



THE STATE
of ALASKA
GOVERNOR MIKE DUNLEAVY

Department of Environmental Conservation

DIVISION OF SPILL PREVENTION AND RESPONSE
Prevention, Preparedness, and Response Program

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March 27, 2025

Pete Strow
Kensington Mine
3031 Clinton Dr, Suite 202
Juneau, AK 99801

Subject: **Kensington Tailings Johnson Creek JNU, Spill #: 24119903101, No Further Action**

Dear Pete Strow:

The Alaska Department of Environmental Conservation (DEC) has completed its review of the case file for the above referenced spill including the interim Spill Incident Report dated March 21, 2024, and the Site Characterization Report prepared by HDR Engineering, Inc. dated February 18, 2025. These reports give a summary of the cleanup actions that were taken, including the recovery of more than 8,000 gallons of released tailings, water quality and sediment sampling of Johnson Creek, and soil sampling at the location of the release.

Water quality sampling conducted on January 31, 2024, immediately following the discovery of the release, showed elevated levels of the following constituents: aluminum, cadmium, copper, iron, lead, and manganese. Water quality sampling conducted on February 1, 2024, and February 6, 2024, did not show any elevated levels for the above constituents. Sediment sampling conducted on February 6, 2024, did not show a difference when compared to historic records.


Soil sampling was conducted between November 6 and November 15, 2024, at the point of release, downgradient of the release on Pipeline Road, and along the drainage ditches that drain into Johnson Creek. Samples were also taken from background locations to evaluate naturally occurring levels of contaminants of concern. Arsenic and manganese were detected at levels higher than migration to groundwater levels, with the highest readings for arsenic at 18.5mg/kg and for manganese at 1,030mg/kg. Background samples showed arsenic at 15.8 mg/kg and manganese at 1,110 mg/kg. HDR's Site Characterization Report determines that while the samples show elevated concentrations of these constituents, the exceedances are generally comparable to naturally elevated metals present in the area. Due to the naturally high levels of these constituents in this area, DEC has determined this incident as closed, as sampling results indicating the exceedances are in line with naturally occurring background levels.

Based on the information in the aforementioned reports, DEC has determined that the lowest practicable level of contamination has been achieved under 18 AAC 75.315 and no further containment or cleanup is required for this site at this time.

If additional areas or levels of contamination are discovered in the future that are not included in the information submitted to DEC, you are required under 18 AAC 75 to contact this office at 1-800-478-9300. In addition, cost recovery under Alaska Statute 46.08.070 will continue until all state costs have been reimbursed.

If you have questions or comments regarding this matter, please contact me at 907-538-3948 or tessa.gottlob@alaska.gov.

Sincerely,

DocuSigned by:

170394A47A7B45F...

Tessa Gottlob
Environmental Program Specialist

cc:

Jason Jones, DEC
Rachael Krajewski, DEC
Cost Recovery, DEC

February 24, 2025

Tessa Gottlob
Alaska Department of Environmental Conservation
Division of Spill Prevention and Response

Re: Kensington Mine Tailings Spill Characterization Report

Dear Ms. Gottlob:

Please find attached the Site Characterization Report prepared by HDR Engineering, Inc. The report documents soil characterization efforts in response to the Kensington Mine tailings release that occurred January 31st, 2024. The characterization work is in accordance with the Site Characterization Workplan approved by the Alaska Department of Environmental Conservation on September 27th, 2024.

Please don't hesitate to contact me at (907) 523-3329 should you have any questions.

Sincerely,



Peter Strow
Environmental Manager

Cc:

David Khan (ADEC)
Sylvia Kreel (ADNR)
Kate Harper (ADNR)
Matthew Reece (USFS)
Kate Kanouse (ADF&G)
Molly Zaleski (NOAA)
Julie Scheurer (NOAA)



Site Characterization Report

Coeur Alaska

Kensington Mine

Kensington, Alaska

February 18, 2025

Site Characterization Report

Coeur Alaska: Kensington Mine

Kensington, Alaska
HDR Project # 10409828

Prepared for:

Coeur Alaska, Inc. and
Alaska Department of Environmental Conservation



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Acronyms and Abbreviations

ADEC	Alaska Department of Environmental Conservation
ADNR	Alaska Department of Natural Resources
APDES	Alaska Pollutant Discharge Elimination System
bgs	below ground surface
Coeur	Coeur Alaska, Inc.
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
GNSS	Global Navigation Satellite System
LCS	Laboratory Control Spike
LCSD	Laboratory Control Spike Duplicate
MDL	Method Detection Limit
MDS	Matrix Spike Duplicate
mg/kg	milligram per kilogram
MRL	Method Reporting Limit
MS	Matrix Spike
RPD	Relative Percent Difference
Site	Coeur Kensington Mine
SVL	SVL Analytical, Inc.
Work Plan	Site Characterization Work Plan, Coeur Alaska: Kensington Mine

Executive Summary

HDR Engineering, Inc. (HDR) has prepared this Site Characterization Report (Report) on behalf of Coeur Alaska, Inc. (Coeur) for the Coeur Kensington Mine (Site; Figure 1). This Report documents soil characterization efforts following a mine tailings release at the Site in January 2024. The site characterization was conducted in general accordance with the *Site Characterization Work Plan, Coeur Alaska: Kensington Mine* (Work Plan), dated 25 September 2024, and approved by Alaska Department of Environmental Conservation (ADEC) on September 27th, 2024. The Report details the soil characterization process, including sampling methodologies, deviations from the Work Plan, a summary of the results, and recommendations based on the evaluation of soil data.

In accordance with the Work Plan, the Site characterization aimed to achieve the following objectives:

1. Identify Site characteristics/conditions that could result in ongoing Site impacts.
2. Evaluate the size of the area potentially impacted by the mine tailings release.
3. Describe potential actions that may be taken to remove any impacted media.

The mine tailings spill was discovered on January 31, 2024, and resulted from a leak in a tailings pipeline that pumps mine tailings from the Process Area to the Tailings Treatment Facility. The pipeline is double-walled and buried approximately 4 feet beneath Pipeline Road between the Process Area and the Tailings Treatment Facility, a total distance of approximately 3.5 miles (Figure 2). An estimated 16,787 gallons of tailings were released and traveled approximately 1,400 feet along Pipeline Road toward Johnson Creek. Coeur completed cleanup activities, including placing coir wattles in the drainage areas along Pipeline Road, diverting the freshwater drainage next to the road in order to prevent the tailings from entering Johnson Creek further, and removing tailings from the freshwater drainage area and Johnson Creek using a vacuum truck and hand tools.

HDR field technicians conducted soil sampling during two separate mobilizations on November 6, 2024, and November 15, 2024. The second mobilization was required because of an unforeseen circumstance that did not allow for the de-energizing of the powerline in the vicinity of the sample area. During the first sampling event, samples were collected in areas outside of areas with powerlines. The second event occurred during a planned outage for the mill. Soil sampling consisted of potholing and collecting a total of 43 soil samples from 21 locations, including 9 locations from the mine tailing release point, 4 locations downgradient along Pipeline Road, 4 locations along the drainage and Johnson Creek entry point, and 3 background locations (Appendix A-Table 1; Figures 2 and 3). Given time constraints during shutdown of the mill, HDR collected a subset of the highest priority samples proposed in the Work Plan. Of the 43 samples collected, 28 of these soil samples were analyzed while the remaining samples were placed on hold pending the results of the initial samples. Based on the initial results, the remaining samples were not analyzed.

Arsenic and manganese were identified as the primary constituents of interest given they were the only analytes detected above the Over 40 Inch Zone Human Health Criteria and/or Migration to Groundwater Criteria in samples collected along the tailing release flow path (Table 1). Background concentrations of arsenic were found to be higher than both the Over 40 Inch Zone Human Health Criteria and the Migration to Groundwater Criteria screening values. Background concentrations of manganese and arsenic were found to be higher than the Migration to Groundwater Criteria screening level.

Based on the samples results, HDR conducted statistical analyses to compare arsenic and manganese concentrations between background and samples along the tailings release path. For arsenic, the statistical analysis indicated that statistically significant differences were observed in some of the samples compared to the background samples though the arsenic concentrations in these samples were lower than the concentrations in the background samples. For manganese, the statistical analyses results suggested no statistically significant difference between the samples collected along the tailings release path and background samples.

Soil sample results were additionally compared to Sediment Effects Benchmarks identified in a site Ecological Risk Assessment conducted in July 2023 (Table 1). The arsenic concentrations were below the ERA Sediment Effects Benchmark and a manganese sediment effects benchmark was not identified due to lack of a national or state aquatic life criteria developed for manganese with the risk of manganese effect on aquatic life considered low.

Proposed soil cleanup levels were developed based on review of the background soil sample concentrations as well as applicable ERA benchmarks and ADEC screening criteria and are summarized below:

- Arsenic (ERA Sediment Effects Benchmarks; 33 milligrams per kilogram [mg/kg])
- Manganese (ADEC Over 40 Inch Zone Human Health Criteria; 2,000 mg/kg)

The findings demonstrate that while some soil samples exhibited elevated concentrations of metals, these exceedances are generally comparable to naturally elevated metals present in soils throughout the region. Arsenic and manganese were identified as the primary constituents of concern though they were below the proposed cleanup levels (ADEC Soil Cleanup Level for arsenic and ERA Sediment Effects Benchmark for manganese). Therefore, no remedial actions are recommended for the site based on the site characterization sampling conducted and presented herein.

1.0 Introduction

HDR Engineering, Inc. (HDR) has prepared this Site Characterization Report (Report) on behalf of Coeur Alaska Inc. (Coeur) for the Coeur Kensington Mine (Site; Figure 1). This Report documents soil characterization efforts following a mine tailings release at the Site in January 2024. HDR conducted the Site characterization in general accordance with the *Site Characterization Work Plan, Coeur Alaska: Kensington Mine* (Work Plan), dated 25 September 2024, and approved by Alaska Department of Environmental Conservation (ADEC) on September 27, 2024. This Report details the soil characterization process, including sampling methodologies, deviations from the Work Plan, a summary of the results, and recommendations based on the evaluation of soil data.

1.1 Project Objectives

In accordance with the Work Plan, the Site characterization aimed to achieve the following objectives:

1. Identify Site characteristics/conditions that could result in ongoing Site impacts.
2. Evaluate the size of the area potentially impacted by the mine tailings release.
3. Describe potential actions that may be taken to remove any impacted media.

1.2 Site Background

This section describes the Site and background information on the mine tailings release and potential area of impacts.

1.2.1 Site Location and Description

The Site is located approximately 45 miles north-northwest of Juneau, Alaska, at latitude 58.864700 north, longitude -135.082000 west (Figure 1). It is situated on the western and southern flanks of Lions Head Mountain, west of Lynn Canal, and within the drainages of Johnson, Sherman, and Slate Creeks (Coeur, 2024). Coeur owns and operates the Site, which has been in operation as an underground gold mine since 2010, processing an average of 2,000 tons of ore per day (ADEC 2017). The Kensington Mine facility includes the Kensington and Jualin underground mines, an underground paste backfill plant, a surface mill, a tailings treatment facility, administrative and camp facilities, generator facilities, water treatment facilities, and marine dock facilities (ADNR 2024b). Mine tailings are either disposed of underground or in a tailings treatment facility in Lower Slate Lake (Figure 1).

Local geology includes Cretaceous-age diorite and monzodiorite rocks, which are medium to very coarse grained and highly altered (USGS 1988). Gold vein deposits are mesothermal vein-style or orogenic-style deposits located in the Jualin diorite between the Coastal Shear Zone and the Gastineau Shear Zone (Coeur 2024). Groundwater at the Site is estimated to be between 5 to 20 feet below ground surface (bgs), based on operator knowledge, and assumed to flow along the underlying bedrock. There are no active domestic or public supply wells in the vicinity of the Site (ADNR 2024a). Coeur owns the nearest well, which is located approximately 3.5 miles northwest of the tailings release location, though it is not currently in use. Groundwater in this well was historically observed at approximately 26 feet bgs and shale bedrock was noted at 20 feet bgs.

1.2.2 Site History

Mining activities at the Site date back to the 19th century, with gold first discovered in the area in 1891. Formal operations began in 1897, focusing on both the Kensington and Jualin deposits. Early mining efforts yielded approximately 40,000 ounces of gold from 75,000 tons of ore. These operations ceased in the early 20th century due to economic and logistical challenges, including declining gold prices and limitations of infrastructure at the time (Coeur 2024; ADEC 2017).

In the mid-1980s, Coeur initiated modern exploration activities and acquired a 50 percent interest in the Kensington property. By 1995, Coeur secured full ownership and began extensive planning and permitting for redevelopment. The permitting process concluded in the approval of the Environmental Impact Statement (EIS) in 2005, allowing for the commencement of mine development under stringent environmental regulations (ANDR 2024b).

Construction of the mine began in 2005, and commercial operations at the Kensington Mine began in 2010, with an average ore processing capacity of 2,000 tons per day. Tailings are managed through a controlled disposal system at the Tailings Treatment Facility (TTF), with ongoing monitoring to demonstrate compliance with water quality standards (ADEC 2024b). ADEC oversees these efforts, requiring annual reports and consistent adherence to the Alaska Pollutant Discharge Elimination System (APDES) permit AK0050571 (ADEC 2024a).

In recent years, Coeur has proposed expansions to extend the mine's operational life. A Final Supplemental EIS was released in 2021, and Final Record of Decision for the Kensington Mine expansion was released the following year, expanding the life of the mine by at least 10 years (ADNR 2022).

1.2.3 Mine Tailings Release

On January 31, 2024, a leak was discovered in a tailings pipeline that pumps mine tailings from the Process Area to the Tailings Treatment Facility. The pipeline is double-walled and buried approximately 4 feet beneath Pipeline Road between the Process Area and the Tailings Treatment Facility, a total distance of approximately 3.5 miles (Figure 2).

An estimated 16,787 gallons of tailings were released and traveled approximately 1,400 feet along Pipeline Road toward Johnson Creek. Tailings were initially released to the subsurface at the pipeline leak location (at approximately 4 feet bgs); however, the material surfaced near the release point and flowed down-gradient along Pipeline Road and along the drainage ditch/culvert towards Johnson Creek (Figure 2).

Immediately after the release was detected, Coeur shut down the mill and pipeline, placed coir wattles in the drainage areas along Pipeline Road, and diverted the freshwater drainage next to the road to prevent the tailings from entering Johnson Creek further. Additionally, Coeur used a vacuum truck to remove tailings from the freshwater drainage area and tailings within Johnson Creek were physically removed by mine personnel. A total of approximately 8,111 gallons of tailings were recovered and disposed of underground or in the Tailings Treatment Facility. An additional approximately 50 cubic yards of tailings were recovered using hand tools and vacuum trucks once the snow melted at the Site.

Coeur excavated the area of damaged pipeline and repaired the pipeline following the leak. The area was partially backfilled with gravel and sand but left open to conduct additional investigation in

this area. Following the release, Coeur implemented or is in the process of implementing corrective actions at the Site to prevent future pipeline leaks, including internal pipeline inspections; adding a pressure indicator alarm and tailings flow meter; and updating response protocols, staff training, and standard operating procedures.

A detailed summary of the release is provided in the Work Plan.

2.0 Site Characterization Methods

HDR conducted site characterization activities consisting of soil potholing and sampling in accordance with the Work Plan between November 6 and November 15, 2024. The Work Plan scope is summarized below and includes any deviations made in the field.

2.1 Utility Locate

Ahead of conducting intrusive site characterization activities, Coeur conducted an internal utility locate in the planned soil disturbance areas. Coeur reviewed existing Site utility plans and used a 3M Dynatel locator to scan the planned soil disturbance areas in the dig permit for underground utilities or other cables/pipes. Depending on the purpose of the dig, a tone generator may identify specific cables or just a general locate identifying all cables in the area. Identified underground utilities and cables/pipes were marked on the ground with spray paint and the depth to the features were noted. A single underground electrical line was identified during the utility locate.

Upon arrival at the site, the Coeur representative in charge of the underground utility locate accompanied HDR staff on a field walk to draw attention to the location of an electrical line adjacent to the sampling locations. As a precaution, the electrical line adjacent to the sampling locations was shut off during the potholing and sampling.

2.2 Soil Sampling

HDR conducted soil sampling during two separate mobilizations on November 6, 2024, and November 15, 2024. The first sampling event occurred during a period when it was not possible to de-energize the power lines in portions of the sampling area. Samples were collected within the sampling areas that were outside of known power line areas. The timing of the second sampling event was limited based on a planned shutdown of the mill. Therefore, HDR sampled a subset of 21 out of the 24 locations proposed in the Work Plan (including held step-out samples) (Figures 1 and 2). Sample locations were prioritized based on those most critical to the characterization of potential impacts associated with the mine tailings release. A total of 43 samples were collected from these locations, 24 of which were analyzed with the remaining placed on hold pending the results of the analyzed samples. Hold samples were collected as potential step-out samples that could be analyzed if evaluation of the initial results determined that the step-out samples need to be analyzed to delineate any identified impacts.

Soil sampling was conducted in three main areas associated with the mine tailings release point and flow path in accordance with the Work Plan: the mine tailings release point, downgradient along Pipeline Road, and along the drainage and Johnson Creek entry point (Figures 1 and 2).

- **Mine Tailings Release Point:** Soil samples were collected from nine locations in the immediate vicinity of the mine tailings release point to characterize soil at the release point

(SB01 through SB09; Figure 3). Six sample locations were positioned surrounding the pipe release point at a radial distance of approximately 5 feet away and were analyzed (SB01 through SB6). Step-out soil samples were collected from three locations at a radial distance of approximately 10 feet from the pipe release point (5 feet away from the initial six sample locations) and placed on hold pending the results of the initial samples (SB07 through SB09). For all nine locations, soil samples were collected from between 0.5 and 4.5 feet bgs, as detailed in Table 2. A step-out sample to the east of SB05 was not collected due to inaccessibility on a steep slope. Sample locations SB10 through SB13 were proposed as additional lateral step-out samples to be placed on hold but were not collected due to time constraints and accessibility issues. A total of 25 soil samples were collected of which 13 were analyzed.

- **Downgradient along Pipeline Road:** Soil samples were collected from four locations downgradient of the mine tailings release point along Pipeline Road to characterize soil along the tailings release flow path within Pipeline Road (SB14 through SB17; Figure 3). The sample locations were positioned approximately every 200 feet downgradient of the mine tailings release point along the Pipeline Road tailings flow path. For all four locations, soil samples were collected from between 0.5 and 2.5 feet bgs, as detailed in Table 2. The shallowest 0.5 to 1 foot bgs samples were analyzed and the 2 to 2.5 feet bgs samples placed on hold pending the results of the shallower samples. A total of eight soil samples were collected of which four were analyzed.
- **Along the drainage and Johnson Creek entry point:** Soil samples were collected from three locations along the drainage to Johnson Creek from Pipeline Road to characterize soil along the tailings release flow path within the drainage (SB18 through SB20; Figure 3). One additional sample was collected at the Johnson Creek entry point to characterize soil at the location where mine tailings released entered Johnson Creek (SB21; Figure 3). For all four locations, soil samples were collected from between 0.5 and 3.5 feet bgs, as detailed in Table 2. The shallowest 0.5 to 1 foot bgs samples were analyzed and the 2 to 2.5 and 3 to 3.5 feet bgs samples collected at SB20 and SB21 were placed on hold pending the results of the shallower samples. A total of seven soil samples were collected of which four were analyzed.

Additionally, three background soil samples were collected to assess the background metals concentrations (BG01 through BG03; Figure 3). BG01 was collected from approximately 200 feet upgradient of the mine tailing pipe release along the Pipeline Road, BG02 was collected from soil in the cut slope of Pipeline Road immediately adjacent to but above the tailings release point, and BG03 was collected adjacent and upstream to the Johnson Creek entry point (Figure 3). Background soil samples were collected at a depth of approximately 2 to 2.5 feet bgs.

Field duplicates were collected at a frequency of one per ten field samples, and matrix spike and matrix spike duplicate samples were collected at a frequency of one per twenty field samples.

An excavator was used to pothole to a total depth of approximately 5 feet bgs at each of the sampling locations at the mining tailings release point and along Pipeline Road (SB01 through SB09 and SB14 through SB17). Sampling was only conducted to the depth at which bedrock or refusal were encountered at locations where bedrock or refusal were encountered shallower than 5 feet bgs. Soil samples were collected at the prescribed depths from the potholes directly into laboratory-issued 8-ounce jars. In areas where excavator access was limited within the drainage and Johnson

Creek entry point sample locations (SB19 through SB21 and BG03), a hand auger, shovel, or other similar hand tools were used to collect soil samples were placed directly into laboratory-issued 8-ounce jars. Reusable sampling equipment was decontaminated between samples using an Alconox solution and rinsed using deionized water.

For each sample location, the potholing/sampling equipment used, soil/geology characteristics, sample location and depth, total, refusal, and encountered groundwater depths, and other notable observations (discoloration, sediment deposits, etc.) were documented in the field notes. Field notes and soil logs of the potholes are included as Appendix B; photos of the sampling locations are included in Appendix C.

The soil sample locations were surveyed for horizontal and vertical control with a Bad Elf global navigation satellite system (GNSS) receiver. Coordinates were surveyed in the State Plane Zone 4 Coordinate system. Horizontal information (northing and easting data) was provided in North American Datum 1983, State Plane Zone 4 feet, and vertical information (elevation data) was provided in National Geodetic Vertical Datum 1988 feet.

All soil samples were collected in laboratory-provided sample jars, placed in a cooler, and shipped under chain-of-custody protocol for laboratory analysis.

3.0 Results and Findings

This section summarizes the soil characterization results and findings, including soil pothole observations and soil sample analytical results.

3.1 Soil Potholing/Exploratory Hole Results

Fifteen potholes were excavated with an excavator at the mining tailings release point and along Pipeline Road to collect soil samples from the depths noted in Section 2.2. HDR field technicians made the following observations of the soil at these samples locations:

- The soil surrounding the mine tailings pipe consisted of gray poorly sorted sand with gravel, consistent with trench backfill material. Two of the potholes, SB02 and SB03, encountered wood logs at approximately 3 to 3.5 feet bgs.
- Soil compositions varied only slightly between locations along Pipeline Road, with the uppermost soils consisting of brown to dark brown and gray sandy gravel and cobbles with varying amounts of Silt and some scattered boulders. The soil below the uppermost layer consisted of brown to dark brown with some black sandy gravel and cobbles with some organics. The deepest intervals consisted of orangish brown to dark brown sandy gravel with silt.

Soil samples were collected from a total of four sample locations along the drainage ditch and at the entry point to Johnson Creek (SB18 through SB20 and BG03), using an excavator and/or hand tools from the depths noted in Section 2.2. Three sample locations along the drainage ditch and near Johnson Creek were in areas inaccessible by the excavator and were dug using hand tools (SB20, SB21, and BG03). HDR field technicians made the following observations of the soil at these samples locations:

- Soil encountered at these locations was different than the soil encountered along Pipeline

Road and are likely more representative of natural deposits compared to road fill material along Pipeline Road. The soil consisted of silty sand and sandy gravel without the trench backfill material identified at the locations along Pipeline Road.

- The uppermost soils at location SB20 consisted of mostly dark brown silty sand with abundant organic matter. The deepest interval of SB20 consisted of sandy gravel. The uppermost material in SB21 and BG03 along the western edge of Johnson Creek consisted of gray sandy gravel.

Groundwater was not encountered in any of the potholes. No staining, odors, or the presence of tailings-like material were observed in the potholes. Soil classification and field documents are included in Appendix B; photos of select potholes are included in Appendix C.

3.2 Soil Investigation Analytical Results and Screening Level Analysis

Forty-four soil samples were collected during soil sampling, including field duplicates and matrix spike/matrix spike duplicates (MS/MSD) soil samples for quality assurance/quality control (QA/QC) purposes, and background samples to serve as baseline conditions for comparison with mine tailings release characterization samples. Twenty-eight out of the 44 soil samples were analyzed while the remaining samples were placed on hold pending the results of the initial samples. Based on results from the initial soil sample analysis, the samples placed on hold were not ultimately analyzed. Laboratory analytical reports are provided in Appendix D.

Soil samples were analyzed for arsenic, cadmium, copper, lead, manganese, nickel, selenium, silver, and zinc using Environmental Protection Agency (EPA) method 6020B and for mercury using EPA method 7471B, in accordance with the Work Plan. A comparison of the soil sample results and ADEC's Over 40 Inch Zone Human Health Criteria and Migration to Groundwater Criteria is presented in Table 1.

Arsenic and manganese were the only analytes detected above the screening levels. Arsenic exceeded the Over 40 Inch Zone Human Health Criteria (7.2 mg/kg) at SB01 (3 to 3.5 and 4 to 4.5 feet bgs), SB02 (2 to 2.5 and 4 to 4.5 feet bgs), SB04 (4 to 4.5 feet bgs), SB06 (4 to 4.5 feet bgs), and SB21 (0.5 to 1 feet bgs) with the highest concentration, 18.5 mg/kg, observed at SB04. All samples exceeded the Migration to Groundwater Criteria for arsenic (0.2 mg/kg). The background samples yielded arsenic concentrations of 15.3 mg/kg (BG01), 8.86 mg/kg (BG02), and 15.8 mg/kg (BG03). All background samples exceeded the Over 40 Inch Zone Human Health Criteria and the Migration to Groundwater Criteria.

Manganese was detected at up to 1,030 mg/kg (SB14 at 0.5 to 1 feet bgs), which is below the Over 40 Inch Zone Human Health Criteria (2,000 mg/kg). All samples, except for SB01 (4 to 4.5 feet bgs), SB05 (4 to 4.5 feet bgs), and SB20 (0.5 to 1 feet bgs), exceeded the Migration to Groundwater Criteria for manganese (370 mg/kg). The background samples yielded manganese concentrations of 1,110 mg/kg (BG01), 933 mg/kg (BG02), and 487 mg/kg (BG03). All three samples exceeded the Migration to Groundwater Criteria.

3.2.1 Statistical Analysis

HDR conducted statistical analyses to compare arsenic and manganese concentrations between background and samples along the tailings release path. Paired t-tests (assuming unequal variances) were applied to locations with multiple data points, while one-sample-t-tests were applied to locations with single data points (Table 2). Unequal variances t-tests were applied instead of regular t-test due to sample sizes and variances differed between the background and release point datasets. For the same reason, standard deviations were not calculated for certain comparisons. For arsenic, the results indicate that statistically significant differences were observed ($p < 0.05$) in half of the sample sites (Table 2); however, the arsenic concentrations in these samples were lower than the concentrations in the background samples. This suggests that while a difference exists, it does not indicate elevated arsenic concentration in the tailings release path and may be attributed to natural variability, dilution, or geochemical factors. For manganese, the statistical analyses results suggested no statistically significant difference between the samples collected along the tailings release path and background samples. Therefore, for manganese, there is insufficient evidence to suggest statistically significant deviations from background soils.

3.2.2 Ecological Risk Assessment

Cedar Creek Associates, Inc. prepared an Ecological Risk Assessment in July 2023 (ERA), on behalf of Coeur to fulfill requirements of a Record of Decision (ROD) issued by the United States Department of Agriculture Forest Service in February 2022. The goal of the ERA was to evaluate the effects of the Kensington Project mining activities on environmental receptors.

The ERA was performed by identifying constituents of interest and conducting exposure and effects assessments for the constituents of interest in surface water and sediment. The assessments included identification of surface water and sediment effects benchmarks to screen site data against. Soil sample results generated as part of this site characterization effort were additionally screened against the sediment effects benchmarks (Table 1). The soil sample results were all below the sediment effects benchmarks identified in the ERA. Note that a sediment effects benchmark was not identified for manganese due to lack of a national or state aquatic life criteria developed for manganese with the risk of manganese effect on aquatic life considered low.

Table 1. Soil Sample Analytical Results and ADEC Clean Up Levels

-	Location	Site	Depth (ft)	Arsenic (mg/kg)	Cadmium (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Manganese (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Zinc (mg/kg)	Mercury (mg/kg)
ADEC Screening Levels	Over 40 Inch Zone Human Health Criteria (mg/kg) ¹	-	-	7.2	76	3300	400	2000	1700	410	410	25000	3.1 (14) ²
	Migration to Groundwater (mg/kg)	-	-	0.2	9.1	370	-	370	340	6.9	11	4900	0.36
ERA Sediment Effects Benchmarks		-	-	33	5.0	149	128	-	49	3.2	1.8	459	1.1
Soil Sample Analytical Results	Background Samples	BG01	2-2.5	15.3	0.443	101	1.95	1110	3.36	0.170J	0.0841	95.0	0.019J
		BG02	2-2.5	8.86	ND	159	5.4	933	2.81	0.129J	0.184	71.3	0.013J
		BG03	2-2.5	15.8	ND	46.7	12.5	487	9.46	0.354J	0.110	94.8	0.038
	Mine Tailings Release Point	SB01	0.5-1	2.39	ND	78.7	2.26	673	1.53	0.141J	0.205	32.4	0.013J
			2-2.5	6.46	ND	125	4.23	868	2.59	ND	0.0944	56.6	ND
			3-3.5	11	ND	72.5	4.4	558	2.76	0.381J	0.178	58.6	0.019J
			4-4.5	7.72	0.417	53.3	3.89	248	2.69	0.406J	0.0896	52.3	0.024J
		SB02	0.5-1	1.82	ND	86.6	2.42	897	1.81	0.244J	0.387	37	0.014J
			2-2.5	10.1	ND	82.5	5.62	959	2.44	0.351J	0.454	52.2	0.021J
			4-4.5	9.41	ND	57.2	4.67	497	3.05	0.403J	0.135	53.5	0.032J
		SB03	0.5-1	1.61	ND	219	1.46	601	1.36	0.161J	0.159	30.4	0.021J
			2-2.5	2.55	ND	61.2	2.66	553	1.35	ND	0.0915	28.3	0.019J
			4-4.5	6.76	ND	83.8	7.48	989	2.37	0.149J	0.155	46.6	0.014J
		SB04	4-4.5	18.5	ND	47.7	5.49	417	4.61	1.46J	0.171	72.3	0.038
		SB05	4-4.5	1.64	ND	15	1.19	207	13.7	ND	ND	28.4	0.011J
	SB06	4-4.5	7.52	ND	50.8	4.98	575	10.8	0.334J	0.0819	57.8	0.031J	
	Downgradient Along Pipeline Road	SB14	0.5-1	3.58	ND	119	5.31	1030	3.61	0.171J	0.411	76.7	0.016J
		SB15	0.5-1	0.408	ND	25.3	ND	527	ND	ND	ND	8.21	0.015J
		SB16	0.5-1	1.92	ND	86.3	4.36	943	3.16	0.313J	0.404	44.6	0.051
		SB17	0.5-1	2.32	ND	77.5	2.46	896	1.9	0.191J	0.204	34.2	0.028J
Along Drainage	SB18	0.5-1	0.998J	ND	158	4.96	680	4.99	0.214J	0.420	41.4	0.090	
	SB19	0.5-1	1.75	ND	40.6	3.23	783	1.32	0.191J	0.148	20.7	0.041	
	SB20	0.5-1	2.37	ND	5.91	2.39	55.1	1.46	0.247J	ND	10.0	0.038	

-	Location	Site	Depth (ft)	Arsenic (mg/kg)	Cadmium (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Manganese (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Zinc (mg/kg)	Mercury (mg/kg)
	Johnson Creek Entry Point	SB21	0.5-1	8.22	ND	37.6	44.7	352	7.78	0.160J	0.0727J	40.0	0.026J

Notes:

1. Over 40-inch zone is a site that receives mean annual precipitation of 40 or more inches per year.
2. Level is based on a soil saturation concentration (3.1) The human health risk-based cleanup level is 14, which does not take free product into consideration.

J: Result is less than the reporting limit but greater than or equal to the method detection limit (MDL), and the concentration is an approximate value.

ND: Indicates the analyte was analyzed for but was not detected, result was less than the MDL.

Bold: Analyte concentration is greater than ADEC's Clean Up Levels – Migration to Groundwater.

Italicized: Analyte concentration is greater than ADEC's Clean Up Levels – Over 40 Inch Zone Human Health Criteria.

Table 2. Statistical Test Results

Analyte	Site	Analytical Test	Mean	Std. Deviation	Variance	N	df	t Stat	P(T<=t) one-tail	t Critical one-tail	P(T<=t) two-tail	t Critical two-tail
Arsenic	BG	-	13.32	3.871	58.129	3	-	-	-	-	-	-
	SB01	t-Test: Two-Sample Assuming Unequal Variances	6.893	-	12.672	4	3	-2.250	0.044	2.132	0.088	2.776
	SB02		7.110	-	21.107	3	3	-1.790	0.074	2.132	0.148	2.776
	SB03		3.640	-	7.522	3	3	-3.534	0.012	2.132	0.024	2.776
	SB04	One Sample t- Test	-	-	-	-	-	-2.318	0.146	-	-	-
	SB05		-	-	-	-	-	5.227	0.035	-	-	-
	SB06		-	-	-	-	-	2.595	0.122	-	-	-
	SB14		-	-	-	-	-	4.359	0.049	-	-	-
	SB15		-	-	-	-	-	5.778	0.029	-	-	-
	SB16		-	-	-	-	-	5.101	0.036	-	-	-
	SB17		-	-	-	-	-	4.922	0.039	-	-	-
	SB18		-	-	-	-	-	4.922	0.039	-	-	-
	SB19		-	-	-	-	-	5.178	0.035	-	-	-
	SB20		-	-	-	-	-	4.900	0.039	-	-	-
SB21	-	-	-	-	-	2.282	0.150	-	-	-		
Manganese	BG	-	843.333	321.033	103062.333	3	-	-	-	-	-	-
	SB01	t-Test: Two-Sample Assuming Unequal Variances	586.75	-	67372.916	4	4	-1.134	0.160	2.132	0.320	2.776
	SB02		784.333	-	62881.333	3	4	-0.251	0.407	2.132	0.814	2.776
	SB03		714.333	-	57157.333	3	4	-0.558	0.303	2.132	0.606	2.776
	SB04	-	-	-	-	-	2.300	0.148	-	-	-	
	SB05	-	-	-	-	-	3.433	0.075	-	-	-	

Analyte	Site	Analytical Test	Mean	Std. Deviation	Variance	N	df	t Stat	P(T<=t) one-tail	t Critical one-tail	P(T<=t) two-tail	t Critical two-tail
	SB06	One Sample t-Test	-	-	-	-	-	1.448	0.285	-	-	-
	SB14		-	-	-	-	-	-1.001	0.420	-	-	-
	SB15		-	-	-	-	-	1.707	0.230	-	-	-
	SB16		-	-	-	-	-	-0.538	0.645	-	-	-
	SB17		-	-	-	-	-	-0.284	0.803	-	-	-
	SB18		-	-	-	-	-	0.881	0.471	-	-	-
	SB19		-	-	-	-	-	0.326	0.776	-	-	-
	SB20		-	-	-	-	-	4.253	0.051	-	-	-
	SB21		-	-	-	-	-	2.651	0.118	-	-	-

3.3 Proposed Cleanup Levels and Sampling Results Analysis

Almost all soil samples collected (including background samples) exceeded the migration to groundwater criteria for arsenic and manganese. The risk of migration to groundwater is considered low based on existing leaching analyses that indicate a low leachability potential of these metals from Site tailings (see most recent leachability results provided in Appendix E). The background concentrations of arsenic and manganese are above the Migration to Groundwater Criteria, indicating naturally elevated levels of these constituents in the local rock and soils in areas.

Arsenic and manganese are the only constituents of interest identified based on the soil sampling results. They were additionally compared to ERA Sediment Effects Benchmarks but no sample concentrations exceeded the benchmarks.

Proposed soil cleanup levels were developed based on review of the background soil sample concentrations as well as applicable ERA benchmarks and ADEC screening criteria and are summarized in Table 3.

Table 3. Proposed Clean Up Levels

Potential Contaminant of Concern	CAS Number	Proposed Soil Cleanup Level (mg/kg)	Cleanup Level Reference
Arsenic	7440-38-2	33	ERA Sediment Effects Benchmarks
Manganese	7439-96-5	2000	ADEC Soil Cleanup Level

3.4 Quality Assurance Assessment

QA/QC procedures included analytical checks (field replicates, trip blanks, MS/MSDs); instrument calibration; and procedures to assess data for precision, accuracy, representativeness, comparability, and completeness.

Verification analyses for laboratory parameters were conducted by SVL Analytical, Inc (SVL). The data review focused on criteria for the following QA and QC parameters and their overall effects on the data:

- Sample handling (chain of custody)
- Temperature blank
- Holding time compliance
- MS/MSD and laboratory control samples/laboratory control sample duplicates (LCS/LCSD) results
- Field replicate comparison
- Data validation

SVL is certified by the EPA and has an approved QA/QC program. Analytical methods and testing procedures adhered to EPA-approved protocols and guidelines. The analyses for the arsenic, cadmium, copper, lead, manganese, nickel, selenium, silver, and zinc were conducted with EPA method 6020B and mercury analyses were conducted with EPA method 7471B. All samples were

analyzed within the method hold time and under appropriate method detection limits (MDL) and method reporting limits (MRL).

All soil samples were collected in laboratory-provided sample jars, placed in a cooler, and shipped under chain of custody protocol to SVL. Sample custody was maintained for the samples. The coolers transporting the samples remained at ambient temperatures less than 6 degrees Celsius, meeting the EPA's sampling preservation and holding requirements for temperature.

Laboratory methods blanks were performed for all analyses. The method blank for the November 6, 2024 sampling event had a mercury concentration of 0.015 mg/kg, above the MDL but under the MRL. A method blank for sampling event on November 15, 2024, had a manganese concentration of 0.113 mg/kg, above the MDL and MRL. All sample results associated with these method blanks may exhibit a high bias based on potential contamination due to probable matrix interference. All other method blanks were non-detect for all sampling events.

LCS, MS, and MSD were run to verify accuracy and precision of the analyses. Spike recoveries were calculated to verify accuracy while relative percent differences (RPDs) were calculated to verify precision. All LCS's spike recoveries were within the acceptance limits. Multiple MS/MSD recoveries and RPDs were above the laboratory limits. The MS/MSD recoveries and RPD failures may be a result of field variability and matrix interference.

Field duplicates were collected and analyzed. RPDs of field duplicates were calculated as a measurement of field variability and precision. A total of two sets of duplicated were analyzed. RPDs of multiple analytes were above the acceptance limit of 20 percent; however, this is likely a result of field variability.

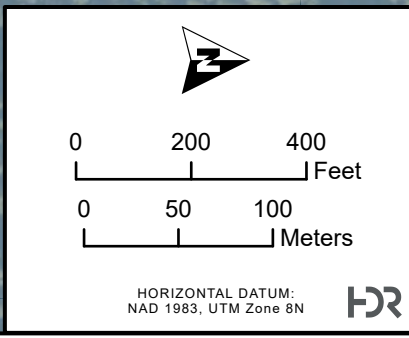
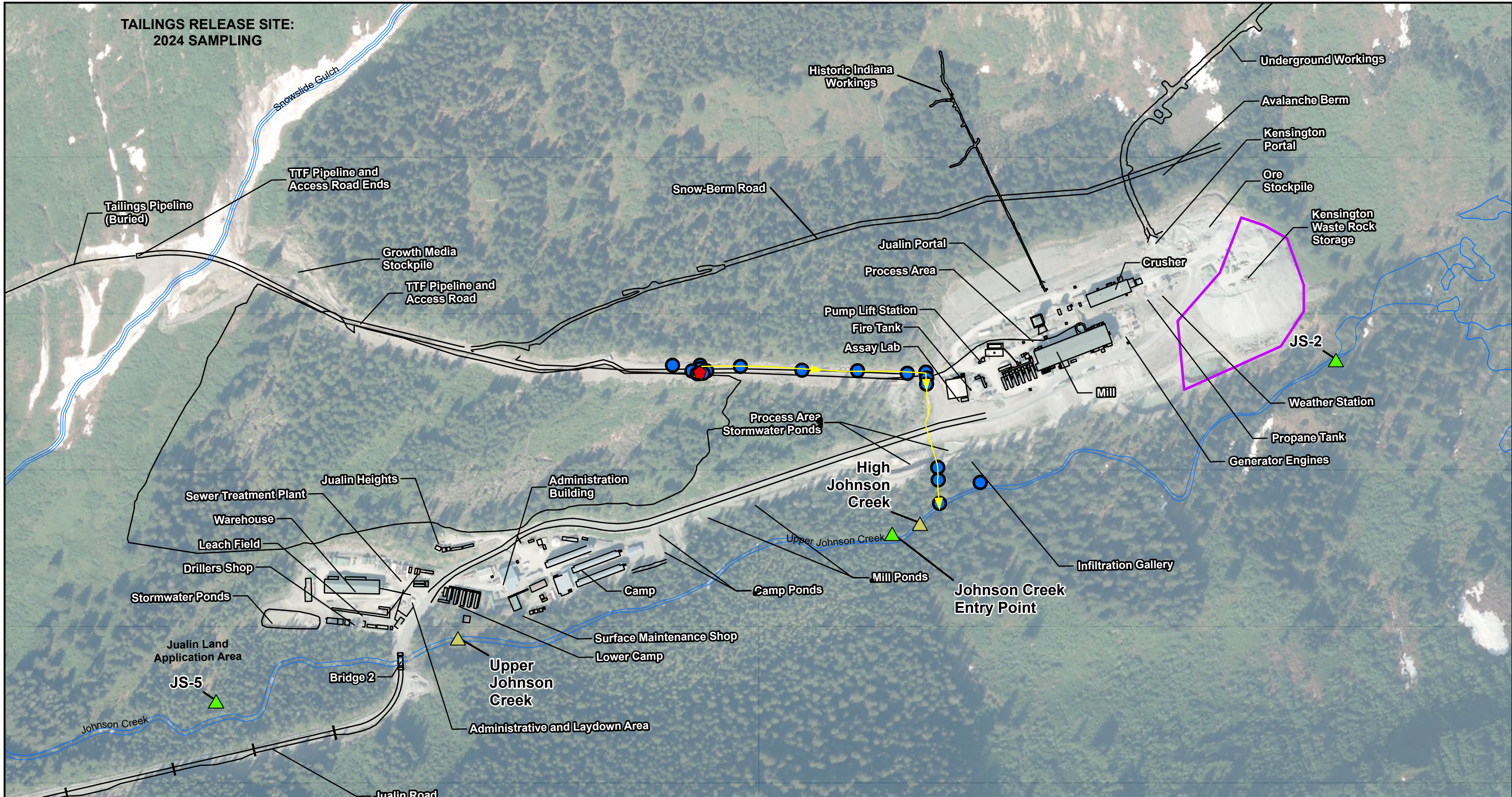
4.0 Conclusions and Recommendations

HDR conducted this site characterization study to evaluate the potential environmental impacts of the mine tailings release at the Site. The findings demonstrate that while some soil samples exhibited elevated concentrations of metals, these exceedances are generally comparable to naturally elevated metals present in soils throughout the region. Arsenic and manganese were identified as the primary constituents of concern though they were below the proposed cleanup levels (ADEC Soil Cleanup Level for arsenic and ERA Sediment Effects Benchmark for manganese). Therefore, no remedial actions are recommended for the site based on the site characterization sampling conducted and presented herein.

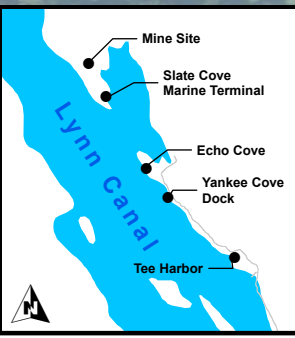
5.0 References

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**TAILINGS RELEASE SITE:
2024 SAMPLING**

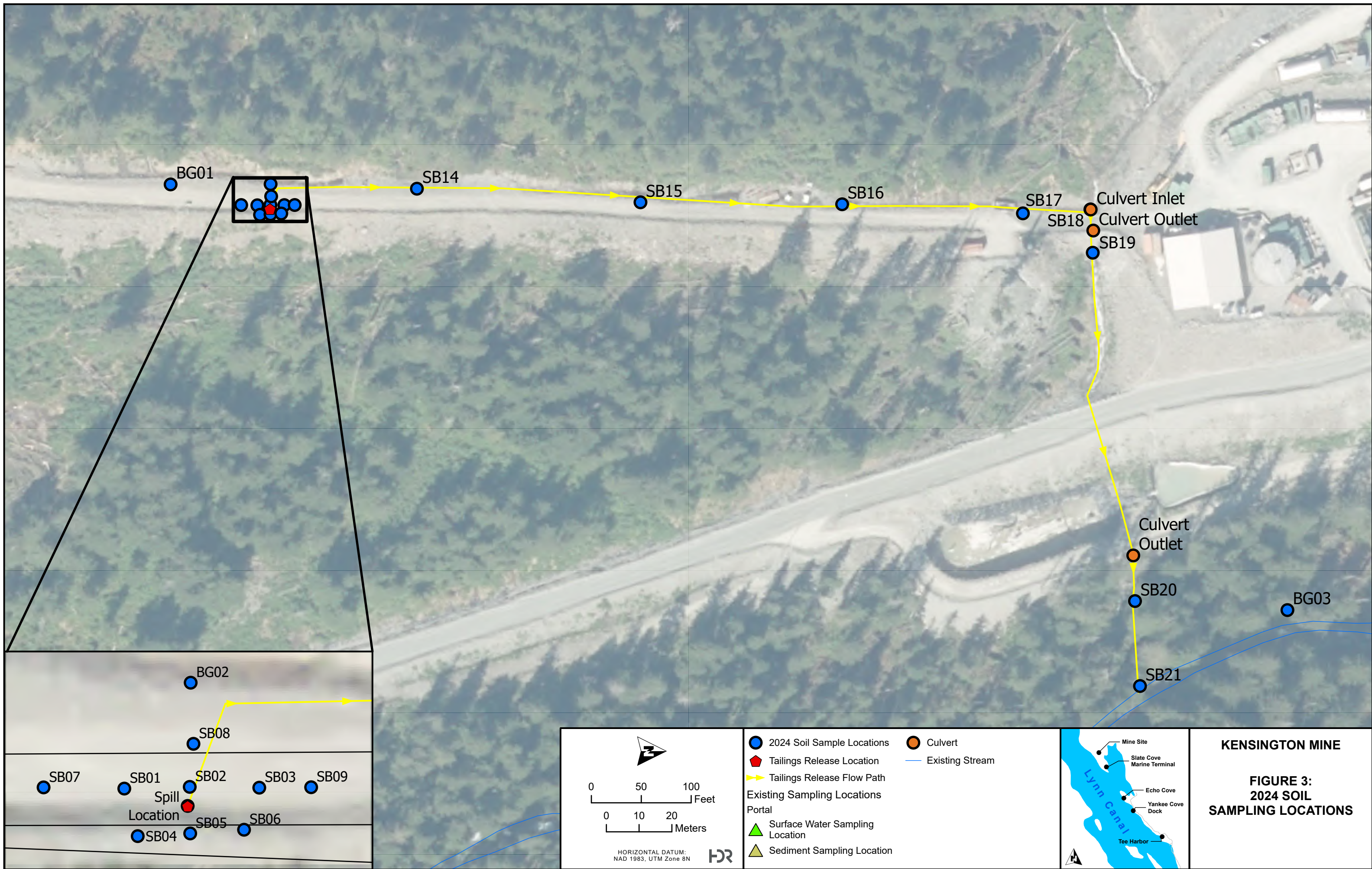



- 2024 Soil Sample Locations
- Tailings Release Location
- ➔ Tailings Release Flow Path
- Existing Sampling Locations
- Portal
- ▲ Surface Water Sampling Location
- ▲ Sediment Sampling Location
- Waste Rock Storage
- Existing Mine Feature
- Existing Stream



KENSINGTON MINE

**FIGURE 2:
2024 SOIL
SAMPLING OVERVIEW**





A

Soil Sampling Summary

Appendix A
Soil Sampling Summary
Kensington Mine, AK




Location	Latitude	Longitude	Sample ID	Sample Area	Sample Depth (ft bgs)	Analyzed/Held	
SB01	58.84293883	-135.0501134	SB01-0.5-1	Release Point	0.5 to 1	A	
			SB01-2-2.5		2 to 2.5	A	
			SB01-3-3.5		3 to 3.5	A	
			SB01-4-4.5		4 to 4.5	A	
SB02	58.84297471	-135.0501152	SB02-0.5-1		0.5 to 1	A	
			SB02-2-2.5		2 to 2.5	A	
			SB02-4-4.5		4 to 4.5	A	
SB03	58.84301286	-135.0501144	SB03-0.5-1		0.5 to 1	A	
			SB03-2-2.5		2 to 2.5	A	
			SB03-4-4.5		4 to 4.5	A	
SB04	58.84294621	-135.0500631	SB04-4-4.5		4 to 4.5	A	
SB05	58.84297499	-135.050066	SB05-4-4.5		4 to 4.5	A	
SB06	58.84300452	-135.0500699	SB06-4-4.5		4 to 4.5	A	
SB07	58.84289455	-135.0501146	SB07-0.5-1	Release Point Step Out	0.5 to 1	H	
			SB07-2-2.5		2 to 2.5	H	
			SB07-3-3.5		3 to 3.5	H	
			SB07-4-4.5		4 to 4.5	H	
SB08	58.84297674	-135.0501608	SB08-0.5-1		0.5 to 1	H	
			SB08-2-2.5		2 to 2.5	H	
			SB08-3-3.5		3 to 3.5	H	
			SB08-4-4.5		4 to 4.5	H	
SB09	58.84304131	-135.0501149	SB09-0.5-1		0.5 to 1	H	
			SB09-2-2.5		2 to 2.5	H	
			SB09-3-3.5		3 to 3.5	H	
			SB09-4-4.5		4 to 4.5	H	
SB14	58.84337644	-135.0502017	SB14-0.5-1		Pipeline Road	0.5 to 1	A
			SB14-2-2.5	2 to 2.5		H	
SB15	58.8439896	-135.0501306	SB15-0.5-1	0.5 to 1		A	
			SB15-2-2.5	2 to 2.5		H	
SB16	58.84454266	-135.0501211	SB16-0.5-1	0.5 to 1		A	
			SB16-2-2.5	2 to 2.5		H	
SB17	58.8450384	-135.0500736	SB17-0.5-1	0.5 to 1		A	
			SB17-2-2.5	2 to 2.5		H	
SB18	58.84522356	-135.0500948	SB18-0.5-1	0.5 to 1		A	
SB19	58.84523005	-135.0498658	SB19-0.5-1	0.5 to 1		A	
SB20	58.84534667	-135.0480236	SB20-0.5-1	Freshwater Drainage		0.5 to 1	A
			SB20-2-2.5			2 to 2.5	H
			SB20-3-3.5			3 to 3.5	H
SB21	58.84536052	-135.0475742	SB21-0.5-1	Johnson Creek Entry Point	0.5 to 1	A	
			SB21-2-2.5		2 to 2.5	H	
BG01	58.84270098	-135.0502234	BG01-2-2.5	Background Samples	2 to 2.5	A	
BG02	58.84297519	-135.0502254	BG02-2-2.5		2 to 2.5	A	
BG03	58.84576465	-135.0479764	BG03-2-2.5		2 to 2.5	A	

Notes:

ft bgs - feet below ground surface

A - analyzed

H - held



B

Field Notes and Soil Classifications

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SINCE 1916



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2 Kensington mine, AK 11/5/24

630 - Arrive at Mine camp and get situated in Cabin

700 - start site orientation and safety briefing

1130 - Finish sites orientation and get equipment ready

1230 - Take tour of mine site to assess sample locations and accessibility

1300 - Spill location about 150' down pipeline rd from map location

* Eastern steep out sample on side of steep slope, unable to collect at location (SB 11)

1315 - SB 18 + SB 19 location is on steep sloped drainage ditch, unable to sample there

* Spill travelled down north side of drainage ditch from spill and crossed pipeline rd between SB 14 SB 15 and then down the southern drainage ditch; material then entered a culvert and migrated NE towards creek; locations SB 18 and SB 19 are located above the culvert.

Scale: 1 square = _____

3

1330 - Sample locations near creek are accessible by foot, and will be sampled on 11/6/24.

1400 - Arrive back at camp and let Cindy (HDR) know about necessary moving of locations due to site recon

1500 - End day

Alvin

Scale: 1 square = _____

Return to the Rain

Field page intentionally
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11/6/2024

SB20-0.5-1.0 @ 09:40

-DR ML w/O

SB20-2.0-2.5 @ 10:05

-LB SM w/G

SB20-3.0-3.5 @ 10:20

-LB SM w/G

SB21-0.5-1.0 @ 11:00

-GR

SB21-1.5-2.0 @ 11:25

-SA GR



11/6/2024

MS/MSD

BG 3 - 2.0-2.5 @ 12:00

- DB/LB SM w/o

Dup 1 = SB 21 - 0.5-1.0

↳ @ 10:40

Kensington Mine Soil Sampling 11/6/24 7

730 - Get equipment loaded up for sampling

800 - Leave camp and head up to sample locations

820 - Arrive at first location and head down to location SB20

940 - Collect 0.5-1" bags sample @ SB20

Soil class: Dark Brown Sandy SILT w/ organics

1005 - Collect 2-2.5" bags sample @ SB20

Soil class: Light Brown silty SAND w/ Gravel

1020 - Collect 3-3.5" bags sample @ SB20

Soil class: Light Brown silty SAND w/ gravel

* Boring terminated due to refusal in hard rock @ 3.5" bags; unable to collect deeper sample

Deion equipment and go to SB21 location

1100 - collect 0.5-1" bags sample @ SB21

* collected adjacent to Johnson creek where spill entered creek

Soil class: Cobbles and Gravel on top of hard rock (slate) with sand and silt

1125 - Collect 1.5-2" sample @ SB21

* Refusal in hard rock; collected sample above refusal

Rock class: Dark gray slate

† Duplicate sample Dup 1 taken out
 the 0.5-1.0' bys interval; decon equipment
 and move to BG 03 location upstream
 of spill; BG 03 location moved upstream
 due to possible spill influence in area.
 1200 - collect 2-2.5' bys background sample
 BG 03

soil class Dark Brown to light brown silty SAND
 with roots and organics

1230 - Finish sampling for day and travel
 to Enviro trailer to pick samples
 for shipment and QC.

1370 - Start packing samples for shipment
 and QC of samples and COL;
 put equipment away

1500 - Samples packaged in cooler and ready
 for shipment; go to cabin to pack
 equipment to journey off site

1630 - Check in at security for bus ride
 to port; boat to Juneau & bus to airport

1800 - Arrive at Juneau airport and hotel
 for EOD.

A. B. M.

Soil Class. For Samples Collected

SB 16 - 0.5-1 = LB Sandy GRAVEL

SB 16 - 2-2.5 = LB Sandy GRAVEL

SB 17 - 0.5-1 = LB Sandy GRAVEL

SB 17 - 2-2.5 = LB Sandy GRAVEL

SB 18 - 0.5-1 = Gray sandy GRAVEL

* Culvert inlet

SB 19 - 0.5-1 = DB Sandy GRAVEL

* Culvert outlet

SB 9 - 0.5-1 = Gray sandy GRAVEL

SB 9 - 2-2.5 = Brown sandy GRAVEL

SB 9 - 3-3.5 = Brown sandy GRAVEL

SB 9 - 4-4.5 = DB w/ Black sandy GRAVEL

with organics

BR - 01 = Brown sandy GRAVEL

BR - 02 = Brown sandy GRAVEL

SB - 08 - 0.5-1 = Brown sandy GRAVEL

SB - 08 - 2-2.5 = Brown sandy GRAVEL

SB - 08 - 3-3.5 = Brown sandy GRAVEL

SB - 08 - 4-4.5 = DB w/ Black sandy GRAVEL

SB 01 - 0.5-1 = with organics

SB 01 - 0.5-1 = LB Sandy GRAVEL

SB 01 - 2-2.5 = Brown sandy GRAVEL

SB 01 - 3-3.5 = DB w/ Black sandy GRAVEL

with organics

SB 01 - 4-4.5 = DB w/ Black sandy GRAVEL

with silt and organics Note in the Rain.

Soil Class. Cont.

11/15/24

- SB04-4-4.5 = DB sandy GRAVEL w/ silt
 SB05-4-4.5 = Gray Poorly sorted SAND
 with gravel
 SB06-4-4.5 = DB sandy GRAVEL w/ silt
 SB14-0.5-1 = Brown Sandy GRAVEL
 SB14-2-2.5 = Brown sandy GRAVEL w/ silt
 SB15-0.5-1 = Brown Sandy GRAVEL
 SB15-2-2.5 = DB silty SAND w/ GRAVEL
 SB03-0.5-1 = Gray sandy GRAVEL
 SB03-2-2.5 = Brown sandy GRAVEL
 SB03 with silt
 3-4' interval logs filled hole
 SB03-4-4.5 = Orange Brown sandy GRAVEL
 with silt
 SB02-0.5-1 = Gray sandy GRAVEL w/ silt
 SB02-2-2.5 = Orange Brown sandy GRAVEL
 SB02-4-4.5 = DB w/ orange sandy GRAVEL
 with silt and organics
 SB07-0.5-1 = Brown sandy GRAVEL w/ silt
 SB07-2-2.5 = Brown sandy GRAVEL w/ silt
 SB07-3-3.5 = DB sandy GRAVEL w/ silt
 SB07-4-4.5 = DB w/ Black sandy GRAVEL
 with silt & organics

Kensington Mine Soil Sampling 11/15/24

- 400 - Meet shuttle at hotel to transport
 to security lot
 500 - Leave security lot and travel to
 mine
 645 - Arrive on site at mine and meet
 with Pete. Drop equipment and get
 ready for fieldwork on site
 800 - Start on pipeline road near spill
 location collecting samples SB 01 -
 SB 14.
 855 - Sample BG-01 collected
 1255 - Begin collecting samples down
 gradient from spill area;
 SB-14 through SB-19
 1400 - Last sample (SB-17) collected
 from excavator.
 1425 - collect samples SB-18 + SB-19
 from both sides of culvert
 where tailings flowed
 1530 - Finish with all sampling and
 lock out / tag out is removed from
 Popper room.
 1630 - Start going through samples
 back at enviro shop to QC and

11/15/24

fill out COC.

2005 - Finish with all QC
of samples and COC. paperwork

★ 2 samples missing throughout
course of day; unknown reason
and location of missing samples
not submitted to lab

- Sample SB-02-3-3.5

- Sample SB-03-3-3.5

2010 - All work for day is
concluded, and samples stored
until shipment in Enviro. trailer

~~At Day~~

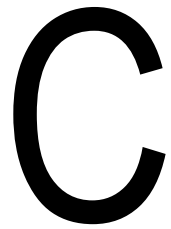
DUP 2: SB1-2-2.5

DUP 3: SB-08 2-2.5

DUP 4: SB-09 4.0-4.5

DUP 5: SB14 2.0-2.5

DUP 6: SB17 2.0-2.5



Photographic Log



1. Looking North, along Pipeline Road showing excavation location of BG01.



2. Looking South, along Pipeline Road showing excavation location of BG02.



3. Looking South, adjacent to the westside of Johnson Creek showing location of BG03.



4. Looking North, along Piepline Road showing excavation location of pothole BG01.



5. Looking East, showing the Eastern sidewall of pothole SB01.



6. Looking North, along Pipeline Road showing the excavation location of pothole SB02.



7. Looking Northeast, showing the eastern sidewall of pothole SB02.



8. Looking Northeast, along Pipeline Road showing the excavation location of pothole SB03.



9. Looking Northeast, showing the eastern sidewall of pothole SB03.



10. Looking South, showing the locations of SB04 (near), SB05 (middle), and SB06 (far) to the east of the spill location.



11. Looking Northeast, showing the excavation location of pothole SB07.



12. Looking Northeast, showing the eastern sidewall of the pothole SB07.



13. Looking North, showing the excavation location of pothole SB08.



14. Looking Northeast, showing the excavation location of pothole SB09.



15. Looking Southeast, showing the eastern sidewall of pothole SB09.



16. Looking Northeast, showing the excavation location of SB14 along the Western side Pipeline Road.



17. Looking North, showing the excavation location of SB16 along the Western edge of Pipeline Road.



18. Looking North, showing the excavation location of pothole SB17, adjacent to the drainage ditch along the western side of Pipeline Road.



19. Looking South, showing the SB18 sample location near the drainage culvert inlet that passes under Pipeline Road.




20. Looking East from Pipeline Road, showing sample SB19 location along drainage.



21. Looking West, showing exploration hole SB20 location along spill pathway near Johnson Creek.



19. Looking North along Johnson Creek, showing exploration hole SB21 location.



D

Laboratory Analytical Reports



Coeur Alaska
3031 Clinton Drive, Suite 202
Juneau, AK 99801

Project Name: Kensington / 2024-11
Work Order: **X4K0118**
Reported: 16-Dec-24 14:03

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
SB20-0.5-1.0-110624	X4K0118-01	Solid	06-Nov-24 09:40	07-Nov-2024	
SB21-0.5-1-110624	X4K0118-04	Solid	06-Nov-24 11:00	07-Nov-2024	
BG03-2-2.5-110624	X4K0118-06	Solid	06-Nov-24 12:00	07-Nov-2024	
BG03-2-2.5-110624-MSMSD	X4K0118-07	Solid	06-Nov-24 12:00	07-Nov-2024	
Dup-1	X4K0118-08	Solid	06-Nov-24 10:40	07-Nov-2024	

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested.

Sample preparation is defined by the client as per their Data Quality Objectives.

This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.

Analyses were performed in accordance with SVL standard operating procedures and calibrations were performed and met SVL internal QC criteria.

The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of SVL Analytical, Inc.

Case Narrative: X4K0118

The state of origin only accredits for drinking water analyses.



Coeur Alaska
3031 Clinton Drive, Suite 202
Juneau, AK 99801

Project Name: Kensington / 2024-11
Work Order: **X4K0118**
Reported: 16-Dec-24 14:03

Client Sample ID: **SB20-0.5-1.0-110624**

Sampled: 06-Nov-24 09:40

SVL Sample ID: **X4K0118-01 (Solid)**

Received: 07-Nov-24

Sample Report Page 1 of 1

Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	2.37	mg/kg	2.00	0.118	20	X446098	JRR	11/13/24 11:05	D12,D14
EPA 6020B	Cadmium	< 0.720	mg/kg	0.800	0.720	20	X446098	JRR	11/13/24 11:05	D12,D14,U
EPA 6020B	Copper	5.91	mg/kg	0.800	0.740	20	X446098	JRR	11/13/24 11:05	D12,D14
EPA 6020B	Lead	2.39	mg/kg	1.60	1.04	20	X446098	JRR	11/13/24 11:05	D12,D14
EPA 6020B	Manganese	55.1	mg/kg	1.60	1.24	40	X446098	SMU	11/13/24 13:00	D12,D14
EPA 6020B	Nickel	1.46	mg/kg	1.00	0.720	20	X446098	JRR	11/13/24 11:05	D12,D14
EPA 6020B	Selenium	0.247	mg/kg	2.00	0.240	20	X446098	JRR	11/13/24 11:05	D12,D14,J
EPA 6020B	Silver	< 0.100	mg/kg	0.160	0.100	20	X446098	JRR	11/13/24 11:05	D12,D14,U
EPA 6020B	Zinc	10.0	mg/kg	8.00	6.40	20	X446098	JRR	11/13/24 11:05	D12,D14
EPA 7471B	Mercury	0.038	mg/kg	0.033	0.011		X446097	MAC	11/13/24 12:16	

This data has been reviewed for accuracy and has been authorized for release.

Kristi A. Groth

Kristi A. Groth
Project Manager



Coeur Alaska
3031 Clinton Drive, Suite 202
Juneau, AK 99801

Project Name: Kensington / 2024-11
Work Order: **X4K0118**
Reported: 16-Dec-24 14:03

Client Sample ID: **SB21-0.5-1-110624**

Sampled: 06-Nov-24 11:00

SVL Sample ID: **X4K0118-04 (Solid)**

Received: 07-Nov-24

Sample Report Page 1 of 1

Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	8.22	mg/kg	1.00	0.0590	10	X446098	JRR	11/13/24 11:08	D12,D14
EPA 6020B	Cadmium	< 0.360	mg/kg	0.400	0.360	10	X446098	JRR	11/13/24 11:08	D12,D14,U
EPA 6020B	Copper	37.6	mg/kg	0.400	0.370	10	X446098	JRR	11/13/24 11:08	D12,D14
EPA 6020B	Lead	44.7	mg/kg	0.800	0.520	10	X446098	JRR	11/13/24 11:08	D12,D14
EPA 6020B	Manganese	352	mg/kg	0.800	0.620	20	X446098	SMU	11/13/24 13:03	D12,D14
EPA 6020B	Nickel	7.78	mg/kg	0.500	0.360	10	X446098	JRR	11/13/24 11:08	D12,D14
EPA 6020B	Selenium	0.160	mg/kg	1.00	0.120	10	X446098	JRR	11/13/24 11:08	D12,D14,J
EPA 6020B	Silver	0.0727	mg/kg	0.0800	0.0500	10	X446098	JRR	11/13/24 11:08	D12,D14,J
EPA 6020B	Zinc	40.0	mg/kg	4.00	3.20	10	X446098	JRR	11/13/24 11:08	D12,D14
EPA 7471B	Mercury	0.026	mg/kg	0.033	0.011		X446097	MAC	11/13/24 12:18	J

This data has been reviewed for accuracy and has been authorized for release.

Kristi A. Groth

Kristi A. Groth

Project Manager



Coeur Alaska
3031 Clinton Drive, Suite 202
Juneau, AK 99801

Project Name: Kensington / 2024-11
Work Order: **X4K0118**
Reported: 16-Dec-24 14:03

Client Sample ID: **BG03-2-2.5-110624**

Sampled: 06-Nov-24 12:00

SVL Sample ID: **X4K0118-06 (Solid)**

Received: 07-Nov-24

Sample Report Page 1 of 1

Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	15.8	mg/kg	2.00	0.118	20	X446098	JRR	11/13/24 11:11	D12,D14
EPA 6020B	Cadmium	< 0.720	mg/kg	0.800	0.720	20	X446098	JRR	11/13/24 11:11	D12,D14,U
EPA 6020B	Copper	46.7	mg/kg	0.800	0.740	20	X446098	JRR	11/13/24 11:11	D12,D14
EPA 6020B	Lead	12.5	mg/kg	1.60	1.04	20	X446098	JRR	11/13/24 11:11	D12,D14
EPA 6020B	Manganese	487	mg/kg	1.60	1.24	40	X446098	SMU	11/13/24 13:07	D12,D14
EPA 6020B	Nickel	9.46	mg/kg	1.00	0.720	20	X446098	JRR	11/13/24 11:11	D12,D14
EPA 6020B	Selenium	0.354	mg/kg	2.00	0.240	20	X446098	JRR	11/13/24 11:11	D12,D14,J
EPA 6020B	Silver	0.110	mg/kg	0.160	0.100	20	X446098	JRR	11/13/24 11:11	D12,D14,J
EPA 6020B	Zinc	94.8	mg/kg	8.00	6.40	20	X446098	JRR	11/13/24 11:11	D12,D14
EPA 7471B	Mercury	0.038	mg/kg	0.033	0.011		X446097	MAC	11/13/24 12:20	

This data has been reviewed for accuracy and has been authorized for release.

Kristi A. Groth

Kristi A. Groth
Project Manager



Coeur Alaska
3031 Clinton Drive, Suite 202
Juneau, AK 99801

Project Name: Kensington / 2024-11
Work Order: **X4K0118**
Reported: 16-Dec-24 14:03

Client Sample ID: **BG03-2-2.5-110624-MSMSD**

Sampled: 06-Nov-24 12:00

Received: 07-Nov-24

Sampled By:

SVL Sample ID: **X4K0118-07 (Solid)**

Sample Report Page 1 of 1

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	10.3	mg/kg	2.00	0.118	20	X446098	JRR	11/13/24 11:14	D12,D14,M4
EPA 6020B	Cadmium	< 0.720	mg/kg	0.800	0.720	20	X446098	JRR	11/13/24 11:14	D12,D14,U
EPA 6020B	Copper	43.9	mg/kg	0.800	0.740	20	X446098	JRR	11/13/24 11:14	D12,D14,M4
EPA 6020B	Lead	4.84	mg/kg	1.60	1.04	20	X446098	JRR	11/13/24 11:14	D12,D14,M4
EPA 6020B	Manganese	478	mg/kg	1.60	1.24	40	X446098	SMU	11/13/24 13:10	D12,D14,M4
EPA 6020B	Nickel	9.50	mg/kg	1.00	0.720	20	X446098	JRR	11/13/24 11:14	D12,D14,M4
EPA 6020B	Selenium	0.327	mg/kg	2.00	0.240	20	X446098	JRR	11/13/24 11:14	D12,D14,J
EPA 6020B	Silver	< 0.100	mg/kg	0.160	0.100	20	X446098	JRR	11/13/24 11:14	D12,D14,U
EPA 6020B	Zinc	60.6	mg/kg	8.00	6.40	20	X446098	JRR	11/13/24 11:14	D12,D14,M4
EPA 7471B	Mercury	0.022	mg/kg	0.033	0.011		X446097	MAC	11/13/24 12:22	J

This data has been reviewed for accuracy and has been authorized for release.

Kristi A. Groth

Kristi A. Groth
Project Manager



Coeur Alaska
3031 Clinton Drive, Suite 202
Juneau, AK 99801

Project Name: Kensington / 2024-11
Work Order: **X4K0118**
Reported: 16-Dec-24 14:03

Client Sample ID: **Dup-1**
SVL Sample ID: **X4K0118-08 (Solid)**

Sampled: 06-Nov-24 10:40
Received: 07-Nov-24
Sampled By:

Sample Report Page 1 of 1

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	7.72	mg/kg	1.00	0.0590	10	X446098	JRR	11/13/24 11:27	D12,D14
EPA 6020B	Cadmium	< 0.360	mg/kg	0.400	0.360	10	X446098	JRR	11/13/24 11:27	D12,D14,U
EPA 6020B	Copper	38.8	mg/kg	0.400	0.370	10	X446098	JRR	11/13/24 11:27	D12,D14
EPA 6020B	Lead	5.01	mg/kg	0.800	0.520	10	X446098	JRR	11/13/24 11:27	D12,D14
EPA 6020B	Manganese	400	mg/kg	0.800	0.620	20	X446098	SMU	11/13/24 13:22	D12,D14
EPA 6020B	Nickel	12.7	mg/kg	0.500	0.360	10	X446098	JRR	11/13/24 11:27	D12,D14
EPA 6020B	Selenium	0.157	mg/kg	1.00	0.120	10	X446098	JRR	11/13/24 11:27	D12,D14,J
EPA 6020B	Silver	0.118	mg/kg	0.0800	0.0500	10	X446098	JRR	11/13/24 11:27	D12,D14
EPA 6020B	Zinc	33.5	mg/kg	4.00	3.20	10	X446098	JRR	11/13/24 11:27	D12,D14
EPA 7471B	Mercury	< 0.011	mg/kg	0.033	0.011		X446097	MAC	11/13/24 12:24	U

This data has been reviewed for accuracy and has been authorized for release.

Kristi A. Groth

Kristi A. Groth
Project Manager



Coeur Alaska
3031 Clinton Drive, Suite 202
Juneau, AK 99801

Project Name: Kensington / 2024-11
Work Order: **X4K0118**
Reported: 16-Dec-24 14:03

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Metals by EPA 6000/7000 Series								
EPA 6020B	Arsenic	mg/kg	<0.0118	0.0118	0.200	X446098	13-Nov-24	U
EPA 6020B	Cadmium	mg/kg	<0.072	0.072	0.080	X446098	13-Nov-24	U
EPA 6020B	Copper	mg/kg	<0.074	0.074	0.080	X446098	13-Nov-24	U
EPA 6020B	Lead	mg/kg	<0.104	0.104	0.160	X446098	13-Nov-24	U
EPA 6020B	Manganese	mg/kg	<0.062	0.062	0.080	X446098	13-Nov-24	U
EPA 6020B	Nickel	mg/kg	<0.072	0.072	0.100	X446098	13-Nov-24	U
EPA 6020B	Selenium	mg/kg	<0.024	0.024	0.200	X446098	13-Nov-24	U
EPA 6020B	Silver	mg/kg	<0.0100	0.0100	0.0160	X446098	13-Nov-24	U
EPA 6020B	Zinc	mg/kg	<0.64	0.64	0.80	X446098	13-Nov-24	U
EPA 7471B	Mercury	mg/kg	0.015	0.011	0.033	X446097	13-Nov-24	J

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals by EPA 6000/7000 Series									
EPA 6020B	Arsenic	mg/kg	2.20	2.50	88.2	80 - 120	X446098	13-Nov-24	
EPA 6020B	Cadmium	mg/kg	2.19	2.50	87.6	80 - 120	X446098	13-Nov-24	
EPA 6020B	Copper	mg/kg	2.34	2.50	93.5	80 - 120	X446098	13-Nov-24	
EPA 6020B	Lead	mg/kg	2.40	2.50	95.8	80 - 120	X446098	13-Nov-24	
EPA 6020B	Manganese	mg/kg	2.33	2.50	93.3	80 - 120	X446098	13-Nov-24	
EPA 6020B	Nickel	mg/kg	2.33	2.50	93.3	80 - 120	X446098	13-Nov-24	
EPA 6020B	Selenium	mg/kg	2.04	2.50	81.4	80 - 120	X446098	13-Nov-24	
EPA 6020B	Silver	mg/kg	2.26	2.50	90.5	80 - 120	X446098	13-Nov-24	
EPA 6020B	Zinc	mg/kg	2.14	2.50	85.5	80 - 120	X446098	13-Nov-24	
EPA 7471B	Mercury	mg/kg	0.350	0.333	105	80 - 120	X446097	13-Nov-24	

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch and Source ID	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	mg/kg	15.7	10.3	2.50	0.30R>S	75 - 125	X446098 - X4K0118-07	13-Nov-24	D12,D14,M4
EPA 6020B	Cadmium	mg/kg	2.34	<0.72	2.50	93.6	75 - 125	X446098 - X4K0118-07	13-Nov-24	D12,D14
EPA 6020B	Copper	mg/kg	44.9	43.9	2.50	0.30R>S	75 - 125	X446098 - X4K0118-07	13-Nov-24	D12,D14,M4
EPA 6020B	Lead	mg/kg	8.91	4.84	2.50	163	75 - 125	X446098 - X4K0118-07	13-Nov-24	D12,D14,M4
EPA 6020B	Manganese	mg/kg	559	478	2.50	0.30R>S	75 - 125	X446098 - X4K0118-07	13-Nov-24	D12,D14,M4
EPA 6020B	Nickel	mg/kg	14.4	9.50	2.50	0.30R>S	75 - 125	X446098 - X4K0118-07	13-Nov-24	D12,D14,M4
EPA 6020B	Selenium	mg/kg	2.38	0.327	2.50	82.0	75 - 125	X446098 - X4K0118-07	13-Nov-24	D12,D14
EPA 6020B	Silver	mg/kg	2.16	<0.1	2.50	86.3	75 - 125	X446098 - X4K0118-07	13-Nov-24	D12,D14
EPA 6020B	Zinc	mg/kg	81.4	60.6	2.50	0.30R>S	75 - 125	X446098 - X4K0118-07	13-Nov-24	D12,D14,M4
EPA 7471B	Mercury	mg/kg	0.338	0.022	0.333	94.6	80 - 120	X446097 - X4K0118-07	13-Nov-24	



Coeur Alaska
 3031 Clinton Drive, Suite 202
 Juneau, AK 99801

Project Name: Kensington / 2024-11
 Work Order: **X4K0118**
 Reported: 16-Dec-24 14:03

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	RPD	RPD Limit	% Recovery	Batch and Source ID	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	mg/kg	12.8	15.7	2.50	20.7	20	97.5	X446098 - X4K0118-07	D12,D14,M4
EPA 6020B	Cadmium	mg/kg	2.41	2.34	2.50	3.0	20	96.5	X446098 - X4K0118-07	D12,D14
EPA 6020B	Copper	mg/kg	46.4	44.9	2.50	3.3	20	99.4	X446098 - X4K0118-07	D12,D14
EPA 6020B	Lead	mg/kg	7.11	8.91	2.50	22.5	20	90.8	X446098 - X4K0118-07	D12,D14,M4
EPA 6020B	Manganese	mg/kg	492	559	2.50	12.9	20	0.30R>S	X446098 - X4K0118-07	D12,D14,M4
EPA 6020B	Nickel	mg/kg	13.2	14.4	2.50	8.5	20	0.30R>S	X446098 - X4K0118-07	D12,D14,M4
EPA 6020B	Selenium	mg/kg	2.41	2.38	2.50	1.3	20	83.3	X446098 - X4K0118-07	D12,D14
EPA 6020B	Silver	mg/kg	2.27	2.16	2.50	5.1	20	90.9	X446098 - X4K0118-07	D12,D14
EPA 6020B	Zinc	mg/kg	67.2	81.4	2.50	19.0	20	0.30R>S	X446098 - X4K0118-07	D12,D14,M4
EPA 7471B	Mercury	mg/kg	0.337	0.338	0.333	0.2	20	94.4	X446097 - X4K0118-07	

Quality Control - SERIAL DILUTION Data

Method	Analyte	Sample Result	Serial Dilution Result	RPD	Q	QC Limits	Batch and Source ID	Notes
Metals by EPA 6000/7000 Series								
EPA 6020B	Arsenic	15.7	15.9	1.0		20	X446098 - MS1	
EPA 6020B	Copper	44.9	44.8	0.2		20	X446098 - MS1	
EPA 6020B	Lead	8.91	8.66	2.8		20	X446098 - MS1	
EPA 6020B	Manganese	559	550	1.8		20	X446098 - MS1	
EPA 6020B	Nickel	14.4	14.9	3.2		20	X446098 - MS1	
EPA 6020B	Zinc	81.4	81.0	0.5		20	X446098 - MS1	



Coeur Alaska
3031 Clinton Drive, Suite 202
Juneau, AK 99801

Project Name: Kensington / 2024-11
Work Order: **X4K0118**
Reported: 16-Dec-24 14:03

Notes and Definitions

- D12 Due to sample odor, a sample dilution was performed indicating the presence of potential interferences.
 - D14 Due to precipitates evident in sample/digestate, a sample dilution was performed.
 - J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
 - M4 The analysis of the spiked sample required a dilution such that the spike recovery calculation does not provide useful information. The LCS recovery was acceptable.
 - U Indicates the analyte was analyzed for but was not detected, result was less than the MDL.
 - LCS Laboratory Control Sample (Blank Spike)
 - RPD Relative Percent Difference
 - UDL A result is less than the detection limit
 - 0.30R>S % recovery not applicable; spike level is less than 30% of the sample concentration
 - <RL A result is less than the reporting limit
 - MRL Method Reporting Limit
 - MDL Method Detection Limit
 - N/A Not Applicable
-



Coeur Alaska
3031 Clinton Drive, Suite 202
Juneau, AK 99801

Project Name: Kensington / 2024-11
Work Order: **X4K0301**
Reported: 27-Dec-24 12:30

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
SB16-0.5-1	X4K0301-01	Soil	15-Nov-24 13:40	19-Nov-2024	
SB17-0.5-1	X4K0301-03	Soil	15-Nov-24 14:05	19-Nov-2024	
SB18-0.5-1	X4K0301-05	Soil	15-Nov-24 14:25	19-Nov-2024	
SB19-0.5-1	X4K0301-06	Soil	15-Nov-24 14:40	19-Nov-2024	
BG-01	X4K0301-13	Soil	15-Nov-24 08:55	19-Nov-2024	
BG-02	X4K0301-14	Soil	15-Nov-24 09:10	19-Nov-2024	
DUP-2	X4K0301-20	Soil	15-Nov-24 09:40	19-Nov-2024	
SB01-0.5-1	X4K0301-21	Soil	15-Nov-24 09:20	19-Nov-2024	
SB01-2-2.5	X4K0301-22	Soil	15-Nov-24 09:25	19-Nov-2024	
SB01-3-3.5	X4K0301-23	Soil	15-Nov-24 09:30	19-Nov-2024	
SB01-4-4.5	X4K0301-24	Soil	15-Nov-24 09:35	19-Nov-2024	

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested.

Sample preparation is defined by the client as per their Data Quality Objectives.

This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.

Analyses were performed in accordance with SVL standard operating procedures and calibrations were performed and met SVL internal QC criteria.

The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

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Case Narrative: X4K0301

The state of origin only accredits for drinking water analyses.



Coeur Alaska
3031 Clinton Drive, Suite 202
Juneau, AK 99801

Project Name: Kensington / 2024-11
Work Order: **X4K0301**
Reported: 27-Dec-24 12:30

Client Sample ID: **SB16-0.5-1**

Sampled: 15-Nov-24 13:40

Received: 19-Nov-24

Sampled By:

SVL Sample ID: **X4K0301-01 (Soil)**

Sample Report Page 1 of 1

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	1.92	mg/kg	1.00	0.0590	10	X447192	SMU	11/29/24 15:37	D19,M4
EPA 6020B	Cadmium	< 0.360	mg/kg	0.400	0.360	10	X447192	SMU	11/29/24 15:37	U,D19
EPA 6020B	Copper	86.3	mg/kg	0.400	0.370	10	X447192	SMU	11/29/24 15:37	D19,M4,R2B
EPA 6020B	Lead	4.36	mg/kg	0.800	0.520	10	X447192	SMU	11/29/24 15:37	D19,M4
EPA 6020B	Manganese	943	mg/kg	4.00	3.10	100	X447192	SMU	11/29/24 15:39	B7,D19,M4,R2B
EPA 6020B	Nickel	3.16	mg/kg	0.500	0.360	10	X447192	SMU	11/29/24 15:37	D19,M4
EPA 6020B	Selenium	0.313	mg/kg	1.00	0.120	10	X447192	SMU	11/29/24 15:37	D19,J
EPA 6020B	Silver	0.404	mg/kg	0.0800	0.0500	10	X447192	SMU	11/29/24 15:37	D19
EPA 6020B	Zinc	44.6	mg/kg	4.00	3.20	10	X447192	SMU	11/29/24 15:37	D19,M4
EPA 7471B	Mercury	0.051	mg/kg	0.033	0.011		X447133	MAC	11/26/24 12:55	

This data has been reviewed for accuracy and has been authorized for release.

Dave Tryon

Dave Tryon

Project Manager



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Coeur Alaska
3031 Clinton Drive, Suite 202
Juneau, AK 99801

Project Name: Kensington / 2024-11

Work Order: **X4K0301**

Reported: 27-Dec-24 12:30

Client Sample ID: **SB17-0.5-1**

Sampled: 15-Nov-24 14:05

Received: 19-Nov-24

Sampled By:

SVL Sample ID: **X4K0301-03 (Soil)**

Sample Report Page 1 of 1

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	2.32	mg/kg	1.00	0.0590	10	X447192	SMU	11/29/24 16:03	D19
EPA 6020B	Cadmium	< 0.360	mg/kg	0.400	0.360	10	X447192	SMU	11/29/24 16:03	U,D19
EPA 6020B	Copper	77.5	mg/kg	0.400	0.370	10	X447192	SMU	11/29/24 16:03	D19
EPA 6020B	Lead	2.46	mg/kg	0.800	0.520	10	X447192	SMU	11/29/24 16:03	D19
EPA 6020B	Manganese	896	mg/kg	4.00	3.10	100	X447192	SMU	11/29/24 16:06	B7,D19
EPA 6020B	Nickel	1.90	mg/kg	0.500	0.360	10	X447192	SMU	11/29/24 16:03	D19
EPA 6020B	Selenium	0.191	mg/kg	1.00	0.120	10	X447192	SMU	11/29/24 16:03	D19,J
EPA 6020B	Silver	0.204	mg/kg	0.0800	0.0500	10	X447192	SMU	11/29/24 16:03	D19
EPA 6020B	Zinc	34.2	mg/kg	4.00	3.20	10	X447192	SMU	11/29/24 16:03	D19
EPA 7471B	Mercury	0.028	mg/kg	0.033	0.011		X447133	MAC	11/26/24 12:57	J

This data has been reviewed for accuracy and has been authorized for release.

Dave Tryon

Dave Tryon

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Coeur Alaska
3031 Clinton Drive, Suite 202
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Project Name: Kensington / 2024-11
Work Order: **X4K0301**
Reported: 27-Dec-24 12:30

Client Sample ID: **SB18-0.5-1**

SVL Sample ID: **X4K0301-05 (Soil)**

Sampled: 15-Nov-24 14:25

Received: 19-Nov-24

Sampled By:

Sample Report Page 1 of 1

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	0.998	mg/kg	1.00	0.0590	10	X447192	SMU	11/29/24 16:09	D19,J
EPA 6020B	Cadmium	< 0.360	mg/kg	0.400	0.360	10	X447192	SMU	11/29/24 16:09	D19,U
EPA 6020B	Copper	158	mg/kg	0.400	0.370	10	X447192	SMU	11/29/24 16:09	D19
EPA 6020B	Lead	4.96	mg/kg	0.800	0.520	10	X447192	SMU	11/29/24 16:09	D19
EPA 6020B	Manganese	680	mg/kg	4.00	3.10	100	X447192	SMU	11/29/24 16:11	B7,D19
EPA 6020B	Nickel	4.99	mg/kg	0.500	0.360	10	X447192	SMU	11/29/24 16:09	D19
EPA 6020B	Selenium	0.214	mg/kg	1.00	0.120	10	X447192	SMU	11/29/24 16:09	D19,J
EPA 6020B	Silver	0.420	mg/kg	0.0800	0.0500	10	X447192	SMU	11/29/24 16:09	D19
EPA 6020B	Zinc	41.4	mg/kg	4.00	3.20	10	X447192	SMU	11/29/24 16:09	D19
EPA 7471B	Mercury	0.090	mg/kg	0.033	0.011		X447133	MAC	11/26/24 12:59	

This data has been reviewed for accuracy and has been authorized for release.

Dave Tryon

Dave Tryon

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Project Name: Kensington / 2024-11
Work Order: **X4K0301**
Reported: 27-Dec-24 12:30

Client Sample ID: **SB19-0.5-1**

SVL Sample ID: **X4K0301-06 (Soil)**

Sampled: 15-Nov-24 14:40

Received: 19-Nov-24

Sampled By:

Sample Report Page 1 of 1

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	1.75	mg/kg	1.00	0.0590	10	X447192	SMU	11/29/24 16:14	D19
EPA 6020B	Cadmium	< 0.360	mg/kg	0.400	0.360	10	X447192	SMU	11/29/24 16:14	D19,U
EPA 6020B	Copper	40.6	mg/kg	0.400	0.370	10	X447192	SMU	11/29/24 16:14	D19
EPA 6020B	Lead	3.23	mg/kg	0.800	0.520	10	X447192	SMU	11/29/24 16:14	D19
EPA 6020B	Manganese	783	mg/kg	4.00	3.10	100	X447192	SMU	11/29/24 16:16	B7,D19
EPA 6020B	Nickel	1.32	mg/kg	0.500	0.360	10	X447192	SMU	11/29/24 16:14	D19
EPA 6020B	Selenium	0.191	mg/kg	1.00	0.120	10	X447192	SMU	11/29/24 16:14	D19,J
EPA 6020B	Silver	0.148	mg/kg	0.0800	0.0500	10	X447192	SMU	11/29/24 16:14	D19
EPA 6020B	Zinc	20.7	mg/kg	4.00	3.20	10	X447192	SMU	11/29/24 16:14	D19
EPA 7471B	Mercury	0.041	mg/kg	0.033	0.011		X447133	MAC	11/26/24 13:01	

This data has been reviewed for accuracy and has been authorized for release.

Dave Tryon

Dave Tryon

Project Manager



Coeur Alaska
3031 Clinton Drive, Suite 202
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Project Name: Kensington / 2024-11
Work Order: **X4K0301**
Reported: 27-Dec-24 12:30

Client Sample ID: **BG-01**
SVL Sample ID: **X4K0301-13 (Soil)**

Sampled: 15-Nov-24 08:55
Received: 19-Nov-24
Sampled By:

Sample Report Page 1 of 1

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	15.3	mg/kg	1.00	0.0590	10	X447192	SMU	11/29/24 16:37	D19
EPA 6020B	Cadmium	0.443	mg/kg	0.400	0.360	10	X447192	SMU	11/29/24 16:37	D19
EPA 6020B	Copper	101	mg/kg	0.400	0.370	10	X447192	SMU	11/29/24 16:37	D19
EPA 6020B	Lead	1.95	mg/kg	0.800	0.520	10	X447192	SMU	11/29/24 16:37	D19
EPA 6020B	Manganese	1110	mg/kg	4.00	3.10	100	X447192	SMU	11/29/24 16:40	B7,D19
EPA 6020B	Nickel	3.36	mg/kg	0.500	0.360	10	X447192	SMU	11/29/24 16:37	D19
EPA 6020B	Selenium	0.170	mg/kg	1.00	0.120	10	X447192	SMU	11/29/24 16:37	D19,J
EPA 6020B	Silver	0.0841	mg/kg	0.0800	0.0500	10	X447192	SMU	11/29/24 16:37	D19
EPA 6020B	Zinc	95.0	mg/kg	4.00	3.20	10	X447192	SMU	11/29/24 16:37	D19
EPA 7471B	Mercury	0.019	mg/kg	0.033	0.011		X447133	MAC	11/26/24 13:12	J

This data has been reviewed for accuracy and has been authorized for release.

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Dave Tryon

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Project Name: Kensington / 2024-11
Work Order: **X4K0301**
Reported: 27-Dec-24 12:30

Client Sample ID: **BG-02**

Sampled: 15-Nov-24 09:10

Received: 19-Nov-24

Sampled By:

SVL Sample ID: **X4K0301-14 (Soil)**

Sample Report Page 1 of 1

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	8.86	mg/kg	1.00	0.0590	10	X447192	SMU	11/29/24 16:42	D19
EPA 6020B	Cadmium	< 0.360	mg/kg	0.400	0.360	10	X447192	SMU	11/29/24 16:42	U,D19
EPA 6020B	Copper	159	mg/kg	0.400	0.370	10	X447192	SMU	11/29/24 16:42	D19
EPA 6020B	Lead	5.40	mg/kg	0.800	0.520	10	X447192	SMU	11/29/24 16:42	D19
EPA 6020B	Manganese	933	mg/kg	4.00	3.10	100	X447192	SMU	11/29/24 16:45	B7,D19
EPA 6020B	Nickel	2.81	mg/kg	0.500	0.360	10	X447192	SMU	11/29/24 16:42	D19
EPA 6020B	Selenium	0.129	mg/kg	1.00	0.120	10	X447192	SMU	11/29/24 16:42	D19,J
EPA 6020B	Silver	0.184	mg/kg	0.0800	0.0500	10	X447192	SMU	11/29/24 16:42	D19
EPA 6020B	Zinc	71.3	mg/kg	4.00	3.20	10	X447192	SMU	11/29/24 16:42	D19
EPA 7471B	Mercury	0.013	mg/kg	0.033	0.011		X447133	MAC	11/26/24 13:14	J

This data has been reviewed for accuracy and has been authorized for release.

Dave Tryon

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Coeur Alaska
3031 Clinton Drive, Suite 202
Juneau, AK 99801

Project Name: Kensington / 2024-11
Work Order: **X4K0301**
Reported: 27-Dec-24 12:30

Client Sample ID: **DUP-2**
SVL Sample ID: **X4K0301-20 (Soil)**

Sampled: 15-Nov-24 09:40
Received: 19-Nov-24
Sampled By:

Sample Report Page 1 of 1

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	2.96	mg/kg	1.00	0.0590	10	X447192	SMU	11/29/24 16:53	D19
EPA 6020B	Cadmium	< 0.360	mg/kg	0.400	0.360	10	X447192	SMU	11/29/24 16:53	U,D19
EPA 6020B	Copper	147	mg/kg	0.400	0.370	10	X447192	SMU	11/29/24 16:53	D19
EPA 6020B	Lead	4.36	mg/kg	0.800	0.520	10	X447192	SMU	11/29/24 16:53	D19
EPA 6020B	Manganese	1020	mg/kg	4.00	3.10	100	X447192	SMU	11/29/24 16:55	B7,D19
EPA 6020B	Nickel	1.89	mg/kg	0.500	0.360	10	X447192	SMU	11/29/24 16:53	D19
EPA 6020B	Selenium	< 0.120	mg/kg	1.00	0.120	10	X447192	SMU	11/29/24 16:53	U,D19
EPA 6020B	Silver	0.0837	mg/kg	0.0800	0.0500	10	X447192	SMU	11/29/24 16:53	D19
EPA 6020B	Zinc	39.9	mg/kg	4.00	3.20	10	X447192	SMU	11/29/24 16:53	D19
EPA 7471B	Mercury	< 0.011	mg/kg	0.033	0.011		X447133	MAC	11/26/24 13:18	U

This data has been reviewed for accuracy and has been authorized for release.

Dave Tryon

Dave Tryon

Project Manager



Coeur Alaska
3031 Clinton Drive, Suite 202
Juneau, AK 99801

Project Name: Kensington / 2024-11
Work Order: **X4K0301**
Reported: 27-Dec-24 12:30

Client Sample ID: **SB01-0.5-1**

Sampled: 15-Nov-24 09:20

SVL Sample ID: **X4K0301-21 (Soil)**

Received: 19-Nov-24

Sample Report Page 1 of 1

Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	2.39	mg/kg	1.00	0.0590	10	X447192	SMU	11/29/24 17:04	D19
EPA 6020B	Cadmium	< 0.360	mg/kg	0.400	0.360	10	X447192	SMU	11/29/24 17:04	U,D19
EPA 6020B	Copper	78.7	mg/kg	0.400	0.370	10	X447192	SMU	11/29/24 17:04	D19
EPA 6020B	Lead	2.26	mg/kg	0.800	0.520	10	X447192	SMU	11/29/24 17:04	D19
EPA 6020B	Manganese	673	mg/kg	4.00	3.10	100	X447192	SMU	11/29/24 17:07	B7,D19
EPA 6020B	Nickel	1.53	mg/kg	0.500	0.360	10	X447192	SMU	11/29/24 17:04	D19
EPA 6020B	Selenium	0.141	mg/kg	1.00	0.120	10	X447192	SMU	11/29/24 17:04	D19,J
EPA 6020B	Silver	0.205	mg/kg	0.0800	0.0500	10	X447192	SMU	11/29/24 17:04	D19
EPA 6020B	Zinc	32.4	mg/kg	4.00	3.20	10	X447192	SMU	11/29/24 17:04	D19
EPA 7471B	Mercury	0.013	mg/kg	0.033	0.011		X447133	MAC	11/26/24 13:20	J

This data has been reviewed for accuracy and has been authorized for release.

Dave Tryon

Dave Tryon

Project Manager



Coeur Alaska
3031 Clinton Drive, Suite 202
Juneau, AK 99801

Project Name: Kensington / 2024-11
Work Order: **X4K0301**
Reported: 27-Dec-24 12:30

Client Sample ID: **SB01-2-2.5**

Sampled: 15-Nov-24 09:25

Received: 19-Nov-24

Sampled By:

SVL Sample ID: **X4K0301-22 (Soil)**

Sample Report Page 1 of 1

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	6.46	mg/kg	1.00	0.0590	10	X447192	SMU	11/29/24 17:09	D19
EPA 6020B	Cadmium	< 0.360	mg/kg	0.400	0.360	10	X447192	SMU	11/29/24 17:09	U,D19
EPA 6020B	Copper	125	mg/kg	0.400	0.370	10	X447192	SMU	11/29/24 17:09	D19
EPA 6020B	Lead	4.23	mg/kg	0.800	0.520	10	X447192	SMU	11/29/24 17:09	D19
EPA 6020B	Manganese	868	mg/kg	4.00	3.10	100	X447192	SMU	11/29/24 17:12	B7,D19
EPA 6020B	Nickel	2.59	mg/kg	0.500	0.360	10	X447192	SMU	11/29/24 17:09	D19
EPA 6020B	Selenium	< 0.120	mg/kg	1.00	0.120	10	X447192	SMU	11/29/24 17:09	U,D19
EPA 6020B	Silver	0.0944	mg/kg	0.0800	0.0500	10	X447192	SMU	11/29/24 17:09	D19
EPA 6020B	Zinc	56.6	mg/kg	4.00	3.20	10	X447192	SMU	11/29/24 17:09	D19
EPA 7471B	Mercury	< 0.011	mg/kg	0.033	0.011		X447133	MAC	11/26/24 13:22	U

This data has been reviewed for accuracy and has been authorized for release.

Dave Tryon

Dave Tryon

Project Manager



Coeur Alaska
3031 Clinton Drive, Suite 202
Juneau, AK 99801

Project Name: Kensington / 2024-11
Work Order: **X4K0301**
Reported: 27-Dec-24 12:30

Client Sample ID: **SB01-3-3.5**

Sampled: 15-Nov-24 09:30

SVL Sample ID: **X4K0301-23 (Soil)**

Received: 19-Nov-24

Sample Report Page 1 of 1

Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	11.0	mg/kg	1.00	0.0590	10	X447192	SMU	11/29/24 17:14	D19
EPA 6020B	Cadmium	< 0.360	mg/kg	0.400	0.360	10	X447192	SMU	11/29/24 17:14	U,D19
EPA 6020B	Copper	72.5	mg/kg	0.400	0.370	10	X447192	SMU	11/29/24 17:14	D19
EPA 6020B	Lead	4.40	mg/kg	0.800	0.520	10	X447192	SMU	11/29/24 17:14	D19
EPA 6020B	Manganese	558	mg/kg	4.00	3.10	100	X447192	SMU	11/29/24 17:17	B7,D19
EPA 6020B	Nickel	2.76	mg/kg	0.500	0.360	10	X447192	SMU	11/29/24 17:14	D19
EPA 6020B	Selenium	0.381	mg/kg	1.00	0.120	10	X447192	SMU	11/29/24 17:14	D19,J
EPA 6020B	Silver	0.178	mg/kg	0.0800	0.0500	10	X447192	SMU	11/29/24 17:14	D19
EPA 6020B	Zinc	58.6	mg/kg	4.00	3.20	10	X447192	SMU	11/29/24 17:14	D19
EPA 7471B	Mercury	0.019	mg/kg	0.033	0.011		X447133	MAC	11/26/24 13:24	J

This data has been reviewed for accuracy and has been authorized for release.

Dave Tryon

Dave Tryon

Project Manager



Coeur Alaska
3031 Clinton Drive, Suite 202
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Project Name: Kensington / 2024-11
Work Order: **X4K0301**
Reported: 27-Dec-24 12:30

Client Sample ID: **SB01-4-4.5**
SVL Sample ID: **X4K0301-24 (Soil)**

Sampled: 15-Nov-24 09:35
Received: 19-Nov-24
Sampled By:

Sample Report Page 1 of 1

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	7.72	mg/kg	1.00	0.0590	10	X447192	SMU	11/29/24 17:19	D19
EPA 6020B	Cadmium	0.417	mg/kg	0.400	0.360	10	X447192	SMU	11/29/24 17:19	D19
EPA 6020B	Copper	53.3	mg/kg	0.400	0.370	10	X447192	SMU	11/29/24 17:19	D19
EPA 6020B	Lead	3.89	mg/kg	0.800	0.520	10	X447192	SMU	11/29/24 17:19	D19
EPA 6020B	Manganese	248	mg/kg	4.00	3.10	100	X447192	SMU	11/29/24 17:22	B7,D19
EPA 6020B	Nickel	2.69	mg/kg	0.500	0.360	10	X447192	SMU	11/29/24 17:19	D19
EPA 6020B	Selenium	0.406	mg/kg	1.00	0.120	10	X447192	SMU	11/29/24 17:19	D19,J
EPA 6020B	Silver	0.0896	mg/kg	0.0800	0.0500	10	X447192	SMU	11/29/24 17:19	D19
EPA 6020B	Zinc	52.3	mg/kg	4.00	3.20	10	X447192	SMU	11/29/24 17:19	D19
EPA 7471B	Mercury	0.024	mg/kg	0.033	0.011		X447133	MAC	11/26/24 13:26	J

This data has been reviewed for accuracy and has been authorized for release.

Dave Tryon

Dave Tryon

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Project Name: Kensington / 2024-11
 Work Order: **X4K0301**
 Reported: 27-Dec-24 12:30

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Metals by EPA 6000/7000 Series								
EPA 6020B	Arsenic	mg/kg	<0.0118	0.0118	0.200	X447192	29-Nov-24	D19,U
EPA 6020B	Cadmium	mg/kg	<0.072	0.072	0.080	X447192	29-Nov-24	D19,U
EPA 6020B	Copper	mg/kg	<0.074	0.074	0.080	X447192	29-Nov-24	D19,U
EPA 6020B	Lead	mg/kg	<0.104	0.104	0.160	X447192	29-Nov-24	D19,U
EPA 6020B	Manganese	mg/kg	0.113	0.062	0.080	X447192	29-Nov-24	B7,D19
EPA 6020B	Nickel	mg/kg	<0.072	0.072	0.100	X447192	29-Nov-24	D19,U
EPA 6020B	Selenium	mg/kg	<0.024	0.024	0.200	X447192	29-Nov-24	D19,U
EPA 6020B	Silver	mg/kg	<0.0100	0.0100	0.0160	X447192	29-Nov-24	D19,U
EPA 6020B	Zinc	mg/kg	<0.64	0.64	0.80	X447192	29-Nov-24	D19,U
EPA 7471B	Mercury	mg/kg	<0.011	0.011	0.033	X447133	26-Nov-24	U

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals by EPA 6000/7000 Series									
EPA 6020B	Arsenic	mg/kg	2.22	2.50	88.7	80 - 120	X447192	29-Nov-24	D19
EPA 6020B	Cadmium	mg/kg	2.28	2.50	91.4	80 - 120	X447192	29-Nov-24	D19
EPA 6020B	Copper	mg/kg	2.48	2.50	99.2	80 - 120	X447192	29-Nov-24	D19
EPA 6020B	Lead	mg/kg	2.61	2.50	104	80 - 120	X447192	29-Nov-24	D19
EPA 6020B	Manganese	mg/kg	2.52	2.50	101	80 - 120	X447192	29-Nov-24	B7,D19
EPA 6020B	Nickel	mg/kg	2.46	2.50	98.6	80 - 120	X447192	29-Nov-24	D19
EPA 6020B	Selenium	mg/kg	2.05	2.50	81.9	80 - 120	X447192	29-Nov-24	D19
EPA 6020B	Silver	mg/kg	2.38	2.50	95.3	80 - 120	X447192	29-Nov-24	D19
EPA 6020B	Zinc	mg/kg	2.19	2.50	87.6	80 - 120	X447192	29-Nov-24	D19
EPA 7471B	Mercury	mg/kg	0.347	0.333	104	80 - 120	X447133	26-Nov-24	

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch and Source ID	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	mg/kg	3.76	1.92	2.50	73.7	75 - 125	X447192 - X4K0301-01	29-Nov-24	D19,M4
EPA 6020B	Cadmium	mg/kg	2.46	<0.36	2.50	98.5	75 - 125	X447192 - X4K0301-01	29-Nov-24	D19
EPA 6020B	Copper	mg/kg	59.0	86.3	2.50	0.30R>S	75 - 125	X447192 - X4K0301-01	29-Nov-24	D19,M4,R2B
EPA 6020B	Lead	mg/kg	4.95	4.36	2.50	23.3	75 - 125	X447192 - X4K0301-01	29-Nov-24	D19,M4
EPA 6020B	Manganese	mg/kg	389	943	2.50	0.30R>S	75 - 125	X447192 - X4K0301-01	29-Nov-24	B7,D19,M4,R2B
EPA 6020B	Nickel	mg/kg	4.06	3.16	2.50	35.9	75 - 125	X447192 - X4K0301-01	29-Nov-24	D19,M4
EPA 6020B	Selenium	mg/kg	2.87	0.313	2.50	102	75 - 125	X447192 - X4K0301-01	29-Nov-24	D19
EPA 6020B	Silver	mg/kg	2.68	0.404	2.50	91.0	75 - 125	X447192 - X4K0301-01	29-Nov-24	D19
EPA 6020B	Zinc	mg/kg	27.5	44.6	2.50	0.30R>S	75 - 125	X447192 - X4K0301-01	29-Nov-24	D19,M4
EPA 7471B	Mercury	mg/kg	0.358	0.051	0.333	92.3	80 - 120	X447133 - X4K0301-01	26-Nov-24	



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Project Name: Kensington / 2024-11
 Work Order: **X4K0301**
 Reported: 27-Dec-24 12:30

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	RPD	RPD Limit	% Recovery	Batch and Source ID	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	mg/kg	3.84	3.76	2.50	2.2	20	77.0	X447192 - X4K0301-01	D19
EPA 6020B	Cadmium	mg/kg	2.37	2.46	2.50	4.0	20	94.6	X447192 - X4K0301-01	D19
EPA 6020B	Copper	mg/kg	76.9	59.0	2.50	26.4	20	0.30R>S	X447192 - X4K0301-01	D19,M4,R2B
EPA 6020B	Lead	mg/kg	5.29	4.95	2.50	6.8	20	37.2	X447192 - X4K0301-01	D19,M4
EPA 6020B	Manganese	mg/kg	602	389	2.50	42.8	20	0.30R>S	X447192 - X4K0301-01	B7,D19,M4,R2B
EPA 6020B	Nickel	mg/kg	3.80	4.06	2.50	6.6	20	25.6	X447192 - X4K0301-01	D19,M4
EPA 6020B	Selenium	mg/kg	2.41	2.87	2.50	17.3	20	84.0	X447192 - X4K0301-01	D19
EPA 6020B	Silver	mg/kg	2.49	2.68	2.50	7.4	20	83.4	X447192 - X4K0301-01	D19
EPA 6020B	Zinc	mg/kg	30.8	27.5	2.50	11.1	20	0.30R>S	X447192 - X4K0301-01	D19,M4
EPA 7471B	Mercury	mg/kg	0.353	0.358	0.333	1.5	20	90.6	X447133 - X4K0301-01	

Quality Control - SERIAL DILUTION Data

Method	Analyte	Sample Result	Serial Dilution Result	RPD	Q	QC Limits	Batch and Source ID	Notes
Metals by EPA 6000/7000 Series								
EPA 6020B	Arsenic	3.76	3.57J	5.1		20	X447192 - MS1	D19,J
EPA 6020B	Copper	59.0	59.7	1.2		20	X447192 - MS1	D19
EPA 6020B	Lead	4.95	4.90	1.0		20	X447192 - MS1	D19
EPA 6020B	Manganese	389	414	6.0		20	X447192 - MS1	B7,D19,R2B
EPA 6020B	Nickel	4.06	4.45	9.2		20	X447192 - MS1	D19
EPA 6020B	Zinc	27.5	29.4	6.6		20	X447192 - MS1	D19



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Project Name: Kensington / 2024-11
Work Order: **X4K0301**
Reported: 27-Dec-24 12:30

Notes and Definitions

B7	Target analyte detected in method blank at or above method limit. Concentration found in the sample was 10 times above the concentration found in the method blank.
D19	Due to an interference from a digestion or extraction fluid acidic matrix, a sample dilution was performed.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
M4	The analysis of the spiked sample required a dilution such that the spike recovery calculation does not provide useful information. The LCS recovery was acceptable.
R2B	RPD exceeded the laboratory acceptance limit.
U	Indicates the analyte was analyzed for but was not detected, result was less than the MDL.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
0.30R>S	% recovery not applicable; spike level is less than 30% of the sample concentration
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable



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Project Name: Kensington / 2024-11
Work Order: **X4K0304**
Reported: 27-Dec-24 12:36

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
SB04-4-4.5	X4K0304-01	Soil	15-Nov-24 12:30	19-Nov-2024	
SB05-4-4.5	X4K0304-02	Soil	15-Nov-24 12:35	19-Nov-2024	
SB06-4-4.5	X4K0304-03	Soil	15-Nov-24 12:40	19-Nov-2024	
SB14-0.5-1	X4K0304-05	Soil	15-Nov-24 12:55	19-Nov-2024	
SB15-0.5-1	X4K0304-07	Soil	15-Nov-24 13:15	19-Nov-2024	
SB03-0.5-1	X4K0304-09	Soil	15-Nov-24 10:50	19-Nov-2024	
SB03-2-2.5	X4K0304-10	Soil	15-Nov-24 10:55	19-Nov-2024	
SB03-4-4.5	X4K0304-11	Soil	15-Nov-24 11:05	19-Nov-2024	
SB16-0.5-1MS/MSD	X4K0304-12	Soil	15-Nov-24 13:40	19-Nov-2024	
SB02-0.5-1	X4K0304-13	Soil	15-Nov-24 09:50	19-Nov-2024	
SB02-2-2.5	X4K0304-14	Soil	15-Nov-24 09:55	19-Nov-2024	
SB02-2-2.5MS/MSD	X4K0304-15	Soil	15-Nov-24 09:55	19-Nov-2024	
SB02-4-4.5	X4K0304-16	Soil	15-Nov-24 10:00	19-Nov-2024	

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested.

Sample preparation is defined by the client as per their Data Quality Objectives.

This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.

Analyses were performed in accordance with SVL standard operating procedures and calibrations were performed and met SVL internal QC criteria.

The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

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Case Narrative: X4K0304

The state of origin only accredits for drinking water analyses.



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Project Name: Kensington / 2024-11
Work Order: **X4K0304**
Reported: 27-Dec-24 12:36

Client Sample ID: **SB04-4-4.5**

Sampled: 15-Nov-24 12:30

SVL Sample ID: **X4K0304-01 (Soil)**

Received: 19-Nov-24

Sample Report Page 1 of 1

Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	18.5	mg/kg	2.00	0.118	20	X447191	SMU	11/29/24 12:17	D19,M4,R2B
EPA 6020B	Cadmium	< 0.720	mg/kg	0.800	0.720	20	X447191	SMU	11/29/24 12:17	D19,U
EPA 6020B	Copper	47.7	mg/kg	0.800	0.740	20	X447191	SMU	11/29/24 12:17	M4
EPA 6020B	Lead	5.49	mg/kg	1.60	1.04	20	X447191	SMU	11/29/24 12:17	D19,M4
EPA 6020B	Manganese	417	mg/kg	8.00	6.20	200	X447191	SMU	11/29/24 13:35	M4,R2B
EPA 6020B	Nickel	4.61	mg/kg	1.00	0.720	20	X447191	SMU	11/29/24 12:17	D19,M4
EPA 6020B	Selenium	1.46	mg/kg	2.00	0.240	20	X447191	SMU	11/29/24 12:17	D19,M4,J
EPA 6020B	Silver	0.171	mg/kg	0.160	0.100	20	X447191	SMU	11/29/24 12:17	D19
EPA 6020B	Zinc	72.3	mg/kg	8.00	6.40	20	X447191	SMU	11/29/24 12:17	M4
EPA 7471B	Mercury	0.038	mg/kg	0.033	0.011		X447134	MAC	11/26/24 12:08	

This data has been reviewed for accuracy and has been authorized for release.

Kristi A. Groth

Kristi A. Groth
Project Manager



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Project Name: Kensington / 2024-11
Work Order: **X4K0304**
Reported: 27-Dec-24 12:36

Client Sample ID: **SB05-4-4.5**

Sampled: 15-Nov-24 12:35

SVL Sample ID: **X4K0304-02 (Soil)**

Received: 19-Nov-24

Sample Report Page 1 of 1

Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	1.64	mg/kg	1.00	0.0590	10	X447191	SMU	11/29/24 12:29	D19
EPA 6020B	Cadmium	< 0.360	mg/kg	0.400	0.360	10	X447191	SMU	11/29/24 12:29	D19,U
EPA 6020B	Copper	15.0	mg/kg	0.400	0.370	10	X447191	SMU	11/29/24 12:29	D19
EPA 6020B	Lead	1.19	mg/kg	0.800	0.520	10	X447191	SMU	11/29/24 12:29	D19
EPA 6020B	Manganese	207	mg/kg	4.00	3.10	100	X447191	SMU	11/29/24 13:48	
EPA 6020B	Nickel	13.7	mg/kg	0.500	0.360	10	X447191	SMU	11/29/24 12:29	D19
EPA 6020B	Selenium	< 0.120	mg/kg	1.00	0.120	10	X447191	SMU	11/29/24 12:29	D19,U
EPA 6020B	Silver	< 0.0500	mg/kg	0.0800	0.0500	10	X447191	SMU	11/29/24 12:29	D19,U
EPA 6020B	Zinc	28.4	mg/kg	4.00	3.20	10	X447191	SMU	11/29/24 12:29	
EPA 7471B	Mercury	0.011	mg/kg	0.033	0.011		X447134	MAC	11/26/24 12:10	J

This data has been reviewed for accuracy and has been authorized for release.

Kristi A. Groth

Kristi A. Groth

Project Manager



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Project Name: Kensington / 2024-11
Work Order: **X4K0304**
Reported: 27-Dec-24 12:36

Client Sample ID: **SB06-4-4.5**

Sampled: 15-Nov-24 12:40

SVL Sample ID: **X4K0304-03 (Soil)**

Received: 19-Nov-24

Sample Report Page 1 of 1

Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	7.52	mg/kg	1.00	0.0590	10	X447191	SMU	11/29/24 12:32	D19
EPA 6020B	Cadmium	< 0.360	mg/kg	0.400	0.360	10	X447191	SMU	11/29/24 12:32	D19,U
EPA 6020B	Copper	50.8	mg/kg	0.400	0.370	10	X447191	SMU	11/29/24 12:32	
EPA 6020B	Lead	4.98	mg/kg	0.800	0.520	10	X447191	SMU	11/29/24 12:32	D19
EPA 6020B	Manganese	575	mg/kg	4.00	3.10	100	X447191	SMU	11/29/24 13:51	
EPA 6020B	Nickel	10.8	mg/kg	0.500	0.360	10	X447191	SMU	11/29/24 12:32	D19
EPA 6020B	Selenium	0.334	mg/kg	1.00	0.120	10	X447191	SMU	11/29/24 12:32	D19,J
EPA 6020B	Silver	0.0819	mg/kg	0.0800	0.0500	10	X447191	SMU	11/29/24 12:32	D19
EPA 6020B	Zinc	57.8	mg/kg	4.00	3.20	10	X447191	SMU	11/29/24 12:32	
EPA 7471B	Mercury	0.031	mg/kg	0.033	0.011		X447134	MAC	11/26/24 12:12	J

This data has been reviewed for accuracy and has been authorized for release.

Kristi A. Groth

Kristi A. Groth
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Project Name: Kensington / 2024-11
Work Order: **X4K0304**
Reported: 27-Dec-24 12:36

Client Sample ID: **SB14-0.5-1**

Sampled: 15-Nov-24 12:55

Received: 19-Nov-24

Sampled By:

SVL Sample ID: **X4K0304-05 (Soil)**

Sample Report Page 1 of 1

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	3.58	mg/kg	1.00	0.0590	10	X447191	SMU	11/29/24 12:45	D19
EPA 6020B	Cadmium	< 0.360	mg/kg	0.400	0.360	10	X447191	SMU	11/29/24 12:45	D19,U
EPA 6020B	Copper	119	mg/kg	0.400	0.370	10	X447191	SMU	11/29/24 12:45	
EPA 6020B	Lead	5.31	mg/kg	0.800	0.520	10	X447191	SMU	11/29/24 12:45	D19
EPA 6020B	Manganese	1030	mg/kg	4.00	3.10	100	X447191	SMU	11/29/24 13:57	
EPA 6020B	Nickel	3.61	mg/kg	0.500	0.360	10	X447191	SMU	11/29/24 12:45	D19
EPA 6020B	Selenium	0.171	mg/kg	1.00	0.120	10	X447191	SMU	11/29/24 12:45	D19,J
EPA 6020B	Silver	0.411	mg/kg	0.0800	0.0500	10	X447191	SMU	11/29/24 12:45	D19
EPA 6020B	Zinc	76.7	mg/kg	4.00	3.20	10	X447191	SMU	11/29/24 12:45	
EPA 7471B	Mercury	0.016	mg/kg	0.033	0.011		X447134	MAC	11/26/24 12:21	J

This data has been reviewed for accuracy and has been authorized for release.

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Project Name: Kensington / 2024-11
Work Order: **X4K0304**
Reported: 27-Dec-24 12:36

Client Sample ID: **SB15-0.5-1**

Sampled: 15-Nov-24 13:15

Received: 19-Nov-24

Sampled By:

SVL Sample ID: **X4K0304-07 (Soil)**

Sample Report Page 1 of 1

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	0.408	mg/kg	1.00	0.0590	10	X447191	SMU	11/29/24 12:48	D19,J
EPA 6020B	Cadmium	< 0.360	mg/kg	0.400	0.360	10	X447191	SMU	11/29/24 12:48	D19,U
EPA 6020B	Copper	25.3	mg/kg	0.400	0.370	10	X447191	SMU	11/29/24 12:48	
EPA 6020B	Lead	< 0.520	mg/kg	0.800	0.520	10	X447191	SMU	11/29/24 12:48	D19,U
EPA 6020B	Manganese	527	mg/kg	4.00	3.10	100	X447191	SMU	11/29/24 14:00	
EPA 6020B	Nickel	< 0.360	mg/kg	0.500	0.360	10	X447191	SMU	11/29/24 12:48	D19,U
EPA 6020B	Selenium	< 0.120	mg/kg	1.00	0.120	10	X447191	SMU	11/29/24 12:48	D19,U
EPA 6020B	Silver	< 0.0500	mg/kg	0.0800	0.0500	10	X447191	SMU	11/29/24 12:48	D19,U
EPA 6020B	Zinc	8.21	mg/kg	4.00	3.20	10	X447191	SMU	11/29/24 12:48	D19
EPA 7471B	Mercury	0.015	mg/kg	0.033	0.011		X447134	MAC	11/26/24 12:23	J

This data has been reviewed for accuracy and has been authorized for release.

Kristi A. Groth

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Project Name: Kensington / 2024-11
Work Order: **X4K0304**
Reported: 27-Dec-24 12:36

Client Sample ID: **SB03-0.5-1**

Sampled: 15-Nov-24 10:50

Received: 19-Nov-24

Sampled By:

SVL Sample ID: **X4K0304-09 (Soil)**

Sample Report Page 1 of 1

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	1.61	mg/kg	1.00	0.0590	10	X447191	SMU	11/29/24 12:51	D19
EPA 6020B	Cadmium	< 0.360	mg/kg	0.400	0.360	10	X447191	SMU	11/29/24 12:51	D19,U
EPA 6020B	Copper	219	mg/kg	4.00	3.70	100	X447191	SMU	11/29/24 14:12	
EPA 6020B	Lead	1.46	mg/kg	0.800	0.520	10	X447191	SMU	11/29/24 12:51	D19
EPA 6020B	Manganese	601	mg/kg	4.00	3.10	100	X447191	SMU	11/29/24 14:12	
EPA 6020B	Nickel	1.36	mg/kg	0.500	0.360	10	X447191	SMU	11/29/24 12:51	D19
EPA 6020B	Selenium	0.161	mg/kg	1.00	0.120	10	X447191	SMU	11/29/24 12:51	D19,J
EPA 6020B	Silver	0.159	mg/kg	0.0800	0.0500	10	X447191	SMU	11/29/24 12:51	D19
EPA 6020B	Zinc	30.4	mg/kg	4.00	3.20	10	X447191	SMU	11/29/24 12:51	
EPA 7471B	Mercury	0.021	mg/kg	0.033	0.011		X447134	MAC	11/26/24 12:25	J

This data has been reviewed for accuracy and has been authorized for release.

Kristi A. Groth

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Project Name: Kensington / 2024-11
Work Order: **X4K0304**
Reported: 27-Dec-24 12:36

Client Sample ID: **SB03-2-2.5**
SVL Sample ID: **X4K0304-10 (Soil)**

Sampled: 15-Nov-24 10:55
Received: 19-Nov-24
Sampled By:

Sample Report Page 1 of 1

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	2.55	mg/kg	1.00	0.0590	10	X447191	SMU	11/29/24 12:54	D19
EPA 6020B	Cadmium	< 0.360	mg/kg	0.400	0.360	10	X447191	SMU	11/29/24 12:54	D19,U
EPA 6020B	Copper	61.2	mg/kg	0.400	0.370	10	X447191	SMU	11/29/24 12:54	
EPA 6020B	Lead	2.66	mg/kg	0.800	0.520	10	X447191	SMU	11/29/24 12:54	D19
EPA 6020B	Manganese	553	mg/kg	4.00	3.10	100	X447191	SMU	11/29/24 14:15	
EPA 6020B	Nickel	1.35	mg/kg	0.500	0.360	10	X447191	SMU	11/29/24 12:54	D19
EPA 6020B	Selenium	< 0.120	mg/kg	1.00	0.120	10	X447191	SMU	11/29/24 12:54	D19,U
EPA 6020B	Silver	0.0915	mg/kg	0.0800	0.0500	10	X447191	SMU	11/29/24 12:54	D19
EPA 6020B	Zinc	28.3	mg/kg	4.00	3.20	10	X447191	SMU	11/29/24 12:54	
EPA 7471B	Mercury	0.019	mg/kg	0.033	0.011		X447134	MAC	11/26/24 12:27	J

This data has been reviewed for accuracy and has been authorized for release.

Kristi A. Groth

Kristi A. Groth
Project Manager



Coeur Alaska
3031 Clinton Drive, Suite 202
Juneau, AK 99801

Project Name: Kensington / 2024-11
Work Order: **X4K0304**
Reported: 27-Dec-24 12:36

Client Sample ID: **SB03-4-4.5**

Sampled: 15-Nov-24 11:05

Received: 19-Nov-24

Sampled By:

SVL Sample ID: **X4K0304-11 (Soil)**

Sample Report Page 1 of 1

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	6.76	mg/kg	1.00	0.0590	10	X447191	SMU	11/29/24 12:57	D19
EPA 6020B	Cadmium	< 0.360	mg/kg	0.400	0.360	10	X447191	SMU	11/29/24 12:57	D19,U
EPA 6020B	Copper	83.8	mg/kg	0.400	0.370	10	X447191	SMU	11/29/24 12:57	
EPA 6020B	Lead	7.48	mg/kg	0.800	0.520	10	X447191	SMU	11/29/24 12:57	D19
EPA 6020B	Manganese	989	mg/kg	4.00	3.10	100	X447191	SMU	11/29/24 14:18	
EPA 6020B	Nickel	2.37	mg/kg	0.500	0.360	10	X447191	SMU	11/29/24 12:57	D19
EPA 6020B	Selenium	0.149	mg/kg	1.00	0.120	10	X447191	SMU	11/29/24 12:57	D19,J
EPA 6020B	Silver	0.155	mg/kg	0.0800	0.0500	10	X447191	SMU	11/29/24 12:57	D19
EPA 6020B	Zinc	46.6	mg/kg	4.00	3.20	10	X447191	SMU	11/29/24 12:57	
EPA 7471B	Mercury	0.014	mg/kg	0.033	0.011		X447134	MAC	11/26/24 12:29	J

This data has been reviewed for accuracy and has been authorized for release.

Kristi A. Groth

Kristi A. Groth

Project Manager



Coeur Alaska
3031 Clinton Drive, Suite 202
Juneau, AK 99801

Project Name: Kensington / 2024-11
Work Order: **X4K0304**
Reported: 27-Dec-24 12:36

Client Sample ID: **SB16-0.5-1MS/MSD**

Sampled: 15-Nov-24 13:40

SVL Sample ID: **X4K0304-12 (Soil)**

Received: 19-Nov-24

Sample Report Page 1 of 1

Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	2.64	mg/kg	1.00	0.0590	10	X447191	SMU	11/29/24 13:01	D19
EPA 6020B	Cadmium	< 0.360	mg/kg	0.400	0.360	10	X447191	SMU	11/29/24 13:01	D19,U
EPA 6020B	Copper	117	mg/kg	0.400	0.370	10	X447191	SMU	11/29/24 13:01	
EPA 6020B	Lead	2.41	mg/kg	0.800	0.520	10	X447191	SMU	11/29/24 13:01	D19
EPA 6020B	Manganese	993	mg/kg	4.00	3.10	100	X447191	SMU	11/29/24 14:21	
EPA 6020B	Nickel	1.36	mg/kg	0.500	0.360	10	X447191	SMU	11/29/24 13:01	D19
EPA 6020B	Selenium	< 0.120	mg/kg	1.00	0.120	10	X447191	SMU	11/29/24 13:01	D19,U
EPA 6020B	Silver	0.0907	mg/kg	0.0800	0.0500	10	X447191	SMU	11/29/24 13:01	D19
EPA 6020B	Zinc	31.5	mg/kg	4.00	3.20	10	X447191	SMU	11/29/24 13:01	
EPA 7471B	Mercury	0.028	mg/kg	0.033	0.011		X447134	MAC	11/26/24 12:31	J

This data has been reviewed for accuracy and has been authorized for release.

Kristi A. Groth

Kristi A. Groth

Project Manager



Coeur Alaska
3031 Clinton Drive, Suite 202
Juneau, AK 99801

Project Name: Kensington / 2024-11
Work Order: **X4K0304**
Reported: 27-Dec-24 12:36

Client Sample ID: **SB02-0.5-1**

Sampled: 15-Nov-24 09:50

Received: 19-Nov-24

Sampled By:

SVL Sample ID: **X4K0304-13 (Soil)**

Sample Report Page 1 of 1

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	1.82	mg/kg	1.00	0.0590	10	X447191	SMU	11/29/24 13:04	D19
EPA 6020B	Cadmium	< 0.360	mg/kg	0.400	0.360	10	X447191	SMU	11/29/24 13:04	D19,U
EPA 6020B	Copper	86.6	mg/kg	0.400	0.370	10	X447191	SMU	11/29/24 13:04	
EPA 6020B	Lead	2.42	mg/kg	0.800	0.520	10	X447191	SMU	11/29/24 13:04	D19
EPA 6020B	Manganese	897	mg/kg	4.00	3.10	100	X447191	SMU	11/29/24 14:24	
EPA 6020B	Nickel	1.81	mg/kg	0.500	0.360	10	X447191	SMU	11/29/24 13:04	D19
EPA 6020B	Selenium	0.244	mg/kg	1.00	0.120	10	X447191	SMU	11/29/24 13:04	D19,J
EPA 6020B	Silver	0.387	mg/kg	0.0800	0.0500	10	X447191	SMU	11/29/24 13:04	D19
EPA 6020B	Zinc	37.0	mg/kg	4.00	3.20	10	X447191	SMU	11/29/24 13:04	
EPA 7471B	Mercury	0.014	mg/kg	0.033	0.011		X447134	MAC	11/26/24 12:33	J

This data has been reviewed for accuracy and has been authorized for release.

Kristi A. Groth

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Project Manager



Coeur Alaska
3031 Clinton Drive, Suite 202
Juneau, AK 99801

Project Name: Kensington / 2024-11
Work Order: **X4K0304**
Reported: 27-Dec-24 12:36

Client Sample ID: **SB02-2-2.5**

Sampled: 15-Nov-24 09:55

SVL Sample ID: **X4K0304-14 (Soil)**

Received: 19-Nov-24

Sample Report Page 1 of 1

Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	10.1	mg/kg	1.00	0.0590	10	X447191	SMU	11/29/24 13:07	D19
EPA 6020B	Cadmium	< 0.360	mg/kg	0.400	0.360	10	X447191	SMU	11/29/24 13:07	D19,U
EPA 6020B	Copper	82.5	mg/kg	0.400	0.370	10	X447191	SMU	11/29/24 13:07	
EPA 6020B	Lead	5.62	mg/kg	0.800	0.520	10	X447191	SMU	11/29/24 13:07	D19
EPA 6020B	Manganese	959	mg/kg	4.00	3.10	100	X447191	SMU	11/29/24 14:27	
EPA 6020B	Nickel	2.44	mg/kg	0.500	0.360	10	X447191	SMU	11/29/24 13:07	D19
EPA 6020B	Selenium	0.351	mg/kg	1.00	0.120	10	X447191	SMU	11/29/24 13:07	D19,J
EPA 6020B	Silver	0.454	mg/kg	0.0800	0.0500	10	X447191	SMU	11/29/24 13:07	D19
EPA 6020B	Zinc	52.2	mg/kg	4.00	3.20	10	X447191	SMU	11/29/24 13:07	
EPA 7471B	Mercury	0.021	mg/kg	0.033	0.011		X447134	MAC	11/26/24 12:35	J

This data has been reviewed for accuracy and has been authorized for release.

Kristi A. Groth

Kristi A. Groth

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Coeur Alaska
3031 Clinton Drive, Suite 202
Juneau, AK 99801

Project Name: Kensington / 2024-11
Work Order: **X4K0304**
Reported: 27-Dec-24 12:36

Client Sample ID: **SB02-2-2.5MS/MSD**

Sampled: 15-Nov-24 09:55

SVL Sample ID: **X4K0304-15 (Soil)**

Received: 19-Nov-24

Sample Report Page 1 of 1

Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	7.04	mg/kg	1.00	0.0590	10	X447191	SMU	11/29/24 13:10	D19
EPA 6020B	Cadmium	< 0.360	mg/kg	0.400	0.360	10	X447191	SMU	11/29/24 13:10	D19,U
EPA 6020B	Copper	73.8	mg/kg	0.400	0.370	10	X447191	SMU	11/29/24 13:10	
EPA 6020B	Lead	5.70	mg/kg	0.800	0.520	10	X447191	SMU	11/29/24 13:10	D19
EPA 6020B	Manganese	746	mg/kg	4.00	3.10	100	X447191	SMU	11/29/24 14:30	
EPA 6020B	Nickel	1.97	mg/kg	0.500	0.360	10	X447191	SMU	11/29/24 13:10	D19
EPA 6020B	Selenium	0.197	mg/kg	1.00	0.120	10	X447191	SMU	11/29/24 13:10	D19,J
EPA 6020B	Silver	0.241	mg/kg	0.0800	0.0500	10	X447191	SMU	11/29/24 13:10	D19
EPA 6020B	Zinc	39.3	mg/kg	4.00	3.20	10	X447191	SMU	11/29/24 13:10	
EPA 7471B	Mercury	0.020	mg/kg	0.033	0.011		X447134	MAC	11/26/24 12:38	J

This data has been reviewed for accuracy and has been authorized for release.

Kristi A. Groth

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Coeur Alaska
3031 Clinton Drive, Suite 202
Juneau, AK 99801

Project Name: Kensington / 2024-11
Work Order: **X4K0304**
Reported: 27-Dec-24 12:36

Client Sample ID: **SB02-4-4.5**

Sampled: 15-Nov-24 10:00

SVL Sample ID: **X4K0304-16 (Soil)**

Received: 19-Nov-24

Sample Report Page 1 of 1

Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	9.41	mg/kg	1.00	0.0590	10	X447191	SMU	11/29/24 13:13	D19
EPA 6020B	Cadmium	< 0.360	mg/kg	0.400	0.360	10	X447191	SMU	11/29/24 13:13	D19,U
EPA 6020B	Copper	57.2	mg/kg	0.400	0.370	10	X447191	SMU	11/29/24 13:13	
EPA 6020B	Lead	4.67	mg/kg	0.800	0.520	10	X447191	SMU	11/29/24 13:13	D19
EPA 6020B	Manganese	497	mg/kg	4.00	3.10	100	X447191	SMU	11/29/24 14:33	
EPA 6020B	Nickel	3.05	mg/kg	0.500	0.360	10	X447191	SMU	11/29/24 13:13	D19
EPA 6020B	Selenium	0.403	mg/kg	1.00	0.120	10	X447191	SMU	11/29/24 13:13	D19,J
EPA 6020B	Silver	0.135	mg/kg	0.0800	0.0500	10	X447191	SMU	11/29/24 13:13	D19
EPA 6020B	Zinc	53.5	mg/kg	4.00	3.20	10	X447191	SMU	11/29/24 13:13	
EPA 7471B	Mercury	0.032	mg/kg	0.033	0.011		X447134	MAC	11/26/24 12:44	J

This data has been reviewed for accuracy and has been authorized for release.

Kristi A. Groth

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Project Manager



Coeur Alaska
 3031 Clinton Drive, Suite 202
 Juneau, AK 99801

Project Name: Kensington / 2024-11
 Work Order: **X4K0304**
 Reported: 27-Dec-24 12:36

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Metals by EPA 6000/7000 Series								
EPA 6020B	Arsenic	mg/kg	<0.0118	0.0118	0.200	X447191	29-Nov-24	D19,U
EPA 6020B	Cadmium	mg/kg	<0.072	0.072	0.080	X447191	29-Nov-24	D19,U
EPA 6020B	Copper	mg/kg	<0.074	0.074	0.080	X447191	29-Nov-24	D19,U
EPA 6020B	Lead	mg/kg	<0.104	0.104	0.160	X447191	29-Nov-24	D19,U
EPA 6020B	Manganese	mg/kg	<0.062	0.062	0.080	X447191	29-Nov-24	D19,U
EPA 6020B	Nickel	mg/kg	<0.072	0.072	0.100	X447191	29-Nov-24	D19,U
EPA 6020B	Selenium	mg/kg	<0.024	0.024	0.200	X447191	29-Nov-24	D19,U
EPA 6020B	Silver	mg/kg	<0.0100	0.0100	0.0160	X447191	29-Nov-24	D19,U
EPA 6020B	Zinc	mg/kg	<0.64	0.64	0.80	X447191	29-Nov-24	D19,U
EPA 7471B	Mercury	mg/kg	<0.011	0.011	0.033	X447134	26-Nov-24	U

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals by EPA 6000/7000 Series									
EPA 6020B	Arsenic	mg/kg	2.31	2.50	92.5	80 - 120	X447191	29-Nov-24	D19
EPA 6020B	Cadmium	mg/kg	2.34	2.50	93.5	80 - 120	X447191	29-Nov-24	D19
EPA 6020B	Copper	mg/kg	2.52	2.50	101	80 - 120	X447191	29-Nov-24	D19
EPA 6020B	Lead	mg/kg	2.54	2.50	102	80 - 120	X447191	29-Nov-24	D19
EPA 6020B	Manganese	mg/kg	2.57	2.50	103	80 - 120	X447191	29-Nov-24	D19
EPA 6020B	Nickel	mg/kg	2.54	2.50	102	80 - 120	X447191	29-Nov-24	D19
EPA 6020B	Selenium	mg/kg	2.04	2.50	81.7	80 - 120	X447191	29-Nov-24	D19
EPA 6020B	Silver	mg/kg	2.38	2.50	95.3	80 - 120	X447191	29-Nov-24	D19
EPA 6020B	Zinc	mg/kg	2.26	2.50	90.5	80 - 120	X447191	29-Nov-24	D19
EPA 7471B	Mercury	mg/kg	0.350	0.333	105	80 - 120	X447134	26-Nov-24	

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch and Source ID	Analyzed	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	mg/kg	22.0	18.5	2.50	0.30R>S	75 - 125	X447191 - X4K0304-01	29-Nov-24	D19,M4,R2B
EPA 6020B	Cadmium	mg/kg	2.91	<0.72	2.50	117	75 - 125	X447191 - X4K0304-01	29-Nov-24	D19
EPA 6020B	Copper	mg/kg	76.7	47.7	2.50	0.30R>S	75 - 125	X447191 - X4K0304-01	29-Nov-24	M4
EPA 6020B	Lead	mg/kg	7.48	5.49	2.50	79.9	75 - 125	X447191 - X4K0304-01	29-Nov-24	D19
EPA 6020B	Manganese	mg/kg	501	417	2.50	0.30R>S	75 - 125	X447191 - X4K0304-01	29-Nov-24	M4,R2B
EPA 6020B	Nickel	mg/kg	6.94	4.61	2.50	93.4	75 - 125	X447191 - X4K0304-01	29-Nov-24	D19
EPA 6020B	Selenium	mg/kg	3.29	1.46	2.50	73.3	75 - 125	X447191 - X4K0304-01	29-Nov-24	D19,M4
EPA 6020B	Silver	mg/kg	2.61	0.171	2.50	97.8	75 - 125	X447191 - X4K0304-01	29-Nov-24	D19
EPA 6020B	Zinc	mg/kg	75.6	72.3	2.50	0.30R>S	75 - 125	X447191 - X4K0304-01	29-Nov-24	M4,R2B
EPA 7471B	Mercury	mg/kg	0.368	0.038	0.333	99.1	80 - 120	X447134 - X4K0304-01	26-Nov-24	



Coeur Alaska
 3031 Clinton Drive, Suite 202
 Juneau, AK 99801

Project Name: Kensington / 2024-11
 Work Order: **X4K0304**
 Reported: 27-Dec-24 12:36

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	RPD	RPD Limit	% Recovery	Batch and Source ID	Notes
Metals by EPA 6000/7000 Series										
EPA 6020B	Arsenic	mg/kg	16.5	22.0	2.50	28.8	20	0.30R>S	X447191 - X4K0304-01	D19,M4,R2B
EPA 6020B	Cadmium	mg/kg	2.68	2.91	2.50	8.4	20	107	X447191 - X4K0304-01	D19
EPA 6020B	Copper	mg/kg	64.6	76.7	2.50	17.1	20	0.30R>S	X447191 - X4K0304-01	M4
EPA 6020B	Lead	mg/kg	6.34	7.48	2.50	16.6	20	34.1	X447191 - X4K0304-01	D19,M4
EPA 6020B	Manganese	mg/kg	275	501	2.50	58.3	20	0.30R>S	X447191 - X4K0304-01	M4,R2B
EPA 6020B	Nickel	mg/kg	6.00	6.94	2.50	14.5	20	55.8	X447191 - X4K0304-01	D19,M4
EPA 6020B	Selenium	mg/kg	2.76	3.29	2.50	17.5	20	52.1	X447191 - X4K0304-01	D19,M4
EPA 6020B	Silver	mg/kg	2.49	2.61	2.50	4.9	20	92.8	X447191 - X4K0304-01	D19
EPA 6020B	Zinc	mg/kg	53.4	75.6	2.50	34.5	20	0.30R>S	X447191 - X4K0304-01	M4,R2B
EPA 7471B	Mercury	mg/kg	0.361	0.368	0.333	2.1	20	96.8	X447134 - X4K0304-01	

Quality Control - SERIAL DILUTION Data

Method	Analyte	Sample Result	Serial Dilution Result	RPD	Q	QC Limits	Batch and Source ID	Notes
Metals by EPA 6000/7000 Series								
EPA 6020B	Arsenic	22.0	19.7	11.0		20	X447191 - MS1	D19
EPA 6020B	Copper	76.7	72.8	5.3		20	X447191 - MS1	
EPA 6020B	Lead	7.48	6.89J	8.3		20	X447191 - MS1	D19,J
EPA 6020B	Manganese	501	495	1.2		20	X447191 - MS1	D10
EPA 6020B	Nickel	6.94	6.86	1.1		20	X447191 - MS1	D19
EPA 6020B	Selenium	3.29	2.78J	16.7		20	X447191 - MS1	D19,J
EPA 6020B	Zinc	75.6	75.3	0.4		20	X447191 - MS1	

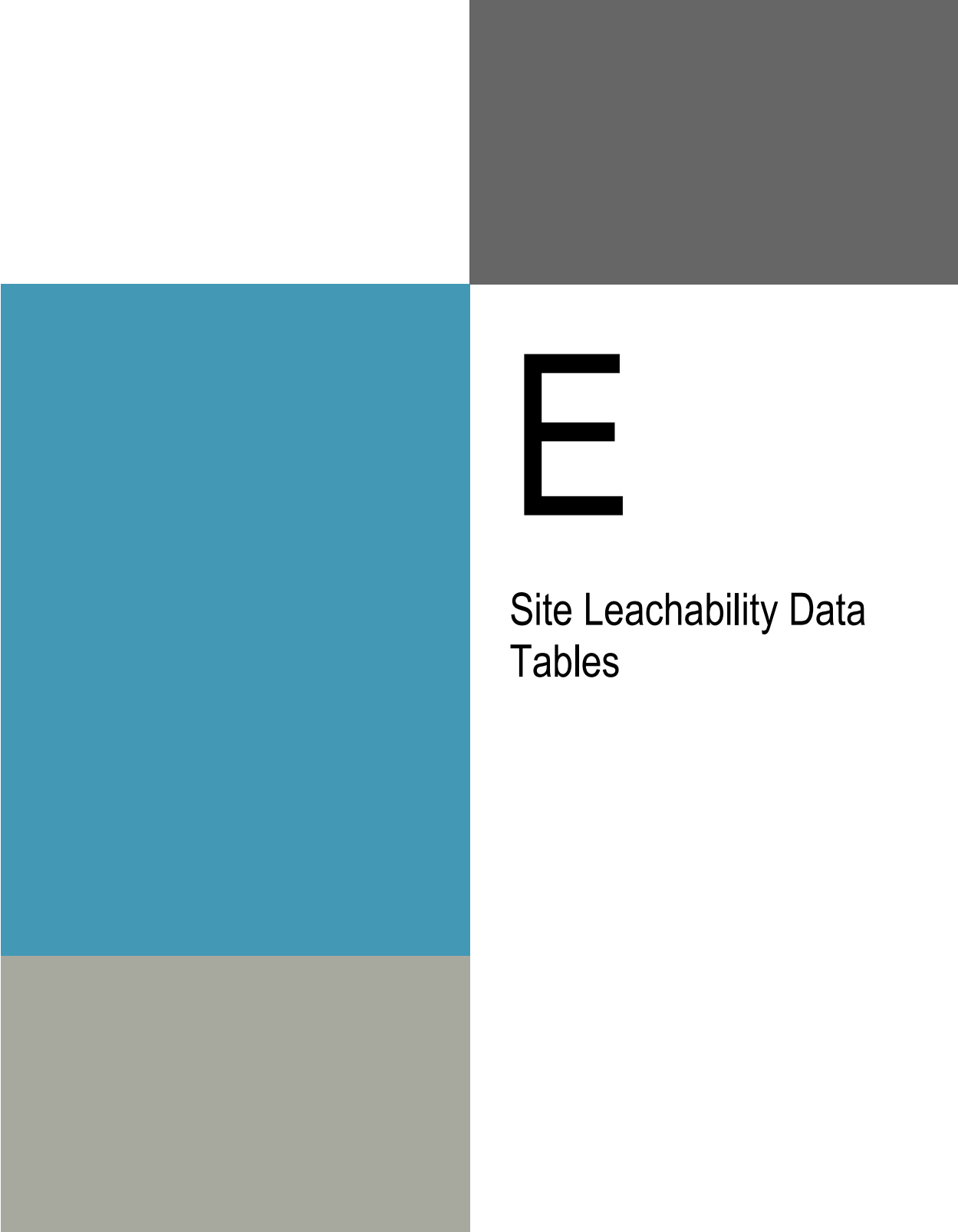


Coeur Alaska
3031 Clinton Drive, Suite 202
Juneau, AK 99801

Project Name: Kensington / 2024-11
Work Order: **X4K0304**
Reported: 27-Dec-24 12:36

Notes and Definitions

- D10 Serial dilution failed, suspected matrix interference.
 - D19 Due to an interference from a digestion or extraction fluid acidic matrix, a sample dilution was performed.
 - J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
 - M4 The analysis of the spiked sample required a dilution such that the spike recovery calculation does not provide useful information. The LCS recovery was acceptable.
 - R2B RPD exceeded the laboratory acceptance limit.
 - U Indicates the analyte was analyzed for but was not detected, result was less than the MDL.
 - LCS Laboratory Control Sample (Blank Spike)
 - RPD Relative Percent Difference
 - UDL A result is less than the detection limit
 - 0.30R>S % recovery not applicable; spike level is less than 30% of the sample concentration
 - <RL A result is less than the reporting limit
 - MRL Method Reporting Limit
 - MDL Method Detection Limit
 - N/A Not Applicable
-



E

Site Leachability Data Tables

2013-2024 Tails MWMP Results	TDS (mg/L)	pH	NH ₃ (mg/L)	Al (ug/L)	As (ug/L)	Cd (ug/L)	Cr (ug/L)	Cu (ug/L)	Fe (ug/L)	Pb (ug/L)	Hg (ug/L)	Ni (ug/L)	Se (ug/L)	Ag (ug/L)	Zn (ug/L)	Nitrate as N (mg/L)	Sulfate as SO ₄ (mg/L)
2013 Tails 1st Quarter	2380	7.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	18.3	ND	ND	ND	5.26	1580
2013 Tails 2nd Quarter	1720	7.84	0.52	489	ND	ND	ND	1.07	ND	ND	ND	16.2	31.8	ND	ND	ND	1240
2013 Tails 3rd Quarter	1700	7.53	0.28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.11	1120
2013 Tails 4th Quarter	2440	7.52	0.14	ND	ND	ND	ND	ND	ND	ND	ND	16.3	ND	ND	ND	4.50	1690
2014 Tails 1st Quarter	2360	7.44	9.53	ND	ND	ND	ND	ND	ND	ND	ND	21.2	ND	ND	ND	5.47	1710
2014 Tails 2nd Quarter	316	7.92	1.16	ND	ND	ND	ND	ND	ND	ND	ND	2.46	ND	ND	ND	ND	190
2014 Tails 3rd Quarter	891	7.87	0.47	ND	ND	ND	ND	ND	ND	ND	ND	6.3	ND	ND	ND	11.00	543
2014 Tails 4th Quarter	1240	7.72	1.72	ND	ND	ND	ND	ND	ND	ND	ND	0.81	ND	ND	ND	4.98	829
2015 Tails 1st Quarter	1160	7.78	2.67	ND	ND	ND	ND	ND	ND	ND	ND	7.00	ND	ND	ND	7.58	698
2015 Tails 2nd Quarter	1560	7.99	1.26	ND	ND	ND	ND	ND	ND	ND	ND	13.20	ND	ND	ND	3.36	1030
2015 Tails 3rd Quarter	947	7.78	2.43	ND	ND	ND	ND	ND	ND	ND	ND	6.60	ND	ND	ND	3.85	577
2015 Tails 4th Quarter	567	7.74	2.76	ND	ND	ND	2.3	ND	ND	ND	ND	3.40	ND	ND	ND	3.79	337
2016 Tails 1st Quarter	739	7.64	1.51	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	6.15	451
2016 Tails 2nd Quarter	1160	7.73	2.23	ND	ND	ND	1.79	ND	ND	ND	ND	ND	ND	ND	ND	8.09	680
2016 Tails 3rd Quarter	1020	7.94	2.51	ND	ND	ND	ND	ND	ND	ND	0.22	ND	ND	ND	ND	3.57	685
2016 Tails 4th Quarter	1110	7.60	3.96	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.75	684
2017 Tails 1st Quarter	1600	7.69	5.73	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27	1090
2017 Tails 2nd Quarter	844	8.04	ND	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	4.74	522
2017 Tails 3rd Quarter	1630	7.59	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.31	1060
2017 Tails 4th Quarter	1200	7.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.62	792
2018 Tails 1st Quarter	2170	7.6	4.36	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.24	1460
2018 Tails 2nd Quarter	995	7.8	0.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.2	610
2018 Tails 3rd Quarter	1030	7.5	ND	ND	ND	ND	ND	1.18	ND	ND	ND	ND	ND	ND	ND	10.3	674
2018 Tails 4th Quarter	853	7.6	0.728	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.97	533
2019 Tails 1st Quarter	1210	8.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.0	746
2019 Tails 2nd Quarter	983	7.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.9	634
2019 Tails 3rd Quarter	742	7.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11.6	454
2019 Tails 4th Quarter	773	7.7	1.55	ND	ND	ND	ND	0.00191	ND	ND	ND	ND	ND	ND	0.0041	3.8	449
2020 Tails 1st Quarter	587	8.0	0.67	ND	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13.0	305
2020 Tails 2nd Quarter	617	8.1	0.079	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.60	324
2020 Tails 3rd Quarter	704	7.8	0.535	ND	ND	ND	ND	ND	116	ND	ND	ND	ND	ND	ND	9.98	407
2020 Tails 4th Quarter	465	8.0	4.14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.70	242
2021 Tails 1st Quarter	460	8.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13.30	235
2021 Tails 2nd Quarter	405	8.2	0.087	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.52	196
2021 Tails 3rd Quarter	651	7.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.10	357
2021 Tails 4th Quarter	353	8.0	3.35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.71	185
2022 Tails 1st Quarter	392	8.1	ND	ND	ND	ND	ND	0.00113	ND	ND	0.000225	ND	ND	ND	ND	8.97	174
2022 Tails 2nd Quarter	493	7.6	0.076	0.21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.7	290
2022 Tails 3rd Quarter	704	7.8	0.535	ND	ND	ND	ND	ND	116	ND	ND	ND	ND	ND	ND	9.98	407
2022 Tails 4th Quarter	327	7.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.2	113
2023 Tails 1st Quarter	1190	7.7	3.38	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.833	822
2023 Tails 2nd Quarter	325	8	ND	179	ND	ND	ND	1.44	149	6.12	ND	ND	ND	ND	8.8	20.4	101
2023 Tails 3rd Quarter	497	8	ND	ND	ND	ND	ND	0.56	ND	ND	ND	ND	ND	ND	ND	11.8	234
2023 Tails 4th Quarter	333	7.9	1.64	101	ND	ND	ND	1	ND	ND	ND	2.01	ND	ND	ND	16.4	92.4
2024 Tails 1st Quarter	276	8.1	0.109	ND	ND	ND	ND	0.57	ND	ND	ND	ND	ND	ND	ND	10.5	69.7
2024 Tails 2nd Quarter	331	8.38	ND	60.5	ND	ND	ND	0.54	ND	ND	ND	ND	ND	ND	ND	11.9	119
2024 Tails 3rd Quarter	223	8.2	1.51	85.5	ND	ND	ND	0.75	ND	ND	ND	ND	ND	ND	9	6.99	96.9
2024 Tails 4th Quarter	385	7.9	0.062	ND	ND	0.563	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.4	172

2013-2024 Tails ABA Results	<i>Sulfur,</i>	<i>Sulfur Forms (Acid Extractable and Non-extractable Sulfur) 3.2.6</i>			<i>Acid</i>	<i>Neutralization</i>	<i>Acid - Base</i>
	<i>Total</i>				<i>Potential</i>	<i>Potential</i>	<i>Accounting</i>
	<i>3.2.4</i>	<i>Sulfate</i>	<i>Pyritic</i>	<i>Non-extractable</i>	<i>1.3.1</i>	<i>3.2.3</i>	<i>1.3.1</i>
	<i>wt%</i>	<i>wt%</i>	<i>wt%</i>	<i>wt%</i>	<i>t CaCO3/1000t</i>	<i>t CaCO3/1000t</i>	<i>t CaCO3/1000t</i>
2013 Tails 1st Quarter	0.16	0.14	0.02	0.02	0.5	110	110
2013 Tails 2ndQuarter	0.54	0.24	0.3	ND	9.3	88.9	79.7
2013 Tails 3rd Quarter	0.09	0.08	0.01	ND	0.3	115	115
2013 Tails 4th Quarter	0.22	0.18	0.03	ND	1.1	121	120
2014 Tails 1st Quarter	0.14	0.14	ND	ND	ND	120	120
2014 Tails 2nd Quarter	0.05	0.05	ND	ND	ND	93.5	93.5
2014 Tails 3rd Quarter	0.05	0.05	ND	ND	ND	116	116
2014 Tails 4th Quarter	0.18	0.11	0.07	ND	2.2	95.6	93.3
2015 Tails 1st Quarter	0.11	0.05	0.05	ND	1.7	103	101.3
2015 Tails 2nd Quarter	0.07	0.06	0.01	ND	0.4	123	122.6
2015 Tails 3rd Quarter	0.13	0.09	0.04	ND	1.3	111	109.7
2015 Tails 4th Quarter	0.26	0.09	0.17	ND	5.3	104	98.7
2016 Tails 1st Quarter	0.09	0.05	0.04	ND	1.3	127	125.7
2016 Tails 2nd Quarter	0.06	0.06	ND	ND	ND	118	118
2016 Tails 3rd Quarter	0.04	0.04	ND	ND	ND	98.1	98.1
2016 Tails 4th Quarter	0.11	0.09	0.02	ND	0.6	160	159.4
2017 Tails 1st Quarter	0.14	0.06	0.08	ND	2.4	120	117.6
2017 Tails 2nd Quarter	0.09	0.06	0.03	ND	1	128	127
2017 Tails 3rd Quarter	0.09	0.07	0.01	ND	0.3	120	119.7
2017 Tails 4th Quarter	0.17	0.1	0.07	ND	2.2	112	110
2018 Tails 1st Quarter	0.15	0.15	ND	ND	ND	155	155
2018 Tails 2nd Quarter	0.05	0.05	ND	ND	ND	118	118
2018 Tails 3rd Quarter	0.06	0.06	ND	ND	ND	125	125
2018 Tails 4th Quarter	0.05	0.05	ND	ND	ND	94	94
2019 Tails 1st Quarter	0.08	0.08	ND	ND	ND	147	147
2019 Tails 2nd Quarter	0.05	0.05	ND	ND	ND	93.7	93.7
2019 Tails 3rd Quarter	0.03	0.03	ND	ND	ND	97.2	97.2
2019 Tails 4th Quarter	0.05	0.05	ND	ND	ND	111	111
2020 Tails 1st Quarter	0.03	0.03	ND	ND	ND	98	98
2020 Tails 2nd Quarter	0.03	0.03	ND	ND	ND	96.8	96.8
2020 Tails 3rd Quarter	0.04	0.04	ND	ND	ND	71.4	71.4
2020 Tails 4th Quarter	0.03	0.03	ND	ND	ND	124	124
2021 Tails 1st Quarter	ND	235	ND	ND	ND	57.1	57.1
2021 Tails 2nd Quarter	ND	ND	ND	ND	ND	85.4	85.4
2021 Tails 3rd Quarter	0.05	ND	0.04	ND	1.3	112	111
2021 Tails 4th Quarter	0.04	ND	0.05	ND	1.4	90.1	88.7
2022 Tails 1st Quarter	ND	ND	0.04	ND	1.3	89.5	88.2
2022 Tails 2nd Quarter	ND	ND	ND	ND	ND	166	166

2022 Tails 3rd Quarter	0.0377	0.04	ND	ND	ND	71.4	71.4
2022 Tails 4th Quarter	ND	ND	ND	ND	ND	117	117
2023 Tails 1st Quarter	0.05	0.05	ND	ND	ND	153	153
2023 Tails 2nd Quarter	ND	ND	ND	ND	ND	ND	ND
2023 Tails 3rd Quarter	0.04	ND	ND	ND	ND	85.7	85.7
2023 Tails 4th Quarter	ND	ND	ND	ND	ND	39.1	39.1
2024 Tails 1st Quarter	ND	ND	ND	ND	ND	ND	ND
2024 Tails 2nd Quarter	ND	ND	ND	ND	ND	40	40
2024 Tails 3rd Quarter	ND	ND	ND	ND	ND	91.8	91.8
2024 Tails 4th Quarter	ND	ND	ND	ND	ND	74.7	74.7