____ Temp _____

Flow _____ Other _____

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

Tracking # 7123 3310 3641

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

	Date:	Time:		
Relinquished by : (Signature) Carley Schwartz	04/01/24	1300	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: DPA 10.0+.1 =10.1
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 4-2-24 Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

ANALYTICAL REPORT

April 01, 2024

Hydro Geo Chem - Tucson, AZ

Sample Delivery Group:	L1718404
Samples Received:	03/23/2024
Project Number:	2024007
Description:	6th & Birch

Report To: Abra Bentley
51 West Wetmore, Ste 101
Tucson, AZ 85705-1678

Entire Report Reviewed By:

Tony Gibson
Project Manager

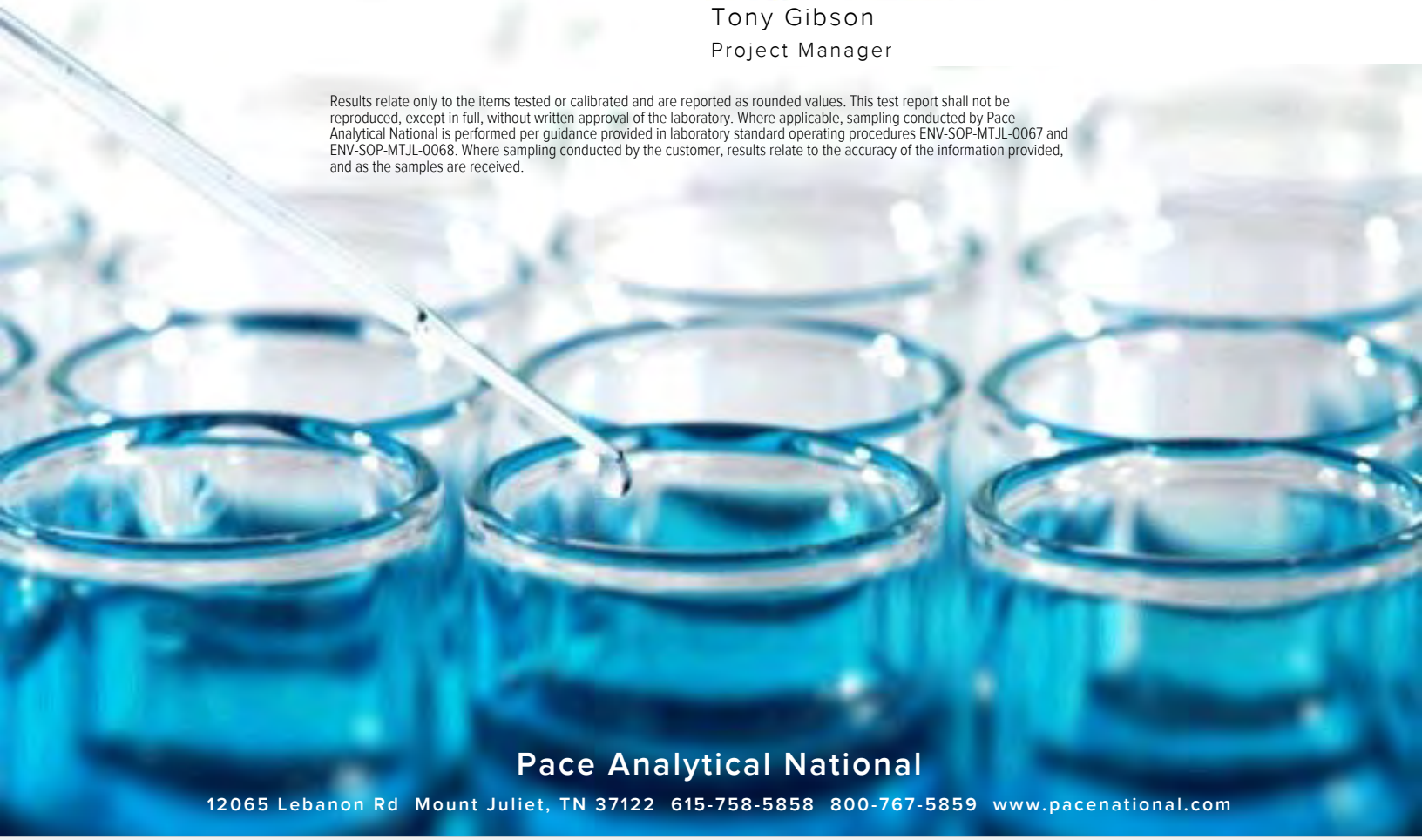


TABLE OF CONTENTS

281 S WILLARD-1 L1718404-01 Solid

Collected by: Luis Montijo | Collected date/time: 03/20/24 13:39 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252922	1	03/27/24 12:09	03/28/24 15:57	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252919	5	03/27/24 12:08	03/29/24 00:45	SJM	Mt. Juliet, TN

692 S 2ND DRIVE-1 L1718404-02 Solid

Collected by: Luis Montijo | Collected date/time: 03/20/24 15:56 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252922	1	03/27/24 12:09	03/28/24 16:00	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2252922	5	03/27/24 12:09	03/29/24 11:10	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252919	5	03/27/24 12:08	03/29/24 00:48	SJM	Mt. Juliet, TN

500 CHERRY-2 L1718404-03 Solid

Collected by: Luis Montijo | Collected date/time: 03/20/24 15:22 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252922	1	03/27/24 12:09	03/28/24 16:03	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252919	5	03/27/24 12:08	03/29/24 00:52	SJM	Mt. Juliet, TN

508 E COTTONWOOD DR. L1718404-04 Solid

Collected by: Luis Montijo | Collected date/time: 03/20/24 14:42 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252922	1	03/27/24 12:10	03/28/24 15:41	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252919	5	03/27/24 12:09	03/29/24 00:28	SJM	Mt. Juliet, TN

315 S WILLARD ST-1 L1718404-05 Solid

Collected by: Luis Montijo | Collected date/time: 03/22/24 10:25 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252922	1	03/27/24 12:09	03/28/24 16:12	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252919	5	03/27/24 12:08	03/29/24 01:02	SJM	Mt. Juliet, TN

350 S 12TH ST-1 L1718404-06 Solid

Collected by: Luis Montijo | Collected date/time: 03/22/24 12:53 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252922	1	03/27/24 12:09	03/28/24 16:15	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252919	5	03/27/24 12:08	03/29/24 01:05	SJM	Mt. Juliet, TN

350 S 12TH ST-2 L1718404-07 Solid

Collected by: Luis Montijo | Collected date/time: 03/22/24 12:53 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252922	1	03/27/24 12:09	03/28/24 16:18	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252919	5	03/27/24 12:08	03/29/24 01:08	SJM	Mt. Juliet, TN

497 S WILLARD ST-1 L1718404-08 Solid

Collected by: Luis Montijo | Collected date/time: 03/22/24 11:53 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252922	1	03/27/24 12:09	03/28/24 16:21	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252919	5	03/27/24 12:08	03/29/24 01:12	SJM	Mt. Juliet, TN

497 S WILLARD ST-2 L1718404-09 Solid

Collected by: Luis Montijo | Collected date/time: 03/22/24 11:53 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252922	1	03/27/24 12:09	03/28/24 16:24	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252919	5	03/27/24 12:08	03/29/24 01:15	SJM	Mt. Juliet, TN

497 S WILLARD ST-3 L1718404-10 Solid

Collected by: Luis Montijo | Collected date/time: 03/22/24 11:53 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252922	1	03/27/24 12:09	03/28/24 16:28	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252919	5	03/27/24 12:08	03/29/24 01:18	SJM	Mt. Juliet, TN

525 S 12 ST-1 L1718404-11 Solid

Collected by: Luis Montijo | Collected date/time: 03/21/24 09:12 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252922	1	03/27/24 12:09	03/28/24 16:31	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252919	5	03/27/24 12:08	03/29/24 01:21	SJM	Mt. Juliet, TN

525 S 12 ST-2 L1718404-12 Solid

Collected by: Luis Montijo | Collected date/time: 03/21/24 09:12 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252922	1	03/27/24 12:09	03/28/24 16:34	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252919	5	03/27/24 12:08	03/29/24 01:25	SJM	Mt. Juliet, TN

525 S 12 ST-3 L1718404-13 Solid

Collected by: Luis Montijo | Collected date/time: 03/21/24 09:12 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252922	1	03/27/24 12:09	03/28/24 16:37	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252919	5	03/27/24 12:08	03/29/24 01:28	SJM	Mt. Juliet, TN

319 S 6TH ST-3 L1718404-14 Solid

Collected by: Luis Montijo | Collected date/time: 03/21/24 10:02 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252922	1	03/27/24 12:09	03/28/24 16:40	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252919	5	03/27/24 12:08	03/29/24 01:31	SJM	Mt. Juliet, TN

985 E MINGOS AVE-1 L1718404-15 Solid

Collected by: Luis Montijo | Collected date/time: 03/20/24 17:22 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252922	1	03/27/24 12:09	03/28/24 16:49	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252919	5	03/27/24 12:08	03/29/24 01:41	SJM	Mt. Juliet, TN

985 E MINGOS AVE-2 L1718404-16 Solid

Collected by: Luis Montijo | Collected date/time: 03/20/24 17:22 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252922	1	03/27/24 12:09	03/28/24 16:52	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252919	5	03/27/24 12:08	03/29/24 01:45	SJM	Mt. Juliet, TN

S 8TH PLACE-1 L1718404-17 Solid

Collected by: Luis Montijo | Collected date/time: 03/20/24 16:45 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252922	1	03/27/24 12:09	03/28/24 16:55	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252919	5	03/27/24 12:08	03/29/24 01:48	SJM	Mt. Juliet, TN

S 8TH PLACE-3 L1718404-18 Solid

Collected by: Luis Montijo | Collected date/time: 03/20/24 16:45 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252922	1	03/27/24 12:09	03/28/24 16:58	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252919	5	03/27/24 12:08	03/29/24 01:51	SJM	Mt. Juliet, TN

18 E BEECH-1 L1718404-19 Solid

Collected by: Luis Montijo | Collected date/time: 03/20/24 13:39 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252922	1	03/27/24 12:09	03/28/24 17:01	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252919	5	03/27/24 12:08	03/29/24 01:55	SJM	Mt. Juliet, TN

950 E MINGOS AVE-1 L1718404-20 Solid

Collected by: Luis Montijo | Collected date/time: 03/20/24 17:52 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252922	1	03/27/24 12:09	03/28/24 17:05	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252919	5	03/27/24 12:08	03/29/24 01:58	SJM	Mt. Juliet, TN

MINERAL RESOURCES-2 L1718404-21 Solid

Collected by: Luis Montijo | Collected date/time: 03/21/24 14:51 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252917	1	03/27/24 14:34	03/28/24 15:22	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2252917	5	03/27/24 14:34	03/28/24 18:24	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252918	5	03/27/24 14:36	03/28/24 23:22	LD	Mt. Juliet, TN

MINERAL RESOURCES-3 L1718404-22 Solid

Collected by: Luis Montijo | Collected date/time: 03/21/24 14:51 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252917	1	03/27/24 14:34	03/28/24 15:23	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2252917	5	03/27/24 14:34	03/28/24 18:26	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252918	5	03/27/24 14:36	03/28/24 23:26	LD	Mt. Juliet, TN

333 S WILLARD ST-1 L1718404-23 Solid

Collected by: Luis Montijo | Collected date/time: 03/21/24 14:09 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252917	1	03/27/24 14:34	03/28/24 15:25	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252918	5	03/27/24 14:36	03/28/24 23:29	LD	Mt. Juliet, TN

333 S WILLARD ST-2 L1718404-24 Solid

Collected by: Luis Montijo | Collected date/time: 03/21/24 14:09 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252917	1	03/27/24 14:34	03/28/24 15:13	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252918	5	03/27/24 14:36	03/28/24 23:06	LD	Mt. Juliet, TN

319 S 6TH ST-1 L1718404-25 Solid

Collected by: Luis Montijo | Collected date/time: 03/21/24 10:02 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252917	1	03/27/24 14:34	03/28/24 15:30	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2252917	5	03/27/24 14:34	03/28/24 18:28	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252918	5	03/27/24 14:36	03/28/24 23:44	LD	Mt. Juliet, TN

319 S 6TH ST-2 L1718404-26 Solid

Collected by: Luis Montijo | Collected date/time: 03/21/24 10:02 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252917	1	03/27/24 14:34	03/28/24 15:32	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2252917	5	03/27/24 14:34	03/28/24 18:30	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252918	5	03/27/24 14:36	03/28/24 23:49	LD	Mt. Juliet, TN

751 E ASPEN ST-1 L1718404-27 Solid

Collected by: Luis Montijo | Collected date/time: 03/21/24 12:52 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252917	1	03/27/24 14:34	03/28/24 15:33	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252918	5	03/27/24 14:36	03/28/24 23:52	LD	Mt. Juliet, TN

705 E ASPEN ST-1 L1718404-28 Solid

Collected by: Luis Montijo | Collected date/time: 03/21/24 11:42 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252917	1	03/27/24 14:34	03/28/24 15:35	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252918	5	03/27/24 14:36	03/28/24 23:55	LD	Mt. Juliet, TN

705 E ASPEN ST-2 L1718404-29 Solid

Collected by	Collected date/time	Received date/time
Luis Montijo	03/21/24 11:42	03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252917	1	03/27/24 14:34	03/28/24 15:37	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252918	5	03/27/24 14:36	03/28/24 23:59	LD	Mt. Juliet, TN

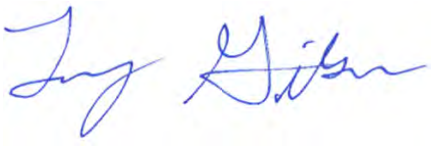
57 E ASPEN ST-1 L1718404-30 Solid

Collected by	Collected date/time	Received date/time
Luis Montijo	03/21/24 11:11	03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2252917	1	03/27/24 14:34	03/28/24 15:38	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2252918	5	03/27/24 14:36	03/29/24 00:02	LD	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.



Tony Gibson
Project Manager

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	2.77		0.544	2.00	1	03/28/2024 15:57	WG2252922
Arsenic	21.8		0.518	2.00	1	03/28/2024 15:57	WG2252922
Barium	190		0.0852	0.500	1	03/28/2024 15:57	WG2252922
Cadmium	6.53		0.0471	0.500	1	03/28/2024 15:57	WG2252922
Copper	272		0.400	2.00	1	03/28/2024 15:57	WG2252922
Iron	25100		2.24	10.0	1	03/28/2024 15:57	WG2252922
Lead	66.1		0.208	0.500	1	03/28/2024 15:57	WG2252922
Manganese	457		0.133	1.00	1	03/28/2024 15:57	WG2252922
Nickel	47.0		0.132	2.00	1	03/28/2024 15:57	WG2252922
Silver	0.690	E4	0.127	1.00	1	03/28/2024 15:57	WG2252922
Thallium	0.515	E4	0.394	2.00	1	03/28/2024 15:57	WG2252922
Zinc	266		0.832	5.00	1	03/28/2024 15:57	WG2252922

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.386	E4	0.0478	15.0	5	03/29/2024 00:45	WG2252919

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	2.44		0.544	2.00	1	03/28/2024 16:00	WG2252922
Arsenic	133		0.518	2.00	1	03/28/2024 16:00	WG2252922
Barium	128		0.0852	0.500	1	03/28/2024 16:00	WG2252922
Cadmium	U		0.0471	0.500	1	03/28/2024 16:00	WG2252922
Copper	107		0.400	2.00	1	03/28/2024 16:00	WG2252922
Iron	71300		11.2	50.0	5	03/29/2024 11:10	WG2252922
Lead	16.1		0.208	0.500	1	03/28/2024 16:00	WG2252922
Manganese	1260		0.133	1.00	1	03/28/2024 16:00	WG2252922
Nickel	105		0.132	2.00	1	03/28/2024 16:00	WG2252922
Silver	0.229	E4	0.127	1.00	1	03/28/2024 16:00	WG2252922
Thallium	0.525	E4	0.394	2.00	1	03/28/2024 16:00	WG2252922
Zinc	99.0		0.832	5.00	1	03/28/2024 16:00	WG2252922

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.435	E4	0.0478	15.0	5	03/29/2024 00:48	WG2252919

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	1.94	E4	0.544	2.00	1	03/28/2024 16:03	WG2252922
Arsenic	11.8		0.518	2.00	1	03/28/2024 16:03	WG2252922
Barium	111		0.0852	0.500	1	03/28/2024 16:03	WG2252922
Cadmium	0.582		0.0471	0.500	1	03/28/2024 16:03	WG2252922
Copper	291		0.400	2.00	1	03/28/2024 16:03	WG2252922
Iron	19000		2.24	10.0	1	03/28/2024 16:03	WG2252922
Lead	23.4		0.208	0.500	1	03/28/2024 16:03	WG2252922
Manganese	305		0.133	1.00	1	03/28/2024 16:03	WG2252922
Nickel	23.3		0.132	2.00	1	03/28/2024 16:03	WG2252922
Silver	0.341	E4	0.127	1.00	1	03/28/2024 16:03	WG2252922
Thallium	0.474	E4	0.394	2.00	1	03/28/2024 16:03	WG2252922
Zinc	248		0.832	5.00	1	03/28/2024 16:03	WG2252922

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.425	E4	0.0478	15.0	5	03/29/2024 00:52	WG2252919

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	2.05	M2	0.544	2.00	1	03/28/2024 15:41	WG2252922
Arsenic	16.2		0.518	2.00	1	03/28/2024 15:41	WG2252922
Barium	154	M2	0.0852	0.500	1	03/28/2024 15:41	WG2252922
Cadmium	1.55		0.0471	0.500	1	03/28/2024 15:41	WG2252922
Copper	109		0.400	2.00	1	03/28/2024 15:41	WG2252922
Iron	27100	M3	2.24	10.0	1	03/28/2024 15:41	WG2252922
Lead	25.8		0.208	0.500	1	03/28/2024 15:41	WG2252922
Manganese	473	M3	0.133	1.00	1	03/28/2024 15:41	WG2252922
Nickel	30.9		0.132	2.00	1	03/28/2024 15:41	WG2252922
Silver	0.306	E4	0.127	1.00	1	03/28/2024 15:41	WG2252922
Thallium	0.971	E4	0.394	2.00	1	03/28/2024 15:41	WG2252922
Zinc	129		0.832	5.00	1	03/28/2024 15:41	WG2252922

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.401	E4	0.0478	15.0	5	03/29/2024 00:28	WG2252919

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	1.52	E4	0.544	2.00	1	03/28/2024 16:12	WG2252922
Arsenic	15.0		0.518	2.00	1	03/28/2024 16:12	WG2252922
Barium	165		0.0852	0.500	1	03/28/2024 16:12	WG2252922
Cadmium	4.72		0.0471	0.500	1	03/28/2024 16:12	WG2252922
Copper	589		0.400	2.00	1	03/28/2024 16:12	WG2252922
Iron	17100		2.24	10.0	1	03/28/2024 16:12	WG2252922
Lead	62.0		0.208	0.500	1	03/28/2024 16:12	WG2252922
Manganese	336		0.133	1.00	1	03/28/2024 16:12	WG2252922
Nickel	29.3		0.132	2.00	1	03/28/2024 16:12	WG2252922
Silver	0.869	E4	0.127	1.00	1	03/28/2024 16:12	WG2252922
Thallium	U		0.394	2.00	1	03/28/2024 16:12	WG2252922
Zinc	275		0.832	5.00	1	03/28/2024 16:12	WG2252922

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.352	E4	0.0478	15.0	5	03/29/2024 01:02	WG2252919

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	2.03		0.544	2.00	1	03/28/2024 16:15	WG2252922
Arsenic	3.16		0.518	2.00	1	03/28/2024 16:15	WG2252922
Barium	109		0.0852	0.500	1	03/28/2024 16:15	WG2252922
Cadmium	U		0.0471	0.500	1	03/28/2024 16:15	WG2252922
Copper	24.9		0.400	2.00	1	03/28/2024 16:15	WG2252922
Iron	11800		2.24	10.0	1	03/28/2024 16:15	WG2252922
Lead	5.30		0.208	0.500	1	03/28/2024 16:15	WG2252922
Manganese	258		0.133	1.00	1	03/28/2024 16:15	WG2252922
Nickel	42.4		0.132	2.00	1	03/28/2024 16:15	WG2252922
Silver	0.200	E4	0.127	1.00	1	03/28/2024 16:15	WG2252922
Thallium	U		0.394	2.00	1	03/28/2024 16:15	WG2252922
Zinc	35.2		0.832	5.00	1	03/28/2024 16:15	WG2252922

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.520	E4	0.0478	15.0	5	03/29/2024 01:05	WG2252919

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	1.98	E4	0.544	2.00	1	03/28/2024 16:18	WG2252922
Arsenic	29.6		0.518	2.00	1	03/28/2024 16:18	WG2252922
Barium	152		0.0852	0.500	1	03/28/2024 16:18	WG2252922
Cadmium	3.71		0.0471	0.500	1	03/28/2024 16:18	WG2252922
Copper	333		0.400	2.00	1	03/28/2024 16:18	WG2252922
Iron	24400		2.24	10.0	1	03/28/2024 16:18	WG2252922
Lead	62.2		0.208	0.500	1	03/28/2024 16:18	WG2252922
Manganese	460		0.133	1.00	1	03/28/2024 16:18	WG2252922
Nickel	36.6		0.132	2.00	1	03/28/2024 16:18	WG2252922
Silver	0.499	E4	0.127	1.00	1	03/28/2024 16:18	WG2252922
Thallium	U		0.394	2.00	1	03/28/2024 16:18	WG2252922
Zinc	183		0.832	5.00	1	03/28/2024 16:18	WG2252922

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.402	E4	0.0478	15.0	5	03/29/2024 01:08	WG2252919

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	4.74		0.544	2.00	1	03/28/2024 16:21	WG2252922
Arsenic	1680		0.518	2.00	1	03/28/2024 16:21	WG2252922
Barium	231		0.0852	0.500	1	03/28/2024 16:21	WG2252922
Cadmium	87.9		0.0471	0.500	1	03/28/2024 16:21	WG2252922
Copper	1830		0.400	2.00	1	03/28/2024 16:21	WG2252922
Iron	19500		2.24	10.0	1	03/28/2024 16:21	WG2252922
Lead	651		0.208	0.500	1	03/28/2024 16:21	WG2252922
Manganese	207		0.133	1.00	1	03/28/2024 16:21	WG2252922
Nickel	17.1		0.132	2.00	1	03/28/2024 16:21	WG2252922
Silver	5.29		0.127	1.00	1	03/28/2024 16:21	WG2252922
Thallium	2.89		0.394	2.00	1	03/28/2024 16:21	WG2252922
Zinc	1320		0.832	5.00	1	03/28/2024 16:21	WG2252922

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.860	E4	0.0478	15.0	5	03/29/2024 01:12	WG2252919

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	1.08	E4	0.544	2.00	1	03/28/2024 16:24	WG2252922
Arsenic	35.7		0.518	2.00	1	03/28/2024 16:24	WG2252922
Barium	169		0.0852	0.500	1	03/28/2024 16:24	WG2252922
Cadmium	2.81		0.0471	0.500	1	03/28/2024 16:24	WG2252922
Copper	167		0.400	2.00	1	03/28/2024 16:24	WG2252922
Iron	19400		2.24	10.0	1	03/28/2024 16:24	WG2252922
Lead	19.2		0.208	0.500	1	03/28/2024 16:24	WG2252922
Manganese	321		0.133	1.00	1	03/28/2024 16:24	WG2252922
Nickel	38.4		0.132	2.00	1	03/28/2024 16:24	WG2252922
Silver	0.552	E4	0.127	1.00	1	03/28/2024 16:24	WG2252922
Thallium	U		0.394	2.00	1	03/28/2024 16:24	WG2252922
Zinc	94.5		0.832	5.00	1	03/28/2024 16:24	WG2252922

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.415	E4	0.0478	15.0	5	03/29/2024 01:15	WG2252919

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	1.79	E4	0.544	2.00	1	03/28/2024 16:28	WG2252922
Arsenic	28.6		0.518	2.00	1	03/28/2024 16:28	WG2252922
Barium	142		0.0852	0.500	1	03/28/2024 16:28	WG2252922
Cadmium	11.5		0.0471	0.500	1	03/28/2024 16:28	WG2252922
Copper	533		0.400	2.00	1	03/28/2024 16:28	WG2252922
Iron	19600		2.24	10.0	1	03/28/2024 16:28	WG2252922
Lead	70.5		0.208	0.500	1	03/28/2024 16:28	WG2252922
Manganese	391		0.133	1.00	1	03/28/2024 16:28	WG2252922
Nickel	29.9		0.132	2.00	1	03/28/2024 16:28	WG2252922
Silver	0.732	E4	0.127	1.00	1	03/28/2024 16:28	WG2252922
Thallium	0.500	E4	0.394	2.00	1	03/28/2024 16:28	WG2252922
Zinc	259		0.832	5.00	1	03/28/2024 16:28	WG2252922

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.335	E4	0.0478	15.0	5	03/29/2024 01:18	WG2252919

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	2.12		0.544	2.00	1	03/28/2024 16:31	WG2252922
Arsenic	11.5		0.518	2.00	1	03/28/2024 16:31	WG2252922
Barium	133		0.0852	0.500	1	03/28/2024 16:31	WG2252922
Cadmium	0.849		0.0471	0.500	1	03/28/2024 16:31	WG2252922
Copper	103		0.400	2.00	1	03/28/2024 16:31	WG2252922
Iron	24700		2.24	10.0	1	03/28/2024 16:31	WG2252922
Lead	22.2		0.208	0.500	1	03/28/2024 16:31	WG2252922
Manganese	422		0.133	1.00	1	03/28/2024 16:31	WG2252922
Nickel	42.3		0.132	2.00	1	03/28/2024 16:31	WG2252922
Silver	0.236	E4	0.127	1.00	1	03/28/2024 16:31	WG2252922
Thallium	1.16	E4	0.394	2.00	1	03/28/2024 16:31	WG2252922
Zinc	93.8		0.832	5.00	1	03/28/2024 16:31	WG2252922

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.399	E4	0.0478	15.0	5	03/29/2024 01:21	WG2252919

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	U		0.544	2.00	1	03/28/2024 16:34	WG2252922
Arsenic	6.22		0.518	2.00	1	03/28/2024 16:34	WG2252922
Barium	102		0.0852	0.500	1	03/28/2024 16:34	WG2252922
Cadmium	U		0.0471	0.500	1	03/28/2024 16:34	WG2252922
Copper	21.5		0.400	2.00	1	03/28/2024 16:34	WG2252922
Iron	13900		2.24	10.0	1	03/28/2024 16:34	WG2252922
Lead	7.26		0.208	0.500	1	03/28/2024 16:34	WG2252922
Manganese	290		0.133	1.00	1	03/28/2024 16:34	WG2252922
Nickel	7.77		0.132	2.00	1	03/28/2024 16:34	WG2252922
Silver	U		0.127	1.00	1	03/28/2024 16:34	WG2252922
Thallium	0.454	E4	0.394	2.00	1	03/28/2024 16:34	WG2252922
Zinc	76.0		0.832	5.00	1	03/28/2024 16:34	WG2252922

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.961	E4	0.0478	15.0	5	03/29/2024 01:25	WG2252919

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	2.33		0.544	2.00	1	03/28/2024 16:37	WG2252922
Arsenic	4.22		0.518	2.00	1	03/28/2024 16:37	WG2252922
Barium	202		0.0852	0.500	1	03/28/2024 16:37	WG2252922
Cadmium	0.168	E4	0.0471	0.500	1	03/28/2024 16:37	WG2252922
Copper	280		0.400	2.00	1	03/28/2024 16:37	WG2252922
Iron	25900		2.24	10.0	1	03/28/2024 16:37	WG2252922
Lead	14.6		0.208	0.500	1	03/28/2024 16:37	WG2252922
Manganese	417		0.133	1.00	1	03/28/2024 16:37	WG2252922
Nickel	74.4		0.132	2.00	1	03/28/2024 16:37	WG2252922
Silver	0.228	E4	0.127	1.00	1	03/28/2024 16:37	WG2252922
Thallium	0.740	E4	0.394	2.00	1	03/28/2024 16:37	WG2252922
Zinc	317		0.832	5.00	1	03/28/2024 16:37	WG2252922

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.509	E4	0.0478	15.0	5	03/29/2024 01:28	WG2252919

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	1.62	E4	0.544	2.00	1	03/28/2024 16:40	WG2252922
Arsenic	42.2		0.518	2.00	1	03/28/2024 16:40	WG2252922
Barium	221		0.0852	0.500	1	03/28/2024 16:40	WG2252922
Cadmium	5.17		0.0471	0.500	1	03/28/2024 16:40	WG2252922
Copper	1930		0.400	2.00	1	03/28/2024 16:40	WG2252922
Iron	36200		2.24	10.0	1	03/28/2024 16:40	WG2252922
Lead	98.6		0.208	0.500	1	03/28/2024 16:40	WG2252922
Manganese	421		0.133	1.00	1	03/28/2024 16:40	WG2252922
Nickel	40.1		0.132	2.00	1	03/28/2024 16:40	WG2252922
Silver	1.58		0.127	1.00	1	03/28/2024 16:40	WG2252922
Thallium	1.11	E4	0.394	2.00	1	03/28/2024 16:40	WG2252922
Zinc	1370		0.832	5.00	1	03/28/2024 16:40	WG2252922

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.585	E4	0.0478	15.0	5	03/29/2024 01:31	WG2252919

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	0.906	E4	0.544	2.00	1	03/28/2024 16:49	WG2252922
Arsenic	9.81		0.518	2.00	1	03/28/2024 16:49	WG2252922
Barium	97.2		0.0852	0.500	1	03/28/2024 16:49	WG2252922
Cadmium	1.89		0.0471	0.500	1	03/28/2024 16:49	WG2252922
Copper	147		0.400	2.00	1	03/28/2024 16:49	WG2252922
Iron	16700		2.24	10.0	1	03/28/2024 16:49	WG2252922
Lead	13.1		0.208	0.500	1	03/28/2024 16:49	WG2252922
Manganese	280		0.133	1.00	1	03/28/2024 16:49	WG2252922
Nickel	25.5		0.132	2.00	1	03/28/2024 16:49	WG2252922
Silver	U		0.127	1.00	1	03/28/2024 16:49	WG2252922
Thallium	U		0.394	2.00	1	03/28/2024 16:49	WG2252922
Zinc	552		0.832	5.00	1	03/28/2024 16:49	WG2252922

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.314	E4	0.0478	15.0	5	03/29/2024 01:41	WG2252919

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	U		0.544	2.00	1	03/28/2024 16:52	WG2252922
Arsenic	9.33		0.518	2.00	1	03/28/2024 16:52	WG2252922
Barium	284		0.0852	0.500	1	03/28/2024 16:52	WG2252922
Cadmium	U		0.0471	0.500	1	03/28/2024 16:52	WG2252922
Copper	601		0.400	2.00	1	03/28/2024 16:52	WG2252922
Iron	30500		2.24	10.0	1	03/28/2024 16:52	WG2252922
Lead	15.3		0.208	0.500	1	03/28/2024 16:52	WG2252922
Manganese	200		0.133	1.00	1	03/28/2024 16:52	WG2252922
Nickel	21.6		0.132	2.00	1	03/28/2024 16:52	WG2252922
Silver	0.379	E4	0.127	1.00	1	03/28/2024 16:52	WG2252922
Thallium	0.566	E4	0.394	2.00	1	03/28/2024 16:52	WG2252922
Zinc	598		0.832	5.00	1	03/28/2024 16:52	WG2252922

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.680	E4	0.0478	15.0	5	03/29/2024 01:45	WG2252919

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	0.882	E4	0.544	2.00	1	03/28/2024 16:55	WG2252922
Arsenic	8.80		0.518	2.00	1	03/28/2024 16:55	WG2252922
Barium	170		0.0852	0.500	1	03/28/2024 16:55	WG2252922
Cadmium	0.479	E4	0.0471	0.500	1	03/28/2024 16:55	WG2252922
Copper	63.5		0.400	2.00	1	03/28/2024 16:55	WG2252922
Iron	18500		2.24	10.0	1	03/28/2024 16:55	WG2252922
Lead	11.0		0.208	0.500	1	03/28/2024 16:55	WG2252922
Manganese	375		0.133	1.00	1	03/28/2024 16:55	WG2252922
Nickel	25.5		0.132	2.00	1	03/28/2024 16:55	WG2252922
Silver	U		0.127	1.00	1	03/28/2024 16:55	WG2252922
Thallium	U		0.394	2.00	1	03/28/2024 16:55	WG2252922
Zinc	126		0.832	5.00	1	03/28/2024 16:55	WG2252922

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.574	E4	0.0478	15.0	5	03/29/2024 01:48	WG2252919

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	0.597	E4	0.544	2.00	1	03/28/2024 16:58	WG2252922
Arsenic	8.57		0.518	2.00	1	03/28/2024 16:58	WG2252922
Barium	89.7		0.0852	0.500	1	03/28/2024 16:58	WG2252922
Cadmium	U		0.0471	0.500	1	03/28/2024 16:58	WG2252922
Copper	29.5		0.400	2.00	1	03/28/2024 16:58	WG2252922
Iron	15300		2.24	10.0	1	03/28/2024 16:58	WG2252922
Lead	8.05		0.208	0.500	1	03/28/2024 16:58	WG2252922
Manganese	287		0.133	1.00	1	03/28/2024 16:58	WG2252922
Nickel	8.93		0.132	2.00	1	03/28/2024 16:58	WG2252922
Silver	U		0.127	1.00	1	03/28/2024 16:58	WG2252922
Thallium	U		0.394	2.00	1	03/28/2024 16:58	WG2252922
Zinc	101		0.832	5.00	1	03/28/2024 16:58	WG2252922

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.851	E4	0.0478	15.0	5	03/29/2024 01:51	WG2252919

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	1.11	E4	0.544	2.00	1	03/28/2024 17:01	WG2252922
Arsenic	8.26		0.518	2.00	1	03/28/2024 17:01	WG2252922
Barium	120		0.0852	0.500	1	03/28/2024 17:01	WG2252922
Cadmium	0.875		0.0471	0.500	1	03/28/2024 17:01	WG2252922
Copper	50.9		0.400	2.00	1	03/28/2024 17:01	WG2252922
Iron	11200		2.24	10.0	1	03/28/2024 17:01	WG2252922
Lead	20.1		0.208	0.500	1	03/28/2024 17:01	WG2252922
Manganese	221		0.133	1.00	1	03/28/2024 17:01	WG2252922
Nickel	25.1		0.132	2.00	1	03/28/2024 17:01	WG2252922
Silver	0.210	E4	0.127	1.00	1	03/28/2024 17:01	WG2252922
Thallium	U		0.394	2.00	1	03/28/2024 17:01	WG2252922
Zinc	284		0.832	5.00	1	03/28/2024 17:01	WG2252922

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.375	E4	0.0478	15.0	5	03/29/2024 01:55	WG2252919

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	1.62	E4	0.544	2.00	1	03/28/2024 17:05	WG2252922
Arsenic	8.65		0.518	2.00	1	03/28/2024 17:05	WG2252922
Barium	106		0.0852	0.500	1	03/28/2024 17:05	WG2252922
Cadmium	0.367	E4	0.0471	0.500	1	03/28/2024 17:05	WG2252922
Copper	35.2		0.400	2.00	1	03/28/2024 17:05	WG2252922
Iron	16600		2.24	10.0	1	03/28/2024 17:05	WG2252922
Lead	8.07		0.208	0.500	1	03/28/2024 17:05	WG2252922
Manganese	315		0.133	1.00	1	03/28/2024 17:05	WG2252922
Nickel	32.3		0.132	2.00	1	03/28/2024 17:05	WG2252922
Silver	0.184	E4	0.127	1.00	1	03/28/2024 17:05	WG2252922
Thallium	U		0.394	2.00	1	03/28/2024 17:05	WG2252922
Zinc	70.1		0.832	5.00	1	03/28/2024 17:05	WG2252922

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.452	E4	0.0478	15.0	5	03/29/2024 01:58	WG2252919

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	U		0.544	2.00	1	03/28/2024 15:22	WG2252917
Arsenic	172		0.518	2.00	1	03/28/2024 15:22	WG2252917
Barium	86.2		0.0852	0.500	1	03/28/2024 15:22	WG2252917
Cadmium	3.67		0.0471	0.500	1	03/28/2024 15:22	WG2252917
Copper	1900		0.400	2.00	1	03/28/2024 15:22	WG2252917
Iron	51100		11.2	50.0	5	03/28/2024 18:24	WG2252917
Lead	101		0.208	0.500	1	03/28/2024 15:22	WG2252917
Manganese	35.3		0.133	1.00	1	03/28/2024 15:22	WG2252917
Nickel	0.586	E4	0.132	2.00	1	03/28/2024 15:22	WG2252917
Silver	0.839	E4	0.127	1.00	1	03/28/2024 15:22	WG2252917
Thallium	1.08	E4	0.394	2.00	1	03/28/2024 15:22	WG2252917
Zinc	4620		4.16	25.0	5	03/28/2024 18:24	WG2252917

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	1.63	E4	0.0478	15.0	5	03/28/2024 23:22	WG2252918

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	U		0.544	2.00	1	03/28/2024 15:23	WG2252917
Arsenic	184		0.518	2.00	1	03/28/2024 15:23	WG2252917
Barium	84.7		0.0852	0.500	1	03/28/2024 15:23	WG2252917
Cadmium	3.13		0.0471	0.500	1	03/28/2024 15:23	WG2252917
Copper	1650		0.400	2.00	1	03/28/2024 15:23	WG2252917
Iron	45500		2.24	10.0	1	03/28/2024 15:23	WG2252917
Lead	101		0.208	0.500	1	03/28/2024 15:23	WG2252917
Manganese	31.5		0.133	1.00	1	03/28/2024 15:23	WG2252917
Nickel	0.515	E4	0.132	2.00	1	03/28/2024 15:23	WG2252917
Silver	0.685	E4	0.127	1.00	1	03/28/2024 15:23	WG2252917
Thallium	0.875	E4	0.394	2.00	1	03/28/2024 15:23	WG2252917
Zinc	4050		4.16	25.0	5	03/28/2024 18:26	WG2252917

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	1.61	E4	0.0478	15.0	5	03/28/2024 23:26	WG2252918

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	U		0.544	2.00	1	03/28/2024 15:25	WG2252917
Arsenic	25.5		0.518	2.00	1	03/28/2024 15:25	WG2252917
Barium	242		0.0852	0.500	1	03/28/2024 15:25	WG2252917
Cadmium	7.24		0.0471	0.500	1	03/28/2024 15:25	WG2252917
Copper	925		0.400	2.00	1	03/28/2024 15:25	WG2252917
Iron	18500		2.24	10.0	1	03/28/2024 15:25	WG2252917
Lead	174		0.208	0.500	1	03/28/2024 15:25	WG2252917
Manganese	310		0.133	1.00	1	03/28/2024 15:25	WG2252917
Nickel	27.8		0.132	2.00	1	03/28/2024 15:25	WG2252917
Silver	1.43		0.127	1.00	1	03/28/2024 15:25	WG2252917
Thallium	U		0.394	2.00	1	03/28/2024 15:25	WG2252917
Zinc	494		0.832	5.00	1	03/28/2024 15:25	WG2252917

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.356	E4	0.0478	15.0	5	03/28/2024 23:29	WG2252918

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	U	M2	0.544	2.00	1	03/28/2024 15:13	WG2252917
Arsenic	17.9		0.518	2.00	1	03/28/2024 15:13	WG2252917
Barium	174		0.0852	0.500	1	03/28/2024 15:13	WG2252917
Cadmium	4.85		0.0471	0.500	1	03/28/2024 15:13	WG2252917
Copper	559	M3	0.400	2.00	1	03/28/2024 15:13	WG2252917
Iron	13800	M3 R5	2.24	10.0	1	03/28/2024 15:13	WG2252917
Lead	67.6		0.208	0.500	1	03/28/2024 15:13	WG2252917
Manganese	238		0.133	1.00	1	03/28/2024 15:13	WG2252917
Nickel	20.2		0.132	2.00	1	03/28/2024 15:13	WG2252917
Silver	1.20		0.127	1.00	1	03/28/2024 15:13	WG2252917
Thallium	U		0.394	2.00	1	03/28/2024 15:13	WG2252917
Zinc	271	M1	0.832	5.00	1	03/28/2024 15:13	WG2252917

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.364	E4	0.0478	15.0	5	03/28/2024 23:06	WG2252918

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	U		0.544	2.00	1	03/28/2024 15:30	WG2252917
Arsenic	89.2		0.518	2.00	1	03/28/2024 15:30	WG2252917
Barium	111		0.0852	0.500	1	03/28/2024 15:30	WG2252917
Cadmium	4.58		0.0471	0.500	1	03/28/2024 15:30	WG2252917
Copper	1140		0.400	2.00	1	03/28/2024 15:30	WG2252917
Iron	43900		2.24	10.0	1	03/28/2024 15:30	WG2252917
Lead	60.2		0.208	0.500	1	03/28/2024 15:30	WG2252917
Manganese	199		0.133	1.00	1	03/28/2024 15:30	WG2252917
Nickel	21.6		0.132	2.00	1	03/28/2024 15:30	WG2252917
Silver	1.01		0.127	1.00	1	03/28/2024 15:30	WG2252917
Thallium	U		0.394	2.00	1	03/28/2024 15:30	WG2252917
Zinc	5110		4.16	25.0	5	03/28/2024 18:28	WG2252917

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.971	E4	0.0478	15.0	5	03/28/2024 23:44	WG2252918

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	U		0.544	2.00	1	03/28/2024 15:32	WG2252917
Arsenic	35.7		0.518	2.00	1	03/28/2024 15:32	WG2252917
Barium	125		0.0852	0.500	1	03/28/2024 15:32	WG2252917
Cadmium	3.85		0.0471	0.500	1	03/28/2024 15:32	WG2252917
Copper	13700		2.00	10.0	5	03/28/2024 18:30	WG2252917
Iron	32200		2.24	10.0	1	03/28/2024 15:32	WG2252917
Lead	102		0.208	0.500	1	03/28/2024 15:32	WG2252917
Manganese	326		0.133	1.00	1	03/28/2024 15:32	WG2252917
Nickel	32.6		0.132	2.00	1	03/28/2024 15:32	WG2252917
Silver	7.80		0.127	1.00	1	03/28/2024 15:32	WG2252917
Thallium	U		0.394	2.00	1	03/28/2024 15:32	WG2252917
Zinc	1260		0.832	5.00	1	03/28/2024 15:32	WG2252917

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.408	E4	0.0478	15.0	5	03/28/2024 23:49	WG2252918

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	U		0.544	2.00	1	03/28/2024 15:33	WG2252917
Arsenic	17.8		0.518	2.00	1	03/28/2024 15:33	WG2252917
Barium	266		0.0852	0.500	1	03/28/2024 15:33	WG2252917
Cadmium	6.91		0.0471	0.500	1	03/28/2024 15:33	WG2252917
Copper	205		0.400	2.00	1	03/28/2024 15:33	WG2252917
Iron	28200		2.24	10.0	1	03/28/2024 15:33	WG2252917
Lead	26.8		0.208	0.500	1	03/28/2024 15:33	WG2252917
Manganese	607		0.133	1.00	1	03/28/2024 15:33	WG2252917
Nickel	43.2		0.132	2.00	1	03/28/2024 15:33	WG2252917
Silver	0.527	E4	0.127	1.00	1	03/28/2024 15:33	WG2252917
Thallium	U		0.394	2.00	1	03/28/2024 15:33	WG2252917
Zinc	241		0.832	5.00	1	03/28/2024 15:33	WG2252917

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.436	E4	0.0478	15.0	5	03/28/2024 23:52	WG2252918

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	U		0.544	2.00	1	03/28/2024 15:35	WG2252917
Arsenic	12.0		0.518	2.00	1	03/28/2024 15:35	WG2252917
Barium	187		0.0852	0.500	1	03/28/2024 15:35	WG2252917
Cadmium	3.97		0.0471	0.500	1	03/28/2024 15:35	WG2252917
Copper	236		0.400	2.00	1	03/28/2024 15:35	WG2252917
Iron	18400		2.24	10.0	1	03/28/2024 15:35	WG2252917
Lead	19.6		0.208	0.500	1	03/28/2024 15:35	WG2252917
Manganese	310		0.133	1.00	1	03/28/2024 15:35	WG2252917
Nickel	43.3		0.132	2.00	1	03/28/2024 15:35	WG2252917
Silver	1.10		0.127	1.00	1	03/28/2024 15:35	WG2252917
Thallium	U		0.394	2.00	1	03/28/2024 15:35	WG2252917
Zinc	496		0.832	5.00	1	03/28/2024 15:35	WG2252917

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.382	E4	0.0478	15.0	5	03/28/2024 23:55	WG2252918

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	U		0.544	2.00	1	03/28/2024 15:37	WG2252917
Arsenic	10.5		0.518	2.00	1	03/28/2024 15:37	WG2252917
Barium	164		0.0852	0.500	1	03/28/2024 15:37	WG2252917
Cadmium	0.448	E4	0.0471	0.500	1	03/28/2024 15:37	WG2252917
Copper	53.3		0.400	2.00	1	03/28/2024 15:37	WG2252917
Iron	33900		2.24	10.0	1	03/28/2024 15:37	WG2252917
Lead	15.2		0.208	0.500	1	03/28/2024 15:37	WG2252917
Manganese	475		0.133	1.00	1	03/28/2024 15:37	WG2252917
Nickel	48.5		0.132	2.00	1	03/28/2024 15:37	WG2252917
Silver	0.161	E4	0.127	1.00	1	03/28/2024 15:37	WG2252917
Thallium	U		0.394	2.00	1	03/28/2024 15:37	WG2252917
Zinc	96.8		0.832	5.00	1	03/28/2024 15:37	WG2252917

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.430	E4	0.0478	15.0	5	03/28/2024 23:59	WG2252918

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	U		0.544	2.00	1	03/28/2024 15:38	WG2252917
Arsenic	18.9		0.518	2.00	1	03/28/2024 15:38	WG2252917
Barium	162		0.0852	0.500	1	03/28/2024 15:38	WG2252917
Cadmium	3.33		0.0471	0.500	1	03/28/2024 15:38	WG2252917
Copper	317		0.400	2.00	1	03/28/2024 15:38	WG2252917
Iron	20600		2.24	10.0	1	03/28/2024 15:38	WG2252917
Lead	50.7		0.208	0.500	1	03/28/2024 15:38	WG2252917
Manganese	403		0.133	1.00	1	03/28/2024 15:38	WG2252917
Nickel	37.4		0.132	2.00	1	03/28/2024 15:38	WG2252917
Silver	1.23		0.127	1.00	1	03/28/2024 15:38	WG2252917
Thallium	U		0.394	2.00	1	03/28/2024 15:38	WG2252917
Zinc	277		0.832	5.00	1	03/28/2024 15:38	WG2252917

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Uranium	0.431	E4	0.0478	15.0	5	03/29/2024 00:02	WG2252918

Method Blank (MB)

(MB) R4051210-1 03/28/24 15:10

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Antimony	U		0.544	2.00
Arsenic	U		0.518	2.00
Barium	U		0.0852	0.500
Cadmium	U		0.0471	0.500
Copper	U		0.400	2.00
Iron	U		2.24	10.0
Lead	U		0.208	0.500
Manganese	U		0.133	1.00
Nickel	U		0.132	2.00
Silver	U		0.127	1.00
Thallium	U		0.394	2.00
Zinc	U		0.832	5.00

Laboratory Control Sample (LCS)

(LCS) R4051210-2 03/28/24 15:12

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony	100	97.5	97.5	80.0-120	
Arsenic	100	98.4	98.4	80.0-120	
Barium	100	104	104	80.0-120	
Cadmium	100	95.9	95.9	80.0-120	
Copper	100	103	103	80.0-120	
Iron	1000	988	98.8	80.0-120	
Lead	100	95.2	95.2	80.0-120	
Manganese	100	101	101	80.0-120	
Nickel	100	94.9	94.9	80.0-120	
Silver	20.0	18.0	89.8	80.0-120	
Thallium	100	99.3	99.3	80.0-120	
Zinc	100	102	102	80.0-120	

L1718404-24 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1718404-24 03/28/24 15:13 • (MS) R4051210-5 03/28/24 15:18 • (MSD) R4051210-6 03/28/24 15:20

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony	100	U	58.1	57.8	58.1	57.8	1	75.0-125	M2	M2	0.581	20
Arsenic	100	17.9	115	117	96.6	98.6	1	75.0-125			1.75	20
Barium	100	174	257	257	82.9	83.0	1	75.0-125			0.0477	20

L1718404-24 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1718404-24 03/28/24 15:13 • (MS) R4051210-5 03/28/24 15:18 • (MSD) R4051210-6 03/28/24 15:20

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Cadmium	100	4.85	98.5	98.6	93.6	93.8	1	75.0-125			0.143	20
Copper	100	559	719	662	160	103	1	75.0-125	M3		8.25	20
Iron	1000	13800	13700	18000	0.000	421	1	75.0-125	M3	M3 R5	27.2	20
Lead	100	67.6	189	160	122	92.1	1	75.0-125			16.9	20
Manganese	100	238	319	340	80.6	102	1	75.0-125			6.37	20
Nickel	100	20.2	120	121	99.6	101	1	75.0-125			0.818	20
Silver	20.0	1.20	19.7	19.8	92.6	92.9	1	75.0-125			0.261	20
Thallium	100	U	94.3	94.9	94.3	94.9	1	75.0-125			0.630	20
Zinc	100	271	372	398	101	127	1	75.0-125		M1	6.75	20

Method Blank (MB)

(MB) R4051310-1 03/28/24 15:36

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Antimony	U		0.544	2.00
Arsenic	U		0.518	2.00
Barium	U		0.0852	0.500
Cadmium	U		0.0471	0.500
Copper	U		0.400	2.00
Iron	U		2.24	10.0
Lead	U		0.208	0.500
Manganese	U		0.133	1.00
Nickel	0.184	E4	0.132	2.00
Silver	U		0.127	1.00
Thallium	U		0.394	2.00
Zinc	U		0.832	5.00

Laboratory Control Sample (LCS)

(LCS) R4051310-2 03/28/24 15:38

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony	100	97.2	97.2	80.0-120	
Arsenic	100	95.8	95.8	80.0-120	
Barium	100	104	104	80.0-120	
Cadmium	100	95.9	95.9	80.0-120	
Copper	100	101	101	80.0-120	
Iron	1000	998	99.8	80.0-120	
Lead	100	94.6	94.6	80.0-120	
Manganese	100	103	103	80.0-120	
Nickel	100	97.3	97.3	80.0-120	
Silver	20.0	18.8	94.0	80.0-120	
Thallium	100	100	100	80.0-120	
Zinc	100	99.9	99.9	80.0-120	

L1718404-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1718404-04 03/28/24 15:41 • (MS) R4051310-5 03/28/24 15:50 • (MSD) R4051310-6 03/28/24 15:53

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony	100	2.05	50.2	52.9	48.2	50.9	1	75.0-125	M2	M2	5.33	20
Arsenic	100	16.2	107	107	90.7	90.7	1	75.0-125			0.0416	20
Barium	100	154	227	224	72.8	70.0	1	75.0-125	M2	M2	1.23	20

L1718404-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1718404-04 03/28/24 15:41 • (MS) R4051310-5 03/28/24 15:50 • (MSD) R4051310-6 03/28/24 15:53

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Cadmium	100	1.55	97.4	98.2	95.9	96.7	1	75.0-125			0.795	20
Copper	100	109	220	217	111	109	1	75.0-125			1.15	20
Iron	1000	27100	24200	24400	0.000	0.000	1	75.0-125	M3	M3	0.882	20
Lead	100	25.8	117	115	91.2	89.2	1	75.0-125			1.73	20
Manganese	100	473	548	513	74.8	39.3	1	75.0-125	M3	M3	6.69	20
Nickel	100	30.9	130	129	98.8	98.1	1	75.0-125			0.601	20
Silver	20.0	0.306	19.6	19.9	96.7	97.8	1	75.0-125			1.17	20
Thallium	100	0.971	92.9	93.2	91.9	92.2	1	75.0-125			0.366	20
Zinc	100	129	238	225	109	96.7	1	75.0-125			5.46	20

Method Blank (MB)

(MB) R4051358-1 03/28/24 22:59

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Uranium	U		0.0478	15.0

Laboratory Control Sample (LCS)

(LCS) R4051358-2 03/28/24 23:03

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Uranium	100	97.1	97.1	80.0-120	

L1718404-24 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1718404-24 03/28/24 23:06 • (MS) R4051358-5 03/28/24 23:16 • (MSD) R4051358-6 03/28/24 23:19

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Uranium	100	0.364	93.9	94.6	93.5	94.2	5	75.0-125			0.785	20

Method Blank (MB)

(MB) R4051433-1 03/29/24 00:21

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Uranium	U		0.0478	15.0

Laboratory Control Sample (LCS)

(LCS) R4051433-2 03/29/24 00:25

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Uranium	100	103	103	80.0-120	

L1718404-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1718404-04 03/29/24 00:28 • (MS) R4051433-5 03/29/24 00:38 • (MSD) R4051433-6 03/29/24 00:42

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Uranium	100	0.401	101	100	101	99.9	5	75.0-125			1.04	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

MDL	Method Detection Limit.
RDL	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
E4	Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL) but above MDL.
M1	Matrix spike recovery was high, the method control sample recovery was acceptable.
M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike recovery was acceptable.
R5	MS/MSD RPD exceeded the laboratory acceptance limit. Recovery met acceptance criteria.

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:
Hydro Geo Chem - Tucson, AZ

51 West Wetmore, Ste 101
Tucson, AZ 85705-1678

Billing Information:
Tanya Bentley
51 West Wetmore, Ste 101
Tucson, AZ 85705-1678

Pres Chk

Report to: **Abra Bentley**

Email To: **abrab@hgcinc.com**

Project Description: **6th & Birch**

City/State Collected: Cottonwood, AZ

Please Circle: PT (MT) CT ET

Phone: **520-293-1500**

Client Project # 2024007

Lab Project # **HYDGEOTAZ-6TH&BIRCH**

Collected by (print): Luis Montijo

Site/Facility ID #

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 #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 1 of 3

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SDG # L1718404
F066

Acctnum: **HYDGEOTAZ**
Template: **T248644**
Prelogin: **P1061544**
PM: **288 - Daphne Richards**
PB:

Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Metals 2ozClr-NoPres									Remarks	Sample # (lab only)
218 S Willard-1	Grab	SS		3/20/24	1339	1	X										-01
692 S 2nd Drive-1		SS		3/20/24	1556	1	X										-02
500 Cherry-2		SS		3/20/24	1522	1	X										-03
508 E Cottonwood Dr.		SS		3/20/24	1442	1	X										-04
315 S Willard st-1		SS		3/22/24	1225	1	X										-05
350 S 12th st-1		SS		3/22/24	1253	1	X										-06
350 S 12th st-2		SS		3/22/24	1253	1	X										-07
497 S Willard St-1		SS		3/22/24	1153	1	X										-08
497 S Willard St-2		SS		3/22/24	1153	1	X										-09
497 S Willard St-3		SS		3/22/24	1153	1	X										-10

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

Remarks:Metals = Cu, Pb, Zn, Ni, Fe, Ag, Mn, Ba, Cd, Sb, As, U and Tl

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS ✓ FedEx __ Courier _____

Tracking # 6727 1909 1604

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	
	3/22/24	~~1630~~ 1611 LM			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: TLAPC Bottles Received:	If preservation required by Login: Date/Time
	3/22/24	1800	SNA	2.0+0=2.0 30	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:	Hold: / Condition: NCF / (OK)
				3/23/24 900	

PNPAZ

Company Name/Address:
Hydro Geo Chem - Tucson, AZ

51 West Wetmore, Ste 101
Tucson, AZ 85705-1678

Billing Information:
Tanya Bentley
51 West Wetmore, Ste 101
Tucson, AZ 85705-1678

Pres Chk

Report to:
Abra Bentley

Email To: **abrab@hgcinc.com**

Project Description:
6th & Birch

City/State Collected: Cottonwood, AZ

Please Circle: PT (MT) CT ET

Phone: **520-293-1500**

Client Project # 202407

Lab Project # **HYDGEOTAZ-6TH&BIRCH**

Collected by (print): Luis Montija

Site/Facility ID #

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 #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Metals 2ozClr-NoPres										Remarks	Sample # (lab only)
525 S 12th St-1	Grab	SS		3/21/24	0912	1	X											- 11
525 S 12th St-2		SS		3/21/24	0912	1	X											- 12
525 S 12th St-3		SS		3/21/24	0912	1	X											- 13
319 S 6th St-3		SS		3/21/24	1002	1	X											- 14
985 E Mingus Ave-1		SS		3/20/24	1722	1	X											- 15
985 E Mingus Ave-2		SS		3/20/24	1722	1	X											- 16
S 8th Place-1		SS		3/20/24	1645	1	X											- 17
S 8th Place-3		SS		3/20/24	1645	1	X											- 18
18 E Beech-1		SS		3/20/24	1339	1	X											- 19
950 E Mingus Ave-1		SS		3/20/24	1752	1	X											- 20

Chain of Custody Page 2 of 3

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SDG # L1718404

Table # F066

Acctnum: **HYDGEOTAZ**
Template: **T248644**
Prelogin: **P1061544**
PM: **288 - Daphne Richards**
PB:

Shipped Via: **FedEX Ground**

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

Remarks:Metals = Cu, Pb, Zn, Ni, Fe, Ag, Mn, Ba, Cd, Sb, As, U and Tl

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS ✓ FedEx __ Courier _____

Tracking # 6727 1909 1604

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
	3/22/24	1611 1330 CM			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 1.1/1.1 °C Bottles Received: 2.0+0=2.0 30	
	3/22/24	1800	SM		
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 3/23/24 Time: 900	Hold: / Condition: NCF / OK

PNPAZ

Company Name/Address:
Hydro Geo Chem - Tucson, AZ

51 West Wetmore, Ste 101
Tucson, AZ 85705-1678

Billing Information:
Tanya Bentley
51 West Wetmore, Ste 101
Tucson, AZ 85705-1678

Pres Chk

Report to:
Abra Bentley

Email To: **abrab@hgcinc.com**

Project Description:
6th & Birch

City/State Collected: Cotton Wood, Az

Please Circle: PT (MT) CT ET

Phone: **520-293-1500**

Client Project # 202407

Lab Project # **HYDGEOTAZ-6TH&BIRCH**

Collected by (print): Luis Montijo

Site/Facility ID #

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

Date Results Needed

Quote #

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Metals 2ozClr-NoPres										Remarks	Sample # (lab only)
Mineral resources-2	Grab	SS		3/21/24	1451	1	X											- 21
mineral resources-3		SS		3/21/24	1451	1	X											- 22
333 S willard st-1		SS		3/21/24	1409	1	X											- 23
333 S willard st-2		SS		3/21/24	1409	1	X											- 24
319 S 6th st-1		SS		3/21/24	1002	1	X											- 25
319 S 6th st-2		SS		3/21/24	1002	1	X											- 26
751 E Aspen st-1		SS		3/21/24	1252	1	X											- 27
705 E Aspen st-1		SS		3/21/24	1142	1	X											- 28
705 E Aspen st-2		SS		3/21/24	1142	1	X											- 29
57 E Aspen st-1	✓	SS		3/21/24	1111	1	X											- 30

Analysis / Container / Preservative

Chain of Custody Page 3 of 3

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SDG # L1718404

Table # F0166

Acctnum: **HYDGEOTAZ**
Template: **T248644**
Prelogin: **P1061544**
PM: **288 - Daphne Richards**
PB:

Shipped Via: **FedEX Ground**

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

Remarks:Metals = Cu, Pb, Zn, Ni, Fe, Ag, Mn, Ba, Cd, Sb, As, U and Tl

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS ✓ FedEx __ Courier _____

Tracking # 6727 1909 1604

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
	3/22/24	1611			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: TuA 9°C Bottles Received: 2.0+0=2.0 30	
	3/22/24	1800			
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 3/23/24 Time: 900	Hold: Condition: NCF / OK

PNPAZ

ANALYTICAL REPORT

March 27, 2024

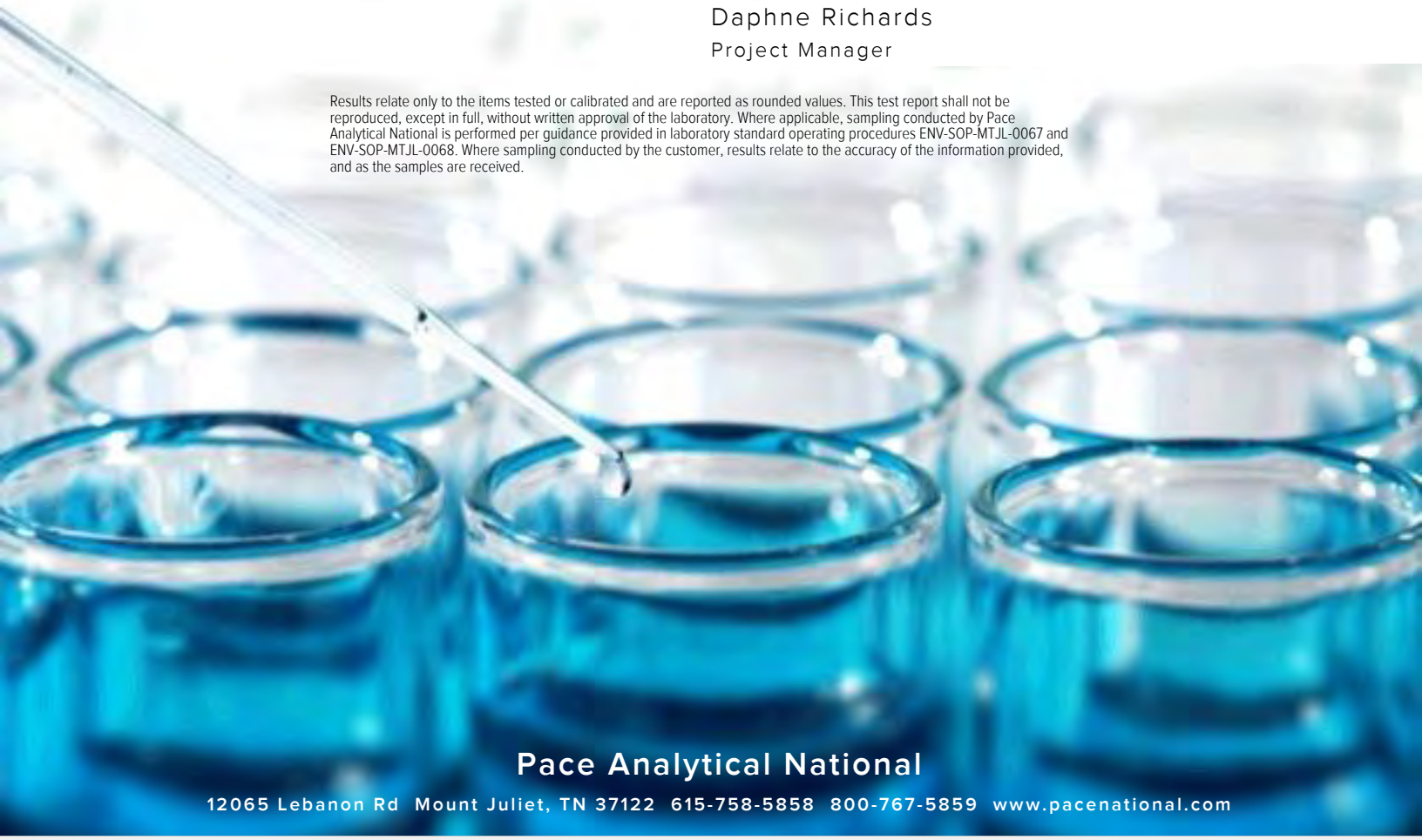
Hydro Geo Chem - Tucson, AZ

Sample Delivery Group:	L1718402
Samples Received:	03/23/2024
Project Number:	2024007
Description:	6th & Birch

Report To: Abra Bentley
51 West Wetmore, Ste 101
Tucson, AZ 85705-1678

Entire Report Reviewed By: Daphne R Richards

Daphne Richards
Project Manager



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

TABLE OF CONTENTS

MINERAL RESOURCES INC-1 L1718402-01 Solid

Collected by: Luis Montijo | Collected date/time: 03/21/24 14:51 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2253113	1	03/25/24 01:19	03/25/24 10:49	SET	Mt. Juliet, TN

319 S 6TH ST-4 L1718402-02 Solid

Collected by: Luis Montijo | Collected date/time: 03/21/24 10:02 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2253113	1	03/25/24 01:19	03/25/24 10:55	SET	Mt. Juliet, TN

S 8TH PLACE-2 L1718402-03 Solid

Collected by: Luis Montijo | Collected date/time: 03/20/24 16:45 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2253113	1	03/25/24 01:19	03/25/24 11:01	SET	Mt. Juliet, TN

692 S 2ND STREET-2 L1718402-04 Solid

Collected by: Luis Montijo | Collected date/time: 03/20/24 16:03 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2253113	1	03/25/24 01:19	03/25/24 11:08	SET	Mt. Juliet, TN

500 CHERRY-1 L1718402-05 Solid

Collected by: Luis Montijo | Collected date/time: 03/20/24 15:26 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2253194	1	03/25/24 08:03	03/27/24 07:10	SET	Mt. Juliet, TN

326 E BEECH-1 L1718402-06 Solid

Collected by: Luis Montijo | Collected date/time: 03/21/24 13:00 | Received date/time: 03/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2253194	1	03/25/24 08:03	03/27/24 07:17	SET	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.

Daphne Richards
Project Manager

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	03/25/2024 10:49	WG2253113

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Hexavalent Chromium	U		0.255	1.00	1	03/25/2024 10:55	WG2253113

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Hexavalent Chromium	U		0.255	1.00	1	03/25/2024 11:01	WG2253113

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	0.286	E4 M2	0.255	1.00	1	03/25/2024 11:08	WG2253113

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Hexavalent Chromium	U		0.255	1.00	1	03/27/2024 07:10	WG2253194

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U	M2 R2	0.255	1.00	1	03/27/2024 07:17	WG2253194

Method Blank (MB)

(MB) R4049488-1 03/25/24 07:53

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Hexavalent Chromium	U		0.255	1.00

L1717746-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1717746-01 03/25/24 08:14 • (DUP) R4049488-3 03/25/24 08:20

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	0.838	1.36	1	47.4	R8	20

L1718341-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1718341-10 03/25/24 10:37 • (DUP) R4049488-8 03/25/24 10:43

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	1.29	1.04	1	21.1	R8	20

Laboratory Control Sample (LCS)

(LCS) R4049488-2 03/25/24 08:02

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Hexavalent Chromium	10.0	10.3	103	80.0-120	

L1718169-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1718169-02 03/25/24 08:45 • (MS) R4049488-5 03/25/24 09:10 • (MSD) R4049488-6 03/25/24 09:16

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Hexavalent Chromium	20.0	U	6.89	8.81	34.5	44.1	1	75.0-125	M2	M2 R2	24.4	20

L1718402-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1718402-04 03/25/24 11:08 • (MS) R4049488-10 03/25/24 11:20 • (MSD) R4049488-11 03/25/24 11:38

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Hexavalent Chromium	20.0	0.286	14.0	14.7	68.5	71.8	1	75.0-125	M2	M2	4.62	20

L1718169-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1718169-02 03/25/24 08:45 • (MS) R4049488-7 03/25/24 09:22

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	643	U	11.8	1.84	1	75.0-125	M2

L1718402-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L1718402-04 03/25/24 11:08 • (MS) R4049488-12 03/25/24 11:45

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	646	0.286	11.4	1.71	1	75.0-125	M2

Method Blank (MB)

(MB) R4050434-1 03/27/24 06:50

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Hexavalent Chromium	U		0.255	1.00

L1718508-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1718508-01 03/27/24 07:48 • (DUP) R4050434-7 03/27/24 08:06

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	U	U	1	0.000		20

L1718511-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1718511-01 03/27/24 08:12 • (DUP) R4050434-8 03/27/24 08:19

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	U	U	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R4050434-2 03/27/24 06:58

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Hexavalent Chromium	10.0	10.3	103	80.0-120	

L1718402-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1718402-06 03/27/24 07:17 • (MS) R4050434-4 03/27/24 07:29 • (MSD) R4050434-5 03/27/24 07:35

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Hexavalent Chromium	20.0	U	1.68	4.02	8.41	20.1	1	75.0-125	M2	M2 R2	82.0	20

L1718544-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1718544-02 03/27/24 08:31 • (MS) R4050434-10 03/27/24 08:43 • (MSD) R4050434-11 03/27/24 08:50

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Hexavalent Chromium	20.0	U	11.9	10.8	59.6	54.1	1	75.0-125	M2	M2	9.73	20

L1718402-06 Original Sample (OS) • Matrix Spike (MS)

(OS) L1718402-06 03/27/24 07:17 • (MS) R4050434-6 03/27/24 07:41

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	654	U	436	66.6	50	75.0-125	M2

L1718544-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1718544-02 03/27/24 08:31 • (MS) R4050434-12 03/27/24 08:56

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	654	U	389	59.5	50	75.0-125	M2

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

MDL	Method Detection Limit.
RDL	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
E4	Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL) but above MDL.
M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
R2	RPD/RSD exceeded the laboratory acceptance limit.
R8	Sample RPD exceeded the method acceptance limit.

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	LA000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

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

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

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

Company Name/Address:
Hydro Geo Chem - Tucson, AZ

51 West Wetmore, Ste 101
Tucson, AZ 85705-1678

Billing Information:
Tanya Bentley
51 West Wetmore, Ste 101
Tucson, AZ 85705-1678

Pres Chk

Report to:
Abra Bentley

Email To: **abrab@hgcinc.com**

Project Description:
6th & Birch

City/State Collected: Cottonwood, AZ

Please Circle: PT (MT) CT ET

Phone: **520-293-1500**

Client Project # 202007

Lab Project # **HYDGEOTAZ-6TH&BIRCH**

Collected by (print): Luis Montejo

Site/Facility ID #

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 #

Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	CR6IC 2ozClr-NoPres										
Mineral Resources incl	Grab	SS		3/21/24	1451	1	X										-01
3195 6th St-4		SS		3/21/24	1002	1	X										-02
S 8th Place-2		SS		3/20/24	1645	1	X										-03
692 S 2nd Street-2		SS		3/20/24	1603	1	X										-04
500 Cherry-1		SS		3/20/24	1526	1	X										-05
326 E Beech-1		SS		3/20/24	~~1442~~ 1300	1	X										-06

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
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 # L1718402
F064

Acctnum: **HYDGEOTAZ**
Template: **T248646**
Prelogin: **P1061547**
PM: **288 - Daphne Richards**
PB:

Shipped Via: **FedEX Ground**

Remarks | Sample # (lab only)

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

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS ✓ FedEx __ Courier _____

Tracking # 6727 1909 1604

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
	3/22/24	1611 1330 LH		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 1.1 °C Bottles Received: 6
	3/22/24	1800	SWA	2.0+0=2.0
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 3/23/24 Time: 900

If preservation required by Login: Date/Time

Hold: | Condition: NCF / (OK)

PNPA-Z

ANALYTICAL REPORT

June 14, 2024

Hydro Geo Chem - Tucson, AZ

Sample Delivery Group:	L1744264
Samples Received:	06/07/2024
Project Number:	2024007
Description:	6th & Birch

Report To: Abra Bentley
51 West Wetmore, Ste 101
Tucson, AZ 85705-1678

Entire Report Reviewed By:

Shane Gambill
Project Manager

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

TABLE OF CONTENTS

JUN 04-06-1 L1744264-01 Solid

Collected by: Luis Montijo | Collected date/time: 06/04/24 12:58 | Received date/time: 06/07/24 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2301395	1	06/13/24 10:05	06/13/24 14:42	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2301401	5	06/13/24 10:04	06/13/24 23:39	LD	Mt. Juliet, TN

JUN 04-27-2 L1744264-02 Solid

Collected by: Luis Montijo | Collected date/time: 06/04/24 13:30 | Received date/time: 06/07/24 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2301395	1	06/13/24 10:05	06/13/24 14:44	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2301401	5	06/13/24 10:04	06/13/24 23:42	LD	Mt. Juliet, TN

JUN 04-44-1 L1744264-03 Solid

Collected by: Luis Montijo | Collected date/time: 06/04/24 14:47 | Received date/time: 06/07/24 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2301395	1	06/13/24 10:05	06/13/24 14:45	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2301401	5	06/13/24 10:04	06/13/24 23:46	LD	Mt. Juliet, TN

JUN 04-48-1 L1744264-04 Solid

Collected by: Luis Montijo | Collected date/time: 06/04/24 15:03 | Received date/time: 06/07/24 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2301395	1	06/13/24 10:05	06/13/24 14:51	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2301401	5	06/13/24 10:04	06/14/24 00:08	JPD	Mt. Juliet, TN

JUN 04-55-2 L1744264-05 Solid

Collected by: Luis Montijo | Collected date/time: 06/04/24 15:27 | Received date/time: 06/07/24 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2301395	1	06/13/24 10:05	06/13/24 14:52	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2301401	5	06/13/24 10:04	06/14/24 00:11	JPD	Mt. Juliet, TN

JUN 05-4-1 L1744264-06 Solid

Collected by: Luis Montijo | Collected date/time: 06/05/24 07:58 | Received date/time: 06/07/24 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2301395	1	06/13/24 10:05	06/13/24 14:54	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2301401	5	06/13/24 10:04	06/14/24 00:14	JPD	Mt. Juliet, TN

JUN 05-9-2 L1744264-07 Solid

Collected by: Luis Montijo | Collected date/time: 06/05/24 08:13 | Received date/time: 06/07/24 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2301395	1	06/13/24 10:05	06/13/24 14:56	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2301401	5	06/13/24 10:04	06/14/24 00:17	JPD	Mt. Juliet, TN

JUN 05-19-3 L1744264-08 Solid

Collected by: Luis Montijo | Collected date/time: 06/05/24 08:40 | Received date/time: 06/07/24 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2301395	1	06/13/24 10:05	06/13/24 14:57	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2301401	5	06/13/24 10:04	06/14/24 00:22	JPD	Mt. Juliet, TN

JUN 05-45-1 L1744264-09 Solid

Collected by: Luis Montijo | Collected date/time: 06/05/24 10:19 | Received date/time: 06/07/24 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2301395	1	06/13/24 10:05	06/13/24 14:59	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2301401	5	06/13/24 10:04	06/14/24 00:25	JPD	Mt. Juliet, TN

JUN 05-51-1 L1744264-10 Solid

Collected by: Luis Montijo | Collected date/time: 06/05/24 11:15 | Received date/time: 06/07/24 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2301395	1	06/13/24 10:05	06/13/24 15:01	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2301401	5	06/13/24 10:04	06/14/24 00:28	JPD	Mt. Juliet, TN

JUN 05-56-2 L1744264-11 Solid

Collected by: Luis Montijo | Collected date/time: 06/05/24 12:41 | Received date/time: 06/07/24 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2301395	1	06/13/24 10:05	06/13/24 15:02	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2301401	5	06/13/24 10:04	06/14/24 00:32	JPD	Mt. Juliet, TN

JUN 05-71 -1 L1744264-12 Solid

Collected by: Luis Montijo | Collected date/time: 06/05/24 13:56 | Received date/time: 06/07/24 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2301395	1	06/13/24 10:05	06/13/24 15:04	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2301401	5	06/13/24 10:04	06/14/24 00:35	JPD	Mt. Juliet, TN

JUN 05-72-2 L1744264-13 Solid

Collected by: Luis Montijo | Collected date/time: 06/05/24 14:05 | Received date/time: 06/07/24 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2301395	1	06/13/24 10:05	06/13/24 15:06	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2301401	5	06/13/24 10:04	06/14/24 00:38	JPD	Mt. Juliet, TN

JUN 05-77-1 L1744264-14 Solid

Collected by: Luis Montijo | Collected date/time: 06/05/24 14:29 | Received date/time: 06/07/24 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2301395	1	06/13/24 10:05	06/13/24 15:11	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2301401	5	06/13/24 10:04	06/14/24 00:48	JPD	Mt. Juliet, TN

SAMPLE SUMMARY

JUN 06-3-1 L1744264-15 Solid

Collected by: Luis Montijo
Collected date/time: 06/06/24 07:55
Received date/time: 06/07/24 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2301395	1	06/13/24 10:05	06/13/24 15:13	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2301401	5	06/13/24 10:04	06/14/24 00:51	JPD	Mt. Juliet, TN

JUN 06-16-1 L1744264-16 Solid

Collected by: Luis Montijo
Collected date/time: 06/06/24 09:01
Received date/time: 06/07/24 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2301395	1	06/13/24 10:05	06/13/24 14:34	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2301401	5	06/13/24 10:04	06/13/24 23:23	LD	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.

Shane Gambill
Project Manager

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	1.71	E4	0.544	2.00	1	06/13/2024 14:42	WG2301395
Arsenic	11.6		0.518	2.00	1	06/13/2024 14:42	WG2301395
Barium	107		0.0852	0.500	1	06/13/2024 14:42	WG2301395
Cadmium	0.675		0.0471	0.500	1	06/13/2024 14:42	WG2301395
Copper	64.0		0.400	2.00	1	06/13/2024 14:42	WG2301395
Iron	8930		2.24	10.0	1	06/13/2024 14:42	WG2301395
Lead	16.2		0.208	0.500	1	06/13/2024 14:42	WG2301395
Manganese	252		0.133	1.00	1	06/13/2024 14:42	WG2301395
Nickel	17.9		0.132	2.00	1	06/13/2024 14:42	WG2301395
Silver	U		0.127	1.00	1	06/13/2024 14:42	WG2301395
Zinc	60.2		0.832	5.00	1	06/13/2024 14:42	WG2301395

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Thallium	0.129	E4	0.0650	2.00	5	06/13/2024 23:39	WG2301401
Uranium	0.202	E4	0.0478	15.0	5	06/13/2024 23:39	WG2301401

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	0.853	E4	0.544	2.00	1	06/13/2024 14:44	WG2301395
Arsenic	10.8		0.518	2.00	1	06/13/2024 14:44	WG2301395
Barium	97.1		0.0852	0.500	1	06/13/2024 14:44	WG2301395
Cadmium	2.04		0.0471	0.500	1	06/13/2024 14:44	WG2301395
Copper	107		0.400	2.00	1	06/13/2024 14:44	WG2301395
Iron	8690		2.24	10.0	1	06/13/2024 14:44	WG2301395
Lead	23.6		0.208	0.500	1	06/13/2024 14:44	WG2301395
Manganese	273		0.133	1.00	1	06/13/2024 14:44	WG2301395
Nickel	18.0		0.132	2.00	1	06/13/2024 14:44	WG2301395
Silver	U		0.127	1.00	1	06/13/2024 14:44	WG2301395
Zinc	136		0.832	5.00	1	06/13/2024 14:44	WG2301395

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Thallium	0.0722	E4	0.0650	2.00	5	06/13/2024 23:42	WG2301401
Uranium	0.208	E4	0.0478	15.0	5	06/13/2024 23:42	WG2301401

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	2.03		0.544	2.00	1	06/13/2024 14:45	WG2301395
Arsenic	8.24		0.518	2.00	1	06/13/2024 14:45	WG2301395
Barium	106		0.0852	0.500	1	06/13/2024 14:45	WG2301395
Cadmium	0.461	E4	0.0471	0.500	1	06/13/2024 14:45	WG2301395
Copper	145		0.400	2.00	1	06/13/2024 14:45	WG2301395
Iron	10700		2.24	10.0	1	06/13/2024 14:45	WG2301395
Lead	10.3		0.208	0.500	1	06/13/2024 14:45	WG2301395
Manganese	198		0.133	1.00	1	06/13/2024 14:45	WG2301395
Nickel	21.2		0.132	2.00	1	06/13/2024 14:45	WG2301395
Silver	U		0.127	1.00	1	06/13/2024 14:45	WG2301395
Zinc	568		0.832	5.00	1	06/13/2024 14:45	WG2301395

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Thallium	U		0.0650	2.00	5	06/13/2024 23:46	WG2301401
Uranium	0.493	E4	0.0478	15.0	5	06/13/2024 23:46	WG2301401

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	1.13	E4	0.544	2.00	1	06/13/2024 14:51	WG2301395
Arsenic	2.96		0.518	2.00	1	06/13/2024 14:51	WG2301395
Barium	74.8		0.0852	0.500	1	06/13/2024 14:51	WG2301395
Cadmium	0.306	E4	0.0471	0.500	1	06/13/2024 14:51	WG2301395
Copper	24.3		0.400	2.00	1	06/13/2024 14:51	WG2301395
Iron	5150		2.24	10.0	1	06/13/2024 14:51	WG2301395
Lead	6.95		0.208	0.500	1	06/13/2024 14:51	WG2301395
Manganese	175		0.133	1.00	1	06/13/2024 14:51	WG2301395
Nickel	12.1		0.132	2.00	1	06/13/2024 14:51	WG2301395
Silver	U		0.127	1.00	1	06/13/2024 14:51	WG2301395
Zinc	35.9		0.832	5.00	1	06/13/2024 14:51	WG2301395

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Thallium	U		0.0650	2.00	5	06/14/2024 00:08	WG2301401
Uranium	0.524	E4	0.0478	15.0	5	06/14/2024 00:08	WG2301401

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	1.35	E4	0.544	2.00	1	06/13/2024 14:52	WG2301395
Arsenic	2.82		0.518	2.00	1	06/13/2024 14:52	WG2301395
Barium	83.6		0.0852	0.500	1	06/13/2024 14:52	WG2301395
Cadmium	0.278	E4	0.0471	0.500	1	06/13/2024 14:52	WG2301395
Copper	23.0		0.400	2.00	1	06/13/2024 14:52	WG2301395
Iron	4700		2.24	10.0	1	06/13/2024 14:52	WG2301395
Lead	6.31		0.208	0.500	1	06/13/2024 14:52	WG2301395
Manganese	169		0.133	1.00	1	06/13/2024 14:52	WG2301395
Nickel	10.9		0.132	2.00	1	06/13/2024 14:52	WG2301395
Silver	U		0.127	1.00	1	06/13/2024 14:52	WG2301395
Zinc	48.6		0.832	5.00	1	06/13/2024 14:52	WG2301395

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Thallium	U		0.0650	2.00	5	06/14/2024 00:11	WG2301401
Uranium	0.382	E4	0.0478	15.0	5	06/14/2024 00:11	WG2301401

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	2.07		0.544	2.00	1	06/13/2024 14:54	WG2301395
Arsenic	6.83		0.518	2.00	1	06/13/2024 14:54	WG2301395
Barium	122		0.0852	0.500	1	06/13/2024 14:54	WG2301395
Cadmium	1.08		0.0471	0.500	1	06/13/2024 14:54	WG2301395
Copper	90.9		0.400	2.00	1	06/13/2024 14:54	WG2301395
Iron	11300		2.24	10.0	1	06/13/2024 14:54	WG2301395
Lead	19.8		0.208	0.500	1	06/13/2024 14:54	WG2301395
Manganese	245		0.133	1.00	1	06/13/2024 14:54	WG2301395
Nickel	27.4		0.132	2.00	1	06/13/2024 14:54	WG2301395
Silver	U		0.127	1.00	1	06/13/2024 14:54	WG2301395
Zinc	154		0.832	5.00	1	06/13/2024 14:54	WG2301395

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Thallium	U		0.0650	2.00	5	06/14/2024 00:14	WG2301401
Uranium	0.227	E4	0.0478	15.0	5	06/14/2024 00:14	WG2301401

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	1.48	E4	0.544	2.00	1	06/13/2024 14:56	WG2301395
Arsenic	24.5		0.518	2.00	1	06/13/2024 14:56	WG2301395
Barium	133		0.0852	0.500	1	06/13/2024 14:56	WG2301395
Cadmium	U		0.0471	0.500	1	06/13/2024 14:56	WG2301395
Copper	52.9		0.400	2.00	1	06/13/2024 14:56	WG2301395
Iron	15800		2.24	10.0	1	06/13/2024 14:56	WG2301395
Lead	9.05		0.208	0.500	1	06/13/2024 14:56	WG2301395
Manganese	1520		0.133	1.00	1	06/13/2024 14:56	WG2301395
Nickel	38.0		0.132	2.00	1	06/13/2024 14:56	WG2301395
Silver	U		0.127	1.00	1	06/13/2024 14:56	WG2301395
Zinc	138		0.832	5.00	1	06/13/2024 14:56	WG2301395

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Thallium	U		0.0650	2.00	5	06/14/2024 00:17	WG2301401
Uranium	0.198	E4	0.0478	15.0	5	06/14/2024 00:17	WG2301401

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	1.50	E4	0.544	2.00	1	06/13/2024 14:57	WG2301395
Arsenic	9.57		0.518	2.00	1	06/13/2024 14:57	WG2301395
Barium	129		0.0852	0.500	1	06/13/2024 14:57	WG2301395
Cadmium	1.28		0.0471	0.500	1	06/13/2024 14:57	WG2301395
Copper	138		0.400	2.00	1	06/13/2024 14:57	WG2301395
Iron	10100		2.24	10.0	1	06/13/2024 14:57	WG2301395
Lead	22.7		0.208	0.500	1	06/13/2024 14:57	WG2301395
Manganese	268		0.133	1.00	1	06/13/2024 14:57	WG2301395
Nickel	23.7		0.132	2.00	1	06/13/2024 14:57	WG2301395
Silver	U		0.127	1.00	1	06/13/2024 14:57	WG2301395
Zinc	102		0.832	5.00	1	06/13/2024 14:57	WG2301395

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Thallium	U		0.0650	2.00	5	06/14/2024 00:22	WG2301401
Uranium	0.275	E4	0.0478	15.0	5	06/14/2024 00:22	WG2301401

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	3.50		0.544	2.00	1	06/13/2024 14:59	WG2301395
Arsenic	11.5		0.518	2.00	1	06/13/2024 14:59	WG2301395
Barium	229		0.0852	0.500	1	06/13/2024 14:59	WG2301395
Cadmium	2.88		0.0471	0.500	1	06/13/2024 14:59	WG2301395
Copper	202		0.400	2.00	1	06/13/2024 14:59	WG2301395
Iron	17400		2.24	10.0	1	06/13/2024 14:59	WG2301395
Lead	35.8		0.208	0.500	1	06/13/2024 14:59	WG2301395
Manganese	425		0.133	1.00	1	06/13/2024 14:59	WG2301395
Nickel	44.2		0.132	2.00	1	06/13/2024 14:59	WG2301395
Silver	U		0.127	1.00	1	06/13/2024 14:59	WG2301395
Zinc	434		0.832	5.00	1	06/13/2024 14:59	WG2301395

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Thallium	0.0955	E4	0.0650	2.00	5	06/14/2024 00:25	WG2301401
Uranium	0.435	E4	0.0478	15.0	5	06/14/2024 00:25	WG2301401

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	1.19	E4	0.544	2.00	1	06/13/2024 15:01	WG2301395
Arsenic	17.4		0.518	2.00	1	06/13/2024 15:01	WG2301395
Barium	103		0.0852	0.500	1	06/13/2024 15:01	WG2301395
Cadmium	0.504		0.0471	0.500	1	06/13/2024 15:01	WG2301395
Copper	37.9		0.400	2.00	1	06/13/2024 15:01	WG2301395
Iron	9280		2.24	10.0	1	06/13/2024 15:01	WG2301395
Lead	14.2		0.208	0.500	1	06/13/2024 15:01	WG2301395
Manganese	333		0.133	1.00	1	06/13/2024 15:01	WG2301395
Nickel	29.5		0.132	2.00	1	06/13/2024 15:01	WG2301395
Silver	U		0.127	1.00	1	06/13/2024 15:01	WG2301395
Zinc	44.5		0.832	5.00	1	06/13/2024 15:01	WG2301395

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Thallium	0.0680	E4	0.0650	2.00	5	06/14/2024 00:28	WG2301401
Uranium	0.292	E4	0.0478	15.0	5	06/14/2024 00:28	WG2301401

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	0.884	E4	0.544	2.00	1	06/13/2024 15:02	WG2301395
Arsenic	19.0		0.518	2.00	1	06/13/2024 15:02	WG2301395
Barium	109		0.0852	0.500	1	06/13/2024 15:02	WG2301395
Cadmium	0.314	E4	0.0471	0.500	1	06/13/2024 15:02	WG2301395
Copper	32.0		0.400	2.00	1	06/13/2024 15:02	WG2301395
Iron	7810		2.24	10.0	1	06/13/2024 15:02	WG2301395
Lead	10.5		0.208	0.500	1	06/13/2024 15:02	WG2301395
Manganese	235		0.133	1.00	1	06/13/2024 15:02	WG2301395
Nickel	24.7		0.132	2.00	1	06/13/2024 15:02	WG2301395
Silver	U		0.127	1.00	1	06/13/2024 15:02	WG2301395
Zinc	31.2		0.832	5.00	1	06/13/2024 15:02	WG2301395

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Thallium	U		0.0650	2.00	5	06/14/2024 00:32	WG2301401
Uranium	0.217	E4	0.0478	15.0	5	06/14/2024 00:32	WG2301401

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	0.830	E4	0.544	2.00	1	06/13/2024 15:04	WG2301395
Arsenic	7.30		0.518	2.00	1	06/13/2024 15:04	WG2301395
Barium	119		0.0852	0.500	1	06/13/2024 15:04	WG2301395
Cadmium	0.468	E4	0.0471	0.500	1	06/13/2024 15:04	WG2301395
Copper	36.2		0.400	2.00	1	06/13/2024 15:04	WG2301395
Iron	9770		2.24	10.0	1	06/13/2024 15:04	WG2301395
Lead	12.7		0.208	0.500	1	06/13/2024 15:04	WG2301395
Manganese	318		0.133	1.00	1	06/13/2024 15:04	WG2301395
Nickel	31.1		0.132	2.00	1	06/13/2024 15:04	WG2301395
Silver	U		0.127	1.00	1	06/13/2024 15:04	WG2301395
Zinc	43.1		0.832	5.00	1	06/13/2024 15:04	WG2301395

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Thallium	U		0.0650	2.00	5	06/14/2024 00:35	WG2301401
Uranium	0.240	E4	0.0478	15.0	5	06/14/2024 00:35	WG2301401

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	0.955	E4	0.544	2.00	1	06/13/2024 15:06	WG2301395
Arsenic	7.40		0.518	2.00	1	06/13/2024 15:06	WG2301395
Barium	130		0.0852	0.500	1	06/13/2024 15:06	WG2301395
Cadmium	0.0846	E4	0.0471	0.500	1	06/13/2024 15:06	WG2301395
Copper	77.8		0.400	2.00	1	06/13/2024 15:06	WG2301395
Iron	10400		2.24	10.0	1	06/13/2024 15:06	WG2301395
Lead	7.47		0.208	0.500	1	06/13/2024 15:06	WG2301395
Manganese	445		0.133	1.00	1	06/13/2024 15:06	WG2301395
Nickel	22.0		0.132	2.00	1	06/13/2024 15:06	WG2301395
Silver	U		0.127	1.00	1	06/13/2024 15:06	WG2301395
Zinc	108		0.832	5.00	1	06/13/2024 15:06	WG2301395

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Thallium	U		0.0650	2.00	5	06/14/2024 00:38	WG2301401
Uranium	0.265	E4	0.0478	15.0	5	06/14/2024 00:38	WG2301401

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	1.80	E4	0.544	2.00	1	06/13/2024 15:11	WG2301395
Arsenic	13.3		0.518	2.00	1	06/13/2024 15:11	WG2301395
Barium	130		0.0852	0.500	1	06/13/2024 15:11	WG2301395
Cadmium	1.25		0.0471	0.500	1	06/13/2024 15:11	WG2301395
Copper	82.2		0.400	2.00	1	06/13/2024 15:11	WG2301395
Iron	15400		2.24	10.0	1	06/13/2024 15:11	WG2301395
Lead	25.2		0.208	0.500	1	06/13/2024 15:11	WG2301395
Manganese	459		0.133	1.00	1	06/13/2024 15:11	WG2301395
Nickel	39.3		0.132	2.00	1	06/13/2024 15:11	WG2301395
Silver	U		0.127	1.00	1	06/13/2024 15:11	WG2301395
Zinc	80.2		0.832	5.00	1	06/13/2024 15:11	WG2301395

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Thallium	0.0746	E4	0.0650	2.00	5	06/14/2024 00:48	WG2301401
Uranium	0.209	E4	0.0478	15.0	5	06/14/2024 00:48	WG2301401

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	2.11		0.544	2.00	1	06/13/2024 15:13	WG2301395
Arsenic	4.12		0.518	2.00	1	06/13/2024 15:13	WG2301395
Barium	127		0.0852	0.500	1	06/13/2024 15:13	WG2301395
Cadmium	0.549		0.0471	0.500	1	06/13/2024 15:13	WG2301395
Copper	33.3		0.400	2.00	1	06/13/2024 15:13	WG2301395
Iron	9580		2.24	10.0	1	06/13/2024 15:13	WG2301395
Lead	10.6		0.208	0.500	1	06/13/2024 15:13	WG2301395
Manganese	256		0.133	1.00	1	06/13/2024 15:13	WG2301395
Nickel	28.6		0.132	2.00	1	06/13/2024 15:13	WG2301395
Silver	U		0.127	1.00	1	06/13/2024 15:13	WG2301395
Zinc	60.0		0.832	5.00	1	06/13/2024 15:13	WG2301395

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Thallium	U		0.0650	2.00	5	06/14/2024 00:51	WG2301401
Uranium	0.356	E4	0.0478	15.0	5	06/14/2024 00:51	WG2301401

Metals (ICP) by Method 6010D

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Antimony	1.83	E4 M2	0.544	2.00	1	06/13/2024 14:34	WG2301395
Arsenic	13.9		0.518	2.00	1	06/13/2024 14:34	WG2301395
Barium	115		0.0852	0.500	1	06/13/2024 14:34	WG2301395
Cadmium	1.78		0.0471	0.500	1	06/13/2024 14:34	WG2301395
Copper	146		0.400	2.00	1	06/13/2024 14:34	WG2301395
Iron	11600	M3	2.24	10.0	1	06/13/2024 14:34	WG2301395
Lead	29.7		0.208	0.500	1	06/13/2024 14:34	WG2301395
Manganese	304		0.133	1.00	1	06/13/2024 14:34	WG2301395
Nickel	24.8		0.132	2.00	1	06/13/2024 14:34	WG2301395
Silver	U		0.127	1.00	1	06/13/2024 14:34	WG2301395
Zinc	135		0.832	5.00	1	06/13/2024 14:34	WG2301395

Metals (ICPMS) by Method 6020B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Thallium	0.102	E4 M2	0.0650	2.00	5	06/13/2024 23:23	WG2301401
Uranium	0.385	E4	0.0478	15.0	5	06/13/2024 23:23	WG2301401

Method Blank (MB)

(MB) R4081449-1 06/13/24 14:30

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Antimony	U		0.544	2.00
Arsenic	U		0.518	2.00
Barium	U		0.0852	0.500
Cadmium	U		0.0471	0.500
Copper	U		0.400	2.00
Iron	5.19	E4	2.24	10.0
Lead	U		0.208	0.500
Manganese	U		0.133	1.00
Nickel	0.147	E4	0.132	2.00
Silver	U		0.127	1.00
Zinc	U		0.832	5.00

Laboratory Control Sample (LCS)

(LCS) R4081449-2 06/13/24 14:32

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony	100	99.2	99.2	80.0-120	
Arsenic	100	97.4	97.4	80.0-120	
Barium	100	111	111	80.0-120	
Cadmium	100	95.6	95.6	80.0-120	
Copper	100	106	106	80.0-120	
Iron	1000	1040	104	80.0-120	
Lead	100	95.2	95.2	80.0-120	
Manganese	100	102	102	80.0-120	
Nickel	100	99.3	99.3	80.0-120	
Silver	20.0	20.6	103	80.0-120	
Zinc	100	98.8	98.8	80.0-120	

L1744264-16 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1744264-16 06/13/24 14:34 • (MS) R4081449-5 06/13/24 14:39 • (MSD) R4081449-6 06/13/24 14:40

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony	100	1.83	73.1	75.7	71.2	73.9	1	75.0-125	M2	M2	3.53	20
Arsenic	100	13.9	102	106	88.0	92.0	1	75.0-125			3.94	20
Barium	100	115	205	224	90.3	109	1	75.0-125			8.77	20
Cadmium	100	1.78	89.3	93.1	87.5	91.3	1	75.0-125			4.18	20
Copper	100	146	225	237	79.3	90.8	1	75.0-125			4.95	20

L1744264-16 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1744264-16 06/13/24 14:34 • (MS) R4081449-5 06/13/24 14:39 • (MSD) R4081449-6 06/13/24 14:40

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Iron	1000	11600	11200	12000	0.000	40.6	1	75.0-125	M3	M3	7.00	20
Lead	100	29.7	116	120	86.0	90.6	1	75.0-125			3.96	20
Manganese	100	304	389	400	85.3	96.2	1	75.0-125			2.76	20
Nickel	100	24.8	115	121	90.1	96.3	1	75.0-125			5.22	20
Silver	20.0	U	18.6	19.2	92.9	95.9	1	75.0-125			3.10	20
Zinc	100	135	211	222	75.9	86.5	1	75.0-125			4.87	20

Method Blank (MB)

(MB) R4081598-1 06/13/24 23:16

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Thallium	U		0.0650	2.00
Uranium	U		0.0478	15.0

Laboratory Control Sample (LCS)

(LCS) R4081598-2 06/13/24 23:19

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Thallium	100	90.5	90.5	80.0-120	
Uranium	100	89.9	89.9	80.0-120	

L1744264-16 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1744264-16 06/13/24 23:23 • (MS) R4081598-5 06/13/24 23:32 • (MSD) R4081598-6 06/13/24 23:36

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Thallium	100	0.102	75.4	73.0	75.3	72.9	5	75.0-125		M2	3.24	20
Uranium	100	0.385	82.0	78.9	81.6	78.5	5	75.0-125			3.87	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

MDL	Method Detection Limit.
RDL	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
E4	Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL) but above MDL.
M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike recovery was acceptable.

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:
Hydro Geo Chem - Tucson, AZ

51 West Wetmore, Ste 101
Tucson, AZ 85705-1678

Billing Information:
Tanya Bentley
51 West Wetmore, Ste 101
Tucson, AZ 85705-1678

Pres Chk

Report to: **Abra Bentley**

Email To: abrab@hgcinc.com

Project Description: 6th & Birch

City/State Collected: Cottonwood, AZ

Please Circle: PT (MT) CT ET

Phone: 520-293-1500

Client Project # 2024007

Lab Project # HYDGEOTAZ-6TH&BIRCH

Collected by (print): Luis Montijo

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Metals 2oz Cl-NoPres

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs		Remarks	Sample # (lab only)
Jun 04-D6-1	Grab	SS		06/04/24	1258	1	X		-01
Jun 04-27-2	"	SS		06/04/24	1330	1	X		-02
Jun 04-44-1	"	SS		06/04/24	1447	1	X		-03
Jun 04-49-1	"	SS		06/04/24	1503	1	X		-04
Jun 04-55-2 DR for AB 6/10*24		SS		06/04/24	1527	1	X		-05
Jun 05-4-1		SS		06/05/24	0758	1	X		-06
Jun 05-9-2		SS		06/05/24	0813	1	X		-07
Jun 05-19-3		SS		06/05/24	0840	1	X		-08
Jun 05-45-1		SS		06/05/24	1019	1	X		-09
Jun 05-51-1		SS		06/05/24	1115	1	X		-10

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

Remarks: Metals = Cu, Pb, Zn, Ni, Fe, Ag, Mn, Ba, Cd, Sb, As, U and Tl
EPA method 6010 B
4-day rush

pH _____ Temp _____
Flow _____ Other _____

Samples returned via: ___ UPS ___ FEX ___ Courier _____

Tracking #

Relinquished by: (Signature) — Date: 06/06/24 — Time: 1140 — Received by: (Signature)

Relinquished by: (Signature) — Date: 6-6-24 — Time: 1700 — Received by: (Signature)

Relinquished by: (Signature) — Date: — Time: — Received for lab by: (Signature)

Trip Blank Received: Yes / No
HCl / MeoH
TBR

Temp: 3.1 °C Bottles Received: 16

Date: 6/7/24 Time: 415

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

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

Chain of Custody Page 1 of 2

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
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

LANCL64

SDG E043

Acctnum: HYDGEOTAZ
Template: T248646
Prelogin: P1061547
PM: 288 - Daphne Richards
PB:

Shipped Via: FedEx Ground

Company Name/Address:
Hydro Geo Chem - Tucson, AZ

51 West Wetmore, Ste 101
Tucson, AZ 85705-1678

Billing Information:
Tanya Bentley
51 West Wetmore, Ste 101
Tucson, AZ 85705-1678

Pres Chk

Report to: **Abra Bentley**

Email To: abrab@hgcinc.com

Project Description: 6th & Birch

City/State Collected: Cottonwood, AZ

Please Circle: PT (MT) CT ET

Phone: 520-293-1500

Client Project # 2024007

Lab Project # HYDGEOTAZ-6TH&BIRCH

Collected by (print): Luis Montijo

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

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

Quote #

Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Analysis / Container / Preservative: Metals 2oz Clr NoPres								Remarks	Sample # (lab only)
Jun 05-56-2	Grab	SS		06/05/24	1241	1	X									-11
Jun 05-71-1	"	SS		06/05/24	1356	1	X									-12
Jun 05-72-2	"	SS		06/05/24	1405	1	X									-13
Jun 05-77-1	"	SS		06/05/24	1429	1	X									-14
Jun 06-3-1	"	SS		06/06/24	0755	1	X									-15
Jun 06-116-1	"	SS		06/06/24	0901	1	X									-16

Chain of Custody Page 2 of 2

Pace
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12065 Lebanon Rd Mount Juliet, TN 37122
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SDG # L1704264

Table #

Acctnum: HYDGEOTAZ
Template: T248646
Prelogin: P1061547
PM: 288 - Daphne Richards
PB:

Shipped Via: FedEX Ground

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

Remarks: Metals = Cu, Pb, Zn, Ni, Fe, Ag, Mn, Ba, Cd, Sb, As, U and Tl
EPA method 6010B
4-day rush

pH _____ Temp _____
Flow _____ Other _____

Samples returned via: ___ UPS ___ FedEx ___ Courier

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
Carlos Schwantes	06/06/24	1140			
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.1+0.2=3.3 °C Bottles Received:	
	6-6-24	1800			
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 6/7/24 Time: 915	Hold: Condition: NCF / OK